Utilities Commission of New Smyrna Beach

New Smyrna Beach, FL

INVITATION TO BID # 07-20

INVITATION TO BID ON THE
FIELD STREET CAPACITOR BANK ADDITION
2019

Prepared by:
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Jacksonville, FL 32207
(904) 398-8636
UTILITIES COMMISSION  
CITY OF NEW SMYRNA BEACH, FLORIDA  

ITB #07-20  
FIELD STREET CAPACITOR BANK ADDITION  

INVITATION TO BID  

The Utilities Commission, City of New Smyrna Beach, Florida (COMMISSION) is seeking bids from qualified vendors to:  

Provide management and administration, labor and supervision, construction tools and equipment, materials and expendables, and temporary and permanent construction services to perform the individual construction items of work for the FIELD STREET CAPACITOR BANK ADDITION, complete, including overhead and profit.  

The project location is the Field Street Substation, located at 1050 Field Street, New Smyrna Beach, Florida, east of I-95 and south of SR-44 (Volusia County).  

In general, the project involves furnishing and installing a 115kV capacitor bank, 115kV circuit breaker, disconnect switch, instrument transformers, protective relay panel, underground conduit, and control cable.  

Construction items of work will include material procurement, temporary construction and protection, fencing and gates, foundation installation, conduit installation, grounding, yard cover, owner-furnished equipment installation, substation structures and supports, substation devices and bus materials, relay and control panels, power and control cable installation, wiring and testing, modifications and removals, and project documentation. All work shall be completed per the requirements of the Construction Drawings, technical Specifications, and approved submittals.  

Only the following major items of substation equipment will be Owner-furnished:  
- Disconnect Switch, 3-Phase Gang Operated, 138kV 650kV BIL, 2000A vertical break, Southern States EV-2, quantity 1;  

Some construction items of work can be completed without taking a clearance outage. Other items of work will require a clearance outage on either a transmission line, or a segment of substation bus, or of the existing substation power transformers.  

The contractors or other qualified Bidders on the construction covered by this proposal, along with their suppliers and sub-contractors, are considered to be experts in the procurement and installation of substation and transmission materials, and as experts, should have complete and up-to-date information as to the cost of raw materials, labor and other factors affecting the final price of such construction. Therefore, firm price proposals are specifically requested.  

Notice is hereby given that sealed bids will be received at 200 Canal Street, New Smyrna Beach, FL 32168, until 2:30 P.M. on February 12, 2020 at which time they will be publicly opened in the 3rd floor DeBerry Room.
Submit Bids To: Caleb Fisher, CPPB  
Purchasing Agent  
Utilities Commission,  
City of New Smyrna Beach  
(386) 424.3045 Voice  
(386) 424.2748 Fax  
CFISHER@UCNSB.ORG  

Mailing Address: 200 Canal Street  
New Smyrna Beach, FL  
32168  

Walk In Delivery: 200 Canal Street  
New Smyrna Beach, FL  
32168  

Bidders must indicate on the sealed envelope the following:

A. Invitation To Bid Number  
B. Hour and Date of Opening  
C. Name of Bidder
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## ATTACHMENTS
- 1808-2 Field St CapBank Specifications
- 1808-2 Field St CapBank Bid Drawings 2019-11-03
**UTILITIES COMMISSION**  
**CITY OF NEW SMYRNA BEACH, FLORIDA**

**ITB #07-20**
**FIELD STREET CAPACITOR BANK ADDITION**

**BID SCHEDULE**

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<th>Date</th>
<th>Event</th>
<th>Details</th>
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<tr>
<td>December 16, 2019</td>
<td>DISTRIBUTION OF THE INVITATION TO BID</td>
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<tr>
<td>January 14, 2020</td>
<td>PRE-BID MEETING (NON-MANDATORY)</td>
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<tr>
<td></td>
<td><strong>TIME:</strong> 2:00 P.M.</td>
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<tr>
<td></td>
<td><strong>LOCATION:</strong> DEBERRY ROOM, 3RD FLOOR UTILITY COMMISSION</td>
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<tr>
<td></td>
<td>200 CANAL STREET</td>
<td></td>
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<tr>
<td></td>
<td>NEW SMYRNA BEACH, FL 32169</td>
<td></td>
</tr>
<tr>
<td>January 24, 2020</td>
<td>DEADLINE FOR FINAL QUESTIONS BY 2:30 P.M.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>E-MAIL:</strong> <a href="mailto:cfisher@ucnsb.org">cfisher@ucnsb.org</a></td>
<td></td>
</tr>
<tr>
<td>January 31, 2020</td>
<td>ADDENDUM PUBLISHED BY 5:00 P.M.</td>
<td></td>
</tr>
<tr>
<td>February 12, 2020</td>
<td>BID RETURN DEADLINE BY 2:30 P.M.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>LOCATION:</strong> UTILITIES COMMISSION RECEPTION</td>
<td></td>
</tr>
<tr>
<td></td>
<td>200 CANAL STREET</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NEW SMYRNA BEACH, FL 32169</td>
<td></td>
</tr>
</tbody>
</table>
1. **INSTRUCTIONS TO BIDDERS:** To insure consideration of your bid, please follow these instructions. Bids not in compliance with conditions specified herein are subject to rejection.

2. **SEALED BIDS:** AN ORIGINAL BID AND 1 COPY plus a USB Flash Drive or a CD must be in the Finance Department by the date and time specified. The Bid Reply, Certification of Drug-Free Workplace Form, Public Entity Crimes Form, Non-Collusion Affidavit of Prime Bidder Form, Evaluation Factors, Questionnaire, and any addenda issued must be included. Proposals must be sealed and clearly labeled with the following information:
   a. Name and address of Bidder
   b. Bid number
   c. Date and time of Bid Opening

3. **COMMISSION:** The term COMMISSION used herein refers to the Utilities Commission, City of New Smyrna Beach, Florida, or its duly authorized representative.

4. **BIDDER:** The term BIDDER used herein refers to the dealer/manufacturer or business organization submitting a bid to the COMMISSION in response to this solicitation.

5. **BID EXAMINATION: ** BIDDERS are expected to examine, when applicable, the drawings, specifications, delivery requirements, performance sites and all instructions to satisfy themselves of conditions affecting cost of performing this contract.

6. **FURNISHED ITEMS:** No material, labor or facilities will be furnished by the COMMISSION unless specifically stated.

7. **COLLUSION:** The BIDDER hereby attests that the prices in this offer have been arrived at independently without consultation, communication or agreement with any competitor for the purpose of restricting competition.

8. **PRICE WARRANTY:** The BIDDER warrants that the prices of the items set forth herein do not exceed the prices charged by the BIDDER under a contract with the State of Florida.

9. **COMMERCIAL WARRANTY:** The BIDDER agrees that the supplies and services furnished under this award shall be covered by the most favorable commercial warranties the BIDDER gives any customers for comparable quantities of such supplies or services and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to the COMMISSION by any other provision of this award.

10. **INSPECTION AND ACCEPTANCE:** A duly authorized representative of the COMMISSION will accomplish inspection and acceptance of the supplies/services purchased herein at the designated delivery point.
11. **QUESTIONS REGARDING BID: COMMISSION** has made every effort to provide prospective vendors with the information needed to appropriately respond to this bid. **COMMISSION** realizes that some clarification, interpretation, or additional information may be required.

   **Questions regarding any portion of this bid shall be directed, in writing, to:**
   Utilities Commission, City of New Smyrna Beach
   Caleb Fisher, Purchasing Agent
   cfisher@ucnsb.org
   or
   P.O. Box 100
   New Smyrna Beach, FL 32170-0100

   All such requests must be received no later than 2:30 PM, Eastern Standard Time, **January 24, 2020**. Responses to all requests for more information will be included in any addenda and will be made available to all BIDDERS on **January 31, 2020**. Requests for additional information received after the **January 24, 2020** deadline will not receive a response. Responses will **not** be made orally.

   Any additional information pertaining to this Bid or to the services being sought hereunder obtained in a manner other than as described in the preceding paragraph should be regarded as unofficial. **COMMISSION** will not be bound in any way by information so obtained, or by a Bidder’s reliance thereon.

12. **COMMUNICATIONS:** Any communication between any potential vendor, service provider, bidder, lobbyist or consultant and any U.C. Commission Member, staff member, or consultant of the U.C. regarding this procurement is strictly prohibited from the date on which the solicitation advertisement appears on the U.C.’s website, Demandstar, or newspaper through the date of contract award. Also, from the date of the filing of any notice of protest of award through resolution for the parties involved in the protest or contract award, whichever is longer. The only exceptions to this are communications with the U.C.’s Material Manager or the U.C.’s designated point of contact. Any violation shall constitute grounds for immediate and permanent disqualification of the offending firm and possible debarment or suspension. At the U.C.’s General Manager/CEO and Director of Finance (CFO)’s sole discretion, it may also serve as grounds for the voiding of any Contract with the violator and/or to temporarily or permanently debarring the violator from future work with the U.C. This process will safeguard the integrity of the U.C.’s procurement and protest process and provide an ethical, equitable, and transparent procurement process.

13. **NON-DISCLOSURE:** The Utilities Commission understands the vendors concerns regarding confidential and/or proprietary information for both participating parties. In response UCNSB is incorporating the following verbiage into **ITB #07-20 FIELD STREET CAPACITOR BAND ADDITION**. Upon receipt by UCNSB, responses to solicitations become public records subject to the provisions of Florida’s state policy on public records, Section 119 Florida Statutes. If you believe that any portion of your response is exempt, you should clearly
UTILITIES COMMISSION  
CITY OF NEW SMYRNA BEACH, FLORIDA  

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identify the specific documents for which confidentiality is claimed and provide specific legal authority of the asserted exemption.

14. **INVOICES:** All invoices resulting from the award of this bid will be paid within 30 days of receipt of invoice or receipt of goods or acceptance of work performed.

15. **BID FORM:** A Bid Form is provided, and a completed original and one duplicate copy shall be returned in a sealed envelope properly marked with Bid number and acknowledgment of receipt of addenda where applicable. It is incumbent upon each bidder to ensure that they have received all addenda before submitting their bid.

16. **BID OPENING:** Bids will be publicly opened, read aloud and recorded, on the date and time indicated, at the location specified in the request for bid. It is the BIDDER’s sole responsibility to assure his/her bid is delivered at the proper time and place of the bid. The COMMISSION will not be responsible for late deliveries or delayed mail. Bids delivered after the time specified shall not be considered; such bids shall remain unopened.

17. **QUOTING PRICES:** Carelessness in quoting prices or in preparation of bid otherwise will not relieve the BIDDER. BIDDERS are expected to examine specifications, delivery schedule, extensions, and all terms and conditions in the bid documents. Bids having erasures or corrections must be initialed in ink by the BIDDER. In the event of an extension error(s), the unit price will prevail.

18. **AMENDED OR WITHDRAWN BIDS:** Bids may be amended or withdrawn only by written notice prior to the bid opening. Amendments will only be accepted in the form of a new bid package. The bidder must pick up the original bid package and submit an amended sealed bid prior to the bids closing date and time. Amendments or withdrawals received after the bid opening will not be effective, and the original bid submitted will be considered.

19. **PUBLIC ENTITY CRIMES:** UNDER SECTION 287.133(2)(a), FLORIDA STATUTES, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for Category two for a period of 36 months from the date of being placed on the convicted vendor list. See attachment “A”.

20. **CONSIDERATION OF BIDS:** The COMMISSION reserves the right to award the contract to the Bidder(s) that the COMMISSION deems to offer the best overall bid. The COMMISSION is therefore not bound to accept a bid on the basis of lowest price. In addition, the COMMISSION at its sole discretion, reserves the right to cancel this Bid, to reject any and all bids, to waive any and all informalities and/or irregularities, to re-advertise with either the identical or revised specifications, or not award a contract at all if it is deemed to be in the best interest of the COMMISSION to do so. The COMMISSION also reserves
the right to make multiple or split awards if it is deemed to be in the **COMMISSION’S** best interest. The **COMMISSION** shall not be responsible for any cost or expense incurred by the Bidder in preparing or submitting a bid or any cost prior to the execution of a contract agreement.

21. **TIE BID:** In the event of a tie bid where quality and service are equal; a preference is given to vendors submitting, with the proposal, a certification of a drug free work place in accordance with Section 287.087 Florida Statutes. Where tie bids are between bidders, one of which is located in Volusia County and the other bidder is not, the recommended award shall be to the local bidder. Past Performance-Consideration will be given to a vendor based on previous history and performance on similar Utilities Commission projects or requirements. Delivery availability or completion period. Capacity to perform in terms of service availability, facilities, personnel or financial availability. Closeness to delivery point. If all conditions are equal, a flip of a coin, with two witnesses present, shall be the deciding factor.

22. **SUBMITTING BIDS:** Bids shall be addressed and mailed or delivered as specified on page one (1) to 200 Canal St. New Smyrna Beach, Florida 32168.

23. **NO BID:** In the event an Invitation to Bid is returned as a no bid, "**NO BID**" shall be properly marked on the outside of the envelope with the bid number.

24. **REJECTED BIDS:** The **COMMISSION** reserves the right to reject bids containing any additional terms or conditions not specifically requested in the original conditions and specifications.

25. **FAILURE OF THE CONTRACTOR TO DELIVER:** Failure of the contractor to deliver within the time specified, or within a reasonable time as interpreted by the **COMMISSION** or failure to make replacements of rejected articles as directed, shall permit the **COMMISSION** to purchase on the open market articles of comparable grade to take the place of those rejected or not delivered. On all such purchases, the contractor shall reimburse the **COMMISSION**, within a reasonable time specified by the Purchasing Authority, for any expenses incurred in excess of the defaulted price. Payments due the contractor by the **COMMISSION** may be withheld until reimbursement is received.

26. **BRAND OR TRADE NAMES:** When brand or trade names are used in the bid invitation, it is for the purpose of item identification and to establish standards for quality; style and features. Bids on equivalent items will be considered unless items are noted as no substitutes. Equivalent bids must be accompanied by descriptive literature and/or specifications to receive consideration. Demonstrations and/or samples may be required and shall be at no charge to the **COMMISSION**. The **COMMISSION** reserves the right to determine if bid goods are equivalent to specified goods.

27. **AWARDS:** Awards shall be made as required for the best interest of the **COMMISSION**. The right is reserved to make award(s) by individual items, group of items, all or none, or any combination thereof, with one or more suppliers.
28. **INDEPENDENT CONTRACTORS:** Contractors are independent contractors, and all persons employed by Contractor in connection herewith shall be its employees and not employees of COMMISSION in any respect.

29. **INSURANCE:** The Contractor shall, at its sole expense, maintain in effect at all times during the performance of the services insurance coverage with limits not less than those set forth below and with insurers and under forms of policies satisfactory to COMMISSION.

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Minimum Amounts and Limits</th>
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</thead>
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<tr>
<td>(a) Worker's Compensation</td>
<td>Statutory requirements at location of work</td>
</tr>
<tr>
<td>Employer's Liability</td>
<td>$ 100,000 Each occurrence</td>
</tr>
<tr>
<td></td>
<td>$ 300,000 Disease, aggregate</td>
</tr>
<tr>
<td></td>
<td>$ 100,000 Disease, each employee</td>
</tr>
<tr>
<td>(b) General Liability</td>
<td>$ 1,000,000 General Aggregate</td>
</tr>
<tr>
<td></td>
<td>$ 1,000,000 Products - Comp Ops Agg</td>
</tr>
<tr>
<td></td>
<td>$ 500,000 Each Occurrence</td>
</tr>
<tr>
<td></td>
<td>$ 50,000 Fire Damage</td>
</tr>
<tr>
<td></td>
<td>$ 5,000 Medical Expense</td>
</tr>
<tr>
<td>(c) Automobile Liability</td>
<td>$ 1,000,000 Combined Single Limit</td>
</tr>
<tr>
<td>(owned, hired and non-owned)</td>
<td></td>
</tr>
<tr>
<td>Option of Split Limits:</td>
<td></td>
</tr>
<tr>
<td>(1.) Bodily Injury</td>
<td>$ 500,000 Per Person</td>
</tr>
<tr>
<td></td>
<td>$ 1,000,000 Per Accident</td>
</tr>
<tr>
<td>(2.) Property Damage</td>
<td>$ 500,000</td>
</tr>
</tbody>
</table>
Coverage shall apply to the indemnity agreement and shall include the COMMISSION their officers and employees, each as additional insured’s but only as regards to their liability arising out of Contractor's performance of the work or out of operations performed by others on behalf of Contractor under this Contract. The insurance as afforded to such additional insured’s shall state that it is primary insurance and shall provide for a severability of interest or cross-liability clause. Prior to commencing performance of any work or site mobilization, Contractor shall furnish COMMISSION with Certificates of Insurance (identifying on the face thereof the Project name and Contract number) as evidence of the above required insurance and such Certificates shall provide for thirty (30) days written notice to COMMISSION prior to cancellation thereof.

COMMISSION is not maintaining any insurance on behalf of Contractor covering loss or damage to the work or to any other property of Contractor unless otherwise specifically set forth herein.

None of the requirements contained herein as to types, limits and approval of insurance coverage to be maintained by Contractor are intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by Contractor under this contract.

Contractor shall deliver the original Certificate of Insurance and one copy to the agent of the COMMISSION.

Notices, in original and one copy, of cancellation, termination and alternation of such policies shall also be provided to the agent of the COMMISSION.

30. **WARRANTY AND ACCEPTANCE:** All material shall be new, and workmanship shall be first class in every respect. The work shall be subject to inspection and acceptance by COMMISSION. Contractor guarantees its work hereunder for a period of twelve (12) months after completion and acceptance of the work unless otherwise set forth herein. In the event COMMISSION discovers defects in material or workmanship at any time before the expiration of the specified warranty period, Contractor shall, upon written notice from COMMISSION, repair or replace at its sole expense any such defects. COMMISSION may perform such repairs or replacements by other reasonable means and Contractor agrees to pay for such corrective measures. Neither acceptance of the work by COMMISSION nor payment shall relieve Contractor from liability under the indemnity clause or any of the guarantees or warranties contained or implied herein.
31. **LAWS, REGULATIONS, PERMITS AND TAXES:** Contractor must comply with COMMISSION’s jobsite procedures and regulations and with all applicable local, state and federal laws, rules and regulations and must obtain all permits required for any of the work performed hereunder. Contractor must procure and pay for all permits and inspections required for any of the work performed hereunder and must furnish any bonds, security or deposits required to permit performance of the work. Contractor must, to the extent permissible under applicable law, comply with the jobsite provisions which validly and lawfully apply to work on the specific jobsite being performed under this Contract.

32. **WORK RULES, SECURITY:** For work performed on COMMISSION premises, Contractor shall strictly observe COMMISSION work rules and security requirements. All work shall be carried out during normal COMMISSION working hours unless specifically agreed to in writing by COMMISSION. Contractor shall, at COMMISSION’s request remove from site any employee whom COMMISSION deems to be incompetent, dishonest or uncooperative.

33. **CHANGES:** COMMISSION may, at any time, direct in writing additions, deletions or changes to all or any part of the work. If any such changes cause an increase or decrease in the cost of or in the time required to perform such work, Contractor shall submit detail information substantiating such claims and an equitable adjustment shall be made to the price or time of performance.

34. **RELEASE AGAINST LIENS OR CLAIMS:** Contractor shall promptly pay all claims of persons or firms furnishing labor, equipment or materials used in performing the work hereunder. COMMISSION may require Contractor to submit satisfactory evidence of payment and releases of all such claims. If there is any evidence of any such unpaid claim, the COMMISSION may withhold any payment until Contractor has furnished such evidence of payment and release.

35. **ASSIGNMENT:** Any assignment by Contractor of this Contract or of any rights hereunder or hypothecation thereof in any manner, in whole or in part, by operation of law or otherwise, without the prior written consent of the COMMISSION shall be voided.

36. **SAFETY AND FIRE PREVENTION:** Contractor shall always conduct all operations under the Contract in a manner to avoid risks of bodily harm to persons, damage to any property and fire. Contractor shall be responsible to take all precautions necessary and continuously inspect all work, materials and equipment to discover, determine and correct any such conditions which may result in any of the aforementioned risks.
37. SUSPENSION OF WORK AND TERMINATION: COMMISSION May Suspend Work - The COMMISSION may at any time and without cause suspend the Work or any portion thereof by notice in writing to the Contractor. The Project Manager shall fix the date on which Work shall be resumed and the Contractor will resume the Work on the date so fixed. The Contractor will be allowed an extension of the Contract Time, if directly attributable to any suspension. However, no change to the contract price will be allowed on claims for suspended work or delays, whatever the Cause or reason.

COMMISSION May Terminate for Cause - If the Contractor is adjudged bankrupt or insolvent; if he makes a general assignment for the benefit of his creditors without COMMISSION approval; if a trustee or receiver is appointed for the Contractor or for any of his property; if he files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws; if he fails to prosecute and complete the Work in accordance with the established Project Schedule or within the Contract Time allowed; if he repeatedly fails to supply sufficient skilled workers or suitable materials or equipment; if he repeatedly fails to make prompt payment to subcontractors for labor, materials or equipment; if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction; if he disregards the authority of the Project Manager; or if he otherwise substantially violates any provisions of the Contract Documents, then the COMMISSION may, without prejudice to any other right or remedy and after giving the Contractor and his Surety seven (7) days written notice, terminate the services of the Contractor and take possession of the Work and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and assign the completion of the Work to the Surety, or finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Amount exceeds the direct and indirect cost of completing the Work, including compensation for additional professional services, such excess shall be paid to the Contractor. If such cost exceeds such unpaid balance, the Contractor will pay the difference to the COMMISSION. Such cost incurred by the COMMISSION will be determined by the COMMISSION and incorporated in a Change Order.

Where the Contractor's services have been so terminated by the COMMISSION, said termination shall not affect any rights of the COMMISSION against the Contractor then existing or which may thereafter accrue. Any retention or payment of moneys by the COMMISSION due the Contractor will not release the Contractor from liability.

Upon Termination for Cause, the Contractor shall not be entitled to payment for any anticipated supplemental costs, administrative expenses and/or profit for uncompleted Work. If after notice of termination of the services of the Contractor for cause, it is determined that the Contractor was not in default, the termination shall be deemed to have been for the convenience of the COMMISSION. In such event the Contractor may recover from the COMMISSION payment for Work completed and reasonable termination costs as provided in the following paragraph.
Termination for Convenience: Upon seven (7) days written notice to the Contractor and the Surety, or sooner if reasonable under the circumstances, the COMMISSION may, without cause and without prejudice to any other right or remedy, elect to terminate any part of the Work, or the Contract in whole or in part, as the COMMISSION may deem appropriate. In any termination for convenience, the Contractor shall be paid for work completed, and costs incurred, materials delivered or ordered by the Contractor and subcontractors at the time of termination provided, however, that the payment to the Contractor will exclude any and all anticipated supplemental costs, administrative expenses and profit for uncompleted Work. Upon termination for convenience, the COMMISSION shall have full power and authority to take possession of the Work, assume any sub-agreements with Subcontractors and suppliers which the COMMISSION selects, and prosecute the Work to completion by contract or as the COMMISSION may deem expedient.

Removal of Contractor Employee: The COMMISSION retains the right to require immediate removal of any contractor employee, including the foreman or superintendent if in the COMMISSION's sole determination, it is in the interest of the COMMISSION or the project. Such removal should be immediate and not subject to approval or discussion.

38. **MAINTENANCE OF RECORDS:** The Contractor will keep adequate records and supporting documents applicable to this contract. Said records and documentation will be retained by the Contractor for a minimum of five (5) years from the date of final payment on this Contract. The COMMISSION and its authorized agents shall have the right to audit, inspect and copy records and documentation as often as the COMMISSION deems necessary during the period of this contract and a period of five (5) years after completion of contract performance; provided however, such activity shall be conducted only during normal business hours. The COMMISSION, during the period of time defined by the preceding sentence, shall also have the right to obtain a copy of and otherwise inspect any audit made at the direction of the Contractor as concerns the aforesaid records and documentation.

39. **CONFLICT OF INTEREST OF OFFICERS OR EMPLOYEES OF THE CONTRACTING ENTITY/LOCAL JURISDICTION, MEMBERS OF THE LOCAL GOVERNING BODY, OR OTHER ELECTED OFFICIALS:** No member or employee of the contracting entity/local jurisdiction or its designees or agents; no member of the governing body; and no other public official of the COMMISSION who exercises any function or responsibility with respect to this contract, during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed. Further, the Contractor shall cause to be incorporated in all subcontracts, the language set forth in this paragraph prohibiting conflict of interest.
40. **EMPLOYEE CONFLICT OF INTEREST:** It shall be unethical for any COMMISSION employee to participate directly or indirectly in a procurement contract when the COMMISSION employee knows that:

   (1) The COMMISSION employee or any member of the COMMISSION employee's immediate family has a financial interest in the procurement contract; or

   (2) Any other person, business, or organization with whom the COMMISSION employee or any member of a COMMISSION employee's immediate family is negotiating or has an arrangement concerning prospective employment is involved in the procurement contract.

A COMMISSION employee or any member of a COMMISSION employee's immediate family who holds a financial interest in a disclosed blind trust shall not be deemed to have a conflict of interest with regard to matters pertaining to that financial interest.

41. **GRATUITIES AND KICKBACKS:**

   (1) Gratuities. It shall be unethical for any person to offer, give, or agree to give any COMMISSION employee or former COMMISSION employee, or for any COMMISSION employee or former COMMISSION employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity COMMISSION in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore.

   (2) Kickbacks. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier sub-contractor or any person associated therewith, as an inducement for the award of a subcontract or order.

   (3) Contract Clause. The prohibition against gratuities and kickbacks prescribed in this Section shall be conspicuously set forth in every contract and solicitation therefore.
42. **USE OF PREMISES:** The Contractor will confine his equipment, the storage of materials and equipment, and the operations of his workers to the areas permitted by law, ordinances, permits or the requirements of the Contract Documents and shall not unreasonably encumber the premises with materials or equipment.

The Contractor shall confine the operation of workmen and equipment, and the storage of materials and equipment to the COMMISSION’s property or to other non-COMMISSION property or in public right-of-way areas indicated on the Contract Drawings as including work to be done pursuant to the Contract documents. In the event the Contractor desires to have access to the project site, or perform work or operations pertaining to the contract on, over or from non-COMMISSION property adjacent to the project site, the Contractor shall obtain written authorization to do so from the respective adjacent property owner(s) prior to using such property. Such written authorization shall include a provision whereby the property owner agrees to hold the COMMISSION harmless, and to defend the Utilities Commission, in the event of any liability, loss, injury, or claim incurred as a result of the Contractors work or operations involving the use of the adjacent non-COMMISSION property. The COMMISSION shall be provided with a notarized, certified copy of such written authorization(s) before the Contractor commences work or operations or use of such property in connection with work or operations pursuant to this contract.

43. **EMERGENCIES:** In emergencies affecting the safety of persons, the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Project Manager, is obligated to act at his discretion to prevent threatened damage, injury or loss. He will give the Engineer and or Project Manager prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order shall thereupon be issued covering the changes and deviations involved. If the Contractor believes that additional Work done by him in an emergency which arose from causes beyond his control entitles him to an increase in the Contract Amount or an extension of the Contract Time, he may make a claim.

44. **CHANGES IN THE WORK:** Without invalidating the Agreement, the COMMISSION may, at any time or from time to time, order additions, deletions or revisions in the Work authorized by written Change Orders or directive. Upon receipt of a Change Order, the Contractor will proceed with the work involved. All such work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Amount or any extension or shortening of the Contract Time, an equitable adjustment will be made.

Additional Work performed by the Contractor without authorization of a Change Order will not entitle him to an increase in the Contract Amount or any extension of the Contract Time, except in the case of an emergency.
It is the Contractor's responsibility to notify his Surety of any changes affecting the general scope of the Work or change of the Contract Amount and the amount of the applicable bonds shall be adjusted accordingly, and an amended bond document furnished to the COMMISSION.

In the event the COMMISSION directs the Contractor to make a change in the Work, and if the COMMISSION and the Contractor do not arrive at a mutually acceptable increase of decrease in the Contract Amount, the Contractor shall not use any such lack of mutual acceptance as a basis or cause to stop or otherwise delay the progress or the execution and completion of any of the work ordered, directed or required pursuant to the Contract Documents.

45. PERFORMANCE AND PAYMENT BONDS: In the event the Contract is awarded to the Bidder, he will thereafter enter into a written contract with the Owner and furnish a Payment and Performance Bond in an amount equal to the contract price, in strict accordance with Section 255.05 of Florida Statutes. Payment and Performance Bonds shall be secured from or countersigned by an agency or surety company recognized in good standing and authorized to do business in the State of Florida.

46. BID BOND: Bids shall be accompanied by a security deposit as follows: Bid Bond in the amount of a sum no less than 10 percent of the Bid Price/Sum. Endorse the Bid Bond in the name of the COMMISSION as the obligee, signed and sealed by the principal (Contractor) and surety.

47. HURRICANE OR TROPICAL STORM SUSPENSIONS: During official hurricane season (June 1 to Nov. 30) this provision will be effective. If a hurricane or tropical storm watch or warning is issued for any part of the COMMISSION service area contractors will be required to take the following actions at no added cost to COMMISSION.

1. Cease all work except to secure the completed work and protect any stored materials from storm damage, or from being caught into motion by storm forces that may damage other property.
2. Fill any excavations and secure from erosion and traffic.
3. Collect and remove or secure any loose material or packing from work or storage areas.
4. Remove all materials or equipment from any street or roadway.
5. Remove equipment from the barrier islands.
6. Evacuate all personnel from work areas upon issue of order by emergency services agency.

Contractors may return to work upon lifting of watches and warnings and restoration of public access. Allowance will be made to contract time for storm warning/watch & preparation plus reasonable time (not more than 5 days unless special circumstances warrant) after access is restored if it has been interrupted by official order. No adjustments will be made to the contract prices.
48. **LIQUIDATED DAMAGES:** 
If awarded this construction contract, the Bidder agrees to complete the work covered by this contract as follows:

1. Substantially Complete the overall construction not later than **August 29, 2020.**
2. Final Completion in **THIRTY (30) consecutive calendar days** from substantial completion.

In general, Substantial Completion of the overall construction shall be when the capacitor bank and all equipment has been completed and tested and is ready to be place in-service. Complete requirements are described in the Measurement and Payment section of the Specifications.

Should the Contractor fail to substantially complete work under this Contract on or before the date stipulated for Substantial Completion (or such later date as may result from extensions of time granted by Owner), he shall pay Owner, as liquidated damages, the sum of **$1,655.00 (ONE THOUSAND SIX HUNDRED FIFTY-FIVE DOLLARS)** for each consecutive calendar day that terms of the Contract remain unfulfilled beyond date allowed by the contract, which sum is agreed upon as a reasonable and proper measure of damages which Owner will sustain per deim by failure of Contractor to complete work within time as stipulated; it being recognized by Owner and Contractor to complete on schedule is uncertain and cannot be computed exactly. In no way shall costs for liquidated damages be construed as a penalty on the Contractor.

For each consecutive calendar day that the work remains incomplete after the date established for Final Completion, the Owner will retain from the compensation otherwise to be paid to the Contractor the sum of **$250.00 (TWO HUNDRED FIFTY DOLLARS).** This amount is the minimum measure of damages the Owner will sustain by Failure of the Contractor to complete all remedial work, correct deficient work, clean up the project and other miscellaneous tasks as required to complete all work specified. This amount is in addition to the liquidated damages prescribed above for Substantial Completion.

47. **INDEMNIFICATION FOR TORT ACTIONS/LIMITATION OF LIABILITY:**
The provisions of Florida Statute 768.28 applicable to the Utilities Commission, City of New Smyrna Beach apply in full to this contract. Any legal actions to recover monetary damages in tort for injury or loss of property, personal injury, or death caused by the negligent or wrongful act or omission of any employee of the Utilities Commission acting within the scope of his/her office or employment are subject to the limitations specified in this statute.

No officer, employee or agent of the Utilities Commission acting within the scope of his/her employment or function shall be held personally liable in tort or named as a defendant in any action for injury or damage suffered as a result of any act, event or failure to act.

The Utilities Commission shall not be liable in tort for the acts or omissions of an officer, employee or agent committed while acting outside the course and scope of his/her employment. This exclusion includes actions committed in bad faith or with malicious
purpose, or in a manner exhibiting wanton and willful disregard of human rights, safety, or property.

To the fullest extent permitted by law, the vendor shall defend, indemnify, and hold harmless the Utilities Commission, its officials, agents, and employees from and against any and all claims, suits, judgments, demands, liabilities, damages, cost and expenses (including attorney’s fees) of any kind or nature whatsoever arising directly or indirectly out of or caused in whole or in part by any act or omission of the vendor or its subcontractors (if any), anyone directly or indirectly employed by them, or anyone for whose acts any of them may be liable; excepting those acts or omissions arising out of the sole negligence of the Utilities Commission.

Provided, however, if the contract between the Utilities Commission and the Contractor is deemed by a court of competent jurisdiction to be a construction contract for purposes of Section 725.06, Florida Statutes, any obligation of the Contractor to defend, indemnify or hold harmless the Utilities Commission, shall be limited to an obligation to indemnify or hold harmless the Utilities Commission, its officers and employees from liability damages, losses, and costs, including but not limited to reasonable attorney’s fees, to the extent caused by the negligence, recklessness or intentionally wrongful conduct of the contractor and persons employed or utilized by the Contractor in the performance of the contract.
IDENTICAL TIE BIDS - Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).

4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

VENDOR SIGNATURE
THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted Bid, Bid or Contract for **ITB #07-20 – FIELD STREET CAPACITOR BANK ADDITION**.

2. This sworn statement is submitted by ____________________________

   [name of entity submitting sworn statement] whose business address is:

   ____________________________ and (if applicable) its

   Federal Employer Identification Number (FEIN) is ____________________________.

   If entity has no FEIN, include the Social Security Number of the individual signing this

   sworn statement: ____________________________.

3. My name is ____________________________ and my relationship to the entity named

   above is ____________________________.

4. I understand that a “public entity crime” as defined in Paragraph 287.133 (1) (g), Florida

   Statutes, means a violation of any state of federal law be a person with respect to and directly

   related to the transaction of business with any public entity or with an agency or political

   subdivision of any other state or with the United States, including, but not limited to, any bid

   or contract for goods or services to be provided to any public entity or an agency or political

   subdivision of any other state, or of the United States and involving antitrust, fraud, theft,

   bribery, collusion, racketeering, conspiracy, or material misrepresentation.

5. I understand that “convicted” or “conviction” as defined in Paragraph 287.133 (91) (b), Florida

   Statutes means a finding of guilt or a conviction of a public entity crime, with or without

   adjudication of guilt, in any federal or state trial court or recording, relating to charges brought

   by federal or state trial court or recording, relating to charges brought by federal or state trial

   court or recording, relating to charged brought by indictment or information after July 1, 1989,

   as a result of just verdict, non-jury trial, or entity of a plea of guilty or nolo contendere.

6. I understand the “affiliate” as defined in Paragraph 287.133(1)(a), Florida Statutes, means: (1)

   A Predecessor or Successor of a person convicted of public crime: or (2) An entity under the

   control of any natural person who is active in the management of the entity and who has been

   convicted of a public entity crime. The term “affiliate” includes those officers, directors,

   executives, partners, shareholder, employees, members, and agents who are active in the

   management of an affiliate. The ownership by one person of shares constituting a controlling

   interest in another person, or a pooling of equipment or income among persons when not for

   fair market value under an arm’s length agreement, shall be a prima facie case that one person

   controls another person. A person who knowingly enters into a joint venture with a person who

   has been convicted of public crime in Florida during the preceding 36 months shall be

   considered an affiliate.
7. I understand that a “person” as defined in Paragraph 287.133(1) (e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provisions of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members and agents who are active in management of an entity.

8. Based on information and belief, that statement which I have marked below is true in relation to the entity submitting this sworn statement. [Please indicate which statement applies]

   ____ Neither the entity submitting this sworn statement, or one more of the officers, directors, executives, partners, shareholders, employees, members or agents who are active in the management of the entity, nor any affiliate or the entity, has been charged with and convicted of a public entity subsequent to July 1, 1989, AND [Please indicate which additional statement applies.]

   ____ There has been a proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. [Please attach a copy of the final order.]

   ____ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. [Please attach a copy of the final order.]

   ____ The person or affiliate has not been placed on the convicted vendor list. [Please describe any action taken by or pending with the Department of General Services.]

Date

Signature

STATE OF: ___________________ COUNTY OF: ___________________

PERSONALLY APPEARED BEFORE ME, the undersigned authority, ____
[name of individual signing] who after first sworn by me affixed his/her signature in the space provided above on this day of ________________, 20___.

My commission expires: Personally known to me, or

Print, Type or Notary Stamp Type of I.D.

Notary Public
UTILITIES COMMISSION
CITY OF NEW SMYRNA BEACH, FLORIDA

ITB #07-20
FIELD STREET CAPACITOR BANK ADDITION

NON-COLLABORATION AFFIDAVIT OF PRIME BIDDER FORM

State of _______________

County of _______________

_____________________________________, being first duly sworn, deposes and says that:

He/she is _______________ of __________________, Bidder that has submitted the attached Bid;

He/she is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

Neither the said Bidder nor any of its officers, partners, owners, agent representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person, to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the COMMISSION.

The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

_____________________________________

Signed

_____________________________________

Title

Subscribed and sworn to before me this _____ day of ________, 20__.

_____________________________________

Title

My Commission Expires: ________________
AUTHORIZED SIGNATURES/NEGOTIATORS

The BIDDER or proposer represents that the following persons are authorized to sign and/or negotiate contracts and related documents to which the BIDDER or proposer will be duly bound:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone #</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Signature)</td>
<td>(Title)</td>
<td></td>
</tr>
<tr>
<td>(Name of Business)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The BIDDER/offeror shall complete and submit the following information with the bid or proposal:

Type of Organization

_____ Sole Proprietorship    _____ Partnership

_____ Joint Venture          _____ Corporation

State of Incorporation:  

Federal I.D. or Social Security number is:  
UTILITIES COMMISSION
CITY OF NEW SMYRNA BEACH, FLORIDA

ITB #07-20
FIELD STREET CAPACITOR BANK ADDITION

REQUEST FOR TAXPAYER IDENTIFICATION NUMBER AND CERTIFICATION W-9 FORM

Submit under Bid Submittal Requirements, Tab #5.
VENDOR APPLICATION

In addition to General conditions, your **BID** may be disqualified if the following vendor information is not returned with your **BID**.

Vendor is:
( ) Corporation
( ) Partnership
( ) Sole Proprietorship
( ) Other____________________________(Explain)

Federal Employer Identification Number or Social Security Number: ____________________________

Do you collect Florida State Sales Tax? ( ) Yes ( ) No

Firm Name: ____________________________________________

Mailing Address: ________________________________________

________________________________________________________________________

Telephone No. ________________ Fax No. ________________

Email Address: ________________ Web Address: __________

Commodity or Service Supply: ________________________________________

If vendor is quoting, as a manufacturer’s representative and the purchase order should be addressed to the manufacturer in care of the vendor, so indicate.

If remittance address is different from the mailing address so indicate below.

Firm Name: ____________________________________________

Mailing Address: ________________________________________

________________________________________________________________________

________________________________________________________________________

Submitted by: ________________________________

Name & Title Printed: ________________________________________
ITALIES COMMISSION
CITY OF NEW SMYRNA BEACH, FLORIDA

ITB #07-20
FIELD STREET CAPACITOR BANK ADDITION

QUESTIONNAIRE

Additional space may be required. Please answer questions in the order presented. All questions must be answered or contractor may be disqualified.

1. Has your company ever been denied insurance or had insurance canceled?

2. Is your company bondable? Has your company ever been denied bond? If yes, explain.

3. Can your insurance company produce a certificate of insurance stating your limits and naming UCNSB as an Additional Insured?

4. Since January 1, 2015, has your company been a defendant in any lawsuits?

5. Is your company a subsidiary or otherwise legally affiliated with any other company?

6. Is your company rated by Dunn & Bradstreet or any other rating agency? If yes, what is the name of the agency and rating?

7. Is your company in any stage of bankruptcy, including initial filing?

8. Has your company been disbarred by the Federal Government or any State Government?

9. How many employees does your company have?

   Staff Employees:   Full Time_________   Part Time_________

   Contract Employees: Full Time_________   Part Time_________
REQUIRED DISCLOSURE

At its sole discretion, the COMMISSION may reject any bidder the COMMISSION finds to lack, or whose present or former executive employees, officers, directors, stockholders, partners or owners are found by the COMMISSION to lack honesty, integrity, or moral responsibility. The discretion of the COMMISSION may be exercised based on the COMMISSION’S own investigation, public records, or any other reliable sources of information. By submitting a bid, bidder recognizes and accepts that the COMMISSION may reject the bid based upon the exercise of its sole discretion and bidder waives any claim it might have for damages or other relief resulting from the rejection of its bid based on these grounds.
BID SUBMITTAL REQUIREMENTS

Bids shall include all of the information solicited in this ITB, and any additional information that the BIDDER deems pertinent to the understanding and evaluating of the bid. Bids shall be organized, and sections tabbed in the following order. The BIDDER should not withhold any information from the written response in anticipation of presenting the information orally or in a demonstration, since oral presentations or demonstrations may not be solicited. All bids shall include, at a minimum, the following information. Failure to supply all of the information requested shall result in the bid being excluded from consideration. The COMMISSION reserves the right to request information or clarification from bidders following the bid opening if omissions are deemed curable.

TAB #1 Experience:
Provide a profile showing company history, business structure, and a list of principals. A minimum of **five (5) years** in business is required.

TAB #2 References:
Submit a detailed list of clients receiving similar services within the last **five (5) years**. Please include a brief description of the scope of work performed and the name, phone number and email address of the contact person.

TAB #3 Pricing:
Complete, sign and submit the Bid Tabulation and Bid Form.

TAB #4 License and Insurance:
Submit a current Occupational License, from an authorizing government agency, and a current Certificate of Insurance. The COMMISSION does not need to be named as an Additional Insured at this time but this is a requirement when work commences.

TAB #5 Other Required Forms:
Complete, sign, notarize (if required) and submit the following:
A. Certification of Drug-Free Workplace
B. Public Entity Crimes
C. Non-Collusion Affidavit of Prime Bidder
D. Authorized Signatures/Negotiators
E. Taxpayer Identification Number and Certification W-9
F. Vendor Application
G. Questionnaire
H. Compliance with the Florida Trench Safety Act

TAB #6 Addenda Acknowledgement:
Complete, sign and submit all addenda (if any).
BIDDER hereby acknowledges that all costs for complying with the Florida Trench Safety Act (553.60-553.64 inclusive Florida Statutes) are included in the various items of the proposal and in the total bid price. For informational purposes only, the BIDDER is required to further identify these costs to be summarized below:

<table>
<thead>
<tr>
<th>Trench Safety Measure (Description)</th>
<th>Unit of Measure (LF, SY)</th>
<th>Unit (Quantity)</th>
<th>Extended Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**THIS IS NOT A PAY ITEM.** The purpose of this form is to disclose information on the costs associated with trench safety measures and to insure that the BIDDER has considered these costs and has included them in the bid price. Contractor will not receive additional payment if actual quantities differ from those estimated above or if the contractor uses a safety measure different than those listed.

Failure to complete the above form, if applies to BID, may result in the BID being declared non-responsive.
BIDDER NAME: __________________________________________________________

The COMMISSION is seeking a Qualified Certified Substation Construction Contractor licensed in the State of Florida to complete the following scope of work.

Provide management and administration, labor and supervision, construction tools and equipment, materials and expendables, and temporary and permanent construction services to perform the individual construction items of work for the FIELD STREET CAPACITOR BANK ADDITION PROJECT, complete, including overhead and profit.

The project location is the Field Street Substation, located at 1050 Field Street, New Smyrna Beach, Florida, east of I-95 and south of SR-44 (Volusia County).

In general, the project involves furnishing and installing a 115kV capacitor bank, 115kV circuit breaker, disconnect switch, instrument transformers, protective relay panel, underground conduit, and control cable.

Construction items of work will include material procurement, temporary construction and protection, fencing and gates, foundation installation, conduit installation, grounding, yard cover, owner-furnished equipment installation, substation structures and supports, substation devices and bus materials, relay and control panels, power and control cable installation, wiring and testing, modifications and removals, and project documentation. All work shall be completed per the requirements of the Construction Drawings, Technical Specifications, and approved submittals.

Only the following major items of substation equipment will be Owner-furnished:
- Disconnect Switch, 3-Phase Gang Operated, 138kV 650kV BIL, 2000A vertical break, Southern States EV-2, quantity 1;

Some construction items of work can be completed without taking a clearance outage. Other items of work will require a clearance outage on either a transmission line, or a segment of substation bus, or of the existing substation power transformers.

The contractors or other qualified Bidders on the construction covered by this proposal, along with their suppliers and sub-contractors, are considered to be experts in the procurement and installation of substation and transmission materials, and as experts, should have complete and up-to-date information as to the cost of raw materials, labor and other factors affecting the final price of such construction. Therefore, firm price proposals are specifically requested.

Contractor shall provide insurance, materials, tools, labor, equipment and supervision to perform all work necessary to complete this scope of work. Contractor shall reference plans and specifications attached for further detail.
CONTRACTOR SHALL SUBMIT WARRANTIES AND A CONSTRUCTION SCHEDULE WITH BID SUBMITTAL.

Contractor is responsible for staging area and storage of materials. The COMMISSION will pay for installed materials only.

Contractor is responsible for all Maintenance of Traffic Devices, including obtaining an approved Maintenance of Traffic Plan from FDOT, the County of Volusia, and the City of New Smyrna Beach.


All construction is subject to the COMMISSION’s inspection.
BIDDER NAME: ____________________________________________

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Est. Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Procure Substation Material Package</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td>Procure Relay / Control Panel Package</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td>Site Work and Yard Cover</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td>Fences and Gates</td>
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<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td>Conduit and Boxes</td>
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<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>Substation Grounding</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>7</td>
<td>Substation Foundations</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>8</td>
<td>Install Owner-Furnished Disconnect Switch</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>9</td>
<td>Capacitor Bank</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>10</td>
<td>SF6 Circuit Breaker</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>11</td>
<td>Install Substation Materials</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>12</td>
<td>Substation Relocations and Removals</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>13</td>
<td>Panelboards, Power and Control Cables</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>14</td>
<td>Relay / Control Panel</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>15</td>
<td>Testing and Documentation</td>
<td>1</td>
<td>LS</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>16</td>
<td>Contingency</td>
<td>1</td>
<td>LS</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

TOTAL NUMERIC BID COST $ ____________________________

TOTAL WRITTEN BID COST: ____________________________
## UNIT PRICES

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Additional 5/8” x 10’ Ground Rod (Transmission)</td>
<td>each</td>
<td>$__________</td>
</tr>
<tr>
<td>B</td>
<td>Additional Concrete</td>
<td>yard</td>
<td>$</td>
</tr>
<tr>
<td>C</td>
<td>Additional Rebar</td>
<td>lb.</td>
<td>$</td>
</tr>
<tr>
<td>D</td>
<td>Additional Control Cable</td>
<td>CLF</td>
<td>$</td>
</tr>
<tr>
<td>E</td>
<td>Additional SIS Panel Wire</td>
<td>CLF</td>
<td>$</td>
</tr>
</tbody>
</table>
Insert Contractor & Manufacturer warranties and Qualification documents after this page.

Installer shall be certified by Manufacturer.

Dewatering: Any and all dewatering activities shall be permitted by the contractor or their sub-contractors. In any event, a copy of the dewatering permit shall be submitted to the UCNSB prior to dewatering activities. If no permit is required, the contractor shall provide the UCNSB with written affirmation that no permit is required. Said affirmation must be from the FDEP.

Line Item 16, Contingency: Contractor shall include fixed $25,000.00 contingency for this project. It will be returned to COMMISSION if not used. Use of contingency funds must be requested in writing from the contractor to the COMMISSION designated project manager. All contingency requests must include support for the use of funds and must be approved by the COMMISSION’s project manager and director of engineering. Contingency funds are available for building permit fees, permit fees, minor discrepancies between field conditions and the plans and specifications and may be used to adjust for quantity changes to listed bid items.

BIDDERS must sign BID FORM.
BIDDER NAME: ________________________________

Pursuant to, and in compliance with, COMMISSION’S ADVERTISEMENT FOR BID dated DECEMBER 16, 2019 and the INFORMATION FOR BIDDERS AND OTHER CONTRACT DOCUMENTS relating hereto, the undersigned hereby proposes to furnish all tools, labor, equipment and materials to perform all the work necessary for the ITB #07-20 – FIELD STREET CAPACITOR BANK ADDITION for the UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, VOLUSIA COUNTY, FLORIDA, all as required by and in strict accordance with the Contract Documents, Schedules, Scope of Work and Construction Plan, at the prices listed in the Bid Tabulation enclosed.

The undersigned BIDDER agrees to commence work within FOURTEEN (14) CALENDAR DAYS after the date of the Notice-to-Proceed letter, to submit Shop Drawings within SIXTY (60) CALENDAR DAYS after the date of the Notice-to-Proceed letter, and shall complete the Work described in the Bid Scope of Work and the Bid Tabulation (Substantial Completion) within ONE HUNDRED FIFTY (150) CONSECUTIVE CALENDAR DAYS thereafter.

The undersigned BIDDER hereby represents that the Drawings and the Contract, including all Contract Documents, have been carefully examined and the BIDDER will execute the Contract and perform all its items, covenants and conditions, all in strict compliance with the requirements of the specifications and drawings. The BIDDER, by and through the submission of his bid, agrees that he has examined and that he shall be held responsible for having heretofore examined the site, the location and route of all proposed work and for having satisfied himself as to the character of the route, the location, surface and underground obstruction, the nature of the groundwater conditions, and all other physical characteristics of the Work, in order that he may include in the prices which he bid, all costs pertaining to the Work and thereby provide for the satisfactory completion thereof, including the removal, relocation or replacement of any objects or obstructions which will be encountered in doing the proposed Work.

BIDDERS must sign BID FORM.
The undersigned hereby declares that the following list states any and all variations from, and exceptions to, the requirements of the instruction and specifications.

________________________________________________________________________

These Prices are valid for orders placed within ninety (90) days from date of fully executed Contract Documents.

Submitted By:

Company ________________________________

Name and Title __________________________ Signature __________________________

Telephone No. __________________________ e-mail__________________________

The COMMISSION reserves the right to award the contract to the Bidder(s) that the COMMISSION deems to offer the best overall bid. The COMMISSION is therefore not bound to accept a bid on the basis of lowest price. In addition, the COMMISSION at its sole discretion, reserves the right to cancel this Bid, to reject any and all bids, to waive any and all informalities and/or irregularities, to re-advertise with either the identical or revised specifications, or not award a contract at all if it is deemed to be in the best interest of the COMMISSION to do so. The COMMISSION also reserves the right to make multiple or split awards if it is deemed to be in the COMMISSION’S best interest. The COMMISSION shall not be responsible for any cost or expense incurred by the Bidder in preparing or submitting a bid or any cost prior to the execution of a contract agreement.

As representative for the PROPOSER, I have read and understand this statement.

Name and Title________________________ Signature __________________________

BIDDERS MUST SIGN BID FORM.
If you do NOT intend to bid on this requirement/project, please return this form immediately. Thank you, Utilities Commission, City of New Smyrna Beach, Florida

We, the undersigned have declined to submit a bid due to the following reason(s):

Specifications too “tight”, i.e. geared toward one brand/manufacturer service only (explain below).
Unable to meet time period for responding to bid.
We do not offer this product or service.
Our schedule would not permit us to perform.
Unable to meet specifications.
Unable to meet Bond/Insurance requirement(s).
Specifications unclear (explain below).
Unable to meet insurance requirements.
Please remove us from your “bidder’s list”.
Other (specify below).

REMARKS:  


We understand that if the “No Bid” letter is not executed and returned our name may be deleted from the bidder’s list of the Utilities Commission, City of New Smyrna Beach, FL.

Company Name: __________________________   E-mail: __________________________

Bid Number: __________________________   Date: __________________________

Signature: __________________________   Fax: __________________________

Telephone: __________________________
<table>
<thead>
<tr>
<th>Description</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validity of Bid, if different than 90 days</td>
<td></td>
</tr>
<tr>
<td>Foundations Subcontractor (name)</td>
<td></td>
</tr>
<tr>
<td>(address)</td>
<td></td>
</tr>
<tr>
<td>Electrical Testing Subcontractor (name)</td>
<td></td>
</tr>
<tr>
<td>(address)</td>
<td></td>
</tr>
<tr>
<td>Other (identify service) Subcontractor</td>
<td></td>
</tr>
<tr>
<td>(address)</td>
<td></td>
</tr>
<tr>
<td>Subcontractor</td>
<td></td>
</tr>
<tr>
<td>(address)</td>
<td></td>
</tr>
<tr>
<td>Substation Packager (name)</td>
<td></td>
</tr>
<tr>
<td>Relay / Control Panel Supplier (name)</td>
<td></td>
</tr>
<tr>
<td>Concrete Supplier (name)</td>
<td></td>
</tr>
</tbody>
</table>
## SCHEDULE OF VALUES

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Material</th>
<th>Labor/Equipment</th>
<th>Total (match Bid Form)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Procure Substation Material Package</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td>Procure Relay / Control Panel Package</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td>Site Work and Yard Cover</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td>Fences and Gates</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td>Conduit and Boxes</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>Substation Grounding</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>7</td>
<td>Substation Foundations</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>8</td>
<td>Install Owner-Furnished Disconnect Switch</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>9</td>
<td>Capacitor Bank</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>10</td>
<td>SF6 Circuit Breaker</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>11</td>
<td>Install Substation Materials</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>12</td>
<td>Substation Relocations and Removals</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>13</td>
<td>Power and Control Cables</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>14</td>
<td>Relay / Control Panel</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>15</td>
<td>Testing and Documentation</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>16</td>
<td>Contingency</td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>
### Information to be Furnished with Bid - Sheet 3

**SCHEDULE OF VALUES**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Material</th>
<th>Labor/Equipment</th>
<th>Total (match Bid Form)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Additional 5/8” x 10’ Ground Rod (Transmission)</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>B</td>
<td>Additional Concrete</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>C</td>
<td>Additional Rebar</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>D</td>
<td>Additional Control Cable</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>E</td>
<td>Additional SIS Panel Wire</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>
KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned,
______________________________ as Principal, and ______________________________
______________________________ as Surety, are hereby held and firmly bound unto
the Utilities Commission, City of New Smyrna Beach, Florida as Owner in the penal sum of, (ten
percent (10%) of the Contract Bid) ________________________________
for the payment of which, well and truly to be made, we hereby jointly and severally bind
ourselves, successors and assigns to pay Owner upon default of Bidder the penal sum set forth on
the face of this Bond.

Signed, this_________________________ day of_____________________, 20_______

The condition of the above obligation is such that whereas the Principal has submitted to the
Utilities Commission, City of New Smyrna Beach, Florida a certain Bid, attached hereto and
hereby made a part hereof, to enter into a contract in writing, for the Project Name Project.

NOW THEREFORE,

1. Default of Bidder shall occur upon failure of Bidder to deliver within the time
required by the Bidding Documents the executed Agreement required by the
Bidding Documents and any performance and payment bonds required by the
bidding documents and Contract Documents.

2. This obligation shall be null and void if:

2.1 Owner accepts Bidder’s bid and Bidder delivers within the time required by
the Bidding Documents (or any extension thereof agreed to in writing by
Bidder and, if applicable, consented to by Surety when required by
paragraph 5 hereof).

2.2 All bids are rejected by the Owner, or
2.3 Owner fails to issue a notice of award to bidder within the time specified in
the Bidding Documents (or any extension thereof agreed to in writing by
Bidder and, if applicable, consented to by Surety when required by
paragraph 5 hereof).

3. Payment under this bond will be due and payable upon default of Bidder and within
thirty (30) calendar days after receipt of Bidder and Surety of written notice of
default from Owner which notice will be given with reasonable promptness,
identifying this Bond and the Project and including a statement of the amount due.

4. Surety waives notice of any and all defenses based on or arising out of any time
extension to issue notice of award agreed to in writing by Owner and Bidder,
provided that the time for issuing notice of award including extensions shall not in
the aggregate exceed one hundred twenty (120) days from Bid Due without
Surety’s written consent.

5. No suit or action shall be commenced under this Bond prior to thirty (30) calendar
days after the notice of default required in paragraph 3 above is received by Bidder
and Surety, and in no case later than one year after Bid Due Date.

6. Any suit or action under this Bond shall be commenced only in a court of
competent jurisdiction located in Volusia County, Florida.

7. Notice required hereunder shall be in writing and sent to Bidder and Surety at their
respective addresses shown on the face of this Bond. Such notices may be sent by
personal delivery, commercial courier or by United States Registered or Certified
Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective
upon receipt by the party concerned.

8. Surety shall cause to be attached to this Bond a current and effective Power of
Attorney evidencing the authority of the officer, agent or representative who
executed this Bond on behalf of Surety to execute, seal and deliver such Bond and
bind the Surety thereby.
9. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of the Bond conflicts with any applicable provision of any applicable statute, then the provisions of said statute shall govern and the remainder of the Bond that is not in conflict therewith shall continue in full force and effect.

10. The term “bid” as used herein includes a bid, offer or proposal as applicable.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal (Print Full Name)  
______________________________  

Surety (Print Full Name)  
______________________________  

By:____________________________(L. S.)  
Signature (attach power of attorney)

Title:____________________________  
Title:____________________________  

Attest:____________________________  
Signature and Title

Attest:____________________________  
Signature and Title

IMPORTANT – Surety companies executing bonds must appear on the Treasury Department’s most current list (Circular 570 as amended) and be authorized to transact business in the State of Florida.

END OF SECTION
This Agreement is by and between the Utilities Commission, City of New Smyrna Beach, Florida (herein called Owner) and LOW BIDDER NAME Contractors, Inc. (herein called Contractor).

Owner and Contractor, in consideration of the mutual covenants herein set forth, agree as follows:

ARTICLE 1 – WORK

1.01. Contractor shall complete all Work as specified or indicated in the Contract Documents based on the acceptance by Owner of Contractor’s Bid.

The Work is generally described as follows:

SCOPE OF WORK

ARTICLE 2 – CONTRACT PRICE

2.01. Owner shall pay Contractor for completion of the Work designated in Article 1 in accordance with the Contract Documents, based on Unit Prices as indicated in Contractors Bid Tabulation for ITB #07-20 – FIELD STREET CAPACITOR BANK ADDITION with a guaranteed maximum price amount of: Written Dollar Amount ($###,###.##).
ARTICLE 3 – PAYMENT PROCEDURES

3.1. Submittal and Processing of Payments
A. Contractor shall submit Applications for Payment in accordance with Article 9 of the General Terms and Conditions. Applications for Payment will be processed by Owner as provided in the General Terms and Conditions.

3.2. Progress Payments
A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment. All progress payments will be on the basis of the progress of the Work measured established in the General Terms and Conditions.

B. Consent of the Surety shall be obtained before final payment is paid by Owner. Consent of the Surety, signed by an agent, must be accompanied by a certified copy of such agent's authority to act for the Surety.

3.3. Final Payment
A. Upon completion and acceptance of the Work in accordance with the General Terms and Conditions, Owner shall pay the remainder of the Contract Price as provided in the General Terms and Conditions.

ARTICLE 4 – CONTRACTOR'S REPRESENTATIONS

4.01. In order to induce Owner to enter into this Agreement, Contractor makes the following representations:

A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.

B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, and performance of the Work.

C. Contractor is familiar with and is satisfied as to all Federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Contractor has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including application of the specific means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by Contractor, and safety precautions and programs incident thereto.
E. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

F. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
G. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Drawings, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

H. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 5 – CONTRACT DOCUMENTS

5.1. The Contract Documents which comprise the entire agreement between Owner and Contractor concerning the Work consist of the following:

1. Section 00500 – Agreement.
2. Contractor Submitted Bid Document.
3. ITB #07-20
4. Bid Addenda (if applicable).
5. Performance and Payment Bond.
7. Certificate of Insurance.
8. Contract Drawings
9. Contract Specifications
10. Notice of Award.
11. Notice to Proceed.

5.2. The Contract Documents may be amended, modified, or supplemented only as provided in General Terms and Conditions.

ARTICLE 6 – MISCELLANEOUS

6.1. Term.

A. Terms used in this Agreement will have the meanings indicated in the General Terms and Conditions

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and specifically, but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be
limited by law); and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

6.3. Successors and Assigns.
A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

Contractor shall allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, made or received by the Contractor in conjunction with this project. Specifically, the Contractor must:

(1) Keep and maintain public records that ordinarily and necessarily would be required by the Owner in order to perform the services being performed by the Contractor.

(2) Provide the public with access to public records on the same terms and conditions that the Owner would provide the records and at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

(3) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law.

(4) Meet all requirements for retaining public records and transfer, at no cost, to the Owner all public records in possession of the Contractor upon termination of the contract and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the Owner in a format that is compatible with the information technology systems of the Owner.

The Contractor shall promptly provide the Owner with a copy of any request to inspect or copy public records in possession of the Contractor and shall promptly provide the Owner a copy of the Contractor’s response to each such request. Failure to grant such public access will be grounds for immediate termination of this contract by the Owner.

6.4. Severability.
A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

6.5. Business Addresses.
A. The business address of Contractor given herein is hereby designated as the place to which all notices, letters, and other communication to Contractor will be mailed or delivered. The address
of Owner appearing herein is hereby designated as the place to which all notices, letters, and other communication to Owner shall be mailed or delivered. Either party may change its address at any time by an instrument in writing delivered to the other party.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. One counterpart each has been delivered to Owner and Contractor.

This Agreement will be effective on____________________, 2019.

Owner: Utilities Commission, City of New Smyrna Beach, FL

Contractor: ____________________________

By: Joseph G. Bunch
Title: General Manager and CEO
Address for giving notices:
Julie Couillard, P.E.
P.O. Box 100
New Smyrna Beach, FL 32170-0100

Physical Address: 200 Canal Street
New Smyrna Beach, FL 32168

Approved as to Form:
Contractor’s License No.__________________

Expiration Date:__________________________

Thomas A. Cloud, Attorney for Owner

END OF SECTION
UTILITIES COMMISSION  
CITY OF NEW SMYRNA BEACH, FLORIDA  

ITB #07-20  
FIELD STREET CAPACITOR BANK ADDITION  

PERFORMANCE AND PAYMENT BOND – SECTION 00645  
(TO BE COMPLETED BY UCNSB AND CONTRACTOR AFTER BID IS AWARDED)  
(PAYMENTS WILL NOT BE MADE TO CONTRACTOR UNTIL A RECORDED COPY OF THE PERFORMANCE AND PAYMENT BOND ARE SUBMITTED TO THE COMMISSION)  

PUBLIC CONSTRUCTION BOND  

Bond No. (enter bond number)  

BY THIS BOND, We______________________________, as Principal and______________________________, a corporation, as Surety, are bound to UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH, FL., herein called Owner, in the sum of ______________________$, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.  

THE CONDITION OF THIS BOND is that if Principal:  

1. Performs the contract dated______________________________, 2020, between Principal and Owner for construction of ITB #07-20 – FIELD STREET CAPACITOR BANK ADDITION, the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and  

2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and  

3. Pays Owner all losses, damages, expenses, costs, and attorney’s fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract; and  

4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.  

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.  

Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes does not affect Surety’s obligation under this bond.  

DATED ON______________________________, 2020.  

(Name of Principal)  
By:  

(Name of Surety)  
By:  

Attorney in Fact  

END OF SECTION  

SECTION 00645  
ITB #07-20  

49
PART 1 - GENERAL

1.1 DESCRIPTION
   A. This Section 01000 includes:
      1. Protection and Restoration of Property.
      2. Change Orders.
      4. Traffic Control.
      5. Survey Work.
      6. Existing Utilities.
      7. Special Conditions.
      8. Coordination.
      9. Abbreviations and Symbols.
   B. Related work specified elsewhere includes:
      Project Specific Conditions - Section 01010.
      Application for Payment - Section 01027.
      Measurement and Payment - Section 04400.

1.2 PROTECTION AND RESTORATION OF PROPERTY
   A. The Contractor shall not enter upon private property for any purpose without first
      obtaining permission and he shall use every precaution necessary to prevent
      damage or injury to any public or private property, trees, fences, monuments, and
      underground structures, etc., on and adjacent to the site of the work.
   B. The Contractor shall not do any work that would affect any pipeline, telephone,
      telegraph, or electric transmission line, or other structure. The Contractor shall not
      enter upon the right-of-way or other lands appurtenant thereto, until authority
      therefore has been secured from the proper persons.
   C. The Contractor shall be responsible for all damage or injury to property of any
      person or entity resulting from any act, omission, neglect or misconduct in his
      manner or method of executing said work, from his non-execution of said work, or
      from defective work or materials. The Contractor shall not be released from said
      responsibility until the work shall have been completed and accepted and the
      contract requirements fulfilled.
   D. When or where any direct or indirect damage or injury is done to public or private
      property by or on account of any act, omission, neglect, or misconduct in the
      execution of the work, or in consequence of the non-execution thereof on the part
      of the Contractor, or any act in the proper completion of work, the Contractor shall
      restore such property, at his own expense, to a condition equal or better to that
      existing before such damage or injury was done by repairing, rebuilding, or
      otherwise restoring, as may be directed. If not possible, the Contractor shall make
      good such damage or injury in a manner acceptable to the damaged or injured party.
1.3 CHANGE ORDERS
A. The Owner or Engineer may at any time make changes within the general scope of the project, issue additional instructions, require additional work or direct the omission of portions of the work; provided, however, that the Contractor shall not proceed with any change involving an increase or decrease in contract sum, without prior written authorization from the Owner or Engineer in accordance with the procedure outlined hereunder.

B. The Owner or Engineer shall order changes in the project by giving the Contractor a written change order request (“Change Order Request”), setting forth in detail the nature of the requested change. Within ten (10) days of receipt of a Change Order Request, the Contractor shall furnish to the Owner or Engineer a statement setting forth in detail, with a suitable break-down by quantity and unit price the Contractor’s estimate of the changes in the contract sum. If the Owner approves in writing such estimate by the contractor, such Change Order Request and such estimate shall constitute a Change Order, and the additional funds will be paid from the “Contingency” item in the Schedule of Values, as set forth in the Contractor’s estimate. This procedure shall apply to both additive and deductive change orders.

C. The Owner or Engineer may make minor changes to the work not involving a change in the contract sum without the use of a Change Order.

D. Additional work performed by the Contractor without authorization of a Change Order is done at its own risk and will not entitle it to an increase in the Contract Price or an extension of the Contract Time.

1.4 PUBLIC ACCESS AND CONVENIENCE
A. At all points in the work where public access to any building, house, place of business, public road, or sidewalk would be obstructed by any section of the Contractor in executing the work required by this Contract, the Contractor shall provide such temporary structure, bridges or roadway as may be necessary to maintain public access at all times. At least one lane for vehicular traffic shall be maintained in streets on which the Contractor is working unless otherwise authorized by the Engineer in writing.

B. Prior to temporarily cutting off access to driveways and garages, the Contractor shall give 24 hours notice to affected property owners. Interruptions to use of private property shall be kept to a minimum. The Contractor is responsible for and may make other suitable arrangements with owners of private driveways in lieu of the requirement of this Section.

C. Materials stored at the site of the work shall be so placed and the work shall at all times be so conducted as to cause minimum obstruction to vehicular or pedestrian traffic. No roadway shall be closed or opened except by express permission of the City, County or such other authorized public agency having jurisdiction.
D. The Contractor shall exercise precaution at all times for the protection of persons and property. The safety provisions of applicable laws, building codes and construction codes shall be observed.

1.5 TRAFFIC CONTROL
A. It shall be the responsibility of the Contractor in performance of the work elements of the Contract to furnish all traffic control equipment and personnel.
B. The Contractor shall provide bypasses, crossings, and other means for the maintenance of one-way traffic in all streets, and two-way traffic wherever possible, in all streets where work is in progress. The Contractor shall plan and schedule his operations to impose the least possible interference with normal traffic flow. Any such interference shall be cleared with the applicable local, County or State agency prior to beginning construction.
C. The Contractor shall provide, erect, and maintain effective barricades, danger signals, and signs on all intercepted streets or highways and in other locations where required for the protection of the work and the safety of the public. Barricades or obstructions which encroach on, or are adjacent to public rights-of-way shall be provided with lights which shall be kept burning at all times between sunset and sunrise. Conformity with State, County and local laws and regulations is required in the use of streets and highways. The Contractor shall be responsible for all damages resulting from any neglect or failure to meet these requirements. Watchmen shall be provided as required by local regulations or as necessary to fulfill the requirements stated herein.
D. The State of Florida Department of Transportation "Utility Accommodation Guide Procedure 616-400" and its "Uniform Manual for Traffic Control Devices" shall be followed as applicable. Additionally, traffic control requirements shall meet all local, State and Federal requirements.

1.6 SURVEY WORK
A. Prior to commencing work, the Contractor shall satisfy himself as to the accuracy of all survey or existing site information as indicated in the Drawings or Specifications. Should the Contractor discover any errors, inaccuracies or omissions in the survey data, he shall immediately notify the Engineer. The commencing of any of the work by the Contractor shall be held as the Contractor's acceptance that all survey or existing site information is correct and accurate, without any reasonably inferable errors, inaccuracies or omissions.
B. The Contractor shall engage a Florida Registered Land Surveyor to carefully survey and place all control stakes, benchmarks, reference points and property corners and will be responsible for any mistake or loss of time caused by their unnecessary loss or disturbance. If the loss or disturbance of the stakes or marks cause a delay in the Work, the Contractor shall have no claim for damages or extension of time. Control stakes, benchmarks, reference points and property corners disturbed by the Contractor's work shall be replaced by a Florida Registered Land Surveyor and Mapper, at the Contractor's expense. In the event the Owner must provide the services of the Florida Registered Surveyor and Mapper to perform this replacement work, the cost of the surveying services will be deducted from any sums due the Contractor for the work performed under this Contract.

C. All survey work shall be performed under the guidance and direction of a Florida Registered Surveyor and Mapper.

D. All survey work for Record Drawings shall be performed by a Florida Registered Surveyor and Mapper.

1.7 EXISTING UTILITIES
A. All existing utilities shown on the Drawings are located according to the information available to the Engineer at the time the Drawings were prepared and have not been independently verified by the Owner or the Engineer. Guarantee is not made that all existing underground utilities are shown or that the locations of those shown are accurate. The locations shown are for bidding purposes only. Finding the actual location of any existing utilities is the Contractor's responsibility and shall be done before he commences any work in the vicinity. Furthermore, the Contractor shall be fully responsible for any and all damages which might be occasioned by the Contractor's failure to exactly locate and preserve any and all underground utilities. The Owner or Engineer will assume no liability for any damages sustained or costs incurred because of the Contractor's operations in the vicinity of existing utilities or structures, nor for temporary bracing and shoring of same. If it is necessary to shore, brace, or swing a utility, the utility company or department affected shall be contacted and their permission obtained regarding the method to use for such work.

B. It is the Contractor's responsibility to locate all underground utilities before beginning work.

C. The Contractor shall schedule and execute all work involving existing utilities in order to minimize necessary interruption of services. Whenever such interruption is necessary for completion of the work the Contractor is responsible for notifying the Engineer and the appropriate utility at least 48 hours in advance. All work to repair/restore utility service shall be performed to the satisfaction of the appropriate utility. All costs related to service maintenance, interruption, and restoration shall be included in the appropriate line item in the Contract, and will not be paid as an additional item.
1.8 SPECIAL CONDITIONS

A. Visits to the construction site may be made by representatives of local regulatory agencies. The Contractor shall submit details of all instructions from the above to the Engineer immediately. The Work will not be accepted by the Owner until final acceptance has been received from the various departments of the Regulatory Agencies having jurisdiction.

B. The Contractor shall furnish sufficient labor, construction equipment and materials, and shall work such hours, including night shifts and overtime operations, as may be necessary to insure the prosecution of the work in accordance with the approved progress schedule. If, in the opinion of the Engineer, the Contractor falls behind the progress schedule, the Contractor shall take such steps as may be necessary to improve his progress and the Engineer may require him to increase the number of shifts and/or overtime operation, days of work and/or the amount of construction equipment and materials, all without additional cost to the Owner. The Contractor shall be responsible for any additional costs incurred by the Owner or Engineer due to the overtime work. The failure of the Contractor to comply with the requirements of the Engineer under this provision shall be grounds for determination of the Engineer that the Contractor is not prosecuting the work with such diligence as will insure completion within the time specified. Upon such determination, the Engineer may recommend to the Owner to seek such legal remedy as is deemed necessary to protect the Owner's interest.

C. In addition to these Specifications all work must comply with the requirements of the local governing agency, Department of Transportation, Water Management District, Department of Environmental Protection, and all other applicable State or Federal agencies' Specifications and Permits. In the event of a conflict the more stringent specification or requirement shall govern.

D. The items of work on this project are to proceed in the sequence of work items listed hereinafter and shall be operable within the time frame stated from the date of the Notice to Proceed. No work is to start that involves the modification to existing facilities without prior approval and authorization from the Owner or his designated representative. An advance notice of 48 hours is required to the Owner prior to start of any work that involves modifications to existing structures, piping or appurtenances.

E. The Contractor is responsible for notifying all permitting agencies of his intentions to begin construction. Proper notification to each agency shall be given within the time frame required by that agency.

F. The Contractor shall give the Engineer 10 days minimum notice before beginning work on the Project.

G. Before performing tests, the Contractor shall provide the Engineer with a minimum of 48 hours notice.
H. Before performing any work outside the designated limits of the work site, the Contractor shall secure any necessary permits and/or authorization from the applicable Owner or verify that such has been previously obtained. All requirements of any said permits or authorization shall be followed.

I. Contractor shall not work overtime unless authorized to do so by Owner. If overtime is required, Contractor shall provide seven (7) days minimum notice to Engineer and Owner.

1.08 COORDINATION
The Contractor shall be fully responsible for the coordination of his work and the work of his employees, subcontractors, and suppliers and to assure compliance with schedules.

1.9 ABBREVIATIONS AND SYMBOLS
A. Referenced Standards
   1. Any reference to published specifications or standards of any organization or association shall comply with the requirements of the specification or standard which is current on the date of Advertisement for Bids. In case of a conflict between the referenced specifications or standards, the one having the more stringent requirements shall govern.
   2. In case of conflict between the referenced specifications or standards and the Contract Documents, the Contract Documents shall govern.

END OF SECTION
PART 1 - GENERAL

1.1 GENERAL

A. It is the intent of these Specifications to set forth the standards of construction, materials, and guarantees required, and to establish the scope of work to be performed in the **FIELD STREET CAPACITOR BANK ADDITION**, owned and operated by the COMMISSION.

B. The Contractor is responsible for coordinating the detailed design requirements of all items and/or components for the substation project, excepting the items stated as being provided by the COMMISSION. Identification of items on the Contract Drawings are limited to the extent necessary to establish a pattern. Where Contract Drawings indicate or specifications refer to equipment or to operations in the singular, it is in reference to such items in the total quantity required for a complete and operable installation as specified.

C. Contractor shall furnish all material and equipment shown or specified within this solicitation, including all components, appurtenances, and miscellaneous materials that are required to successfully install and operate the equipment provided. It is the intent of these Contract Drawings and Specifications for the Contractor to provide a complete, functioning system to the COMMISSION. The contractor is responsible for providing and installing all items necessary for a complete installation regardless of whether the item is specifically called out in the Contract Documents.

D. It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, light, temporary power, transportation, supervision, and temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the Work within the specified time.

E. All material purchased shall be new.

1.2 CONTRACT DOCUMENTS

A. Where the Specifications state that an “Approved Equal” substitute is allowed, the Bidder shall submit data as necessary to establish equivalency. Purchase or installation of substitute materials before submittals are reviewed and accepted in writing by the COMMISSION or their Engineer are done at the Contractor’s risk.
B. Likewise, exceptions to the Contract Documents or alternate arrangements, if proposed by the Contractor, shall be submitted in complete detail, including drawings illustrating the proposed changes. The exceptions must be completely described and itemized in an accompanying letter of transmittal and include any credit reduction that may be realized by acceptance of the substitution. Proceeding with any exceptions or alternate arrangements before submittals are reviewed and accepted in writing by the COMMISSION or their Engineer are done at the Contractor’s risk.

I. If the Contractor proposes alternate methods of general arrangements or development, they shall follow the pattern set by the Contract Documents and shall include any dimension changes necessary to adapt the alternate method of construction. The Contractor shall make all required field investigations as required to establish the existing conditions.

C. Any discrepancies found between the Drawings and Specifications or any inconsistencies or ambiguities in the Drawings or Specifications shall be immediately reported to the COMMISSION or their Engineer, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after discovery of such discrepancies, inconsistencies, or ambiguities prior to the corrections directed by the COMMISSION shall be done at the Contractor’s risk.

D. Anything mentioned in the Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Specifications shall be of like effect as if shown or mentioned in both. Figure dimensions on Drawings shall govern over scale dimensions and detailed Drawings shall govern over general Drawings.

1.3 CONSTRUCTION SEQUENCE

A. The Contractor shall sequence the construction activities such that outages to transmission lines, substation power transformers, and distribution equipment are minimized.

B. Contractor is advised that all transmission line, bus, and transformer outages shall be approved in advance by the COMMISSION and by the applicable third-party transmission system operator. Outage approval is not guaranteed and may be affected by time of year and system conditions outside of the COMMISSION’s control.

1.4 CORRECTION OF WORK

A. The Contractor shall promptly remove from the premises all Work rejected by the COMMISSION for failure to comply with the Contract Documents whether incorporated in the construction or not, and the Contractor shall promptly replace and re-execute the Work in accordance with the Contract Documents and without expense to the COMMISSION and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.
B. All removal and replacement work shall be done at the Contractor’s expense. If the Contractor does not take action to remove such rejected Work within 10 days after receipt of Written Notice, the COMMISSION may remove such Work, store the materials, and replace the rejected Work at the expense of the Contractor.

C. Any work which may be done or materials ordered by the Contractor prior to receipt of the Notice to Proceed, incorporation of previously rejected Work, work done contrary to or regardless of the instruction of the COMMISSION, work done beyond the limits shown on the Plans, except as herein specified, or any extra work done without written authority from the COMMISSION, will be considered as unauthorized and may not be paid for. Work so done may be ordered removed or replaced at the Contractor’s expense.

1.5 SUPERVISION BY CONTRACTOR

A. The Contractor shall supervise and direct the Work. They shall be solely responsible for the means, methods, techniques, sequences, safety, and procedures of construction. The Contractor shall employ and maintain on the Work a qualified supervisor or superintendent at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present on the site at all times when the work is in progress as required to perform adequate supervision and coordination of the Work as determined by the COMMISSION. The supervisor shall have a thorough understanding of the Contract documents and shall have previous experience in the type of work being performed.

END OF SECTION
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 SUMMARY
A. This section specifies administrative and procedural requirements necessary to prepare and process the Contractor’s Applications for Payment.
   1. Coordinate the Schedule of Values and Applications for Payment with the Contractor’s Construction Schedule, List of Subcontracts, and Submittal Schedule.
   B. The Contractor’s Construction Schedule and Submittal Schedule are included in section “Submittals”.

1.3 SCHEDULE OF VALUES
A. Coordinate preparation of the Schedule of Values with preparation of the Contractor’s Construction Schedule.
   1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
      a. Application for Payment form
      b. List of subcontractors
      c. Schedule of submittals.
   2. Submit the Schedule of Values to the Owner at the earliest feasible date, but in no case later than 7 days before the date scheduled for submittal of the initial Application for Payment.
   3. Where work is separated into phases, provide sub-schedules showing values correlated with each phase of payment.
   B. Format and Content: Use the Project Manual Table of Contents as a guide to establish the line items for the Schedule of Values. Provide at least one line item for each specification section.
      1. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide several line items for principal subcontract amounts, when appropriate.
      2. Schedule Updating: Update and resubmit the Schedule of Values when Change Orders or Construction Change Directives result in a change in the Contract Sum.
1.4 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by the Engineer and paid for by the Owner.
   1. The initial Application for Payment, the Application for Payment at time of Substantial Completion, and the final Application for payment involve additional requirements.

B. Payment Application Times: Payment applications shall be submitted to the Owner monthly for the work completed in the preceding month.

C. Payment Amount: The invoice amount shall be determined based on an estimated percentage complete of the Labor/Equipment amount in each item of the Schedule of Values, plus the actual cost of materials installed during the time period.

D. Retainage: The Owner shall withhold a retainage in the amount of 10% of each invoice. This amount shall be noted on the Application for Payment and deducted from the total amount requested. The retainage will be paid to the Contractor after approval of the Final Payment Application detailed below.

E. Payment Application Forms: Use AIA forms for Applications for Payment.

F. Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the Owner. Incomplete applications will be returned without action.
   1. Entries shall match data on the Schedule of Values and Contractor’s Construction Schedule. Use updated schedules if revisions have been made.
   2. Include amounts of Change Orders and construction Change Directives issued prior to the last day of the construction period covered by the application.

G. Transmittal: Submit 5 signed and notarized copies of each Application for Payment to the Engineer by means ensuring receipt within 24 hours; one copy shall be complete, including waivers of lien and similar attachments, if required.
   1. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application.

H. Waivers of Mechanics Lien: When required by the Owner, submit waivers of mechanics liens from subcontractors or sub-subcontractors and suppliers for the construction period covered by the previous application with each Application for Payment.
   1. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item.
   2. When an application shows completion of an item, submit final or full waivers.
   3. Waiver Delays: Submit each Application for Payment with the Contractor’s waiver of mechanics lien for the period of construction covered by the application.
      a. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of Work covered by the application who could lawfully be entitled to a lien.
   4. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to Owner.
I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of Values.
3. Contractor’s Construction Schedule.
4. Submittal Schedule.
5. Certificates of insurance and insurance policies.
7. Copy of Building Permit.

J. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment; Administrative actions and submittals that shall proceed or coincide with this application include:

1. Warranties (guarantees) and maintenance agreements.
3. Start-up performance reports.
4. Change-over information related to Owner’s occupancy, use, operation and maintenance.
5. Final cleaning.
6. List of incomplete Work recognized as exceptions to Engineer’s Certificate of Substantial Completion.

K. Final Payment Application: Administrative actions and submittals which must precede or coincide with submittal of the final payment Application for Payment include the following:

1. Evidence of completion of project closeout requirements.
2. Evidence of completion of items specified for completion after Substantial Completion.
3. AIA Document G706, “Contractor’s Affidavit of Payment of Debts and Claims”: or other evidence acceptable to the Owner.
5. AIA Document G707, “Consent of Surety to Final Payment”.
6. Assurance that work not complete and accepted will be completed without undue delay.
7. Transmittal of required project construction records to Owner.
8. Removal of temporary facilities and services.
10. Change of door locks to Owner’s access.

PART 2 - PRODUCTS (Not Applicable)
PART 3 - EXECUTION (Not Applicable)
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies requirements of photographic documentation of the project conditions before construction. The video tape and photographs will serve as record of existing conditions for disputes arising from restoration and should therefore be taken along the lines of construction at such frequency as necessary to depict details of existing conditions.

B. Payment: All cost for photographs and video tapes including processing, indexing and cataloging shall be on a lump sum basis, and shall be paid for by the Contractor, excepting photographs taken by the Engineer or the Owner.

1.3 SUBMITTALS

A. Photographs and Digital Video Disks: capable of being viewed in Windows 7 or above based software.

B. Provide full-size narrated DVD with label to identify subject areas.

C. Provide photographs, as necessary, to supplement DVD to clearly depict existing conditions.

1.4 QUALITY ASSURANCE

A. Video narration shall completely (location, orientation, etc.) identify each scene.

B. Index and catalog photographs in such a manner that each scene is readily identifiable.

C. Photographs shall indicate the orientation of view and shall indicate date and time the photograph was made.

PART 2 - PRODUCTS (NOT APPLICABLE)
PART 3 - EXECUTION

3.1 CONSTRUCTION DOCUMENTATION

A. Pre-Construction Conditions: Take photographs and video tape all areas where construction is to take place within two weeks prior to the start of construction. Submit processed photographs to the Engineer before construction commences.

B. During construction or when major equipment is installed or where problems occur, the Contractor shall take pictures and videotape.

C. Post-Construction Conditions: Upon completion of construction work and before final payment, the contractor shall take photographs and video tapes of all completed construction and of all areas disturbed or restored by construction activities.

D. Unusual Conditions encountered during construction shall be photographed and videotaped if not already a matter of photographic record.

END OF SECTION
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary
Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for project closeout,
including but not limited to:
1. Field review procedures.
2. Project record document submittal.
3. Operating and maintenance manual submittal.
4. Submittal of warranties.
5. Final cleaning.
B. Closeout requirements for specific construction activities are included in the appropriate
specifications.

1.3 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting a Substantial Completion meeting,
Contractor shall complete the following.
1. Submit specific warranties, workmanship bonds, maintenance agreements, final
certifications and similar documents.
2. Obtain and submit releases enabling the Owner unrestricted use of the Work and
access to services and utilities; include occupancy permits, operating certificates
and similar releases.
B. Field Review Procedures: On receipt of a notice that the facilities are substantially
complete, the Engineer will proceed with field review meeting with the Contractor and
Owner or Owner’s representative present. The Engineer will review documentation
provided by the Contractor and the Owner’s representative. From field observations
and the documentation provided, the Engineer will prepare a “punch list” of items that
must be completed or corrected before the work can be considered complete and the
final payment is made. The work which is substantially complete will be considered
cleared for partial utilization and turned over to the Owner. These items may be put into
service by the Owner and shall not be altered by the Contractor.
UTILITIES COMMISSION
CITY OF NEW SMYRNA BEACH, FLORIDA

ITB #07-20
FIELD STREET CAPACITOR BANK ADDITION

1.4 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, Contractor shall complete the following.
   1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
   2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
   3. Submit a copy of the Engineer's final inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.
   4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion, or when the Owner took possession of and responsibility for corresponding elements of the Work.
   5. Submit consent of surety to final payment.
   6. Submit a final liquidated damages settlement statement.
   7. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

B. Re-inspection Procedure: The Engineer will schedule a final completion meeting to review the work identified in the punch list upon receipt of notice from the Contractor that the work has been completed.
   1. Upon completion of Final Completion review, the Engineer will prepare a notification for the Contractor and Owner of final completion or advise the Contractor of work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance. This notification of final completion only implies that through examination of records and visual inspection the work appears to meet the requirements of the drawings and specifications as all construction activities are not observed by the Engineer. If the Engineer must perform another review of any work identified on the punch list because the Contractor failed to complete all work before the final completion inspection, the Contractor will be responsible for paying all the Engineer's cost for another field review.

1.5 RECORD DOCUMENT SUBMITTALS

A. General: Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Engineer's reference during normal working hours.

B. Record Drawings: Maintain a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date. An independent Florida licensed land
surveyor must be retained to locate all subsurface and surface improvements including potable water mains and fittings, reclaimed water mains and fittings, force mains and fittings, extent of any paving, and all pipe inverts and structure top elevations for sanitary sewer and stormwater improvements. All record and as-built drawings must meet the COMMISSION’s “Potable Water Rules, Design, and Construction Specifications”, “Reclaimed Water Rules, Design, and Construction Specifications”, and “Wastewater Rules, Design, and Construction Specifications”, Final Acceptance Section. Section 7, Section 7 and Section 8 respectively. All files shall be submitted to the COMMISSION digitally in both Adobe PDF and AutoDesk DWG format (meeting AutoDesk 2014 edition or later.)

1. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.
2. Mark new information that is important to the Owner but was not shown on Contract Drawings or Shop Drawings.
3. Note related Change Order numbers where applicable.
4. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.

C. Record Specifications: Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications. Give attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data. Upon completion of the Work, submit record Specifications to the Engineer for the Owner's records.

D. Record Product Data: Maintain one copy of each Product Data submittal. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned later by direct observation. Note related Change Orders and mark-up of record drawings and Specifications. Upon completion of mark-up, submit complete set of record Product Data to the Engineer for the Owner's records.

E. Record Sample Submitted: Immediately prior to the date or dates of Substantial Completion, the Contractor will meet at the site with the Engineer and the Owner's personnel to determine which of the submitted Samples that have been maintained during progress of the Work are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's Sample storage area.

F. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Engineer for the Owner's records.
G. Maintenance Manuals: Organize operating and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual heavy-duty 2-inch, 3-ring vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. Include the following types of information:

1. Emergency instructions.
2. Spare parts list.
4. Wiring diagrams.
5. Recommended "turn around" cycles.
6. Inspection procedures.
7. Shop Drawings and Product Data.
8. Fixture lamping schedule.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 CLOSEOUT PROCEDURES

A. Operating and Maintenance Instructions: Arrange for each installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. If installers are not experienced in procedures, provide instruction by manufacturer's representatives. Include a detailed review of the following items:

1. Maintenance manuals.
2. Record documents.
3. Spare parts and materials.
4. Tools.
5. Lubricants.
6. Fuels.
7. Identification systems.
8. Control sequences.
9. Hazards.
10. Cleaning.
11. Warranties and bonds.
12. Maintenance agreements and similar continuing commitments.
B. As part of instruction for operating equipment, demonstrate the following procedures:
1. Start-up.
2. Shutdown.
3. Emergency operations.
5. Safety procedures.
7. Effective energy utilization.

3.2 FINAL CLEANING

A. General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities".
B. Before the completion of the project, the Contractor shall, unless otherwise especially directed or permitted in writing:
   1. Tear down and remove all temporary buildings and structures which he built;
   2. Remove all temporary works, tools, and machinery or other construction equipment furnished by him;
   3. Remove, acceptably disinfect, and cover all organic matter and material containing organic matter in, under, and around privies, houses, and other buildings used by him;
   4. Remove all rubbish from any grounds which he has occupied; and
   5. Leave the roads, all parts of the premises and adjacent property affected by his operations, in a neat and satisfactory condition.
C. The Contractor shall restore or replace any public or private property damaged by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of the operations. To this end, the Contractor shall restore all highway, roadside and landscaping work within any right-of-way, platted or prescriptive. Acceptable materials, equipment, and methods shall be used for such restoration.
D. The Contractor shall thoroughly clean all materials and equipment installed by him and his subcontractors and on completion of the work shall deliver the facilities undamaged and in fresh and new-appearing condition.
E. It is the intent of the Specifications to place the responsibility on the Contractor to restore to their original condition all items disturbed, destroyed or damaged during construction.
F. When finished surfaces require cleaning with cleaning materials the Contractor shall use only those cleaning materials which will not create hazards to health or property, and which will not damage the surfaces. Cleaning materials shall be used only on those surfaces recommended by the manufacturer. The manufacturer’s directions and recommendations shall be followed at all times.
G. The Contractor shall do everything in his power to keep the amount of dust produced during his construction activities to a minimum. If required by the Engineer, the Contractor, at his expense, shall spray water or other dust control agents over the areas which are producing the dust. Construction operations shall be scheduled so that dust and other contaminants will not fall on wet or newly-coated surfaces.
H. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner. Where extra materials of value remaining after completion of associated Work have become the Owner's property, arrange for disposition of these materials as directed.

I. Inspection
Prior to final completion, the Owner, Engineer and Contractor shall review the site with regards to site cleanup, restoration and maintenance of the system. The Contractor shall clean and/or restore all items determined to be unsatisfactory by the Owner or Engineer, at his expense.

END OF SECTION
PART 1- GENERAL

1.1 GENERAL

The intent of this section is to define the basis of payment for Bid Items listed in the Bid Tabulation Form. Separate payment will be made only for specific items listed in this section. For all the following, Bidder shall furnish management and administration, labor and supervision, construction tools and equipment, materials and expendables, and temporary and permanent construction services as required to perform the individual items of work, complete, including overhead and profit.

For each Item, Payment for the completion of all work required of the Contractor shall be at the price shown in the Bid Tabulation Form. Payment in that amount will constitute full compensation for all work required and/or specified.

1.2 MEASUREMENT AND PAYMENT

A. Item 1- Procure Substation Material Package

Measurement shall consist of obtaining approvals, procurement, transportation, accepting delivery, offloading, and storing or staging substation steel structures, instrument transformers, arresters, insulators, bus and other materials for substation construction, per the Construction Drawings and the requirements of applicable specification sections.

B. Item 2- Procure Relay / Control Panel Package

Measurement shall consist of obtaining approvals, procurement, transportation, accepting delivery, offloading, and storing or staging relay and control panels and any loose relays or other materials for protection and control construction, per the Construction Drawings and the requirements of Section 16290.

C. Item 3- Site Work and Yard Cover

Measurement shall consist of clearing and grubbing, earthwork, grading and drainage, and grassing per the Construction Drawings and the requirements of applicable specification sections.

D. Item 4- Fences and Gates

Measurement shall consist of chain link fence and gate additions and removals, per the Construction Drawings and the requirements of Section 02830.

E. Item 5- Conduit and Boxes

SECTION 01700

ITB #07-20
Measurement shall consist of installing raceways, conduit and fittings, junction boxes, and pull boxes per the Construction Drawings and the requirements of applicable specification sections.

F. Item 6- Substation Grounding

Measurement shall consist of installing substation grounding and bonding conductors and connectors, per the Construction Drawings and the requirements of Section 16060.

G. Item 7- Substation Foundations

Measurement shall consist of constructing drilled-pier or cast-in-place concrete substation foundations, per the Construction Drawings, approved submittals, and the requirements of Sections 02466 and 03300.

H. Item 8- Install Owner-Furnished Disconnect Switch

Measurement shall consist of disconnect switch assembly and adjustment, rigging, placing, leveling and securing to the structure, and making high voltage, and grounding connections per the Construction Drawings and the requirements of applicable specification sections.

I. Item 9 – Capacitor Bank

Measurement shall consist of capacitor bank purchase, delivery, rigging, placing, securing to the foundation, and making high voltage and grounding connection per the Construction Drawings and the requirements of the applicable specification sections.

J. Item 10- SF6 Circuit Breaker

Measurement shall consist of circuit breaker and frame purchase, delivery, assembly or adjustment, rigging, placing, leveling and securing to the foundation, and making high voltage, low voltage power, CT, control, and grounding connections per the Construction Drawings and the requirements of applicable specification sections. This Item excludes Testing, see Bid Item 15.

K. Item 11- Install Substation Materials

Measurement shall consist of assembling and installing substation steel structures, switches, instrument transformers, arresters, insulators, bus and other substation materials, per the Construction Drawings and the requirements of applicable specification sections.
L. Item 12- Relocations and Removals

Measurement shall consist of structure and equipment relocations where indicated, demolition, removals not specifically covered under other Bid Items, and return of removed materials, per the Construction Drawings and the requirements of applicable specification sections.

M. Item 13- Panelboards, Power and Control Cables

Measurement shall consist of installing panelboard breakers, and pulling and training low voltage power, CT, and control cables in various raceways, per the Construction Drawings and the requirements of applicable specification sections.

N. Item 14- Install Relay / Control Panel

Measurement shall consist of installing the relay and control panel, mounting and wiring any loose relays or devices, and terminating low voltage power, CT, and control cables, per the Construction Drawings, approved submittals, and the requirements of applicable specification sections. This Item excludes Testing, see Bid Item 15.

O. Item 15- Testing and Documentation

Measurement shall consist of performing circuit breaker field testing per the manufacturer’s recommendations, cable testing, relay and control functionality testing, testing of grounds, commissioning and energization, any other testing called for in the Construction Drawings or applicable specification sections, and reporting of test results.

P. Item 16- Contingency

Measurement shall consist of completing approved Change Order work.

Q. Item A- Additional 5/8” x 10’ Ground Rod

Unit Price measurement shall consist of procuring and installing each ground rod extension and coupling required in addition to the basic installation units, and documentation therefor, per the requirements of the Construction Drawings and Section 16301 Article 3.09.

R. Item B- Additional Concrete

Unit Price measurement shall consist of procuring and installing each cubic yard of additional cast-in-place concrete for a foundation, where the final Construction Drawing requirement is greater than the Bid Drawing quantity. Payment shall be to the nearest tenth of a cubic yard.
S. Item C- Additional Rebar

Unit Price measurement shall consist of procuring and installing each pound of additional steel reinforcing bars for a foundation, where the final Construction Drawing requirement is greater than the Bid Drawing quantity.

T. Item D- Additional Control Cable

Unit Price measurement shall consist of procuring and installing each 100 linear feet of additional multi-conductor control cable, where the final Construction Drawing requirement is greater than the Bid Drawings number of runs and distances. Payment shall be to the nearest tenth of a unit (ten feet).

U. Item E- Additional SIS Panel Wire

Unit Price measurement shall consist of procuring and installing each 100 linear feet of additional SIS panel wire, where the final Construction Drawing requirement is greater than the Bid Drawings number of runs and distances. Payment shall be to the nearest tenth of a unit (ten feet).

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION
CLOSURE

The analyses and recommendations submitted herein are based on the data obtained from the soil boring presented on Figure 3 and the assumed loading conditions. This report does not reflect any variations which may occur adjacent to the boring. The nature and extent of the variations near the boring may not become evident until during construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations presented in this report after performing on-site observations during the construction period and noting the characteristics of the variations.

In the event any changes occur in the design, nature, or location of the proposed facility, we should review the applicability of conclusions and recommendations in this report. We recommend a general review of final design and specifications by our office to verify that earthwork and foundation recommendations are properly interpreted and implemented in the design specifications. Ardaman and Associates should attend the pre-bid and preconstruction meetings to verify that the bidders/contractor understand the recommendations contained in this report.

This study is based on a relatively shallow exploration and is not intended to be an evaluation for sinkhole potential. This study does not include an evaluation of the environmental (ecological or hazardous/toxic material related) condition of the site and subsurface.

This report has been prepared for the exclusive use of Fred Wilson & Associates in accordance with generally accepted geotechnical engineering practices for the purpose of the proposed improvements at the Field Street substation in New Smyrna Beach. No other warranty, expressed or implied, is made.

We are pleased to be of assistance to you on this phase of the project. When we may be of further service to you or should you have any questions, please contact us.

Very truly yours,
ARDAMAN & ASSOCIATES, INC.
Certificate of Authorization No. 5950

Eric C. Balog, E.I.
Assistant Project Engineer

ECB/CTJ/jj/nfm
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(1) Unified Soil Classification System (please refer to Figure 3).
(2) Reference: after Teng. 1962
(3) Values for sandy soils shown are in units of: lb/in³, Reference: FHWA IP-84-11 Handbook on Design of Piles and Drilled Shafts under Lateral Loads.
(4) \( \gamma_{\text{Buoyant}} = \gamma_{\text{Sat}} - \gamma_{\text{Water}} \)
(5) \( \Phi \): angle of internal friction; \( C \): cohesion; \( E \): Youngs Modulus; \( G \): Shear Modulus; \( \mu \): Poisson’s Ratio
SECTION 48
TOWNSHIP 17 SOUTH
RANGE 34 EAST

OBTAINED FROM U.S.G.S. QUAD MAP: NEW SMYRNA BEACH, FLORIDA 1986
(REVISION 1998)

SITE LOCATION MAP

SUBSURFACE SOIL EXPLORATION
NEW SUBSTATION EQUIPMENT
USNB8 FIELD 8T SUBSTATION
NEW SMYRNA BEACH, FLORIDA

SCALE: (FEET)
LEGEND

STANDARD PENETRATION TEST (SPT) BORING LOCATION

NOTE: THE BASE MAP FOR THE BORING LOCATION PLAN WAS PROVIDED BY FRED WILSON & ASSOCIATES, INC.
SOIL DESCRIPTIONS

1. FINE SAND (SP)
2. SILTY FINE SAND (SM)
3. CLAYEY FINE SAND (SC)
4. GRAVEL

LEGEND

COLORS

A. LIGHT GRAY TO GRAY
B. GREENISH GRAY
C. DARK BROWN

N. HAND AUGER

THE STANDARD PENETRATION TEST (SPT) BORING

N. STANDARD PENETRATION RESISTANCE IN BLOWS PER FOOT
NM. NATURAL MOISTURE CONTENT IN PERCENT (ASTM D-2216)
-200. PERCENT PASSING NO. 200 SIEVE SIZE (PERCENT FINES) (ASTM D-1140)
X. GROUNDWATER LEVEL MEASURED ON DATE DRILLED
WOH. SAMPLER ADVANCED BY STATIC WEIGHT OF HAMMER AND RODS ONLY

SP, SP-SM. UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D-2487)
SM, SC, CH.

NOTES:
1. UPON COMPLETION OF THE SPT BORING, THE BOREHOLE WAS GROUTED WITH CEMENT-BENTONITE SLURRY.
2. ALL SPT BORINGS WERE PERFORMED USING AN AUTOMATIC HAMMER TO THE BORING TERMINATION DEPTH. AUTOMATIC HAMMER N-VALUES MAY BE CONVERTED TO EQUIVALENT SAFETY HAMMER N-VALUES BY MULTIPLYING BY 1.24.

SHELL CONTENT

TRACE: 5
FEW: 5 TO 10
LITTLE: 15 TO 25
SOME: 30 TO 45
MOSTLY: 50 TO 100

ENGINEERING CLASSIFICATION

COHESIONLESS SOILS

DESCRIPTION

BLOW COUNT "N"

VERY LOOSE
4
LOOSE
4 TO 10
MEDIUM DENSE
10 TO 30
DENSE
30 TO 50
VERY DENSE
50

WHILE THE BORING IS REPRESENTATIVE OF SUBSURFACE CONDITIONS AT ITS RESPECTIVE LOCATION AND FOR ITS RESPECTIVE VERTICAL REACH, LOCAL VARIATIONS CHARACTERISTIC OF THE SUBSURFACE MATERIALS OF THE REGION ARE ANTICIPATED AND MAY BE ENCOUNTERED. THE BORING LOG AND RELATED INFORMATION ARE BASED ON THE DRILLER'S LOGS AND VISUAL EXAMINATION OF SELECTED SAMPLES IN THE LABORATORY. THE DELINEATION BETWEEN SOIL TYPES SHOWN ON THE LOGS IS APPROXIMATE AND THE DESCRIPTION REPRESENTS OUR INTERPRETATION OF SUBSURFACE CONDITIONS AT THE DESIGNATED BORING LOCATION ON THE PARTICULAR DATE DRILLED.

THE GROUNDWATER ELEVATION SHOWN ON THE BORING LOG REPRESENTS THE GROUNDWATER SURFACE ENCOUNTERED ON THE DATE SHOWN. FLUCTUATION IN WATER TABLE LEVELS SHOULD BE ANTICIPATED THROUGHOUT THE YEAR.
APPENDIX

Standard Penetration Test Boring Procedure
The standard penetration test is a widely accepted test method of *in situ* testing of foundation soils (ASTM D 1586). A 2-foot long, 2-inch O.D. split-barrel sampler attached to the end of a string of drilling rods is driven 18 inches into the ground by successive blows of a 140-pound hammer freely dropping 30 inches. The number of blows needed for each 6 inches of penetration is recorded. The sum of the blows required for penetration of the second and third 6-inch increments of penetration constitutes the test result or N-value. After the test, the sampler is extracted from the ground and opened to allow visual examination and classification of the retained soil sample. The N-value has been empirically correlated with various soil properties allowing a conservative estimate of the behavior of soils under load.

The tests are usually performed at 5-foot intervals. The test holes are advanced to the test elevations by rotary drilling with a cutting bit, using circulating fluid to remove the cuttings and hold the fine grains in suspension. The circulating fluid, which is a bentonitic drilling mud, is also used to keep the hole open below the water table by maintaining an excess hydrostatic pressure inside the hole. In some soil deposits, particularly highly pervious ones, NX-size flush-coupled casing must be driven to just above the testing depth to keep the hole open and/or prevent the loss of circulating fluid.

Representative split-spoon samples from the soils are brought to our laboratory in air-tight jars for further evaluation and testing, if necessary. Samples not used in testing are stored for 30 days prior to being discarded.