

PROJECT MANUAL

REBID - 2022 Museum Foundation Repairs

Project Number: PW-2022-07



Prepared By: Town of Tyrone

August 12, 2022

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INVITATION FOR CONSTRUCTION QUOTES

Project Name: REBID - 2022 Museum Foundation Repair

Project Number: PW-2022-07

Project Location: Tyrone Museum, 881 Senoia Road, Tyrone GA 30290

Bid Security Required: No

Performance Bond Required: No

Payment Bond Required: No

Project Description: Install 6 helical piles for foundation repairs in accordance with the project documents.

Project A&E: Same as Owner

Project Owner: Town of Tyrone; 950 Senoia Road, Tyrone, GA 30290

Project Contact: Scott A. Langford, PE Email: slangford@tyrone.org Phone: 770-487-4038

Pre-Quote Conference: None

Quote Delivery: Mail or hand deliver sealed bid to Project Contact listed above. It is the contractor's responsibility to ensure that the bid is properly delivered by the time listed on this invitation.

Bid Security: In the amount of 5% on the Town's Bid Bond form as located in the bid documents

Quote Closing Date: September 14, 2022 Time: 11:00 AM Location: Tyrone Municipal Complex
Attn: Scott Langford
950 Senoia Road
Tyrone GA 30290

Instruction to Bidders

August 12, 2022

Return completed **bid form, bid bond, and certificate of insurance** as required in the Bid Documents to:

**Town of Tyrone
Attn: Scott Langford
950 Senoia Road
Tyrone GA, 30290**

Complete bid package must be received no later than 11:00 AM EST on September 14, 2022. It is the responsibility of the bidder to ensure the owners receipt of the completed bid package. The project consists of Georgia Professional Engineer design and installing 6 helical piles as per the project documents at the Town Museum, 881 Senoia Road; Tyrone, GA 30290.

By submitting and signing the bid form, the contractor acknowledges that they are familiar with the site and existing conditions as ascertained through a site visit. No adjustments will be made in the contract price due to existing site conditions not shown in the specifications or plans which could have been discovered by a site visit by the contractor. Site visits will be allowed between 8:30 AM to 4:00 PM, Monday through Friday. It is not required to schedule an appointment unless access into the interior is desired.

REBID - 2022 Museum Foundation Repairs
PW-2022-07
BID FORM

Bidder declares that the full name and business address of Bidder's Principal is as follows:

FEIN# (required) _____

Company _____

Address _____

City/State/ZIP CODE _____

Phone _____ Email _____

ACKNOWLEDGE AGENDA (Initial each received):

Addendum #1 _____

Addendum #2 _____

Other Addendum # _____ (number and initial as applicable)

Signature acknowledges that Bidder has read the bid documents thoroughly before submitting a bid, will fulfill the obligations in accordance to the scope of work or specifications, terms, and conditions, and is submitting without collusion with any other individual or firm. Authorized signature is required. Bidder also certifies they are a Drug Free Workplace.

BASE BID:

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following lump sum including all applicable taxes and fees:

BASE BID SCHEDULE

No.	Item	Estimate Quantity	Unit	Unit Price	Total Price
1.	Installation of six helical piles in accordance with the contract documents, Complete	1	Lump Sum	\$	\$
2.	Allowance for Special Contingency	1	Lump Sum	\$ 1,000.00	\$ <u>1,000.00</u>

Total of Base Bid - \$ _____

UNIT PRICE: BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following lump sum including all applicable taxes and fees:

No.	Item	Unit Price
1.	Bid Alternate #1 – additional pile shaft extension per linear foot. (Note: Base bid includes 20-foot length of pile per pile location. See spec Section 316613 Section 1.2 A.)	\$

REBID - 2022 Museum Foundation Repairs
PW-2022-07
BID FORM

Bidder has examined the premises and conditions affecting the Work, the undersigned proposes to furnish all services, labor and materials called for by them for the entire Work, in accordance with said documents,

for the Base Bid price of: _____ DOLLARS (in words)

\$_____ (in Numbers) which amount is hereinafter called the "Base Bid."

Signed, sealed, and dated this _____ day of _____, 2020

Legal Name of Company: _____

Company Seal

Authorized Signature: _____

Printed Name: _____

Title: _____

(THE TOWN OF TYRONE RESERVES THE RIGHT TO ADD/MODIFY/DELETE WORK and/or SITES IN THIS CONTRACT)
Project Manager: Scott Langford, PE, Public Works Director & Town Engineer; slangford@tyrone.org, 770-487-4038

BID BOND

KNOW ALL PERSONS BY THESE PRESENTS: that we, the undersigned as Principal, and as Surety, are hereby held and firmly bound unto Town of Tyrone, Georgia as OWNER in the penal sum of 5% for the payment of which, well and truly to be made, we hereby jointly severally bind ourselves, successors and assigns.

Signed, this day of _____, 20____. The condition of the above obligation is such that whereas the Principal has submitted to Town of Tyrone, Georgia a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for:

REBID - 2022 MUSEUM FOUNDATION REPAIRS for the TOWN OF TYRONE, GEORGIA

PROJECT NUMBER: PW-2022-07

NOW, THEREFORE,

A. If said BID shall be rejected, or

B. If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for faithful performance of said contract, and for the payment of all persons performing labor furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extensions of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

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 hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal L . S .

Surety

By: _____
(Address) (Surety)

_____ (Address)

_____ (Address)

_____ (Address)

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended), be authorized to transact business, and have a registered agent in the state where project is located.

AGREEMENT

THIS AGREEMENT made this _____ day of _____, 20____, by and between the Town of Tyrone, Georgia, hereinafter called "Town" and _____, hereinafter called "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

Section 1. Scope of Work

The Work to be performed by the Contractor shall consist of installing 6 helical piles at the Town Museum located at 881 Senoia Road in Tyrone, Georgia. Installation shall be in accordance with the project documents for the REBID – 2022 Museum Foundation Repair Project, dated August 12, 2022. The Contractor will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the Work described herein.

Section 2. Term

The Contractor will perform the Work described herein within the timeframe as stated in the project documents' Bid Form.

Section 3. Payment

The Owner shall pay to the Contractor compensation upon completion by the Contractor of the Work described herein. Payment terms are NET 30 days following receipt of a correct invoice. Invoices must be submitted to:

Town of Tyrone
Attn: Scott Langford
950 Senoia Road
Tyrone, Georgia 30290

Section 4. Insurance

The Firm's Comprehensive General and Automobile Liability Insurance shall be written for not less than limits of liability as follows:

A. Comprehensive General Liability

- a. Bodily and Personal Injury, Property Damage and Contractual: \$1,000,000
Combined Single Limit Each Occurrence/\$2,000,000 General Aggregate
- b. General Aggregate Limits shall apply per Project

B. Comprehensive Automobile Liability

- a. Bodily Injury and Property Damage: \$1,000,000 Combined Single Limit Each Occurrence
- b. Any Auto including Hired and Non-Owned liability coverage is required.

C. Workers' Compensation

- a. Workers' Compensation insurance covering all employees of Contractor or any subcontractor engaged in performing the services required by this proposal of not less than the minimum requirement of \$100,000 per accident/\$100,000 Disease each employee/\$500,000 Disease policy limit. At a minimum, the policy must also meet Georgia required coverage.

D. The Town must be listed as "additional insured" on the policy of insurance as follows:

Town of Tyrone; 950 Senoia Road; Tyrone, GA 30290.

Firm shall provide the Town with a valid Certification of Insurance evidencing the Town as an addition. The certificate shall be on the ACORD 25 form. The certificate will further confirm that at least thirty (30) days prior written notice will be furnished to the Town by Insurer before cancellation or non-renewal of policy. The insurance policies may not include a deductible, retention or self-insurance in excess of \$10,000. It is further understood that any coverage extended by reason of this paragraph shall be primary and non-contributory and such shall be evidenced on the Certificate of Insurance. Any insurance maintained by the Town of its own protection shall be secondary of excess insurance. All insurance companies providing coverage must have an AM Best Rating of A-VII or better unless approved by the Town in advance at its sole discretion.

Providing and maintaining adequate insurance coverages is a material obligation of the Contractor and is of the essence of this contract. All such insurance shall meet all laws of the State of Georgia. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized to do business in Georgia. The Contractor shall, at all times, comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing Georgia laws or this contract. The limits of coverage under each insurance policy maintained by the Contractor shall not be interpreted as limiting the Contractor's liability and obligations under the contract. Upon award of this contract, the selected Contractor shall add the Town of Tyrone as a certificate holder to their insurance policy and the Town shall be listed as additional insured.

Section 5. Indemnification

The Contractor shall save and hold harmless, pay on behalf of, protect, defend, indemnify the Town, assure entire responsibility and liability for losses, expenses, demands and claims in connection with or arising out of any injury, or alleged injury (including death) to any person, or damage, or alleged damage, to property of the Town or others sustained or alleged to have been sustained in connection with or to have arisen out of or resulting from the performance or the intended performance of any work/service, outlined or resulting from this agreement, by the Contractor or their employees, including losses, expenses or damages sustained by the Town or Town officials, including the Mayor and Council members and employees of the Town from any and all such losses, expenses, damages, demands and claims. The Contractor further agrees to defend any suit or action brought against the Town or Town officials based on any such alleged injury or damage and to pay all damages, cost and expenses in connection therewith or resulting there from. As an integral part of this agreement, the Contractor agrees to purchase and maintain, during the life of this contract, contractual liability insurance in the amounts required in the general liability insurance requirements. The obligations of the Contractor pursuant to this paragraph shall not be limited in any way by any limitation in the amount or type of proceeds, damages, compensation, or benefits payable under any policy of insurance or self-insurance maintained by or for the use and benefit of the Contractor.

Section 6. Subcontracting

The Contractor shall not have the right or power to assign, subcontract, or transfer interest in this contract. The Contractor is prohibited from subcontracting any services covered in the scope of work.

Section 7. Changes

The Town shall have the right, at any time, to alter the specifications to meet increased or decreased needs. If any such changes cause an increase or decrease in the cost or the time required for the performance, or otherwise affects any other provision of this agreement, an equitable adjustment shall be made and this agreement shall be modified in writing accordingly.

Section 8. Non-Discrimination

The Contractor shall not discriminate against any individuals and will take proactive measures to assure compliance with all Federal and State requirements concerning fair employment, employment of people with disabilities, and concerning the treatment of all employees without regard to discrimination based upon age, race, color, religion, sex, national origin or disability.

Section 9. Governing Laws

This contract is made under and shall be governed and construed in accordance with the laws of the State of Georgia.

Section 10. Termination for Cause

The Town reserves the right to terminate this contract at any time for cause. The violation of any provision or condition contained in this contract, or the refusal, failure, or inability to carry out any provisions of this contract shall constitute sufficient grounds to terminate this contract for cause. Should the Town elect to terminate this contract for cause, the Town will notify the Contractor 30 days prior to the termination date and shall specify the cause for termination as well as the date the termination shall be effective. This termination notice will be issued via a written letter sent by certified U.S. mail. Immediate dismissals may be

executed if deemed necessary the Town.

Section 11. Termination without Cause

The Town and/or the Contractor may terminate this contract without cause. Written notice of termination must be sent via certified U.S. mail no later than thirty (30) days prior to the termination date.

Section 12. Employee Guidelines

The Contractor certifies that it maintains a drug free work place environment to ensure workers safety and workplace integrity. The Contractor further agrees that their employees shall comply with the Georgia Drug-Free Workplace Policy.

While engaged in the performance of these services, only authorized employees of the Contractor are allowed at the Town's location where the work is being performed. During the performance of these services, the Contractor employees are not to be accompanied in work area by acquaintance, family members, associates or any other person(s) who are not a current, authorized employee(s) of the Contractor.

The Contractor shall use only qualified personnel to provide the required services. The Contractor shall be responsible for insuring that employees abide by all rules and regulation set forth for the public areas where the work is being performed.

Section 13. Safety

The Contractor and any persons employed by the Contractor shall be required to adhere to all OSHA requirements and regulations that apply while performing any part of the Work described herein.

The Contractor shall perform all work in accordance with State and Federal safety

regulation in regards to work zones, work areas, equipment, vehicles, tools and supplies. The Contractor shall provide all necessary and required work zone protective devices and traffic channeling devices as required under State and Federal safety regulations.

Should the Contractor fail to perform the work in accordance with State and Federal safety regulations, the Town, at its' option may cancel any agreement, reserving for itself any remedies it may have for breach of contract.

The Contractor shall protect the safety and convenience of the general public. The Contractor shall perform work as needed and necessary to protect the general public from hazards.

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized official, this Agreement in quadruplicate (four copies) of which each shall be deemed an original on the date first above written.

TOWN OF TYRONE, GEORGIA

By: _____

Name: _____

Title: _____

(SEAL)

Attest:

Name: _____
(Please Print)

Title: _____

(Company Name):

By: _____

Name: _____

Address: _____

(SEAL)

Attest:

Name: _____
(Please Print)

Title: _____

STATE OF GEORGIA

FAYETTE COUNTY

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT OF 2006

WITNESSETH:

1. Pursuant to the Georgia Security and Immigration Compliance Act of 2006, the Contractor understands and agrees that compliance with the requirements of O.C.G.A. § 13-10-91 and Georgia Department of Labor Rule 300-10-1-.02. are conditions of this Agreement. The Contractor further agrees that such compliance shall be attested by the Georgia Department of Labor through execution of the contractor affidavit. The Contractor's fully executed affidavit is attached hereto as Exhibit "A" and is incorporated into this Agreement by reference herein.

2. The Contractor understands and agrees that, in the event the Contractor employs or contracts with any subcontractor or subcontractors in connection with this Agreement, the Contractor shall:

- A. Secure from each such subcontractor and sub-subcontractor an attestation of the subcontractor's compliance with O.C.G.A. § 13-10-91 and Georgia Department of Labor Rule 300-10-1.02 by causing each such subcontractor to execute the subcontractor affidavit required by Georgia Department of Labor Rule 300-10-1-.08, which is attached hereto as Exhibit "B", and sub-subcontractor, hereto as Exhibit "C", or a substantially similar

subcontractor affidavit. The Contractor further understands and agrees that the Contractor shall require the executed subcontractor affidavit to become part of the agreement between the Contractor and each such subcontractor. The Contractor agrees to maintain records of each subcontractor attestation required hereunder for inspection by the Department at any time.

CONTRACTOR AFFIDAVIT UNDER O.C.G.A. 13-10-91(b) (1)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of the Town of Tyrone, Georgia has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Name of Project

Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, 20__ in (city) _____ (state) _____.

Signature

Printed Name and Title of Authorized Officer of Agent

SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE ___ Day of _____, 20__.

NOTARY PUBLIC

My Commission Expires: _____

O.C.G.A. 50-36-1 (e)(2) Affidavit

By executing this affidavit under oath, as an applicant for a(n) Contract, as referenced in O.C.G.A. 50-36-1, from Town of Tyrone, Georgia, the undersigned applicant verifies one of the following with respect to my application for a public benefit:

- 1)___ I am a United States citizen.
- 2)___ I am a legal permanent resident of the United States.
- 3)___ I am a qualified alien or non-immigrant under the Federal Immigration and Nationality Act with an alien number issued by the Department of Homeland Security or other federal immigration agency.

My alien number issued by the Department of Homeland Security or other federal immigration agency is: _____

The undersigned applicant also hereby verifies that he or she is 18 years of age or older and has provided at least one secure and verifiable document, as required by O.C.G.A. 50-36-1 (e)(1), with this affidavit.

The secure and verifiable document provided with this affidavit can best be classified as:

(Driver's License, Passport, etc. - Attach copy)

In the making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of O.C.G.A 16-10-2-, and face criminal penalties as allowed by such criminal statute.

Executed in _____(city) _____(state).

Signature of Applicant

Printed Name of Applicant

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE
____ DAY OF _____, 20__

NOTARY PUBLIC
My Commission Expires:

SECTION 00100 - GENERAL REQUIREMENTS

PART 1 - GENERAL PROVISIONS

- 1.1 The proposed work is located at the Tyrone Museum, 881 Senoia Road, Tyrone, Georgia.

PART 2 - PRODUCTS – OWNER

- 2.1 Town of Tyrone
950 Senoia Road
Tyrone, GA 30290

PART 3 - CONTRACTOR

- 3.1 Project is to be substantially complete within 30 calendar days from the Commencement Date as depicted on the Notice to Proceed. Substantially complete implies that the piles are installed and the facility can be safely used by the general public for its intended purpose.
- 3.2 Construction hours shall be from 8:00 am until 5:00 pm.
- 3.3 For temporary facilities and controls, the Contractor is required to provide for this work including, but are not necessarily limited to:
- A. Temporary utilities such as water, sanitary facilities, electricity and telephone.

The Contractor shall use the means that are necessary to maintain temporary facilities and controls in their proper and safe condition throughout the progress of the work.

In the event of loss or damage, the Contractor shall immediately make repairs and replacements necessary at no cost to the Owner.

The Contractor shall provide adequate artificial lighting when natural light is not adequate for work and for areas accessible to workmen.

The Contractor shall provide temporary sanitary toilets for use by personnel, maintain in sanitary condition, and comply with the minimum requirements of public agencies having jurisdiction.

For the aid of safety, the Contractor shall provide and maintain for duration of construction, required barricades, warning signs, steps, bridges, platforms and other temporary construction necessary for safety of workmen in compliance with pertinent safety and other regulations.

3.4 The Contractor shall maintain these temporary facilities and controls for the safe proper completion of work and remove such facilities and controls as the work progress permits or as directed by the Engineer.

3.5 The Contractor shall exercise these general safety requirements for hazard control.

The Contractor shall store volatile wastes in covered metal containers during work hours and remove from premises at end of workday.

The Contractor shall conduct cleaning and disposal operations to comply with applicable ordinances and anti-pollution laws.

The Contractor shall use cleaning materials only on surfaces recommended by the cleaning material manufacturer.

The Contractor shall not burn or bury rubbish and waste materials on the project site.

The Contractor shall dispose of volatile wastes in accordance with state, federal and local regulations.

The Contractor shall not dispose of wastes into streams, waterways or wetlands.

The Contractor shall remove all waste from the site and dispose of it in accordance with the local agency having jurisdiction.

Playing of music and/or smoking is prohibited on job site.

3.6 During construction, the Contractor shall execute cleaning to ensure that the site is maintained free from waste materials and rubbish accumulation.

The Contractor shall provide on-site containers for the collection of waste materials, debris and rubbish.

3.7 The Contractor shall remove waste materials, debris and rubbish from site and legally dispose of at public or private dumping areas off the Owner's property.

□

PART 4 – ADMINISTRATION OF THE CONTRACT

4.1 Owner Representative:
Scott A. Langford, P.E.
Town of Tyrone
950 Senoia Road
Tyrone, GA 30290

4.2 Contractor shall provide a one (1) year warranty for all work performed under this Contract along with helical pile warranty as specified in the specifications

END OF SECTION 00100

SECTION 316613 - HELICAL PILES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes installation of helical pier system for foundation repairs at Town of Tyrone Museum, 881 Senoia Road, Tyrone, Georgia.

1.2 UNIT PRICES

- A. Unit prices are included in the contract to accommodate changes in price for actual installation of pile foundations. The base bid shall include a minimum of 20' length pile per pile location.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Product information should include, at a minimum:
 1. Product model identification numbering,
 2. Shaft – Outside Diameter, wall thickness in inches, Moment of Inertia, and Section Modulus,
 3. Recommended Torsional Strength in ft-lbs
 4. Allowable mechanical compression and tension strengths,
 5. Ultimate mechanical compression and tension strengths,
 6. Ultimate Capacity – by Torque compression and tension strengths,
 7. Allowable Capacity- by Torque compression and tension strengths,
 8. Manufacturer's recommended capacity to torque ratio,
 9. Corrosion resistance material to be used,
 10. Helix diameters, area, and thickness; and,
 11. Warranty and minimum design life.

- B. Design: Contractor shall provide a shop drawing of the pile locations, dimensions, minimum final installation torque and assemblies to be installed. This submittal shall be stamped and signed by a registered Professional Engineer in the state of Georgia; hereinafter referred to as "Engineer". Any soil testing needed for design of the pile system shall be the responsibility of the contractor, not the Owner.

1.4 QUALITY ASSURANCE

- A. The pile installation company shall have a minimum of 10 consecutive years of experience in helical pile foundation installation.
- B. Preinstallation Conference: Conduct conference at the site.
- C. Helical pile warranty shall be for 40 years minimum.

PART 2 - PRODUCTS

2.1 HELICAL PILES

- A. The materials and dimensions shall be as per the approved shop drawings in accordance with the design Engineer's sealed documents. Any variation of this must be approved by the design Engineer and owner in writing prior to the work being performed. Minimum shaft diameter of 2.875" with a minimum 10" helix configuration is required. Base bid number of piles required is six (6) piles.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in accordance with the design Engineer's sealed documents. Any variation of this must be approved by the Engineer and owner in writing prior to the work being performed.
- B. Install in accordance with the manufacturer's written recommendations for installation.
- C. Torque indicator required for installation and inspection. The torque motor shall have a capacity that exceeds the final torque requirement provided by the Engineer and shall be properly calibrated. Calibration record less than 6 months old shall be provided to the owner, inspector and Engineer. The motor shall be adjustable with respect to the rotations per minute and shall no more than 2 pivot hinges (90 degrees from each other). The equipment shall have adequate crowd and torque simultaneously to ensure proper advancement of the pile. Drive tool shall be in-line, straight and rigid; and be by the manufacturer of the pile.
- D. Contractor shall locate utilities and structures above and below grade in the area and work and shall protect them during installation. The contractor is responsible for the repair of any utility damaged during installation.
- E. Contractor shall notify Engineer and owner of any discrepancy that may affect the proper installation of the pile systems. Work should not continue until written direction is given by the Engineer and owner.
- F. Installation of pile shall not exceed 40 rotations per minute unless authorized in writing by the Engineer. Continuous axial force (crowd) shall be applied sufficient enough to ensure the pile advances into the ground a distance of at least 80% of the blade pitch per rotation.
- G. Do not exceed torsion strength rating of pile during installation. Remove and discard pile if the rating is exceeded.
- H. Do not exceed bolt hole elongation as per the pile manufacturer's written recommendations.
- I. Piles shall be terminated and brackets installed in accordance with the pile manufacturer's written recommendations and the engineering drawings.
- J. Do not allow pile to contact any electrical grounding component including concrete rebar or other non-galvanized metal objects to prevent corrosion of the pile.

3.2 FIELD QUALITY CONTROL

- A. Special Inspections: The contractor shall inform the owner and Engineer at least 24 hours prior to the installation of the piles so inspections may take place. The contractor will be responsible for coordinating with the inspection company. The Owner may engage a qualified special inspector to perform the following special inspections:
1. Helical Pile Installation.
- B. Allowable Tolerances: The contractor shall install the piles at locations specified and shall not exceed 5 degrees from the orientation angle.
- C. Contractor shall supply Owner and design Engineer installation records with 48 hours of installation. Records shall include the following information:
1. Name of project, contractor and supervisor during installation
 2. Date, time and weather conditions during installation
 3. Type of torque indicator used
 4. Assigned pile number and location
 5. Type and configuration of the lead section with length and number and size of helical pile bearing plates
 6. Type and configuration of extension sections with length and number and size of helical bearing plates, if any
 7. Installation duration and observations
 8. Total length installed
 9. Final elevation of top shaft and cut off length
 10. Final plumbness or inclination of shaft
 11. Installation torque at minimum 3-foot intervals
 12. Final installation torque
 13. Verified axial load capacity
 14. Comments pertaining to interruptions, obstructions or other relevant information.

END OF SECTION 316615