TECHNICAL SPECIFICATIONS AND CONTRACT DOCUMENTS

FOR

LIFT STATION F-10 ELECTRICAL IMPROVEMENTS

October 2015

Prepared By:

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State of Florida

Bid No. B-4-16-17
Owner Proj. No. MI-RR-98
Engineer Proj. No. 200-76510-14001
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A. FORMAL SEALED BIDS/QUOTES: No later than three (3) business days after a bid opening the Purchasing Manager or his/her designee shall post a tabulation of competitive sealed bids/quotes on a bulletin board located in or near the Purchasing Services Office. The apparent low bid/quote will be the intended award recommendation. If after posting the tabulation, the apparent low bid/quote is found to be non-responsive to the specifications, the formal award evaluation will be posted. The time for filing protest will begin the date of the later posting. The County reserves the right to award the contract to the lowest responsive and qualified BIDDER, whose Bid is considered to be in the best interest of the OWNER.

B. FORMAL SEALED PROPOSALS: No later than three (3) business days after the selection committee recommendations are finalized the Purchasing Manager or his/her designee shall post the selection committee’s rankings and recommended award for bids.

II. PROCEEDINGS
A. Any bidder, querter or bidder who is allegedly aggrieved in connection with the solicitation or pending award of a contract must file a formal written protest with the Purchasing Manager within five (5) business days of the posted award recommendation.

B. The formal written protest shall reference the bid/quote/proposal number, and shall state with particularity the facts and laws, upon which the protest is based, including full details of adverse affects and the relief sought.

C. Within seven (7) calendar days of receipt of the formal written protest the Purchasing Manager will arrange a meeting of the Protest Committee and the affected parties. The Protest Committee shall consist of two (2) Department Directors or designees, both of whom must be from an organizational group which the user department or group is not assigned; one (1) Assistant County Manager, who must be from an organizational group which the user department or group is not assigned. The Purchasing Manager shall act as a non-voting Hearing Coordinator and the County Attorney or designee may be requested to attend as a non-voting member. The Purchasing Manager or designee shall record the meeting and provide any information as the committee may request. The purpose of the meeting of the Protest Committee is to provide an opportunity to: (1) review the basis of the protest, (2) evaluate the facts and merits of the bid protest, and (3) if possible, to reach a resolution of the protest that is acceptable to the affected parties. For the purpose of the Protest Committee hearing, resolution shall mean that the Protest Committee and the affected parties.

D. In the event the matter not resolved with the Protestor’s acceptance of the Protest Committee’s decision, the Purchasing Manager will schedule the recommended award including the details of the protest and the Protest Committee’s recommendation before the Board of County Commissioners via Board Agenda. The County Manager, prior to approval and placement on the Board agenda, may elect to resolve the matter before presentation to the Board. In the event that the County Manager cannot bring the matter to resolution, a copy of the Agenda Report shall be furnished immediately to all affected parties. The affected parties may appear before the Board of County Commissioners as a final means of administrative remedy.

III. STAY OF PROCUREMENTS DURING PROTESTS
Failure to observe any or all of the above procedures shall constitute a waiver the right to protest a contract award. In the event of a timely protest under the procedure, the County shall not proceed further with solicitation or with the award until a recommendation is made by the Committee, or a written determination is made by the County Manager that the award must be made without delay in order to protect the public interest. Invoice disputes between an awardee and user agency will follow the guidelines set forth in AO-33, Prompt Payment of Invoices. INCURRED COST: Brevard County is not liable for any cost incurred by any vendor prior to an award. Costs for developing a response to this request for bid are entirely the obligation of the bidder and shall not be chargeable in any manner to Brevard County.

THE COUNTY OF BREVARD RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS, TO WAIVE INFORMALITIES, AND TO ACCEPT ALL OR ANY PART OF ANY BID AS MAY BE DEEMED TO BE IN THE BEST INTEREST OF THE COUNTY.

UNLESS OTHERWISE NOTED, PAYMENT OF GOODS OR SERVICES PROVIDED AS A RESULT OF THIS SOLICITATION WILL BE MADE PER FLORIDA STATUTE. ALL FIRST TIME VENDORS MUST SUBMIT A W-9 FORM TO COUNTY FINANCE.

CP-22 CONSTRUCTION (REV. 7/07/08)

VENDOR COMPLAINTS AND DISPUTES
Brevard County encourages prompt and fair handling of all complaints and disputes with the business community. In order to resolve disputed matters in an equitable manner, the following procedures are adopted:

I. Posting of Award Notices
A. FORMAL SEALED BIDS/QUOTES: No later than three (3) business days after a bid opening the Purchasing Manager or his/her designee shall post a tabulation of competitive sealed bids/quotes on a bulletin board located in or near the Purchasing Services Office. The apparent low bid/quote will be the intended award recommendation. If after posting the tabulation, the apparent low bid/quote is found to be non-responsive to the specifications, the formal award evaluation will be posted. The time for filing protest will begin the date of the later posting. The County reserves the right to award the contract to the lowest responsive and qualified BIDDER, whose Bid is considered to be in the best interest of the OWNER.

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A. Any bidder, querter or bidder who is allegedly aggrieved in connection with the solicitation or pending award of a contract must file a formal written protest with the Purchasing Manager within five (5) business days of the posted award recommendation.

B. The formal written protest shall reference the bid/quote/proposal number, and shall state with particularity the facts and laws, upon which the protest is based, including full details of adverse affects and the relief sought.

C. Within seven (7) calendar days of receipt of the formal written protest the Purchasing Manager will arrange a meeting of the Protest Committee and the affected parties. The Protest Committee shall consist of two (2) Department Directors or designees, both of whom must be from an organizational group which the user department or group is not assigned; one (1) Assistant County Manager, who must be from an organizational group which the user department or group is not assigned. The Purchasing Manager shall act as a non-voting Hearing Coordinator and the County Attorney or designee may be requested to attend as a non-voting member. The Purchasing Manager or designee shall record the meeting and provide any information as the committee may request. The purpose of the meeting of the Protest Committee is to provide an opportunity to: (1) review the basis of the protest, (2) evaluate the facts and merits of the bid protest, and (3) if possible, to reach a resolution of the protest that is acceptable to the affected parties. For the purpose of the Protest Committee hearing, resolution shall mean that the Protestor finds the decision of the Protest Committee acceptable.

D. In the event the matter not resolved with the Protestor’s acceptance of the Protest Committee’s decision, the Purchasing Manager will schedule the recommended award including the details of the protest and the Protest Committee’s recommendation before the Board of County Commissioners via Board Agenda. The County Manager, prior to approval and placement on the Board agenda, may elect to resolve the matter before presentation to the Board. In the event that the County Manager cannot bring the matter to resolution, a copy of the Agenda Report shall be furnished immediately to all affected parties. The affected parties may appear before the Board of County Commissioners as a final means of administrative remedy.

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CP-22 CONSTRUCTION (REV. 7/07/08)
Sealed bids will be received at the Brevard County Purchasing Services Office, 2725 Judge Fran Jamieson Way, Building C, Third Floor, Suite C-303, Melbourne, Florida 32940, until 2:00 p.m. on November 16, 2015, for:

**Lift Station F-10 Electrical Improvements**

The project consists of upgrading the electrical, control and instrumentation equipment associated with existing Lift Station F-10. This scope of work includes furnishing and installing a Triplex Pump Control Panel, electrical disconnects, battery charging system for the existing emergency generator, complete and integrated grounding system, and making improvements to instruments, controls, alarms, and lighting. This work also involves the re-installation of an Owner-furnished RTU system and includes providing and maintaining a temporary bypass pumping system, performing required demolition of old components, performing all demonstration tests, and furnishing and installing all hardware, fasteners, conduits, wiring, and other incidentals required for the complete installation in conformance with the Specifications and Drawings.

Bids shall be submitted in triplicate on BID forms furnished for that purpose in accordance with the Bid Documents, (the Drawings and Specifications), which may be obtained in electronic (pdf ) format at the office of the Brevard County Utility Services Department at 2725 Judge Fran Jamieson Way, Building A, Suite 213, Melbourne, FL 32940, 321-633-2089. A non-refundable fee of $10.00 will be required for each set of Bid Documents to cover the cost of file preparation and administration. Bidding documents will be shipped upon receipt of the non-refundable fee. Only complete sets of the Bidding Documents will be distributed. Anyone purchasing a complete set of Bidding Documents must indicate whether they are a general contractor, subcontractor, supplier, or manufacturer. Bidders requesting Bidding Documents to be sent via express or overnight delivery shall specify same and provide their account number with request. Anyone wishing to have Bid Documents delivered to them must include a street address to permit delivery and billing from the delivery service.

**SPECIAL NOTICE:** Bids for this project will only be accepted from the current list of Brevard County Pre-qualified Underground Utility Contractors for FY 2016 CIP Projects. Any party may pay for and obtain the bid documents, but only bids from the pre-qualified contractors will be considered.

All questions about the meaning or intent of the Bidding Documents must be submitted in writing to, Jon McLester, Purchasing Supervisor, Brevard County Purchasing Services Office, 2725 Judge Fran
Jamieson Way, Building C, Third Floor, Suite C-303, Melbourne, Florida 32940. Written questions may be mailed, expedited, faxed to (321) 617-7391, or sent via email to: Jonathan.McLester@brevardcounty.us. All questions must be received in writing prior to 5:00 p.m. on November 9, 2015.

No bid shall be considered unless sealed and filed with the Purchasing Services Office at the address specified, no later than the time set forth above. The official time clock will be the date and time stamp clock located in the Purchasing Office. Each bid must be accompanied by a Bidder’s Bond, payable to Brevard County, Florida for five percent (5%) of the amount of the bid; to be forfeited as liquidated damages in the event that the bid is accepted and the bidder fails to enter promptly into a written contract and furnish the required Performance Bond, Payment Bond, and Insurance Certificates. Bids arriving after the designated time will be returned unopened.

No bids shall be withdrawn for a period of thirty (30) days after the opening of bids. Brevard County reserves the right to reject any or all bids and to waive minor irregularities in the bids.

Bids must be submitted in a sealed envelope and be marked on the outside of the envelope:

SEALED BID FOR:  Lift Station F-10 Electrical Improvements

BID NUMBER:  B-4-16-17

BID OPENING DATE:  November 16, 2015, at 2:00 p.m., in the Purchasing Services Conference Room, Building C, Third Floor, Brevard County Government Center.

A Pre-Bid Conference will be held on October 29, 2015, at 9:00 a.m., at the Sykes Creek Regional Wastewater Treatment Facility, Maintenance Building, 3630 North Courtenay Parkway, Merritt Island, FL 32953. All prospective bidders are strongly encouraged to attend.

END OF SECTION
1.01 DEFINITIONS

General: Whenever in the Contract Documents, the following terms (or pronouns in place of them) are used, the intent and meaning of such terms shall be interpreted as follows:

1. Addendum: A written explanation, interpretation, change, correction, addition, deletion, or modification, affecting the Contract Documents, including Drawings and Specifications issued by the Owner and distributed to prospective bidders prior to the bid opening.

2. Affidavit: The instrument which is to be signed by the Contractor and submitted to the Owner through the Engineer, upon completion of that job, showing that all bills have been paid. It shall also mean such instrument that may be requested by the Owner incident to partial payments.

3. “And” –“Or”: The word “and” shall also mean “or”, and the word “or” shall also mean “and” whenever the contents or purpose so require.

4. Article: The prime subdivision of a section of these or any other referenced Specifications, the Instructions to Bidders, and Special Conditions and the General Conditions.

5. Bid: The offer of the Bidder for the work when made out and submitted on the prescribed bid form, properly signed and guaranteed.

6. Bid Form: The official form on which the Owner requires formal bids to be prepared and submitted.

7. Bidder: An individual, firm or corporation submitting a bid for the work contemplated; acting directly or through a duly authorized representative.

8. Bid Security or Bid Bond: The security designated in the Bid to be furnished by the Bidder as guaranty that Bidder will enter into the Contract for the work if the bid is accepted.

9. Calendar Day: Any day, including Saturdays, Sundays and holidays, and regardless of the weather conditions.

10. Change Order: A written order to the Contractor signed by the Owner, Engineer and Contractor, authorizing an addition, deletion or revision in the work, or an adjustment in the Contract price or the Contract time issued after
execution of the Contract. The term change order also includes any written order signed by the County Manager, within the scope of the monetary authority delegated to the Manager by the County Commission, and signed by the Engineer and Contractor.

11. Contractor: The person whose Bid shall be accepted by the Owner and who shall thereafter enter into a formal contract with the Owner to furnish the work as bid upon. The Contractor has the obligation to deliver to the Owner the completed job in good and workmanlike condition.

12. Contract Documents: The Contract Documents shall include the following whether or not such documents are attached together as one document:

a) Advertisement for Bids
b) Instructions to Bidders
c) Bid
d) Bid Security or Bid Bond
e) Contract
f) Performance Bond
g) Payment Bond
h) Maintenance Bond
i) General Conditions
j) Special Conditions
k) Supplementary Conditions
l) Technical Conditions
m) Technical Specifications
n) Addenda
o) Drawings and modifications
p) Schedule of Work
q) Criteria for Water and Sanitary Sewerage Systems within Brevard County, latest revision (Criteria)
r) Warranties, Guarantees
s) Signed written change orders
t) Signed written task orders
u) Notice of Award
v) Notice to Proceed

13. County Commission: The Board of County Commissioners of Brevard County, Florida.

14. Drawings: The official approved drawings or plans to exact reproductions thereof which show the location, character, dimensions and details of the work to be done and which are to be considered as part of the Contract Documents, the same as though attached thereto.

15. Engineer: See “Owner’s Engineer” below.

16. Equipment: The machinery and equipment, together with the necessary supplies for upkeep and maintenance, and including the tools and apparatus necessary for the proper construction and acceptable completion of the Work.
17. Force Account Work: Work performed pursuant to a work order from the Owner in addition to that set forth in the original contract or in supplemental agreements or change orders, and which is paid for on the basis of actual cost of materials and labor, plus a fixed percentage of such costs.

18. Materials: Any substance proposed to be used in connection with the construction of any structure, facility or appurtenance, or of other work under the contract.

19. Nominal Quantity: A contingent amount included in the Bid Form to establish a price extension for a contingent item of unknown character and quantity generally relating to subsoil conditions.

20. Notices:
   a) Notice of Award: Official letter from the Owner requesting the successful Bidder to furnish all the documents required for the signing of the Contract.
   b) Notice to Proceed: The official letter from the Owner to the Contractor instructing the Contractor to commence work; identifying the date when the Contract time begins to run and a completion date.

21. Owner: Brevard County Board of County Commissioners.

22. The Owner’s Engineer: Tetra Tech, Rasesh R. Shah, P.E. Any instructions, advice, or recommendations Owner’s Engineer may give the Contractor are given in the name of the Owner and by Owner’s authority and consent. The Owner’s Engineer shall not supplant the Contractor in Contractor's conduct, direction and supervision of the work, unless specifically directed to do so by the Owner, in writing, under appropriate terms of the Contract Documents. All orders and instructions of the Owner to the Contractor shall be given through the Owner’s Engineer. It is recognized that the Contractor is wholly and solely responsible for delivery to the Owner of the completed work in a good and worker like condition. If directions given by Owner’s Engineer will result in change in contract price or time, Contractor must notify Owner’s Engineer, and receive an approved Change Order, before beginning the work.

23. Performance and Payment Bonds: The securities furnished by the Contractor and the sureties as a guaranty that the Contractor will fulfill the terms of the Contract in accordance with the Drawings, Specifications and other Contract Documents. (Forms to be used are included in this package).

24. Person: The word “person” shall mean and include any individual, partnership, society, association joint stock company, corporation, estate, receiver, trustee, assignee, or referee, whether appointed by a court or otherwise, and any combination of individuals or “persons”.

00100-3
25. Principal: When used in the Bid Bond, the word “Principal” means the same as the word “Bidder”. When used in the Performance and Payment Bonds, the word “Principal” means the same as the word “Contractor”.

26. Project: The “Project” is described in Section 00030 of this agreement, entitled “Advertisement for Bids for Brevard County”, and also includes the entire construction of the Project to be performed as provided in the Contract Documents.

27. Project Manual: The title of the documentary information, whether bound or provided in electronic format, prepared for a construction project, which includes bidding requirements, conditions of contract and product specifications.

28. Pronouns: The masculine pronoun shall include the feminine and neuter and the singular shall include the plural.

29. Provided: As used in the Specifications or upon the Drawings, the word “provided” shall be understood to mean “provided complete in place”, that is, “furnished and installed”.

30. Scope of the Work: Includes the Work, as the term is herein defined, as well as the responsibility for performing and complying with all incidental matters pertaining thereto, as set out in the Contract Documents.

31. Specifications: The Instructions to Bidders, General Conditions, Special Conditions, Technical Specifications and such other documents as set forth in the Contract Documents.

32. Special Conditions: Specific clauses supplemental to the other Contract Documents setting forth conditions varying from or additional to the other Contract Documents for a specific project.


34. Subcontractor: A person supplying labor, materials, supplies, equipment, services, and other incidentals used directly or indirectly by the Contractor or Subcontractors. Such person has contractual relations with the Contractor, but not with the Owner.

35. Superintendent: The Contractor’s authorized executive representative, in responsible charge of the work at all times.

36. Surety: The corporate body which is bound by the Performance and Payment Bonds with and for the Contractor (who is primarily liable) and which engages to be responsible for his acceptable performance of the work for which the contract has been made and/or for his prompt payment of all debts pertaining thereto.

37. Work Order: A written authorization to the Contractor signed by the Owner,
concerning the performance of work and/or the furnishing of materials on a force account basis as provided in the General Conditions.

38. Work: Shall mean everything expressly or impliedly required to be furnished and/or done by the Contractor by any one or more of the Contract Documents.

1.02 OBLIGATION OF BIDDER TO BECOME INFORMED AS TO ALL CONDITIONS RELATING TO PROJECT

A. The Bidder, by and through the submission of the bid, agrees that the Bidder shall have made a reasonable investigation of the site, including surface and subsurface conditions, prior to formulating the bid. Bidder further agrees that Bidder has examined the site and the location of all proposed work and that Bidder has satisfied himself from Bidder’s own personal knowledge and experience or from professional advice as to the character, condition and location of the site, (including the nature of the ground, surface and subsurface; the water elevations; location of buried utilities; any other conditions surrounding and affecting the work; any obstructions; the nature of any existing construction; and all other physical characteristics of the job), that Bidder has accounted for such conditions and characteristics in the prices bid including all costs pertaining to the work and for the satisfactory completion thereof, including the removal, relocation or replacement of any objects or obstructions which may be encountered in doing the proposed work.

B. Any records of contours, obstructions and other subsurface investigations shown on the Drawings or included hereinafter, were made solely for design purposes for the work, and the Owner and Owner's Engineer do not warrant, guarantee or represent that said data is correct with respect to actual subsurface conditions; therefore, the Bidder, by and through the submission of the bid, affirms that Bidder has made, or has caused to be made, such reasonable test holes and/or other reasonable investigations of such subsurface conditions, and/or that Bidder is otherwise satisfied with respect to such conditions; and should the Bidder be awarded the Contract, Bidder agrees that Bidder will make no claims against the Owner or Owner's Engineer if in carrying out the Work, Bidder finds that the actual conditions do not conform to those indicated as a result of such tests or inspections.

1.03 EXAMINATION OF CONTRACT DOCUMENTS

A. The Bidder warrants that Bidder has carefully examined the Drawings and Specifications and other Contract Documents, and informed himself thoroughly regarding any and all conditions and requirements, **including the construction schedule requirements of Section 01310**, that may in any manner affect the work to be performed under the Contract. Ignorance on the part of the Contractor will in no way relieve Bidder of the obligations and responsibilities assumed under the Contract.

1.04 ADDENDA, CHANGES OR INTERPRETATIONS DURING BIDDING

A. No oral interpretations will be made to any Bidder as to the meaning of the Contract Documents. Any inquiry or request for interpretation received seven (7) or more days prior to the date fixed for opening of bids, will be given due 00100-5
consideration. All such modifications or interpretations shall be made and
issued in writing in the form of an addendum and, if issued, will be mailed or
sent by available means to all known prospective Bidders not later than five (5)
days prior to the established bid opening date. Each prospective Bidder shall
acknowledge receipt of such addenda in the space provided therefor in the Bid
form. In case any bidder fails to acknowledge receipt of such addenda or
addendum, the bid will nevertheless be construed as though it had been
received and acknowledged, and the submission of the bid will constitute
acknowledgment of the receipt of same. All addenda are a part of the Contract
Documents and each Bidder will be bound by such addenda, whether or not
received by the Bidder. It is the responsibility of each prospective Bidder to
verify that the Bidder has received all addenda issued before bids are opened.
Prior to execution of the Contract, the Bidder shall provide written
documentation that the bid submitted encompasses all addenda issued by
number.

Oral Statements: No oral statement of any person whomsoever shall in any
matter or degree modify or otherwise affect the terms of the Contract
Documents.

1.05 FAMILIARITY WITH LAWS

A. The Bidder is required to be familiar with and shall be responsible for
complying with all federal, state and local laws, ordinances, rules and
regulations that in any manner affect the work, including those provisions of
Brevard County ordinance 98-37 codified in sec. 2-226 through 2-229 of the
Code of Ordinances of Brevard County, Florida (hereafter referred to as the
Code), which are incorporated by reference herein as part of these instructions
and as a part of the contract documents. The above-referenced sections of the
Code shall prevail to the extent of any conflict with any provision in the
contract documents. For the purposes of this section, the provisions of section
1.15 or 1.16 of these instructions are not deemed to be in conflict with any
standard or provision set forth in sec.2-226 through 2-229 of the Code.

1.06 PREPARATION AND SUBMISSION OF BIDS

A. Signature of the Bidder: The Bidder must sign the Bid forms in the space
provided for the official signature. If the Bidder is an individual, the words
"doing business as ___________ ___________" or, "Sole Owner" must
appear beneath such signature. In the case of a partnership, the signature of at
least one of the partners must follow the firm name, and the words "Member of
the Firm" should be written beneath such signature. If the Bidder is a
corporation, the title of the officer signing the Bid in behalf of the corporation
must be stated and evidence of the Officer's authority to sign the Bid must be
submitted. The Bidder shall state in the Bid the name and address of each
person interested therein.

B. Basis for Bidding: The price bid for each item shall be on a lump sum or unit
price basis according to the form of the Bid. The bid prices shall remain
unchanged for the duration of the Contract and no claims for cost escalation
during the progress of the work will be considered.

C. Price Bid: The total price bid for the Work shall be the sum of the individual
lump sum prices bid, and/or all of the line item unit prices multiplied by the appropriate estimated quantities for the individual items. Such total bid price shall be stated in figures and words in the appropriate places on the Bid Schedule Form.

In the event that there is a discrepancy on the Bid Schedule Form due to a calculation or other mathematical error in the unit price extensions or in the total summations, the corrected extensions and summations shall be used to determine the project bid amount. The Bidder agrees to honor the corrected total bid amount if errors are discovered after bid opening. During the contract term, the unit price shall prevail.

D. Submission of Bids:

Unless this advertisement has been restricted to Prequalified Contractors, as identified in Section 00030, the following requirements apply to all potential Bidders.

A Bidder Checklist is included at the end of this Section. All items so identified on the Bidder Checklist MUST be submitted for this Bid to be considered.

1. Each bid shall be submitted in triplicate on the Bid Form as furnished, together with a suitable bid security, herein described.

2. The above bid sets and bid security must be submitted in a sealed envelope which shall be marked so as to clearly indicate its contents and the name of the Bidder. If forwarded by mail, the above mentioned envelope shall be in another envelope addressed to Purchasing Services and preferably by special delivery, registered mail; if forwarded otherwise than by mail, it shall be delivered to the same address as listed above. Bids will be received through the date and hour stated in the Advertisement for Bids.

3. The Bidder must submit with the bid, the information on the forms in Section 00300, in which Bidder lists the names and addresses of the major subcontractors together with the services they will supply. Major subcontractors are defined as those having either a total fee in excess of $50,000 or 5% of the total base bid amount. These subcontractors will be prequalified by the Owner prior to Award of Contract and shall be one of the considerations in determining the lowest, best, most qualified and responsive Bidder. After Award of Contract, no change in subcontractors shall be made unless approved by the Owner after a request for such a change has been submitted in writing by the Contractor which shall include the reasons for such request.

E. Trench Safety Act: If so indicated on the Checklist, Bidders shall comply with the “Trench Safety Act.” Trench safety cost per linear foot of pipe trench over five feet deep shall be included in the appropriate space on the Bid Form. This cost shall already be included in the bid total; it shall not be a bid item, but shall be furnished for information and for compliance with said Act only.

In appropriate cases where trench excavations are or may be involved as part
of the project, the submission of a bid will constitute an incontrovertible representation by the Bidder that Bidder has read Florida Statutes, §553.60-64 and the Occupational Safety and Health Administration’s excavation safety standards, 29 C.F.R. 1926.650, subparagraph P (or such successor statutes, standards, etc., as amended or modified from time to time subsequent to October 1, 1990) and will comply with such requirements.

1.07 DISQUALIFICATION OF BIDDERS

A. One Bid: Only one Bid from an individual firm, partnership or corporation under the same or under different names will be considered. If it is believed that a Bidder has an interest in more than one Bid for the work involved, all Bids in which such a Bidder is interested will be rejected.

B. Collusion Among Bidders: If it is believed that collusion exists among the Bidders, the Bids of all participants in such collusion will be rejected, and no participants in such collusion will be considered in future bids for the same work.

1.08 BID SECURITY

A. Each bid must be accompanied by either (1) cash, (2) a Cashier’s or Certified Check of the Bidder, made payable to the Owner, (Brevard County Board of County Commissioners), or (3) a Bidder’s Bond, utilizing the form provided in the contract documents, in an amount not less than five percent (5%) of the total amount of the bid. DO NOT MODIFY OR RE-ISSUE THE BID SECURITY BOND FORM. USE THE FORM PROVIDED IN THE SPECIFICATIONS ONLY. FAILURE TO USE THE FORM PROVIDED IN THE SPECIFICATIONS MAY RESULT IN DISQUALIFICATION OF THE BIDDER. A cashier’s check shall have the necessary State of Florida’s Documentary Stamps attached. Cash and checks will be returned within ten (10) days after the Owner and the accepted Bidder have executed the written Contract. Bid Bonds will only be returned upon request and retained as part of the official file. If ninety (90) days have passed after the date of the formal opening of the bids and no Contract has been awarded, the bid security of any Bidder will be returned upon written request of Bidder, provided that the Bidder has not been notified of the acceptance of the Bid.

1.09 POWER OF ATTORNEY

A. Attorneys-in-Fact who sign Bid Bonds or Contract Bonds, must file with such bonds a certified copy of their Power of Attorney to sign said Bonds.

1.10 BID SECURITY FORFEITED - LIQUIDATED DAMAGES

A. Failure to execute a Contract and file acceptable bonds as provided herein within ten (10) days after a written Notice of Award has been given shall be just cause for the annulment of the award and the forfeiture of the Bid Security to the Owner, which forfeiture shall be considered not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest most responsive and qualified Bidder, or all bids may be rejected.

1.11 WITHDRAWAL OF BID
A. Any bid may be withdrawn prior to the time scheduled in the Advertisement for Bids for the opening thereof, provided that it is done in writing by the one who signed the bid and that the withdrawal is submitted in the same manner as the bid.

1.12 MODIFICATION OF BIDS

A. Written bid modification will be accepted from Bidders if addressed to the Purchasing Services Office per 1.06.D.2 and received prior to bid due date and time.

1.13 OPENING OF BIDS

A. Bid opening shall be public on the date and at the time specified. No responsibility will be attached to any officer for the premature opening of a bid not properly addressed and identified. Sealed bids received pursuant to invitations to bid are exempt from the provisions of subsection (1) and s. 24(a), Art. I of the State Constitution until such time as the agency provides notice of a decision or intended decision pursuant to s. 120.57(3)(a) or within 30 days after bid opening, whichever is earlier. In accordance with Section 255.0518, F.S., the name of each firm submitting a competitive solicitation and the price bid by that firm will be read aloud at the time of the opening.

1.14 CONSIDERATION OF BIDS

A. All acceptable Bids shall be considered by the Owner according to established policy. The details of that policy are provided in Policy BCC-28, Pre-Qualification of Construction Bidders Prior to Award. Please refer to the Policy included in its entirety at the end of this Section.

B. For the purpose of award, after the Bids are opened, the correct summation of the lump sum prices and/or of the products of the estimated quantities shown in the Bid and the unit prices, will be considered the Bid. Until the final award of the Contract, the right will be reserved to reject any and all Bids and to waive technical errors and irregularities as may be deemed best for the interests of the Owner.

C. Tie Bids: Award of all tie quotes/bids shall be made by the Purchasing Manager in accordance with State Statutes, which allows a firm certified as a Drug-Free Workplace to have precedence. When evaluation of vendor responses to solicitations results in identical offers, with regards to bids or quotations, or identical ranking with regards to proposals, from two or more vendors, the County shall determine the order of award using the following criteria in order of preference listed below (from highest priority to lowest priority):

1. For tie bids, quotations or proposals, priority shall be given to the vendor certifying that he/she is a Drug-Free Workplace as defined within '287.087, Florida Statutes;

2. Should a tie still exist, in the case of proposals only, priority shall be given until the tie is broken, to the vendor with the highest total of raw 00100-9
scores for each evaluation criteria, progressing from the highest weighted criteria to the lowest rated criteria. If multiple evaluation criteria have identical weights, the combined total weights of the identically weighted criteria shall be used;

3. Should a tie still exist for bids, quotations or proposals, priority shall be given to the vendor having a verified business establishment within the boundaries of Brevard County, Florida;

4. In the event that a tie still exists after progressing through a-c, the decision shall be made by lot or coin toss. The drawing of lots or coin toss shall be conducted in the presence of the effected bidders if they elect to be present.

D. The apparent low Bidder, after Purchasing publishes the official Bid Tabulation, will be required to submit a fully executed Contractor's Qualification Statement within five (5) days for Owner review and approval. Such information shall be submitted on the form contained in Section 00420 of these Contract Documents.

The Contractor's Qualification Statement shall be submitted with the following information:

1. Resumes of Contractor/Major Subcontractor's key personnel, including Project Manager and Superintendent levels.

2. Any other pertinent qualification data or information determined by Owner to be critical to the success of the project.

If the apparent low Bidder cannot provide adequate documents for review, or the submitted documents give indications of a non-stable or unqualified company, the Contractor will be recommended by staff for Bid rejection and the apparent second low Bidder will be contacted and afforded the previous mentioned five (5) days to submit their pre-qualification documents. This process would continue until a most responsive, responsible Bidder is established.

1.15 RIGHT TO ACCEPT OR REJECT BIDS

A. Bids which contain modifications (other than in accordance with Paragraph 1.12), are incomplete, unbalanced, conditional, obscure or which contain additions not requested or irregularities of any kind, or which do not comply in every respect with the Instructions to Bidders, and the Contract Documents, may be rejected at the option of the Owner. The Owner is not bound to accept the minimum bid stated herein, but reserves the right to accept any bid which in the judgment of the Owner, is the lowest responsive and qualified Bid and which will best serve the needs and interests of the Owner.

1.16 AWARD OF CONTRACT

A. The Contract will be awarded to the lowest responsive and qualified Bidder, whose Bid is considered to be in the best interest of the Owner. This determination will be made at the sole discretion of the Owner and shall be
based upon the character, fitness, experience, history and financial status of the Bidder.

B. The lowest Bidder is determined by the aggregate amount of the unit prices set forth in the form of Bid, if Work or any portion of the Work is bid on a unit price basis, and/or the amount of the Base Bid.

C. A responsive Bidder shall mean a Bidder who has submitted a Bid which conforms, in all material respects, to the Contract Documents.

D. Qualified Bidder shall mean an individual or business which has submitted a bid, offer, proposal, quotation, or response, which has the capability in all respects to fully perform the Contract requirements and has the financial stability, honesty, integrity, skill, business judgment, experience, facilities and reliability necessary to give reasonable assurance of good faith and performance.

E. The Owner reserves the right to reject any or all Bids, or any part of any Bid, to waive minor informalities in any Bid, or to re-advertise for all or part of the work contemplated. The Owner reserves the right, prior to award of Contract, to delete from the scope of the project, any item or any combination of items the aggregate Bid prices for which do not exceed 25 percent of the total Bid price for the project. If Bids are found to be acceptable by the Owner, written notice will be given to the lowest responsive and qualified Bidder of the acceptance of the Bid and the Award of the Contract to same.

F. If a Bidder to whom a Contract is awarded forfeits the Bid security and the Award of the Contract is annulled, the Owner may then award the Contract to the next-lowest responsive and qualified Bidder or the work may be re-advertised or may be constructed by day labor as the Owner decides.

G. The ability of any Bidder to obtain a performance bond shall not be regarded as the sole test of such Bidder’s competence or responsibility.

H. The Owner also reserves the right to reject the Bid of a Bidder who has previously failed to perform properly or to complete Contracts of a similar nature on time.

1.17 EXECUTION OF CONTRACT

A. The Bidder to whom a Contract is awarded will be required to execute in five (5) counterparts the prescribed Contract and Performance and Payment Bonds within ten (10) days from the date of Notice of Award of the Bidder’s Bid, and deliver the executed Contract to the Owner.

1.18 PERFORMANCE, PAYMENT, AND MAINTENANCE BONDS

A. Simultaneously with Bidder’s delivery of the executed Contract to the Owner, a Bidder to whom a Contract has been awarded must deliver to the Owner executed Performance and Payment Bonds on the prescribed forms, each in an amount of one-hundred percent (100%) of the total amount of the accepted Bid, as security for the faithful performance of the Contract and for the payment of all persons performing labor or furnishing materials in connection
A Maintenance Bond in the amount of 25% of the total amount of the Contract, including change orders shall be submitted at contract closeout with the request for final payment. The Performance, Payment, and Maintenance Bonds shall have as the surety thereon only such surety company or companies as are authorized to write bonds of such character and amount under the laws of the State of Florida and with a resident agent in the State of Florida. The Attorney-In-Fact, or other officer who signs the Performance, Payment, and Maintenance Bonds for a surety company, must file with such bonds a certified copy of his Power-Of-Attorney authorizing him to do so.

B. The Performance and Payment Bonds shall remain in force for one (1) year and the Maintenance Bond for two (2) years from the date of final acceptance of the Work as a protection to the Owner against losses resulting from latent defects in materials or improper performance of work under the Contract, which may appear or be discovered during that period.

1.19 QUALIFICATION OF SURETIES
A. Refer to Section 00700, Paragraph 5.1.1.

1.20 INTERPRETATION OF QUANTITIES
A. In the case of unit price items, the amount of work and the quantity of materials to be furnished under this Contract, given in the Bid Form, are to be considered as approximate only and are to be used solely for the comparison of Bids received. The Owner does not expressly, or by implication, represent that actual quantities involved will correspond exactly therewith; nor shall the Bidder plead misunderstanding or deception because of such estimate or quantities or of the character, location or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or material furnished in accordance with the Drawings and other Contract Documents, and it is understood that the quantities may be increased or diminished as provided in the General Conditions without in any way invalidating any of the unit or lump sum prices bid.

1.21 ALTERNATES
A. When certain items of equipment and/or materials are specified and/or described as the product of a particular manufacturer together with any required additional information such as model, number, size or catalog number, only such specific items may be used in the Base Bid except as hereinafter provided.

B. The Contractor must judge for himself that such alternate equipment is of comparable character and quality to the specified equipment. The Owner or the Owner's Engineer will not discuss, approve or disapprove any alternate equipment and/or materials before the bids are opened. The cost of changes in related work, additional drawings which may be required to illustrate or define the alternate equipment and its relation to the other parts or portions of the work shall be paid by the Contractor. No change will be made in the amount of time in which to complete the work or in the liquidated damages.

1.22 CERTIFICATE OF COMPETENCY
A. A Bidder need not have a Brevard County Occupational License at the time of the Bid submittal; however, before the Contract can be awarded, an Occupational License must be obtained by the selected Bidder. If a copy of the license is not included with the Bid submittal, it must be provided to the Owner prior to award of Contract.

1.23 UNAUTHORIZED ALIEN WORKERS

A. Brevard County will not intentionally award publicly-funded contracts to any contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contained in 8 U.S.C. Section 1324a(e) (Section 274A(e) of the Immigration and Nationality Act "INA"). The County shall consider any violation of Section 274A(e) of the INA as grounds for unilateral cancellation of this Agreement by the County.

1.24 ATTORNEY'S FEES

A. In the event of any legal action to enforce the terms of this Contract, each party shall bear its own attorney's fees and costs and any trial shall be non-jury, provided however, that any Surety incorporating all or a part of the Contract Documents into a performance, maintenance or bid bond shall be liable for the County’s attorneys fees where authorized by Florida statutory law, as interpreted by case law, making a surety or insurance company liable for payment of the County’s attorneys fees as a result of litigation or a dispute arising out of either a performance bond or a contract incorporated into a performance bond.

1.25 FLORIDA PUBLIC RECORDS LAW

A. Both parties understand that the County is subject to the Florida Public Records Law, Chapter 119, Florida Statutes and all other applicable Florida Statutes. If the materials provided by the Contractor do not fall under a specific exemption, under Florida or federal law, materials provided by the Contractor to the County would have to be provided to anyone making a public records request. It will be the bidder’s duty to identify the information which it deems is exempt under Florida/federal law and identify the statute by number which exempts that information.

B. Should any person or entity make a public request of the County which requires or would require the County to allow inspection or provide copies of records which the Contractor maintains are exempt from Public Records Law or are confidential, it shall be the Contractor’s obligation to provide the County, within 24 hours (not including weekends and legal holidays), of notification by the County to the Contractor of the request, of the specific exemption or confidentiality provision so the County will able to comply with the requirements of Fla. Stat. 119.07(1)(e) and (f). Should the County face any kind of legal action to require or enforce inspection or production of any records provided by the Contractor to the County which the Contractor maintains are exempt or confidential from such inspection/production as a public record, then the Contractor shall hire and compensate attorney(s) who shall represent the interest of the County as well as the Contractor in defending such action. The Contractor shall also pay any costs to defend such action and
shall pay any costs and attorneys fees which may be awarded pursuant to Fla. Stat. 119.12.

C. All material submitted becomes the property of the County and may be returned only at the County's option. The County has the right to use any or all ideas presented in any reply to this ITB. Selection or rejection of any proposal does not affect this right.

1.26 RIGHT TO AUDIT RECORDS:

A. In the performance of this Agreement, the vendor shall keep books, records, and accounts of all activities, related to the agreement, in compliance with generally accepted accounting procedures. Books, records and accounts related to the performance of this agreement shall be open to inspection during regular business hours by an authorized representative of Brevard County and shall be retained by the vendor for a period of three years after termination of this agreement. All records, books and accounts related to the performance of this agreement shall be subject to the applicable provisions of the Florida Public Records Act, Chapter 119, Florida Statutes.

B. No reports, data, programs or other materials produced, in whole or in part for the benefit and use of the County, under this agreement shall be subject to copyright the vendor in the United States or any other country.

1.27 LOCAL PREFERENCE

A. The Board of County Commissioners of Brevard County, Florida amended the Resolution for a local business preference policy. Businesses located within Brevard County will be given preference through the current procedures established by the resolution as amended. Business with an established and permanent physical location within Brevard County having a responsive and responsible bid within 5% of the lowest responsive and responsible non-local bid shall be given an opportunity to match the low bid. It is understood that the preference applied with the bid is for the Brevard County Board of County Commissioners only, and is valid only for the bid specified. The bidder also understands that failure to maintain the requirements of the Local Vendor Eligibility through completion of the awarded bid or contract may be grounds for immediate termination and may be used for consideration in future awards. The Local Preference Resolution is available for review on the Purchasing Services website: [http://www.brevardcounty.us/CentralServices/Purchasing](http://www.brevardcounty.us/CentralServices/Purchasing).
BIDDER CHECKLIST

BID # B-4-16-17

The items listed and marked below are required for submission with your bid for this project. Failure to submit any items indicated as required may result in rejection of the bid. Offers to provide required items after the date and time designated for the receipt of bids will not be considered.

☑ Completed/Signed Invitation to Bid, Section 00020
☑ Minority Employment Info., Form 00200
☑ Bid Pages 00300-1 and 00300-2
☑ Bid Schedule/Price Sheet, Section 00300
☑ Bid List of Major Subcontractors, Section 00300
☑ Trench Safety Act Compliance, Section 00300
☑ Bid Principals and Executives, Section 00300
☑ Acknowledgment of Officer to Execute Bid on Behalf of a Corporation, Section 00300
☑ 5% Bid Security Bond, Section 0410
☑ Drug Free Workplace Form, Section 00415
☑ Noncollusion Affidavit of Prime Bidder, Section 00480
☑ Public Entity Crime Affidavit, Section 00490
POLICY

TITLE: Pre-Qualification of Construction Bidders Prior To Award

NUMBER: BCC-26
CANCEL: December 21, 2010
APPROVED: October 8, 2013
ORIGINATOR: Central Services
REVIEW: October 8, 2016

I. OBJECTIVE
To delineate and define the process for pre-qualifying bidders prior to award by the Board of County Commissioners in order to evaluate a Contractor's and/or Subcontractor's eligibility for future Brevard County projects.

This Policy requires the Contractor and/or Subcontractor to submit documents which will provide evidence of adequate project experience, quality workmanship, adherence to project schedule, financial soundness, depth of corporate commitment, bid bond, prospective payment and performance bond rating in the surety market, safety performance, and any other pertinent data obtained from reference checks that is determined by staff to be a measure of the Contractor's/Subcontractor's qualifications.

II. REFERENCES
A. Brevard County Policy BCC-25, Procurement Policy.
B. AIA Document A305, Contractor's Qualification Statement.
C. Brevard County Administrative Order AO-45, Post Project Contractor/Subcontractor Evaluation Form.
D. Ordinance 98-37, Pre-Qualification of Construction Bidders Prior to Award.

III. DIRECTIVES
A. The following pre-qualification information of the awarded Contractor will be utilized for all construction projects exceeding $50,000.00:
   2. Most current Financial Statement (less than one (1) year).
   3. Resumes of Contractor/Subcontractor's key personnel down, including Project Manager and Superintendent level.
   4. The Bid Bond, Public Entity Crime Affidavit and Non-Collusion Affidavit (submitted with the Bid) will be reviewed and verified.
   5. List of subcontractors and suppliers and items of work to be performed by the Contractor's workforce.
   6. Contractor's Qualification Statement – AIA Document A305, most recent Edition for subcontractor's determined by staff and identified in the bidding documents to be critical to the success of the project. Key subcontractors and their qualifications are to be identified in the bid documents.
7. Any other pertinent qualifications, evaluations from past projects, data or information determined by staff to be critical to the success of the project.

B. The apparent low bidders, after the formal bid opening, will be required to submit the information above within five (5) days for review and approval by the appropriate Review and Qualification Committee listed below. If the apparent low bidder cannot provide adequate documents for review, or the submitted documents give indications of a non-stable or unqualified company, the Contractor will be recommended by the Review and Qualification Committee for bid rejection and the apparent second low bidder will be contacted and afforded the previous mentioned five (5) days to submit their pre-qualifications documents. This process would continue until a most responsive, responsible bidder is established.

C. The following Review and Qualification Committees and committee members (or designees) are hereby established:

1. Public Works Department Projects
   Public Works Department Director
   Public Works Engineering Manager
   Public Works Engineering Design, Permitting & Construction Manager

2. Utility Services or Natural Resources Management Projects
   Assistant County Manager for Development & Public Services Group
   Utility Services Department Director
   Natural Resources Management Department Director

3. Solid Waste Projects
   Assistant County Manager for Development & Public Services Group
   Solid Waste Management Department Director
   Utility Services Department Director

4. Parks and Recreation Projects – REFERENDUM Projects only
   Parke and Recreation Department Director
   Central Services Department Director
   Public Works Department Director
   (with the consolidation of P&R construction and Facilities construction, all future pre-qualification committees will fall under General Construction Projects)

5. General Construction Projects (any Department relying on Facilities to oversee their projects including special districts, agencies or other County project not otherwise encompassed herein)
   Central Services Department Director
   Deputy County Manager
   User Agency Department Director

6. Landscaping Projects
   Public Works Department Director
   Parks and Recreation Department Director
   Public Works Department - Landscaping Operations Manager

00100-17
IV. RESERVATION OF AUTHORITY
The authority to issue and/or revise this Policy is reserved to the Board of County Commissioners.

Attest:  
[Signature]
Scott Ellis, Clerk of Court

Andy Anderson, Chairman
Board of County Commissioners
Brevard County, Florida

As approved by the Board: 10/8/2013
SECTION 00200

MINORITY EMPLOYMENT INFORMATION

BID NO: B-4-16-17

BID NAME: Lift Station F-10 Electrical Improvements

The Board of County Commissioners, Brevard County, Florida, requires construction contractors, with 15 or more employees, to file Form 00200 with the submission of their bid. (One copy of Form 00200 is provided on the next page of this Section. Photocopies may be made as necessary.) Following an award of a contract, this requirement shall also extend to any of your sub-contractors with 15 or more employees. Failure to submit Form 00200 for your company with your bid may be reason to declare your bid as “non-responsive” to the bid requirements. However, the information contained on the form will be used for statistical purposes only and will not be used in any way as a basis to award a contract.

As the person authorized to sign the statement below, I certify the following:

(Check one and sign in the space provided)

_______ This firm has 15 or more employees and Form 00200 has been submitted as required.

_______ This firm has less than 15 employees and is not required to submit Form 00200.

_________________________   __________________________

BIDDER’s Name     BIDDER’s Title

_________________________

BIDDER’s Signature

00200-1
### 1. CHECK APPROPRIATE BLOCK
- CONTRACTOR □
- SUBCONTRACTOR □

### 2. NAME AND ADDRESS OF FIRM

### 3. TYPE OF CONSTRUCTION

#### EMPLOYEE DATA

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<td>MECHANICS</td>
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<td>CARPENTERS</td>
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<td>CEMENT MASONS</td>
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<td>PIPEFITTERS, PLUMBERS</td>
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<td>PAINTERS</td>
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<td>LABORERS, UNSKILLED</td>
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**totals**

#### PREPARED BY: ____________________________  DATE: ____________________________
(Signature of Project Site Superintendent)

#### REVIEWED BY: ____________________________  DATE: ____________________________
(Signature and Title of Contractor’s Project Manager)
SECTION 00210

NON-LOBBYING STATEMENT

ALL FIRMS ARE HEREBY PLACED ON NOTICE THAT THE COUNTY COMMISSION AND STAFF SHALL NOT BE CONTACTED ABOUT THIS BID/PROPOSAL/QUOTE. FIRMS AND THEIR AGENTS ARE HEREBY PLACED ON NOTICE THAT THEY ARE NOT TO CONTACT MEMBERS OF THE COUNTY COMMISSION OR STAFF (WITH THE EXCEPTION OF THE DESIGNATED LIAISON). PUBLIC MEETINGS AND PUBLIC DELIBERATIONS OF THE SELECTED COMMITTEE ARE THE ONLY ACCEPTABLE FORUM FOR THE DISCUSSION OF MERITS OF PRODUCTS/SERVICES REQUESTED BY THE REQUEST FOR BID/PROPOSAL/QUOTE; AND WRITTEN CORRESPONDENCE IN REGARD TO BID/PROPOSALS/QUOTES MAY BE SUBMITTED TO THE COUNTY MANAGER. EACH BID/PROPOSAL/QUOTE WILL HAVE ONE NON-VOTING STAFF MEMBER DESIGNATED WHO WILL SERVE AS THE LIAISON. FAILURE TO ADHERE TO THESE REQUIREMENTS COULD RESULT IN BOARD ACTION TO DISQUALIFY YOUR FIRM FROM CONSIDERATION OF AWARD.

END OF SECTION
SECTION 00300

BID for

LIFT STATION F-10 ELECTRICAL IMPROVEMENTS

Name of Bidder: __________________________________________
Submitted in Triplicate: ____________________________, 20___

Purchasing Services Office
2725 Judge Fran Jamieson Way
Building C, 3rd Floor, Suite C-303
Melbourne, Florida 32940

Gentlemen:

The undersigned, as Bidder, hereby declares that the only person or persons interested in the Bid, as principal or principals, is or are named herein and that no other person than herein mentioned has any interest in the Bid of the Contract to which the work pertains; that this Bid is made without connection or arrangement with any other person, company, or parties making a bid and that the Bid is in all respects fair and made in good faith without collusion or fraud.

The Bidder further declares that Bidder has examined the site of the work and is fully satisfied that such site is a correct and suitable one for this work and Bidder assumes full responsibility therefor. This determination was made based on Bidder's personal knowledge and experience and/or having made sufficient test holes and other subsurface investigations. The bidder states that the Drawings and Specifications for the work have been examined and based on Bidder's own experience or professional advice, Bidder has determined that the Drawings and Specifications are sufficient for the work to be done and that Bidder has examined the other Contract Documents and all addenda relating thereto, including the Advertisement for Bids, Instructions to Bidders, Bid, Bid Security, Contract, Performance and Payment Bonds, General and Special Conditions, Technical Specifications, Drawings and has read all addenda prior to the receipt of bids, and that Bidder has satisfied himself fully, relative to all matters and conditions with respect to the work to which this Bid pertains.

The Bidder proposes and agrees, if this Bid is accepted, to contract with Brevard County in the form of contract specified, to furnish all necessary materials, equipment, all necessary machinery, tools, apparatus, means of transportation, and labor necessary to complete the work specified in the Bid and the Contract, and called for by the Drawings and Specifications and in the manner specified. The Bidder further proposes and agrees to comply in all respects with the time limits for commencement and completion of the work as stated in the Contract Form.
The Bidder further agrees that the deductions for liquidated damages, as stated in the Contract Form, constitute fixed, agreed, and liquidated damages to reimburse the Owner for additional costs to the Owner resulting from the work not being completed within the time limit stated in the Contract Form.

The Bidder further agrees to execute a Contract and furnish satisfactory Performance and Payment Bonds, each in the amount of one-hundred percent of the Contract price, within ten consecutive calendar days after written notice being given by the Owner of the award of the Contract, and the undersigned agrees that in case of failure on Bidders part to execute the said Contract and Performance and Payment Bonds within the ten consecutive calendar days after the award of the Contract, the cashier's check or Bid Bond accompanying the bid and the money payable thereon shall be paid to the Owner as liquidation of damages sustained by the Owner; otherwise, the Bid Security accompanying the Bid shall be returned to the undersigned after the Contractor is signed and the Performance and Payment Bonds are filed.

The undersigned agrees to accept in full compensation therefor the total of the lump sum prices and extended unit price items named in the following schedule. It is understood that the unit prices quoted or established for a particular item are to be used for computing the amount to be paid to the Contractor, based on the quantities actually constructed as determined by the applicable measurement and payment portion of the technical specifications.

Bidder’s Occupational License No. ________________________________

Name and Address of Surety or Sureties who will sign Bonds:

Performance Bond: _____________________________________________

Payment Bond: _______________________________________________

Maintenance Bond: ___________________________________________
Each Bidder shall fill out and complete the Bid Schedule form included in this Section and shall submit the appropriate number of copies as part of the Bid. The purpose of the Bid Schedule is to provide a uniform comparison of the bids.

This Contract is a **LUMP SUM CONTRACT** and Bidder is to include all costs Bidder may anticipate during the length of this project and the contract. Each Bidder shall include all extras the Bidder may determine necessary to provide the quantity and quality of Work required by the Contract Documents. Fill in the following bid breakdown which will be used to determine bid completeness and understanding. Then fill in the Total Lump Sum Bid Price on the line provided. The total bid price must be equal to the sum of the values in the bid breakdown. The verified sum of the individual values in the bid breakdown takes precedence over any discrepancy between the Total Lump Sum Bid Price written and the corrected total lump sum bid price.

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Item Description</th>
<th>Total Price</th>
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<tbody>
<tr>
<td>1*</td>
<td>Mobilization/Demobilization, Insurance, Bonds</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td>By-pass Installation and Pumping</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td>Demolition</td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td>Electrical Equipment and Materials</td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td>Electrical Modifications and Installation</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>RTU System Installation</td>
<td>$</td>
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<tr>
<td>7</td>
<td>Allowance (Section 01020)</td>
<td>$ 30,000.00</td>
</tr>
</tbody>
</table>

**Total Lump Sum Bid Price:** $ __________________

(In Words)________________________________________________________________________

*NOTE: Bid Item Number 1 cannot be more than 7% of the Total Lump Sum Bid Price. See Section 01025 for more information.*
Acknowledgment is hereby made of the following Addenda received subsequent to issuance of Plans and Specifications:

Addendum No. _____ Dated: ___________   Addendum No.____ Dated: ___________
Addendum No. _____ Dated: ___________   Addendum No.____ Dated: ___________

Dated this ________________day of ______________________, 20___.

Name of Organization: _______________________________________________________

By: _______________________________________________________________________

Title: _____________________________________________________________________

The undersigned Bidder hereby designates, as follows, all major Subcontractors whom Bidder proposes to utilize for the major areas of Work for the Project. The Bidder is further notified that all Subcontractors shall be properly licensed, bondable and shall be required to furnish the Owner with all information on Subcontractors as required in the Bidding and Contract Documents. Failure to furnish this information shall be grounds for rejection of the Bidder's proposal.

<table>
<thead>
<tr>
<th>Area of Specialty</th>
<th>Name and Address</th>
<th>License Number</th>
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</table>
TRENCH SAFETY ACT COMPLIANCE

1. The bidder acknowledges the existence of the Florida Trench Safety Act (hereinafter called the “Act”) and the requirements established therein.

2. The bidder further acknowledges that the Act established the Federal excavation safety standards set forth at 29 CFR Part 1926, Subpart P as the Interim State standard applicable to this project.

3. The bidder will comply with all applicable trench safety standards, during all phases of the work, if awarded the contract, and will ensure that all subcontractors will also comply with the Act.

4. The bidder will consider the geotechnical information available from the Owner, if any, from its own sources and all other relevant information in its design of the trench safety system it will employ on the subject project. The bidder acknowledges that the Owner is not obligated to provide such information, that Bidder is not to rely solely on such information if provided, and that Bidder is solely responsible for the selection of the data on which he relies in designing said safety system, as well as for the system itself.

5. The bidder acknowledges that included in the Total Price in the Bid Form are costs for complying with the Florida Trench Safety Act which is in effect as of October 1, 1990. The undersigned further identifies the costs to be $___________ per Lineal Foot.

6. The amount in Item 5 herein includes the following Trench Safety Compliance Methods and the units of each safety measure. The unit costs and the unit prices are shown solely for the purpose of compliance with the procedural requirements of the Act.

<table>
<thead>
<tr>
<th>Trench Safety Compliance Method</th>
<th>Unit (LF,SY)</th>
<th>Estimated Quantify</th>
<th>Unit Cost</th>
<th>Extended Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>_______</td>
<td>___________</td>
<td>_______</td>
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<td>B.</td>
<td>_______</td>
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<tr>
<td>C.</td>
<td>_______</td>
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<tr>
<td>D.</td>
<td>_______</td>
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<td>_______</td>
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</table>

7. Acceptance of the bid to which this certification and disclosure applies in no way represents that the Owner or its representatives have evaluated or determined that the above costs are adequate to comply with the applicable trench safety requirements, nor

00300-5
does it in any way relieve the undersigned of his sole responsibility for complying with all applicable safety requirements.

Attached hereto is a cashier's check on the______________________________ or a Bid Bond for the sum of _______________________________________________________________ Dollars ($__________________________), made payable to Brevard County Board of County Commissioners, Brevard County, Florida.

______________________________________L.S.
(Name of Bidder) (Affix Seal)

______________________________________L.S.
(Signature of Officer)

______________________________________L.S.
(Title of Officer)

Address: _____________________________________________________

City: ____________________________ State: _____________________

The full names and residences of persons and firms interested in the foregoing bid, as principals, are as follows:

_____________________________________________________________

_____________________________________________________________

_____________________________________________________________

Name of the executive who will give personal attention to the work:

_____________________________________________________________

_____________________________________________________________

Attach list of subcontractors as required by Subsection 1.06.D.3 of Instructions To Bidders, Section 00100.
ACKNOWLEDGMENT OF OFFICER TO EXECUTE BID ON BEHALF OF A CORPORATION

State of __________________________
County of ________________________

On this _____ day of ________________________ 20___, before me personally came and appeared ____________________________, to me known, who, being by me duly sworn, did depose and say that Affiant resides at ___________________________________________________ that Affiant is the ______________________ of _______________________________________, the corporation described in and which executed the foregoing Bid Proposal; that Affiant knows the seal of said corporation, that one of the impressions affixed to said instrument is an impression of such seal; that Affiant is the proper official of said corporation designated to execute such instrument, that Affiant has authority to do so, that Affiant executed same for and in behalf of said corporation, and that Affiant's act is the act and deed of said corporation.

Witness my hand and official notarial seal at _______________________________, the day and year above written.

___________________________________
(Notary Public)

My commission expires: ___________________________ (seal)

END OF SECTION

00300-7
KNOW ALL MEN BY THESE PRESENTS, That we, _________________, of ________________, hereinafter called Principal, and _________________________, hereinafter called Surety, a corporation organized and existing under the Laws of the State of ______________, and authorized to transact business in the State of Florida, as a Surety, are held and firmly bound unto the Brevard County Board of County Commissioners, hereinafter called Obligee, in the penal sum of five percent (5%) of the amount of Principal’s Bid, $_____________________, good and lawful money of the United States of America, for the payment of which the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. The Condition of this Obligation is such, that,

WHEREAS the Principal has submitted a Bid to the Obligee on a contract for the construction of:

Lift Station F-10 Electrical Improvements

NOW THEREFORE, if the Obligee shall accept the Bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the Bid or Contract Documents with good, qualified and sufficient surety for the faithful performance of such construction for the prompt payment of labor and material furnished in the prosecution thereof, then this obligation shall be null and void; otherwise this bid is to remain in full force and effect for the payment to Obligee of the stated penal sum hereof.

In witness whereof, we have hereunto set our signatures and seal this         day of                            , 20      , all pursuant to due authorization.

(Seal)

Principal

By Surety ________________________________

By ________________________________

Attorney-in-Fact in accordance with the attached Power of Attorney

STATE OF                                    )
COUNTY OF                                ) ss:

I, ________________________________, a Notary Public in and for the State and County aforesaid, do hereby certify that ________________________________, and ________________________________, whose names are signed to the foregoing bond, this day personally appeared before me in my State and County aforesaid and acknowledged the same. Given under my hand and seal this ___ day of _________, 20__. 

______________________________   My commission expires: ________________________

(Notary Public)         (seal)

END OF BID SECURITY BOND

00410-1
SECTION 00415

DRUG-FREE WORKPLACE FORM

In accordance with Section 287.087, Florida Statutes, preference must be given to BIDDERS submitting a certification with the Bid which certifies that the BIDDER has a drug-free workplace. 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 BIDDERS have a drug-free workplace program. In order to have a drug-free workplace program, the BIDDER 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), notifying the employees that, as a condition of working on the commodities or contractual services that are under Bid, the employees will abide by the terms of the statement and will notify the employer of any conviction of, or pleas of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States of any state, for a violation occurring in the workplace no late than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug assistance of rehabilitation program if such is available in the employees 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 the following:

(Check one and sign in the space provided)

___________This firm complies fully with the above requirements.

___________This firm does not have a drug-free workplace program meeting the above requirements at this time.

BIDDER's Name ____________________________ BIDDER's Title ____________________________

BIDDER's Signature ____________________________

END OF DRUG-FREE WORKPLACE FORM
AIA Document A305

Contractor's Qualification Statement
1986 EDITION

This form is approved and recommended by The American Institute of Architects (AIA) and The Associated General Contractors of America (AGC) for use in evaluating the qualifications of contractors. No endorsement of submitting party or verification of the information is made by the AIA or AGC.

The Undersigned certifies under oath that the information provided herein is true and sufficiently complete so as not to be misleading.

SUBMITTED TO:
ADDRESS:

SUBMITTED BY: ________________________________ Corporation ☐
NAME: ________________________________ Partnership ☐
ADDRESS: ________________________________ Individual ☐
PRINCIPAL OFFICE: ________________________________ Joint Venture ☐
________________________ Other ☐

NAME OF PROJECT (if applicable):

TYPE OF WORK (file separate form for each Classification of Work):

_________ General Construction
_________ HVAC
_________ Plumbing
_________ Electrical
_________ Other___ (please specify)
1. ORGANIZATION

1.1 How many years has your organization been in business as a Contractor?

1.2 How many years has your organization been in business under its present business name?
   1.2.1 Under what other or former names has your organization operated?

1.3 If your organization is a corporation, answer the following:
   1.3.1 Date of incorporation:
   1.3.2 State of incorporation:
   1.3.3 President’s name:
   1.3.4 Vice-presidents name(s):
   1.3.5 Secretary’s name:
   1.3.6 Treasurer’s name:

1.4 If your organization is a partnership, answer the following:
   1.4.1 Date of organization:
   1.4.2 Type of partnership (if applicable):
   1.4.3 Name(s) of general partner(s):

1.5 If your organization is individually owned, answer the following:
   1.5.1 Date of organization:
   1.5.2 Name of owner:

1.6 If the form of your organization if other than those listed above, describe it and the name of the principals:

2. LICENSING

2.1 List jurisdictions and trade categories in which your organization is legally qualified to do business, and indicate registration or license numbers, if applicable.

2.2 List jurisdictions in which your organization’s partnership or trade name is filed.
3. EXPERIENCE

3.1 List the categories of work that your organization normally performs with its own forces.

3.2 Claims and Suits, (If the answer to any of the questions below is yes, please attach details.)

3.2.1 Has your organization ever failed to complete any work awarded to it?

3.2.2 Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers?

3.2.3 Has your organization filed any law suits or requested arbitration with regard to construction contracts within the last five years?

3.3 Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? (If the answer is yes, please attach details.)

3.4 On a separate sheet, list major construction projects your organization has in progress, giving the name of project, owner, architect, contract amount, percent complete and scheduled completion date.

3.4.1 State total worth of work in progress and under contract:

3.5 On a separate sheet, list the major projects your organization has completed in the past five years, giving the name of project, owner, architect, contract amount, date of completion and percentage of the cost of the work performed with your own forces.

3.5.1 State average annual amount of construction work performed during the past five years:

3.6 On a separate sheet, list the construction experience and present commitments of the key individuals of your organization.
4. REFERENCES

4.1 Trade References:

4.2 Bank References:

4.3 Surety:

4.3.1 Name of bonding company:

4.3.2 Name and address of agent:

5. FINANCING

5.1 Financial Statement.

5.1.1 Attach a financial statement, preferably audited, including your organization’s latest balance sheet and income statement showing the following items:

   Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses);
Net Fixed Assets;
Other Assets;
Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes);
Other Liabilities (e.g. capital, capital stock, authorized and outstanding shares par values, earned surplus and retained earnings).

5.1.2 Name and address of firm preparing attached financial statement, and date thereof:

5.1.3 Is the attached financial statement for the identical organization named on page one?

5.1.4 If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g., parent-subsidiary).

5.2 Will the organization whose financial statement is attached act as guarantor of the contract for construction?
6. SIGNATURE

6.1 Dated ________________________________ this __________ day of __________ 20________

Name of Organization: ____________________________________________________________

By: __________________________________________________________________________

Title: __________________________________________________________________________

6.2

Mr. _________________________________________________________ being duly sworn deposes and says that the information provided herein is true and sufficiently complete so as not to be misleading.

Subscribed and sworn before me this ______________________________ day of __________ 20________

Notary Public:

My Commission Expires:
NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

State of ______________________________

County of ______________________________

__________________________________ ("Affiant"), being duly sworn, deposes and says that:

(1) Affiant is ____________________ of ________________________________, the Bidder that has submitted the attached Bid;

(2) Affiant is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by contract, or has in any manner, 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 Board of County Commissioners of Brevard County, Florida, or any person interested in the Contract; and

(5) 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 of interest, including affiant.

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

(Signature)

______________________________   ____________________________
(Notary Public)     (Title)

My commission expires: ______________________________                  (Seal)
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.

Therefore, prior to entering into a contract (formal contract or purchase order) in excess of the threshold amount established by law to provide goods or services to Brevard County, a person shall file a sworn statement with the contracting officer or Purchasing Director, as applicable. The attached statement or affidavit will be the form to be utilized and must be properly signed in the presence of a notary public or other officer authorized to administer oaths and properly executed.

The inclusion of the sworn statement or affidavit shall be submitted concurrently with your quote or bid documents. Non-inclusion of this document may necessitate rejection of your quote or bid.
STATE OF FLORIDA

COUNTY OF _________________

BEFORE ME, the undersigned authority, personally appeared _________________________________, who, being by me first duly sworn, made the following statement:

1. The Business address of ___________________________________________________________ (name of bidder or contractor) is ________________________________________________________________.

2. My relationship to _____________________________________________ (name of bidder or contractor) is ___________________________ (relationship such as sole proprietor, partner, president, vice president).

3. I understand that public entity crime as defined in Section 287.133 of the Florida Statutes includes a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity in Florida 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 such an agency or political subdivision and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

4. I understand that "convicted" or conviction" is defined by the statute to mean a finding of guilt or a adjudication of guilt, in any federal or state trial court of record relating to charges brought my indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

5. I understand that "affiliate" is defined by the statute to mean (1) a predecessor or successor of a person or a corporation convicted of a public entity 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, or (3) those officers, directors, executives, partners, shareholder, employees, members, and agents who are active in the management of an affiliate, or (4) a person or corporation who knowingly entered into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months.
6. Neither the bidder or contractor nor any officer, director, executive, partner, shareholder, employee, or contractor nor any affiliate of the bidder or contractor has been convicted of a public entity crime subsequent to July 1, 1989.

(Draw a line through paragraph 6 if paragraph 7 below applies.)

7. There has been a conviction of a public entity crime by the bidder or contractor, or an officer, director, executive, partner, shareholder, employee, member or agent of the bidder or contractor who is active in the management of the bidder or contractor or an affiliate of the bidder or contractor. A determination has been made pursuant to Section 287.133(3) by order of the Division of Administrative Hearings that it is not in the public interest for the name of the convicted person or affiliate to appear on the convicted vendor list. The name of the convicted person or affiliate is ____________________________. A copy of the order of the Division of administrative Hearings is attached to this statement.

(Draw a line through paragraph 7 if paragraph 6 above applies.)

___________________________________
Signature

Sworn to and subscribed before me in the state and county first mentioned above on the __________ day of ____________________, 20___.

___________________________ (affix seal)
Notary Public

My commission expires:

END OF SECTION
THIS CONTRACT, by and between the Brevard County, Florida Board of County Commissioners, a political subdivision of the State of Florida (hereinafter called the Owner), and ______________________________________________, a ______________________________ doing business at ______________________________________________________ (hereinafter called the “Contractor”). (Address)

WITNESSETH: That the parties hereto, for the consideration hereinafter set forth, mutually agree as follows:

1.01 SCOPE OF THE WORK

The Contractor shall furnish all labor, materials, equipment, machinery, tools, apparatus, and transportation and perform all of the work shown on the Drawings and described in the Specifications entitled, 

**Lift Station F-10 Electrical Improvements**

as prepared by Tetra Tech, acting as, and in the Contract Documents entitled, the Engineer, and shall do everything required by this Contract and the other Contract Documents.

1.02 THE CONTRACT SUM

A. The Owner shall pay to the Contractor for the faithful performance of the Contract, in lawful money of the United States, and subject to additions and deductions as provided in the Contract Documents, as follows:

B. Based upon the price shown in the Contractor's Bid heretofore submitted to the Owner, which Bid is a part of these Contract Documents, the aggregate amount of this Contract is the sum of ________ ___________________________ ($______________________).

1.03 COMMENCEMENT AND COMPLETION OF WORK

A. The Contractor shall commence work within 10 calendar days after the start of the Contract Time identified on the Notice to Proceed.

B. The Contractor shall prosecute the Work with faithfulness and diligence and shall complete the Work no later than **180 days** after the date specified in the Notice to Proceed.
1.04 CONTRACTOR’S ACCEPTANCE OF CONDITIONS

A. The Contractor hereby agrees that Contractor has carefully examined the surface of the site and has made sufficient reasonable test holes, or other surface and subsurface investigations and is fully satisfied that said site is a correct and suitable one for this work and Contractor assumes full responsibility therefore. The provisions of the Contract shall control any inconsistent provisions contained in the specifications. All Drawings and Specifications have been read and carefully considered by the Contractor, who understands the same and agrees to their sufficiency for the work to be done. It is expressly agreed that under no circumstances, conditions or situations shall this Contract be more strongly construed against the Owner than against the Contractor and Contractor’s Surety.

B. Any ambiguity or uncertainty in the Drawings or Specifications shall be interpreted and construed by the Owner and such decision shall be final and binding upon all parties. If the ambiguity or uncertainty could have been identified during the Bidding process, such discrepancy or inconsistency shall not serve as a claim for additional time or money.

C. It is distinctly understood and agreed that the passing, approval and/or acceptance of any part of the work or material by the Owner, or by any agent or representative as being in compliance with the terms of this Contract or with the Drawings, and Specifications covering said work, shall not operate as a waiver by the Owner of strict compliance with the terms of this Contract, or the Drawings and Specifications covering said work; and that the Owner may require the Contractor and Surety to strictly comply with this Contract and the Drawings and Specifications; and that the Owner may require the Contractor and the Surety to repair, replace, restore any and all of said work and materials which within a period of two years from and after the date of the acceptance of work are found to be defective or to fail in any way to comply with this Contract or with the Drawings and Specifications. This provision shall not apply to material or equipment normally expected to deteriorate or wear out and become subject to normal repair and replacement before their condition is discovered. Failure on the part of the Contractor or Contractor’s Surety, immediately after Notice to either repair or replace any such defective materials and workmanship shall entitle the Owner, if the Owner sees fit, to replace or repair the same and recover the reasonable cost of such replacement or repair from the Contractor and Surety who, shall in any event be jointly and severally liable to the Owner by reason of the Contractor’s breach of this Contract or Contractor’s failure to comply strictly with this Contract and with the Drawings and Specifications.

1.05 LIQUIDATED DAMAGES

A. Both parties recognize that precise actual damages for delay are impossible to determine. The parties therefore agree to fix liquidated damages for delay in the Substantial Completion of the Project, as that term is more fully defined in Section 00700 of this Contract. As a condition precedent to the issuance of the Notice to Proceed, a written addendum setting forth a reasonable date by which the Contractor must realize Substantial Completion shall be executed by the Contractor and the Owner. The reasonable Substantial Completion date set forth in the addendum shall be determined by the Owner’s Engineer after consultation with the Contractor.
On the Substantial Completion date, or such revised Substantial Completion date of the Project as may occur because of an authorized written Change Order of contract time for Substantial Completion, all essential elements of the Project must be ready for their intended use. Therefore, the agreed upon liquidated damages for failure to substantially complete the essential elements of the Project by the Substantial Completion date shall be $100.00 per day for each calendar day of delay in the Substantial Completion of the work, beyond the Substantial Completion date, up to but not including the date the Project is deemed substantially complete by the Owner’s Engineer.

B. The liquidated damages for delay in the completion or construction of non-essential elements of the Project after the date of Substantial Completion is fixed at $75.00 per calendar day.

C. Final completion must occur within 14 days after the Project is deemed substantially complete by the Owner’s Engineer. The liquidated damages for delay of final completion of the Project beyond the established date are fixed at $50.00 per calendar day.

D. This liquidated damages clause applies only to delay claims arising out of the Contractor’s failure to timely perform the work required under the Contract. Nothing in this liquidated damages provision shall be deemed to preclude the prosecution of a claim for actual damages involving defects in the work, breach of contract or any other claim for damages not involving a claim based solely on delay caused by the Contractor’s untimely performance of the work.

E. For each day that any part of the work remains uncompleted after the expiration of the time allowed for completion of the work stipulated in the Contract or as increased by an authorized written Change Order, the sum per day set forth in the applicable subparagraph A, B or C above, shall be deducted from any moneys due the Contractor, or if no money is due the Contractor, the Owner shall have the right to recover said sum or sums from the Contractor, from the Surety, or from both. The amount of these deductions are to cover liquidated damages to the Owner incurred by additional and other expenses due to the failure of the Contractor to complete the work or any part of the work within the completion time specified in subparagraph A, B or C, whichever is applicable, and such deductions are not to be considered as penalties.

1.06 PARTIAL AND FINAL PAYMENTS

In accordance with the provisions fully set forth in the General Conditions, and subject to additions and deductions as provided, the Owner shall pay the Contractor as follows:

A. The Owner shall make partial payments to the Contractor, on the basis of the estimate of work as approved by the Owner’s Engineer, pursuant to provisions of Section 219.70, Florida Statutes, Florida Prompt Payment Act, less five percent (5%) of the amount of such estimate which is to be retained by the Owner until all work has been performed strictly in accordance with this Contract and until such work has been accepted by the Owner. The Owner shall not be responsible for payment to the Contractor for delays.

B. Upon receipt of the payment bond Surety’s written consent to the release of final payment to the Contractor who has furnished and recorded a payment bond and after all guarantees that may be required in the specifications have been furnished and are found acceptable by the Owner, final payment on account of this Contract shall be made within twenty (20) days after completion by
the Contractor of all work covered by this Contract and acceptance of such work by the Owner. If the payment bond surety serves a written revocation of consent to payment or a written direction that the COUNTY withhold a specified amount from a payment, the COUNTY shall withhold from the final payment the amount specified by the payment bond Surety.

1.07 ADDITIONAL BOND

A. It is further mutually agreed between the parties hereto that if, at any time after the execution of this Contract and the Performance and Payment Bonds hereto attached for its faithful performance, the Owner shall deem the surety or sureties upon such bonds to be unsatisfactory, or if, for any reason, such bond(s) ceases to be adequate to cover the performance of the Work, the Contractor shall, at Contractor’s expense, and within three days after the receipt of Notice from the Owner to do so, furnish an additional bond or bonds, in such form and amount, and with such sureties as shall be satisfactory to the Owner. In such event, no further payment to the Contractor shall be deemed due under this Contract until such new or additional security for the faithful performance of the work shall be furnished in manner and form satisfactory to the Owner.

1.08 CONTRACT DOCUMENTS

A. The Contract Documents are those referenced in Section 00700 of the Contract in Article 1 entitled “Definitions”, as set forth in the Instructions to Bidders, which may or may not be attached hereto, and such contract documents also include any approved and fully executed change or task orders. All of the above described contract documents are incorporated as a part of this Contract as if set forth in full herein.
IN WITNESS WHEREOF the parties hereto have executed this Contract on the dates indicated below:*

Attest:                                             Board of County Commissioners of
                                                     Brevard County, Florida (Owner)

__________________________    By:_____________________________
Scott Ellis, Clerk                Robin Fisher, Chairman

Date: ___________________________

Seal                             As approved by the Board on:

                                              ______________________________

______________________________  (Printed Name)                  (Assistant) County Attorney
Contractor                          Reviewed for legal form and content:

Date:__________________________                            ______________________________

By:___________________________                  (Assistant) County Attorney

Signature:_______________________

Title:__________________________

__________________________(Seal)

(*) In the event that the Contractor is a Corporation, there shall be attached to the Contract a certified copy of
a resolution of the Board of Directors of the Corporation, authorizing the officer who signs the Contract to
do so in its behalf.
CERTIFICATE

STATE OF FLORIDA

COUNTY OF _______________________

I HEREBY CERTIFY that a meeting of the Board of Directors of ___________________________, a Corporation under the laws of the State of ___________________, held on __________________, 20___, the following resolution was duly passed and adopted:

“RESOLVED, that ________________________, as ______________ President of the Corporation, be and he is hereby authorized to execute the Contract dated ____________________, 20____, between BREVARD COUNTY, FLORIDA, and this Corporation, and that his execution thereof, attested by the Secretary of the Corporation and with corporate seal affixed, shall be the official act and deed of this corporation.”

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Corporation this _____ day of ____________________, 20__.

____________________________________
Secretary

END OF SECTION
SECTION 00610

PUBLIC CONSTRUCTION PERFORMANCE BOND

BY THIS BOND, We __________________________, as Principal and __________________________, a corporation as Surety, are bound to Brevard County Board of County Commissioners, Brevard County, 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 CONDITIONS OF THIS BOND are that if Principal:

1. Performs promptly, completely and faithfully the contract dated ____________________, between Principal and Owner for construction of the Lift Station F-10 Electrical Improvements, the contract being attached hereto and made a part of this bond by reference, in such time and without delay, and in the manner prescribed in the contract including the delivery, execution and performance of any warranty work required by the contract; and

2. 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

3. 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 and effect.

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

Signed and sealed this ___ day of ___________________, 20__.

Witness: _______________________________ (Principal) (Seal)
 _______________________________ (Name) (Title)

Witness: _______________________________ (Surety) (Seal)
 _______________________________ (Name) (Title)

END OF SECTION
00610-1
PUBLIC CONSTRUCTION PAYMENT BOND

BY THIS BOND, We ________________________________, as Principal and __________________________________________, a corporation as Surety, are bound to Brevard Board of County Commissioners, Brevard County, Florida, 2725 Judge Fran Jamieson Way, Melbourne, Florida, 32940 herein called Owner, in the sum of _____________________________________________ ($__________________), for payment of which we bind ourselves and heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITIONS OF THIS BOND are that if Principal:

1. Promptly makes payment to all claimants, in accordance with Sections 255.05(1),(2) and (10, 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 Brevard County contract number __________ dated ________________, between Principal and Owner for construction of the Lift Station F-10 Electrical Improvements, the contract being attached hereto and made a part of this bond by reference, in such time and without delay, and in the manner prescribed in the contract; and

2. Pay Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under this contract, then this bond is void; otherwise it remains in full force and effect.

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

Signed and sealed this _____ day of ___________________, 20___.

Witness:           BY:_______________________________
                    (Principal)                                            (Seal)
                    Address:
                    Tel.:___________________________        Its:_____________________________
                    (Name)       (Title of Signatory)

Witness:            BY:________________________________
                    (Surety)                                                (Seal)
                    Address:
                    Tel.:___________________________       Its:_____________________________
                    (Name)        (Title of Signatory)

END OF SECTION

00620-1
STATE OF ____________________

COUNTY OF ____________________

KNOWN ALL MEN BY THESE PRESENTS that ______________________________ as Principal, hereinafter called Contractor, and ______________________ as Surety, hereinafter called Surety, are held and firmly bound unto Brevard County, as Obligee, hereinafter called Owner, in the amount of ______________________________ Dollars ($______________________) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated __________________________, Lift Station F-10 Electrical Improvements

in accordance with Drawings and Specifications prepared by Tetra Tech, which Contract is by reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that if the Principal shall remedy any defects in the work due to faulty materials or workmanship, and pay for all damage to other work, person or property resulting therefrom, which shall appear within a period of two (2) years from the date of final acceptance of the work provided for in the Contract, then this obligation is to be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that Owner shall give notice of observed defects with reasonable promptness.
IN WITNESS WHEREOF, the above bounded parties executed this instrument under their several seals, this ___ day of ________________, 20___, A.D., the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

WITNESS: (If Sole Ownership or Partnership, two (2) Witnesses required.
If Corporation, Secretary only will attest and affix seal).

PRINCIPAL:

SIGNATURE OF AUTHORIZED OFFICER (AFFIX SEAL)

WITNESSES:

Name   Title

_________________________________  __________________________________

Business Address

City & State

SURETY:

WITNESS:  __________________________________

Corporate Surety

__________________________________

Attorney-in-Fact  (AFFIX SEAL)

Business Address

City & State

Name of Local Insurance Agency

00640-2
CERTIFICATES AS TO CORPORATE PRINCIPAL

I, __________________________, certify that I am the Secretary of the Corporation named as Principal in the within Bond; that __________________________, who signed the said Bond on behalf of the Principal, was then __________________________ of said Corporation; that I know his signature, and his signature hereto is genuine; and that said Bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

__________________________________
Secretary                      (Corporate Seal)

STATE OF ____________________
COUNTY OF __________________

Before me, a Notary Public, duly commissioned, qualified and acting, personally appeared __________________________________, to me well known, who being by me first duly sworn upon oath, says that he is the Attorney-in-Fact, for the _________________________________, and that he has been authorized by _____________________________ to execute the foregoing Bond on behalf of the Contractor named therein in favor of Brevard County, Florida.

Subscribed and sworn to before me this ____ day of __________________, 20___, A.D.

__________________________________
(Attach Power of Attorney)  Notary Public
State of Florida-at-Large
My Commission Expires: ____________

END OF SECTION

00640-3
THIS IS TO CERTIFY THAT THE _____________________________________________ Insurance Company

Address _____________________________________________________________________, of _____________________________________________, has issued policies of insurance, as described below and identified by a policy number, to the insured named below; and to certify that such policies are in full force and effect at this time. It is agreed that none of these policies will be canceled or changed so as to affect the interest(s) of Brevard County, Florida (hereinafter sometimes called the Owner) until thirty (30) days after written notice of such cancellation or change has been delivered to the Utility Services Department of Brevard County.

Insured: ______________________________________________________________________

Address :_____________________________________________________________________

Status of Insured: ____Corporation      _____Partnership      _____Individual

Location of Operations Insured: ___________________________________________________

Description of Work: ____________________________________________________________

INSURANCE POLICIES IN FORCE

<table>
<thead>
<tr>
<th>Forms of Coverage</th>
<th>Policy Number</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers’ Compensation/</td>
<td></td>
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<tr>
<td>Employers’ Liability</td>
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<tr>
<td>Comprehensive Automobile Liability</td>
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<tr>
<td>Comprehensive General Liability</td>
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<tr>
<td>Excess Liability</td>
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<tr>
<td>Other (Please specify type)</td>
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POLICY INCLUDES COVERAGE FOR:  

<table>
<thead>
<tr>
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<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Additional Insured: Owner and Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Liability under the United States Longshoremen’s and Harbor Workers’ Compensation Act.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. All owned, hired, or non-owned automotive equipment used in connection with work done for the Owner.</td>
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</tr>
<tr>
<td>4. Damage caused by explosion, collapse or structural injury, and damage to underground utilities.</td>
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<tr>
<td>5. Products/Completed Operations</td>
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<tr>
<td>6. Owner’s and Contractor’s Protective Liability</td>
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<tr>
<td>7. Liability assumed in the Contract</td>
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<tr>
<td>8. Personal Injury Liability</td>
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<tr>
<td>9. Excess Liability applies excess of:</td>
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</tr>
<tr>
<td>(a) Employers’ Liability</td>
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<tr>
<td>(b) Comprehensive General Liability</td>
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<tr>
<td>(c) Comprehensive Automobile Liability</td>
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<tr>
<td>(d) Contractual Liability</td>
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</tr>
</tbody>
</table>

**FORMS OF COVERAGE**  

**LIMITS OF LIABILITY**

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Limit</th>
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</thead>
<tbody>
<tr>
<td>Workers’ Compensation</td>
<td></td>
</tr>
<tr>
<td>Employers’ Liability</td>
<td>$</td>
</tr>
<tr>
<td>Comprehensive Auto Liability</td>
<td>$     Each Occurrence</td>
</tr>
<tr>
<td>Comprehensive General Liability</td>
<td>$     Each Occurrence</td>
</tr>
<tr>
<td>Contractual Liability</td>
<td>$</td>
</tr>
<tr>
<td>Excess Liability</td>
<td>$     Each Occurrence</td>
</tr>
<tr>
<td>Builder’s Risk</td>
<td>$</td>
</tr>
<tr>
<td>Other (please specify type)</td>
<td></td>
</tr>
</tbody>
</table>
Excess is to be provided only when a combined single limit is used. **Claims made policy forms are not acceptable.**

The Insurance Company hereby agrees to deliver, within ten (10) days, two (2) copies of the above policies to the Engineer when so requested.

**NOTE:** Entries on this certificate are limited to the Authorized Agent or Insurance Company Representative.

Date ______________ (SEAL) ________________________________________________________________________________

Insurance Company

Issued at ______________ ________________________________________________________________________________

Authorized Representative

Printed Name of Authorized Representative: ____________________________

Address of Authorized Representative: ________________________________

Phone Number of Authorized Representative: ____________________________

Insurance Agent or Company - Send original **and** one copy to:

James Helmer, Interim Director  
Utility Services Department 2725  
Judge Fran Jamieson Way  
Building A-213,  
Melbourne, FL 32940

and

Rasesh Shah, P.E., Project Manager  
Tetra Tech  
201 East Pine Street, Suite1000  
Orlando, Florida 32801

END OF SECTION

00650-3
ARTICLE 1 - DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

Acceptance: By the Brevard County, Florida Board of County Commissioners or designee as being apparently complete in accordance with the Contract Documents.

Agreement: The written agreement between the OWNER and the CONTRACTOR covering the WORK to be performed.

Addenda: Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, Drawings and Specifications, by additions, deletions, clarifications or corrections.

Application for Payment: The form furnished by the OWNER which is to be used by the CONTRACTOR in requesting progress payments, including an affidavit of the CONTRACTOR that progress payments theretofore received from the OWNER for the WORK have been applied by the CONTRACTOR to discharge in full all of the CONTRACTOR’S obligations stated in prior Applications for Payment. As used in these Contract Documents, the Application for Payment is identified as a "Periodic Pay Request" form.

Approval: Accept as satisfactory.

Bonds: Bid, Performance, Payment, and Maintenance Bonds, and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the Contract Documents and in accordance with the laws of the State of Florida.

Change Order: A written order to the CONTRACTOR signed by the OWNER authorizing an addition, deletion or revision in the WORK, or an adjustment in the Contract Price or the Contract Time issued after execution of the Agreement. A Change Order is also a written order signed by the County Manager, within the authority of the monetary limits delegated to the Manager for this contract by the County Commission.

Contract Documents (Also designated as the “Contract”):

The Contract Documents shall include the following whether or not such documents are attached together as one document:

a) Advertisement for Bids  
b) Instructions to Bidders  
c) Bid  
d) Bid Security or Bid Bond
e) Contract  
f) Performance Bond  
g) Payment Bond  
h) Maintenance Bond  
i) General Conditions  
j) Special Conditions  
k) Supplementary Conditions  
l) Technical Conditions  
m) Technical Specifications  
n) Addenda  
o) Drawings and modifications  
p) Schedule of Work  
q) Criteria for Water and Sanitary Sewerage Systems within Brevard County, latest revision (Criteria)  
r) Warranties, Guarantees  
s) Signed written change orders  
t) Signed written task orders  
u) Notice of Award  
v) Notice to Proceed  

Contract Price: The total monies payable to the CONTRACTOR under the Contract Documents.

Contract Time: The number of calendar days stated in the Agreement for the completion of the WORK.

CONTRACTOR: The person, firm or corporation with whom the OWNER has executed the Agreement.

Day: A calendar day of twenty-four hours measured from midnight to the next midnight.

Drawings: The drawings which show the character and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER and are referred to in the Contract Documents.

ENGINEER: The person, firm or corporation named as such in the Contract Documents.

Essential Elements: The Essential Elements of the Contract are defined as the elements of the Project that are necessary to allow the OWNER to occupy and/or use the Project for its intended purpose. Essential Elements may, at the discretion of the OWNER’S ENGINEER, be specifically listed in a separate schedule attached to this agreement.

Field Order: A written order issued by the ENGINEER which clarifies or interprets the Contract Documents in accordance with paragraph 9.3 or orders minor changes in the WORK which do not result in a change in Contract Price or in Contract Time in accordance with paragraph 10.2.

Final Completion: Final Completion is defined as the date upon which the WORK on the Project is 100% complete in conformance with the Contract.

Modification: (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order, or (c) a written order for a minor change or alteration in the WORK issued by the ENGINEER pursuant to paragraph 10.2. A Modification may only be issued after execution of the Agreement.
Notice of Award: The written notice by OWNER to the apparent successful Bidder stating that upon compliance with the conditions precedent to be fulfilled by Bidder within the time specified, OWNER will execute and deliver the Agreement to Bidder.

Notice to Proceed: A written notice given by the Director of OWNER'S REPRESENTATIVE to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform the obligations under the Contract Documents. The contract deadline is also established in the Notice to Proceed.

OWNER: Brevard County, Florida Board of County Commissioners, a political subdivision of the State of Florida, also herein referred to as County.

OWNER’S REPRESENTATIVE: The person or persons designated by the OWNER to represent the OWNER as project manager during the administration of this Agreement. The OWNER'S REPRESENTATIVE and the County Manager have limited delegated authority to authorize additional work under this Contract.

Project: The “Project” is described in Section 00030 of this agreement, entitled “Advertisement for Bids for Brevard County”, and also includes the entire construction to be performed as provided in the Contract Documents.

Project Representative: An authorized representative of the OWNER assigned to observe the WORK performed and materials furnished by the CONTRACTOR, or such other person as may be appointed by the OWNER as Owner’s Project Representative. The CONTRACTOR shall be notified in writing of the identity of this representative.

Shop Drawings: All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, material or some portion of the WORK and as required by the Contract Documents.

Samples: Physical examples which illustrate materials, equipment or workmanship and establish standards by which the WORK will be judged.

Supplementary Conditions: When included as a part of the Contract Documents, Supplementary Conditions refer only to the WORK under this Contract. Supplementary Conditions take precedent over the General Conditions.

Specifications: Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the WORK.

Subcontractor: An individual, firm or corporation having a direct contract with CONTRACTOR or with any other subcontractor for the performance of a part of the WORK at the site. For the purposes of processing payments, subcontractor shall also include supplier, distributor, manufacturer or material suppliers.

Substantial Completion of the Project: Substantial Completion is defined as that point in the construction where all Essential Elements of the WORK are sufficiently complete in conformance with the Contract that the OWNER has the beneficial use or occupancy of the WORK for its intended purpose. The issuance of a Certificate of Substantial Completion, to the extent such certificate is required or issued by the governmental
entity with jurisdiction, shall be presumed to be evidence of Substantial Completion. At Substantial Completion, minor items and items that are seasonally restricted need not be completed, but the items that affect operational integrity and function of the facility must be capable of continuous use. Substantial Completion shall not be deemed to have occurred where 1) latent defects are revealed subsequent to use and occupation of the project by the OWNER or 2) where the scope of substantial defects in workmanship or materials are not readily observable or discoverable when use and occupancy of the project commenced.

Supplier: Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site. For the purposes of processing payments, subcontractor shall also include supplier, distributor, manufacturer or materialman.

Surety: The corporate body which is bound with the CONTRACTOR and which engages to be responsible for the CONTRACTOR and his acceptable performance of the WORK.

Underground Facilities: All pipelines, conduits, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasement containing such facilities which have been installed underground to furnish any of the following services or materials; electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

WORK: Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by CONTRACTOR under the Contract Documents, including all labor, materials, equipment and other incidentals, and the furnishing and installing thereof.

Written Notice: The term "Notice" as used herein shall mean and include all written notices, demands, instructions, claims, approvals, and disapprovals required to obtain compliance with Contract requirements.

ARTICLE 2 - PRELIMINARY MATTERS

Contractor’s Pre-Start Representations:

2.1 CONTRACTOR represents that CONTRACTOR is familiar with, and assumes full responsibility for having familiarized himself with, the nature and extent of the Contract Documents, WORK, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that may in any manner affect performance of the WORK, and represents that CONTRACTOR has correlated the study and observations with the requirements of the Contract Documents. CONTRACTOR has studied all surveys and investigation reports of subsurface and reasonably discoverable physical conditions, including those referred to in the Specifications and that CONTRACTOR has correlated the results of all such data with the requirements of the Contract Documents. CONTRACTOR affirms that CONTRACTOR has made, or has caused to be made, such reasonable test holes and/or other reasonable investigations of such subsurface conditions and/or that CONTRACTOR is otherwise satisfied with respect to such conditions. The OWNER assumes no responsibility for any conclusions or interpretations made by the CONTRACTOR based on information made available by the OWNER, nor does the OWNER assume responsibility for any understandings reached or interpretations made concerning conditions that can affect the WORK by any of its employees or agents unless that understanding or representation is expressly stated in the bid documents. CONTRACTOR further represents that CONTRACTOR possess the corporate resources, including qualified and skilled personnel, appropriate equipment and/or established subcontracts which are fully sufficient to
satisfactorily accomplish the WORK within the Contract Time specified in the Agreement; that such resources already exist or are available, and that such resources shall be committed to this Project.

Commencement of Contract Time:

2.2 The Contract Time will commence to run on the date identified in the written notification by the OWNER in the form of the Notice to Proceed. The Contract Time is expressed in calendar days.

Starting the Project:

2.3 CONTRACTOR shall start to perform the obligations under the Contract Documents within 10 days of the date when the Contract Time commences to run. No WORK shall be done at the site prior to the date on which the Contract Time commences to run, except with the written consent of the OWNER.

Before Starting Construction:

2.4 Before undertaking each part of the WORK, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall at once report in writing to ENGINEER any conflict, error discrepancy which CONTRACTOR discovers. WORK which is considered to be normal to the construction industry and which should have been anticipated by the CONTRACTOR prior to bidding, and discrepancies which should have been observed prior to bidding, will not be eligible for reimbursement by change order.

Schedule of Completion:

2.5 Within ten days after delivery of the Notice to Proceed by OWNER to CONTRACTOR, CONTRACTOR shall submit to ENGINEER and the OWNER, an estimated progress schedule with earnings indicating the starting and completion dates of the various stages of the WORK, and a preliminary schedule of Shop Drawing Submissions. CONTRACTOR is hereby placed on notice that the estimated project schedule, and every schedule update, must be prepared using Microsoft Office Project, latest edition. Other scheduling software programs may be used, but only if their products are fully compatible with and can be directly imported into Microsoft Office Project. It shall be the CONTRACTOR’S responsibility to ensure compatibility. Schedules prepared by other means that cannot be imported by the OWNER without modification will be rejected. No payments shall be made by OWNER to CONTRACTOR until the estimated progress schedule has been reviewed and approved by the OWNER. (See paragraphs 6.22 through 6.27.) The ENGINEER shall review and return this schedule or require revisions thereto within 14 days of its submittal. Said progress schedule shall be updated by CONTRACTOR on a monthly basis, submitted with the pay requests. See also Article 14, herein, and Section 01310.

2.6 A pre-construction conference will be held, prior to any WORK being performed and prior to the commencement of the Contract Time, to establish procedures for the handling of Shop Drawings, other submissions and the processing of Applications for Payment, to negotiate the date of Notice to Proceed, and to establish a working understanding between the parties as to the Project. Present at the conference will be the OWNER or OWNER’S REPRESENTATIVE, the ENGINEER, the Project Representatives, the CONTRACTOR and the CONTRACTOR’S Superintendent, and other appropriate parties such as private utilities, as deemed necessary.

ARTICLE 3 - CORRELATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS

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3.1 It is the intent of the Specifications and Drawings to describe a complete Project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between the OWNER and the CONTRACTOR. They may be altered only by a Modification.

3.2 The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall call it to the ENGINEER’S attention in writing at once and before proceeding with the WORK affected thereby.

3.3 The words "furnish", "furnish and install", and "provide" or words with similar meaning shall be interpreted, unless otherwise specifically stated, to mean "furnish and install complete in place and ready for service".

3.4 Miscellaneous items and accessories which are not specifically mentioned, but which are essential to produce a complete and properly operating instruction, or usable structure or plant, providing the indicated function, shall be furnished and installed without change in the Contract Price. Such miscellaneous items and accessories shall be of the same quality standards, including material, style, finish, strength, class, weight and other applicable characteristics, as specified for the major component of which the miscellaneous item or accessory is an essential part, and shall be approved by the ENGINEER before installation. The above requirements are not intended to include major components not covered by or inferable from the Drawings and Specifications.

3.5 The WORK of all trades under this Contract shall be coordinated by the CONTRACTOR in such a manner as to obtain the best workmanship possible for the entire Project, and all components of the WORK shall be installed or erected in accordance with the best practices of the particular trade.

3.6 Manufacturer’s literature, when referenced, shall be dated and numbered and is intended to establish the minimum requirements acceptable. Whenever reference is given to codes, or standard specifications or other data published by regulating agencies or accepted organizations, including but not limited to National Electrical Code, applicable State Building Code, Federal Specifications, ASTM Specifications, various institute specifications, and the like, it shall be understood that such reference is to the latest edition, including addenda in effect on the date of Bid. However, no provision of any reference standard specification, manual or code (whether or not specifically incorporated by reference in the contract documents) shall be effective to change the duties and responsibilities of the OWNER, CONTRACTOR, or ENGINEER, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to the ENGINEER, or any of the ENGINEER’S consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the WORK or any duty or authority to undertake responsibility contrary to the provisions of these General Conditions.

3.7 Brand names where used in the technical specifications are intended to denote the standard of quality required for the particular material or product. The term "equal" or "equivalent", when used in connection with brand names, shall be interpreted to mean a material or product that is similar and equal in type, quality, size, capacity, composition, finish, color and other applicable characteristics to the material or product specified by trade name, and that is suitable for the same use and capable of performing the same function, in the opinion of the ENGINEER, as the material or product so specified. Determination of whether an item is "equal" or "equivalent" shall be at the discretion of the ENGINEER with the concurrence of the OWNER. Proposed equivalent items must be approved by ENGINEER before they are purchased or incorporated in
the WORK. Failure of the ENGINEER or the OWNER to find an item "equal" or "equivalent" shall not entitle the CONTRACTOR to a change in Contract Price. Approval of an item as "equal" or "equivalent" shall entitle the OWNER to a credit if use of the approved item results in a savings in material and/or labor cost to the CONTRACTOR. (When a brand name, catalog number, model number, or other identification, is used without the phrase "or equal", the CONTRACTOR shall use the brand specified).

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE CONDITIONS; REFERENCE-POINTS

Availability of Lands

4.1 The OWNER will furnish, as indicated in Contract Documents, the lands upon which the WORK is to be done, rights-of-way and easements for access thereto, and such other lands which are designated for the use of the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the OWNER, unless otherwise specified in the Contract Documents. Other access to such lands or rights-of-way for the CONTRACTOR’S convenience shall be the responsibility of the CONTRACTOR. The CONTRACTOR will provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 The CONTRACTOR acknowledges full responsibility for the interpretation of any subsurface tests, if such were available and provided by the OWNER or ENGINEER during bidding.

Subsurface Conditions:

4.3 The CONTRACTOR acknowledges that CONTRACTOR has made, or has caused to be made, prior to bidding such reasonable test holes and/or other reasonable investigations of subsurface conditions or that CONTRACTOR is otherwise satisfied with respect to such conditions. CONTRACTOR is satisfied as to the conditions affecting the WORK, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides, water tables or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the WORK. The CONTRACTOR further acknowledges that CONTRACTOR is satisfied as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection or investigation of the site, including all exploratory work done by the CONTRACTOR, on behalf of the OWNER on the site or any contiguous site, as well as from information presented by the Drawings and Specifications made a part of this Contract, or any other information made available to the CONTRACTOR prior to receipt of Bids. Any failure by the CONTRACTOR to become acquainted with the available information, and to perform any needed subsurface investigations themselves, will not relieve CONTRACTOR from responsibility for estimating properly the difficulty or cost of successfully performing the WORK. The OWNER and ENGINEER assumes no responsibility for any conclusions or interpretations made by the CONTRACTOR on the basis of the information made available by the OWNER or ENGINEER.

Differing Site Conditions:

4.4 (a) The CONTRACTOR shall promptly, and before such conditions are disturbed, notify the OWNER in writing of: (1) subsurface or latent physical conditions at the site differing materially from those which were reasonably discoverable or indicated in this contract, or (2) unknown physical conditions at the site: of an unusual nature, differing materially from those reasonably discoverable or ordinarily encountered and
generally recognized as inherent in WORK of the character provided for in this contract. The CONTRACTOR and OWNER shall promptly investigate the conditions, and if the OWNER finds that such conditions do materially so differ and will cause an increase or decrease in the CONTRACTOR'S cost of, or the time required for, performance of any part of the WORK under this contract, CONTRACTOR shall provide OWNER with a detailed explanation of the change in construction means or methods required by the change fifteen (15) days from initial notice to OWNER of the condition. OWNER shall evaluate CONTRACTOR’S detailed explanation and, if warranted, an equitable adjustment shall be made and the contract modified in writing accordingly.

4.4 (b) No claim of the CONTRACTOR under this clause shall be allowed unless the CONTRACTOR has given the notice and detailed explanation required in (a) above; provided, however, the time prescribed therefore may be extended in writing by the OWNER.

4.4 (c) No claim by the CONTRACTOR for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

Physical Conditions - Underground Facilities:

4.5 The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities or by others, unless it is otherwise expressly provided in the Supplementary Conditions.

4.5.1 OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

4.5.2 CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the WORK with the owners of such Underground Facilities during construction, for the safety and protection thereof as provided in paragraph 6.19 and repairing any damage thereto resulting from the WORK, the cost of all of which will be considered as having been included in the Contract Price. No additional compensation will be allowed the CONTRACTOR because of the existence of utility lines which are not shown on drawings.

4.5.3 If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before performing any WORK affected thereby (except in an emergency as permitted by paragraph 6.21) identify the owner of such Underground Facility and give written notice thereof to that owner and to the Director of the Brevard County Utility Services Department and to the ENGINEER.

Existing Structures:

4.6 The plans show the locations of all known surface and subsurface structures. However, the OWNER and ENGINEER assume no responsibility for failure to show any or all of these structure on the Plans, or to show them in their exact location. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for extra work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or
grades, or requires the building of special work, provisions for which are not made in the Plans and Proposal in which case the provisions in these Specifications for extra work shall apply.

ARTICLE 5 - BONDS AND INSURANCE

Performance, Payment and Maintenance Bonds:

5.1 CONTRACTOR shall furnish separate performance and payment bonds as security for the faithful performance and payment of all the CONTRACTORS' obligations under the Contract Documents.

5.1.1 Before commencing the work or before recommencing the work after a default or abandonment, the contractor shall provide to the COUNTY a certified copy of the recorded bond or bonds. The COUNTY shall not make any payment to the contractor until the contractor has complied with this paragraph. Partial or final payments to the CONTRACTOR shall be made in accordance with the provisions of section 14.3 of these General Conditions.

5.1.2. The Performance and Payment Bonds shall each be in amounts at least equal to the Contract Price and in such form and with such sureties as are acceptable to OWNER. Bond forms for the aforementioned securities are a part of the Contract Documents and CONTRACTOR shall ensure that each executed copy of the bond form is complete and sealed. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents. All Bonds shall be in the forms prescribed by Law or Regulation or by the Contract Documents and be executed by such sureties licensed to do business in Florida, satisfactory to Brevard County. All Bonds signed by an agent must be accompanied by a certified copy of the Power of Attorney. CONTRACTOR shall also provide a maintenance bond in the amount of twenty-five percent (25%), unless different in the Supplementary Conditions, of the final Contract Price which shall remain in force for two (2) years after the date when final payment becomes due. CONTRACTOR shall provide each Subcontractor, as defined in these Contract Documents, with a certified copy of its recorded payment bond. CONTRACTOR shall also provide each Subcontractor with written notice that provisions for making a claim under the payment bond are set forth in §255.05, Florida Statutes. CONTRACTOR must specifically notify all Subcontractors of the deadlines to make claims under the bonds.

5.1.3 As the companies being rated acceptable:

The surety company shall meet all requirements of Florida Statute 287.0935. In cases where the amount of the bond exceeds $500,000, the surety company shall have an A.M. Best’s rating of no less than A- and, in cases where the amount of the bond is $500,000 or less, the surety company shall have an A.M. Best's rating of no less than B+. Depending on the amount of the bond, the surety company shall have a minimum A.M. Best’s financial size category ranking as follows:

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5.1.4. The agent countersigning the bond shall be resident in the State of Florida.

**Special Note:** Florida Statute 255.05 requires that Payment and Performance Bonds for public construction projects over $200,000 EACH be recorded with the Clerk of Court. The awarded CONTRACTOR will be required to submit proof of recording with presentation of the Bonds.

**Insurance:**

5.2 The CONTRACTOR shall provide the OWNER with insurance certificates, with coverage as specified in these Contract Documents, certifying that all required insurance is in force. Such insurance certificates shall include a provision which states that the OWNER shall be notified in writing, by certified mail, of any reduction, cancellation or substantial change of policy or policies at least thirty (30) days prior to the effective date of said action. Insurers must be licensed to conduct business in the State of Florida and have an A.M. Best's rating as well as a financial class that complies with the minimums in Article 5.1.1 above.

5.2.1 The CONTRACTOR shall maintain during the life of this Contract, full and complete Worker's Compensation coverage, for all employees who will be engaged in WORK on the project under this Contract, as required by the State of Florida law. In case any such WORK is sublet, the CONTRACTOR shall require the Subcontractor similarly to provide Workers’ Compensation and Employers’ Liability Insurance for all of the latter's employees to be engaged in such WORK. Where WORK under this contract includes any water or navigational exposure, coverage shall be included to cover the Federal Longshoremen's and Harborworker's Act and the Federal Jones Act.

5.2.2 The CONTRACTOR, at its own expense, shall keep in force and at all times maintain during the term of this Contract:

(a) General Liability Insurance: to include completed operations, products liability, and contractual liability coverages with combined single limits to cover damages for personal injury, accidental death as well as for property damage which may arise directly or indirectly from the performance of the WORK to be completed under this Contract. Coverage for property damage shall be on a “broad form” basis with no exclusions for “X”, “C” and “U”. **Minimum limits of insurance to be provided shall be $5,000,000, per occurrence.** Where applicable, the CONTRACTOR shall purchase and maintain adequate flood insurance coverage for WORK within designated flood hazard areas as defined by Public Law 93-234 (Flood Disaster Protection Act).

(b) Automobile Liability Insurance: Automobile Liability coverage shall be in the **minimum amount of $1,000,000**, combined single limits for Bodily Injury and Property Damage per accident.

(c) Workers' Compensation Coverage: Full and complete Workers' Compensation Coverage, as required by State of Florida law, shall be provided.

(d) Insurance Certificates: The CONTRACTOR shall provide the OWNER with Certificate(s) of Insurance on all the policies of insurance and renewals thereof in a form acceptable to the OWNER. Said Liability Policies shall provide that the OWNER be an additional insured. The OWNER shall be notified in writing of any reduction, cancellation or substantial change of policy or policies at least
thirty (30) days prior to the effective date of said action. All insurance policies shall be issued by responsible companies who are acceptable to the OWNER and licensed and authorized under the laws of the State of Florida.

Regarding Subcontractors:

5.3 In the event any WORK under this Contract is performed by a Subcontractor, the CONTRACTOR shall be responsible for any liability directly or indirectly arising out of the WORK performed under this Contract by a Subcontractor, which liability is not covered by the Subcontractor’s insurance.

5.3.1 The CONTRACTOR agrees that if any part of the WORK under the Contract is sublet, CONTRACTOR will require the Subcontractor(s) to furnish insurance certificates, similar to those required by the OWNER in Section 5.2 above, to CONTRACTOR.

Fire and Extended Coverage Insurance (Builder's Risk):

5.4 The CONTRACTOR shall maintain, as applicable, in an Insurance Company or Insurance Companies acceptable to the OWNER, Fire, Extended Coverage and Vandalism & Malicious Mischief Insurance on buildings and structures, while in the course of construction, including foundations, additions, attachments and all permanent fixtures belonging to and constituting a part of said buildings or structures. The policy or policies shall also cover machinery, if the cost of machinery is included in the Contract. The amount of insurance must at all times be at least equal to the actual cash value of the insured property. The policy shall be in the name of the OWNER and the CONTRACTOR, as their interest may appear, and shall also cover the interests of all Subcontractors performing WORK.

Cancellation and Re-Insurance:

5.5 If any insurance should be canceled or changed by the insurance company or should any insurance expire during the period of this Contract, the CONTRACTOR shall be responsible for securing other acceptable insurance to provide the coverage specified in this section to maintain continuous coverage during the life of this Contract.

ARTICLE 6 - CONTRACTOR’S RESPONSIBILITIES

Supervision and Superintendent's:

6.1 The CONTRACTOR will supervise and direct the WORK. CONTRACTOR will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR’S representative 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 as required to perform adequate supervision and coordination of the WORK. (Copies of written communications given to the Superintendent shall be mailed to the CONTRACTOR’S home office).

Labor, Materials and Equipment:
6.2 The CONTRACTOR will provide competent, suitably qualified personnel to survey and lay out the WORK and perform construction as required by the Contract Documents. CONTRACTOR will at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the WORK or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all WORK at the site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of WORK on Saturday, Sunday or any legal holiday, observed by Brevard County, without the OWNER’S written consent.

6.2.1 CONTRACTOR shall pay for OWNER’S additional costs with no increase in Contract Price on account of the overtime WORK which CONTRACTOR may be authorized under the provisions of paragraph 6.2. Such additional costs include OWNER’S staff and engineering charges. Overtime hours and costs are defined in the Supplementary Conditions.

6.3 The CONTRACTOR will furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the WORK.

6.3.1 All material stored on the job site shall remain the responsibility of the CONTRACTOR until incorporated into the WORK. The OWNER will not reimburse the CONTRACTOR for materials lost, stolen, or damaged while stored on the job site.

6.3.2 While OWNER respects the CONTRACTOR’S right to control means and methods of construction, specific activities shall not be permitted if they have the potential of creating avoidable significant hardship, inconvenience, hazard, or nuisance to the local citizens when other means and practices are available to avoid these conditions. If the OWNER rejects any such planned construction means or methods on this basis, the CONTRACTOR agrees to modify such plans and to employ alternate means acceptable to the OWNER to execute the affected WORK. No claim for damages or delay shall be considered if such changes are required.

6.4 All materials, equipment, test and calibration devices, instruments, and other components of the WORK will be new. Test and calibration equipment used by the CONTRACTOR or any Subcontractor during WORK on the project will not be acceptable. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or approved, such materials shall be delivered to the site in their original packages or container with seals unbroken and labels intact.

6.5 All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise provided in the Contract Documents.

Materials, Equipment, Products, and Substitutions:

6.6 Materials, equipment and products incorporated in the WORK must be approved for use before being purchased by the CONTRACTOR. The CONTRACTOR shall submit to the ENGINEER and the OWNER a list of proposed materials, equipment or products, together with such samples as may be necessary for OWNER to determine their acceptability and obtain OWNER’S approval, within ninety calendar days after award of Contract unless otherwise stipulated in the Supplementary Conditions. No request for payment for "or equal" equipment will be approved until this list has been received and approved by the ENGINEER.
6.6.1 Whenever a material, article or piece of equipment is identified on the Drawings or Specifications by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements, and that other products of equal capacities, quality and function may be considered. The CONTRACTOR may request the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the Contract Documents by reference to brand name or catalogue number, and if, in the opinion of the OWNER, such material, article, or piece of equipment is of equal substance and function to that specified, the OWNER may approve its substitution and use by the CONTRACTOR. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without an increase in the Contract Price or Contract Time. The CONTRACTOR shall reimburse the OWNER for charges of the ENGINEER and ENGINEER’S consultants for evaluating each proposed substitution. These costs shall include transportation to operating installation at factories, etc.

6.6.2 No substitute shall be ordered or installed without the written approval of the OWNER.

6.6.3 Delay caused in obtaining approvals for substitute materials will not be considered justifiable grounds for an extension of Contract Time or increase in Contract Price.

6.6.4 Should any WORK or materials, equipment or products not conform with requirements of the Drawings and Specifications or become damaged during the progress of the WORK, such WORK or materials shall be removed and replaced, together with any WORK disarranged by such alterations, at any time before completion and acceptance of the Project. All such WORK shall be done at the expense of the CONTRACTOR.

6.6.5 No materials or supplies for the WORK shall be purchased by the CONTRACTOR or by any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the Seller. The CONTRACTOR warrants that CONTRACTOR has good title to all materials and supplies to be used by CONTRACTOR in the WORK.

Concerning Subcontractors:

6.7 The CONTRACTOR will not employ any Subcontractor, other person or organization against whom the OWNER may have reasonable objection, nor will the CONTRACTOR be required to employ any Subcontractor against whom CONTRACTOR has reasonable objection. The CONTRACTOR will not make any substitution for any Subcontractor who has been accepted by the OWNER unless the OWNER determines that there is good cause for doing so.

6.8 The CONTRACTOR shall be fully responsible for all acts and omissions of the Subcontractors and of persons and organizations directly or indirectly employed by Subcontractors and of persons and organizations for whose acts any of them may be liable to the same extent that CONTRACTOR is responsible for the acts and omissions of persons directly employed by CONTRACTOR. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any Subcontractor or other person or organization having a direct contract with CONTRACTOR, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any monies due any Subcontractor or other person or organization, except as may otherwise be required by law. OWNER or ENGINEER may furnish to any Subcontractor or other person or organization, to the extent
practicable, evidence of amount paid to CONTRACTOR on account of specific WORK done in accordance with the schedule of values.

6.9  The divisions and sections of the Specifications and the identifications of any Drawings shall not control the CONTRACTOR in dividing the WORK among Subcontractors or delineating the WORK to be performed by any specific trade.

6.10  The CONTRACTOR agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the OWNER.

6.11  All WORK performed for the CONTRACTOR by a Subcontractor shall be pursuant to any appropriate agreement between the CONTRACTOR and the Subcontractor.

6.12  The CONTRACTOR shall be responsible for the coordination of the trades, Subcontractors and materialmen engaged by CONTRACTOR for this WORK.

6.12.1  The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind Subcontractors to the CONTRACTOR by the terms of these General Conditions and other Contract Documents insofar as applicable to the WORK of Subcontractors, and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provisions of the Contract Documents.

6.12.2  The OWNER or ENGINEER will not undertake to settle any differences between the CONTRACTOR and CONTRACTOR’S Subcontractors or between Subcontractors.

6.12.3  If in the opinion of the OWNER any Subcontractor on the Project proves to be incompetent or otherwise unsatisfactory, the CONTRACTOR shall replace such Subcontractor if and when directed to do so by the OWNER in writing.

Patent Fees and Royalties:

6.13  The CONTRACTOR will pay all license fees and royalties and assume all costs incident to the use of any invention, design, process or device which is the subject of patent rights or copyrights held by others. CONTRACTOR will indemnify and hold harmless the OWNER and ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of such rights during or after completion of the WORK, and shall defend all such claims in connection with any alleged infringement of such rights.

6.14  The CONTRACTOR shall be responsible for determining the application of patent rights and royalties on materials, appliances, articles or systems prior to bidding. However, CONTRACTOR shall not be responsible for such determination on systems which do not involve purchase by CONTRACTOR of materials, appliances and articles.

Permits:

6.15  The CONTRACTOR shall secure and possess all construction permits and licenses as required for the WORK, prior to starting relevant portions of the WORK. The OWNER shall pay for local governmental charges for permits and inspection fees necessary for the prosecution of the WORK, which are applicable at
the time of CONTRACTOR’S Bid. The OWNER shall also assist the CONTRACTOR, when necessary, in obtaining such permits and licenses. The CONTRACTOR shall be responsible for obtaining and paying for all St. Johns River Water Management District (SJRWMD) dewatering permits, as required. CONTRACTOR shall be responsible for complying with the rules and requirements of the SJRWMD, Florida Department of Transportation, Florida Department of Environmental Protection, United States Environmental Protection Agency, and any other regulatory agency requirements including financial responsibility (fines, etc.).

Laws and Regulations:

6.16 The CONTRACTOR will give all notices and comply with all laws, ordinances, rules and regulations applicable to the WORK. If the CONTRACTOR observes that the Specifications or Drawings are at variance therewith, CONTRACTOR will give the ENGINEER prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate Modification. If the CONTRACTOR performs any WORK knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the ENGINEER, CONTRACTOR will bear all costs arising therefrom: however, it shall not be CONTRACTOR’S primary responsibility to make certain that the Drawings and Specifications are in accordance with such laws, ordinances, rules and regulations.

Taxes:

6.17 Cost of all sales and other taxes for which the CONTRACTOR is liable under the Contract shall be included in the Contract Price stated by the CONTRACTOR.

Record Drawings:

6.18 The CONTRACTOR will keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the ENGINEER and shall be delivered to ENGINEER for the OWNER upon completion of the Project. It shall be used for this purpose only. Final acceptance of the Project will be withheld until approval of the documents is made by the OWNER.

Safety and Protection:

6.19 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. CONTRACTOR will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to:

6.19.1 All employees on the WORK and other persons who may be affected thereby.

6.19.2 All the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and

6.19.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designed for removal, relocation or replacement in the course of construction.
6.20 The CONTRACTOR will designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the CONTRACTOR’S superintendent unless otherwise designated in writing by the CONTRACTOR to the OWNER.

**Emergencies:**

6.21 In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or the OWNER, is obligated to act, at CONTRACTOR’S discretion, to prevent threatened damage, injury or loss. If the CONTRACTOR believes that additional WORK done by CONTRACTOR in an emergency which arose from causes beyond CONTRACTOR’S control entitles CONTRACTOR to an increase in the Contract Price or an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

**Shop Drawings and Samples:**

6.22 After checking and verifying all field measurements, the CONTRACTOR will submit to the ENGINEER and the OWNER for review, in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.5) copies (or at the OWNER'S option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of the CONTRACTOR. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, materials of construction and the like to enable the OWNER to review the information as required.

6.23 The CONTRACTOR will also submit to the OWNER for review, with such promptness as to cause no delay in WORK, all samples required by the Contract Documents. All samples will have been checked by and stamped with the approval of the CONTRACTOR, identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended.

6.24 At the time of each submission, the CONTRACTOR will in writing call the ENGINEER’S attention to any deviations that the Shop Drawings or sample may have from the requirements of the Contract Documents.

6.25 The ENGINEER will review within thirty (30) calendar days, Shop Drawings and samples, but this review shall only be for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The review of a separate item as such will not indicate review of the assembly in which the item functions. The CONTRACTOR will make any corrections required by the ENGINEER and will return the required number of corrected copies of Shop Drawings and resubmit new samples until the review is satisfactory to the OWNER. The CONTRACTOR shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by the ENGINEER on previous submissions. The CONTRACTOR’S stamp of approval on any Shop Drawings or sample shall constitute a representation to the OWNER and the ENGINEER that the CONTRACTOR has either determined and verified all quantities, dimensions, field construction criteria, materials, catalogue numbers and similar data or CONTRACTOR assumes full responsibility for doing so, and that CONTRACTOR has reviewed or coordinated each Shop Drawing or sample with the requirements of the WORK and the Contract Documents. Shop Drawings submitted without the CONTRACTOR’S stamp or specific written indication will be returned without action. Shop Drawings and submittal data will be reviewed two times, thereafter all further review time will be charged to the CONTRACTOR.
6.26 No WORK requiring a Shop Drawing or sample submission shall be commenced until the submission has been reviewed and approved by the ENGINEER. A copy of each Shop Drawing and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the OWNER and the ENGINEER.

6.27 The ENGINEER’S and/or OWNER’S review of Shop Drawings or samples shall not relieve the CONTRACTOR from CONTRACTOR’S responsibility for any deviations from the requirements of the Contract Documents unless the CONTRACTOR has in writing called the OWNER’S attention to such deviation at the time of submission and OWNER has given written approval to the specific deviation, nor shall any review by the ENGINEER and/or OWNER relieve the CONTRACTOR from responsibility for errors or for omissions in the Shop Drawings.

Cleaning Up:

6.28 Site. The CONTRACTOR shall clean up behind the WORK as much as is reasonably possible as the WORK progresses. Upon completion of the WORK, and before acceptance of and final payment for the Project by the OWNER, the CONTRACTOR shall remove all the surplus and discarded materials, excavated material and rubbish from the roadways, sidewalks, parking areas, lawns and all adjacent property; shall clean the portion of WORK involved in any building under this Contract, so that no further cleaning by the OWNER is necessary prior to OWNER’S occupancy; shall restore all property, both public and private, which has been disturbed or damaged during the prosecution of the WORK; and shall leave the whole in a neat and presentable condition.

6.29 Building. Clean-up operations shall consistently be carried on by the CONTRACTOR at all times to keep the premises free from accumulation of waste materials and rubbish. Upon completion of the WORK, CONTRACTOR shall remove all rubbish, tools, scaffolding, surplus materials, etc., from the building and shall leave the WORK “broom clean”, or its equivalent, unless more exactly specified elsewhere in the Contract. The CONTRACTOR shall do the following special cleaning for all trades upon completion of the WORK.

6.29.1 Remove putty stains and paint from and wash and polish all glass. Do not scratch or otherwise damage glass.

6.29.2 Remove all marks, stains, fingerprints and other soil and dirt from painted, stained and decorated WORK.

6.29.3 Remove all temporary protection and clean and polish floors.

6.29.4 Clean and polish all hardware for all trades; this shall include removal of all stains, dust, dirt, paint, etc.

6.30 General. In case of dispute, the OWNER may remove the rubbish and charge the cost to the CONTRACTOR.

Public Convenience and Safety:

6.31 The CONTRACTOR shall, at all times, conduct the WORK in such a manner as to ensure the least practicable obstruction of public travel. The convenience of the general public and of all residents along and
adjacent to the area of the WORK shall be provided for in a satisfactory manner, consistent with the operation and local conditions. “Street Closed” signs shall be placed immediately adjacent to the WORK, in a conspicuous position, at such locations as traffic demands. At any time that streets are required to be closed, CONTRACTOR shall obtain approval to close the street from the Brevard County Board of County Commissioners, Florida D.O.T. and/or the local municipality, as appropriate. The CONTRACTOR shall notify law enforcement agencies, fire departments, and parties operating emergency vehicles before the street is closed and again as soon as it is opened. Approval from the Board of County Commissioners shall be coordinated through the office of the Director of the Traffic Engineering Division including notification of the news media and affected property owners. Access to fire hydrants and other fire extinguishing equipment shall be provided and maintained at all times. Traffic paths shall be maintained for local traffic.

6.31.1 A Maintenance and Protection of Traffic Plan should be prepared by the CONTRACTOR and presented for approval to the OWNER and ENGINEER. This plan shall be prepared in accordance with the latest edition of the U.S. Department of Transportation's Manual On Uniform Traffic Control Devices and the Brevard County Roadway and Design Standards.

6.31.2 During the course of construction, if the CONTRACTOR is negligent in conforming to the approved Plan or if the CONTRACTOR creates a potentially unsafe traffic condition, the CONTRACTOR will be subject to a penalty of $300 per incident per day.

Sanitary Provisions:

6.32 The CONTRACTOR shall furnish necessary toilet conveniences, secluded from public observation, for use of all personnel on the WORK, whether or not in CONTRACTOR’S employ. They shall be kept in a clean and sanitary condition and shall comply with the requirements and regulations of the Public Authorities having jurisdiction. CONTRACTOR shall commit no public nuisance. Temporary sanitary facilities shall be removed upon completion of the WORK and the premises shall be left clean.

Indemnification:

6.33 The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees and interested third parties from and against all claims, damages, losses and expenses, direct, indirect or consequential, including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court costs arising out of or resulting from the performance of the WORK, provided that any such claim, damage, loss or expense, (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than WORK itself) including the loss of use resulting therefrom and, (b) is caused in whole or in part by any negligent act or omission of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. The CONTRACTOR acknowledges adequate consideration for this indemnification provision.

6.34 In any and all claims against the OWNER or the ENGINEER or any of their agents or employees, by any employee of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.33 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under worker's compensation acts, disability benefit acts or other employee benefit acts.
6.35 The obligations of the CONTRACTOR under paragraph 6.34 shall not extend the liability of the ENGINEER’S negligent acts, errors or omissions or those of CONTRACTOR’S employees or agents.

Responsibility for Connecting to Existing WORK:

6.36 It shall be the express responsibility of the CONTRACTOR to connect CONTRACTOR’S WORK to each part of the existing WORK or WORK previously installed as required by the Drawings and Specifications to provide a complete installation.

Work in Street, Highway and Other Rights-Of-Way:

6.37 Excavation, grading, fill, storm drainage, paving and any other construction or installations in Rights-of-Way of streets, highways, public carrier lines, utility lines (either aerial, surface or subsurface), etc., shall be done in accordance with requirements of these Specifications and authorities having jurisdiction. The CONTRACTOR will be responsible for obtaining all permits necessary for the WORK, and shall follow a proper MOT plan. Upon completion of the WORK, the CONTRACTOR shall present to the ENGINEER certificates, in triplicate, from the proper authorities stating that the WORK has been done in accordance with their requirements.

6.37.1 The OWNER will cooperate with the CONTRACTOR in obtaining action from any utilities or public authorities involved in the above requirements.

Cooperation with Governmental Departments, Public Utilities, Etc.:

6.38 The CONTRACTOR shall be responsible for making all necessary arrangements with governmental departments, public utilities, public carriers, service companies and public or private corporations owning or controlling roadways, railways, water, sewer, gas, electrical, cable television, telephone, and telegraph facilities such as pavements, tracks, piping, wires, cables, conduits, poles, guys, etc., including incidental structures connected therewith, that are encountered in the WORK in order that such items may be properly shored, supported and protected, or the CONTRACTOR may relocate them with the appropriate utility owners’ approval, if CONTRACTOR so desires. The CONTRACTOR shall give proper notices, shall comply with requirements of such parties in the performance of the WORK, shall permit entrance of such parties on the Project in order that they may perform their necessary WORK, and shall pay all charges and fees made by such parties for this WORK.

6.38.1 The CONTRACTOR’S attention is called to the fact that there may be delays on the Project due to work to be done by governmental departments, public utilities, and others in repairing or moving poles, conduits, etc. The CONTRACTOR shall cooperate with the above parties, in every way possible, so that the construction can be completed in the least possible time.

6.38.2 The CONTRACTOR shall have become familiar with all codes, laws, ordinances and regulations which in any manner effect those engaged in the WORK, or materials and equipment used in or upon the WORK, or in any way affect the conduct of the WORK, and no plea of misunderstanding will be considered on account of CONTRACTOR’S ignorance thereof.

Use of Premises:
6.39 CONTRACTOR shall confine apparatus, storage of materials, and operations of CONTRACTOR’S worker’s to limits indicated by law, ordinances, permits, and directions of the OWNER’S REPRESENTATIVE, and shall not unnecessarily encumber any part of the site.

6.39.1 CONTRACTOR shall not overload or permit any part of any structure to be loaded with such weight as will endanger its safety, nor shall CONTRACTOR subject any part of the WORK to stresses or pressures that will endanger it.

6.39.2 CONTRACTOR shall enforce the OWNER’S instructions in connection with signs, advertisements, fires and smoking.

6.39.3 CONTRACTOR shall arrange and cooperate with OWNER in routing and parking of automobiles of employees, Subcontractors and other personnel, and in routing material delivery trucks and other vehicles to the Project site.

Protection of Existing Property Improvements:

6.40 Any existing surface or subsurface improvements, such as pavements, curbs, sidewalks, pipes or utilities, footings, or structures (including portions thereof), trees and shrubbery, not indicated on the Drawings or noted in the Specifications as being removed or altered shall be protected from damage during construction of the Project shall be restored to a condition equal, or better, to that existing at time of award of Contract.

Temporary Heat:

6.41 The CONTRACTOR shall provide heat, fuel and services as necessary to protect all WORK and materials, within all habitable areas of permanent building construction, for all contracts against injury from dampness and cold until final acceptance of all WORK and materials for the Project, unless building is fully occupied by the OWNER prior to such acceptance, in which case the OWNER shall assume all expenses of heating from date of full occupancy. Unless otherwise specifically permitted by Supplementary Conditions, the building permanent heating system shall not be used to provide temporary heat. CONTRACTOR’S proposed methods or heating shall be submitted for approval.

ARTICLE 7 - WORK BY OTHERS

7.1 The OWNER may perform additional WORK related to the Project by OWNER’S own forces, or OWNER may let other direct contracts therefor which shall incorporate these General Conditions. The CONTRACTOR will afford the other contractors who are parties to such direct contracts (or the OWNER, if OWNER is performing the additional WORK), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate CONTRACTOR’S WORK with OWNER’S.

7.2 If any part of the CONTRACTOR’S WORK depends for proper execution or result upon the work of any such other contractor (or the OWNER), the CONTRACTOR will promptly report to the OWNER’S REPRESENTATIVE in writing of any defects or deficiencies in such WORK that render it unsuitable for such proper execution and results.
7.3 The CONTRACTOR will do all cutting, fitting, and patching of the WORK that may be required to make its several parts come together properly and fit it to receive or be received by such other work. The CONTRACTOR will not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the ENGINEER and of the other contractors whose work will be affected.

7.4 If the performance of additional work by other contractors or the OWNER is not noted in the Contract Documents prior to the execution of the Contract, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional work. If the CONTRACTOR believes that the performance of such additional work by the OWNER or others involves CONTRACTOR in additional expense or entitles the CONTRACTOR to an extension of the Contract Time, the CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

7.5 Where practicable, the CONTRACTOR shall build around the work of other separate contractors.

7.6 Cooperation is required in the use of the site facilities and in the detailed execution of the WORK. The CONTRACTOR shall coordinate his operations with those of any other contractors for the best interest of the WORK in order to prevent delay in the execution thereof.

7.7 The CONTRACTOR shall keep himself informed of the progress of the work of other contractors. Should lack of progress or defective workmanship on the part of other contractors interfere with CONTRACTOR’S operations, the CONTRACTOR shall notify the OWNER’S REPRESENTATIVE immediately. Lack of such notice to the OWNER’S REPRESENTATIVE will be construed as acceptance by the CONTRACTOR of the status of the work of other contractors as being satisfactory for proper coordination of CONTRACTOR’S own WORK.

7.8 CONTRACTOR shall give notices of the progress of WORK so as to allow other contractors adequate opportunity to properly direct and coordinate their work. All such notices shall be submitted to the OWNER’S REPRESENTATIVE with copies to other contractors on the Project Site sufficiently ahead of job progress to permit adequate time for the other contractors to coordinate their work.

ARTICLE 8 - OWNER’S RESPONSIBILITIES

8.1 The OWNER will issue all communications to the CONTRACTOR through the ENGINEER or OWNER’S REPRESENTATIVE.

8.2 In case of termination of the employment of the ENGINEER, the OWNER will appoint an engineer against whom the CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to arbitration, if mutually agreeable.

8.3 The OWNER will furnish the data required of OWNER under the Contract Documents promptly and shall make payments to the CONTRACTOR promptly after they are due as provided in Article 14.

8.4 OWNER’S duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1, 4.4 and the Supplementary Conditions. Paragraph 4.2 refers to ENGINEER’S identifying and making available to CONTRACTOR, if available, copies of surveys and investigation reports of subsurface and latent physical conditions at the site or otherwise
affecting performance of the WORK which have been relied upon by ENGINEER in preparing the Drawings and Specifications.

8.5 The OWNER’S responsibilities in respect of liability and property insurance are set forth in Article 5.

8.6 In addition to OWNER’S rights to request changes in the WORK in accordance with Article 10, the OWNER (especially in certain instances as provided in paragraph 10.4), will be obligated to execute Change Orders.

8.7 In connection with the OWNER’S right to stop WORK or suspend WORK, refer to paragraph 15.1. Paragraph 15.4 deals with the OWNER’S right to terminate any services of the CONTRACTOR under certain circumstances.

8.8 The OWNER shall have the right to take possession of and use any completed or partially completed portions of the WORK, notwithstanding the fact that the time for completing the entire WORK or any portion thereof may not have expired; but such taking possession and use shall not be deemed an acceptance of any WORK not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the WORK, the CONTRACTOR shall be entitled to such extra compensation or extension of time or both, except by prior agreement, as the ENGINEER may determine. See paragraph 14.11.

8.9 OWNER’S responsibility in respect of certain inspections, tests and approvals is set forth in paragraphs 9.5 and 9.6.

ARTICLE 9 - ENGINEER’S STATUS DURING CONSTRUCTION

Owner’s Representative:

9.1 The OWNER shall designate the OWNER’S REPRESENTATIVE during the construction period. The duties and responsibilities and the limitations of authority of the ENGINEER as one of the OWNER’S REPRESENTATIVES during construction are set forth in Articles 1 through 17 of these General Conditions and shall not be extended without written consent of the Brevard County Board of County Commissioners.

9.1.1 The ENGINEER’S decision in matters relating to aesthetics shall be final, if within the terms of the Contract Documents and as long as such decisions shall not result in an increase in Contract Time or Contract Price.

9.1.2 Except as may be otherwise provided in the Agreement or elsewhere in the Contract Documents, all claims, counter-claims, disputes and other matters in question between the OWNER and the CONTRACTOR arising out of or relating to the Agreement or the breach thereof will be decided in a court of competent jurisdiction in and for Brevard County.

Visits to Site:

9.2 The ENGINEER will make periodic visits to the site to observe the progress and quality of the executed WORK and to determine, in general, if the WORK is proceeding in accordance with the Contract Documents. The ENGINEER will not be required to make continuous on-site observations to check the quality or quantity of the WORK. ENGINEER’S efforts will be directed toward ascertaining on behalf of the OWNER that the completed Project will conform to the requirements of the Contract Documents. On the
basis of the ENGINEER’S on-site observations as an experienced and qualified design professional, ENGINEER will keep the OWNER informed of the progress of the WORK and will endeavor to guard the OWNER against defects and deficiencies in the WORK.

Clarifications and Interpretations:

9.3 The ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable for the overall intent of the Contract Documents. If the CONTRACTOR believes that a written clarification and interpretation entitles CONTRACTOR to an increase in the Contract Price or extension of Contract Time, CONTRACTOR may make a claim therefor, as provided in Articles 11 and 12.

Measurement of Quantities:

9.4 All WORK completed under the Contract will be measured by the ENGINEER, OWNER’S REPRESENTATIVE, or Project Representative, according to the United States Standard Measures. All linear surface measurements will be made horizontally or vertically as required by the item measured.

Rejecting Defective WORK:

9.5 The ENGINEER, OWNER’S REPRESENTATIVE or Project Representative will have authority to disapprove or reject WORK which is “defective” (which term is hereinafter used to describe WORK that is unsatisfactory, faulty or defective, or does not conform to the requirements of the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to final acceptance). They will also have authority to require special inspection or testing of the WORK as they may individually or severally deem necessary, whether or not the WORK is fabricated, installed or completed.

Correction of Defective WORK:

9.6 Upon representation of a Defective Work Notice to the CONTRACTOR’S REPRESENTATIVE from the OWNER’S REPRESENTATIVE, the CONTRACTOR shall have fourteen days to begin corrective action and repairs. If the CONTRACTOR believes that the necessary corrective action should not begin at the end of that fourteen day period, CONTRACTOR shall submit to the OWNER, with a copy to the OWNER’S ENGINEER, a schedule for review, with an explanation for not wanting to comply with the fourteen day requirement. The OWNER shall determine if the CONTRACTOR’S request is valid, and shall reply to the CONTRACTOR. If the CONTRACTOR refuses to comply with the fourteen day requirement (or an agreed upon schedule), the OWNER has the right to do either (or more) of the following:

1. The OWNER has the right to correct any WORK so performed by the CONTRACTOR and deduct the expenses for doing so from the final payment due the CONTRACTOR, or

2. The OWNER will hold back final payment due CONTRACTOR until such time as the WORK is completed to the satisfaction of the Director of the Brevard County Utility Services Department and in compliance with the OWNER’S specifications. The Director of the Brevard County Utility Services Department shall have the sole discretion to determine if the WORK is satisfactory and in compliance with specifications.

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The remedies contained herein are not exclusive and the OWNER reserves the right to pursue any and all other remedies it deems applicable.

Shop Drawings, Change Orders and Payments:

9.7 In connection with the ENGINEER’S responsibility as to Shop Drawings and samples, see paragraphs 6.22 through 6.27, inclusive.

9.8 In connection with the ENGINEER’S responsibility for Change Orders, see Articles 10, 11 and 12.

9.9 In connection with the ENGINEER’S responsibilities in respect to Application for Payment, etc., see Article 14.

ARTICLE 10 - CHANGES IN THE WORK

10.1 Without invalidating the Agreement, the OWNER may, at any time or from time to time, order additions, deletions or revisions in the WORK. The OWNER shall issue a Request for Proposal to the CONTRACTOR detailing the proposed additions, deletions or revisions to the WORK. The CONTRACTOR shall provide a binding proposal to the OWNER for the items requested. This proposal shall include any increases or decreases in Contract Price and shall include any additional modifications required by virtue of the requested change, whether or not such additional modifications were specifically identified in the Request for Proposal. The OWNER shall review the Proposal. Upon concurrence of the OWNER, and action of the Brevard County Board of County Commissioners, the OWNER shall then 1) modify the Request for Proposal, 2) withdraw the Request for Proposal, or 3) issue a Change Order directing the CONTRACTOR to perform the additions, deletions or revisions covered by the Proposal. The OWNER reserves the right to rebid the contract or contract changes where the WORK has not been previously initiated, where the change increases the original scope of WORK and where the rebid process will not impact existing WORK by the awarded CONTRACTOR. Acceptance of the Final Payment by the CONTRACTOR shall constitute full acknowledgment by the CONTRACTOR that all payments due for modifications required by the OWNER have been incorporated into the Final Payment.

10.2 The ENGINEER may, with prior concurrence of the OWNER, authorize minor changes or alterations in the WORK not involving extra cost or time and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order. If, however, the CONTRACTOR believes that any minor changes or alterations so authorized by the ENGINEER entitles CONTRACTOR to an increase in the Contract Price or extension of Contract Time, the CONTRACTOR shall treat the Field Order as a Request for Proposal and issue a Proposal for the changes in Contract Price and Contract Time prior to proceeding with the WORK covered in the Field Order. The procedures outlined in paragraph 10.1 shall then be followed. CONTRACTOR hereby waives any claim for additional time or money under this contract if CONTRACTOR did not provide this notice prior to commencement of the WORK described in the Field Order. In the event such a Proposal is issued, the CONTRACTOR shall have no damages for delay or other claim arising out of the period of time that is reasonably necessary for the Proposal to be presented to and considered by the Brevard County Commission or, within the monetary limits of the authority delegated to him for this contract, by the County Manager.
10.3 Additional WORK performed by the CONTRACTOR without authorization of a Change Order will not entitle him to an increase in the Contract Price or an extension of the Contract Time, except in the case of an emergency in paragraph 6.21 and except as provided in paragraph 10.1 and 10.2.

10.4 The OWNER will execute appropriate Change Orders prepared by the ENGINEER covering changes in the WORK to be performed as provided in paragraphs 10.1 and 10.2, and WORK performed in an emergency as provided in paragraph 6.21, and any other claim of the CONTRACTOR or a change in the Contract Time or the Contract Price which is approved by the OWNER.

10.5 It is the CONTRACTOR’S responsibility to notify CONTRACTOR'S surety of any changes affecting the general scope of the WORK or change in the Contract Price and the amount of the applicable bonds shall be adjusted accordingly. The CONTRACTOR will furnish proof of such adjustment to the OWNER.

ARTICLE 11 - CHANGE OF CONTRACT PRICE

11.1 The Contract Price constitutes the total compensation payable to the CONTRACTOR for performing the WORK. All duties, responsibilities and obligations assigned to or undertaken by the CONTRACTOR shall be at CONTRACTOR'S expense without changing the Contract Price.

11.2.1 The OWNER may, at any time, without notice to the sureties, by Field Order pursuant to a Proposal from the CONTRACTOR or by written order designated or indicated to be a Change Order, make any change in the WORK within the general scope of the contract, including but not limited to changes:

(1) in the specifications (including drawings and designs);

(2) in the method or manner of performance of the WORK;

(3) in the OWNER furnished facilities, equipment, materials, services or site; or

(4) directing acceleration in the performance of the WORK.

11.2.2 Any other written order or an oral order (which terms are used in this paragraph shall include direction, instruction, interpretation or determination) from the OWNER, which causes any such change shall be treated as a Change Order under this clause, provided that the CONTRACTOR shall follow the procedures outlined in paragraph 10.2 and the change in Contract Price or time is approved by the County Commission.

11.2.3 No order, statement, or conduct of the OWNER shall be treated as a change under this clause or entitle the CONTRACTOR to an equitable adjustment hereunder, unless OWNER issues a Change Order prior to commencement of WORK or notice otherwise required for differing site conditions (see Article 4.4) has been provided.

11.2.4 No claim by the CONTRACTOR for an adjustment hereunder shall be allowed if the notice noted in Article 4.4, Differing Site Conditions, is not provided within the time prescribed.

11.3 The value of any WORK covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:
11.3.1 Where the WORK involved is covered by specific unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved. Should the quantity of WORK be significantly increased or decreased from that stipulated in the Contract Documents, the OWNER or the CONTRACTOR may request adjustment of the unit price(s) by negotiation.

11.3.2 By negotiated lump sum.

11.4 The term Cost of the WORK means the sum of all costs necessarily incurred and paid by the CONTRACTOR in the proper performances of the WORK. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1 Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the WORK under schedules of job for employees not employed full time on the WORK shall be apportioned on the basis of their time spent on the WORK. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, worker’s compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing WORK after regular working hours, or on Sunday or legal holidays, shall be included in the above only to the extent authorized by the OWNER.

11.4.2 Cost of all materials and equipment furnished and incorporated in the WORK, including costs of transportation and storage thereof, and manufacturers’ field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER.

All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

11.4.3 Payments made by CONTRACTOR to the Subcontractors for WORK performed by Subcontractors. If required by the OWNER, CONTRACTOR shall obtain competitive bids from acceptable Subcontractors and shall deliver such Bids to OWNER who will then determine which Bids, if any, will be accepted. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4 Costs of any special consultants, (including, but not limited to, engineers, architects, testing laboratories, surveyors, and accountants) employed for services specifically related to the WORK.

11.4.5 Supplemental costs including the following:

11.4.5.1 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the WORK, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.

11.4.5.2 Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by the OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal
thereof - all in accordance with terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the WORK.

11.4.5.3 Sales, use or similar taxes related to the WORK, and for which CONTRACTOR is liable, imposed by any governmental authority.

11.4.5.4 Royalty payments and fees for permits and licenses. Costs for permits and licenses must be shown as separate item.

11.4.5.5 Losses, damages and expenses, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the execution of, and to, the WORK, provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of the OWNER. No such losses, damages and expenses shall be included in the Cost of the WORK for the purpose of determining CONTRACTOR’S Fee. If, however any such loss or damage requires reconstruction and the CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for CONTRACTOR’S services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.6 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, express mail and similar, incidental petty cash items in connection with the WORK.

11.4.5.7 Cost of premiums for additional Bonds and Insurance required because of changes in the WORK.

11.5 The term Cost of the WORK shall not include any of the following:

11.5.1 Payroll costs and other compensation of CONTRACTOR’S officers, executives, principals (of partnership and sole proprietorships), general managers, engineer, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expediers, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in the principal or a branch office for general administration of the WORK and not specifically included in the schedule referred to in subparagraph 11.4.1 - all of which are to be considered administrative costs covered by the CONTRACTOR’S Fee.

11.5.2 Expenses of CONTRACTOR’S principal and branch offices other than CONTRACTOR’S office at the site.

11.5.3 Any part of CONTRACTOR’S capital expenses, including interest on CONTRACTOR’S capital employed for the WORK and charges against CONTRACTOR for delinquent payments.

11.5.4 Cost of premiums for all bonds and for all insurance policies whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except as otherwise provided in subparagraph 11.4.5.7).

11.5.5 Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them, or for whose acts any of them may be liable, including but not limited to, the correction of defective WORK, disposal of materials or equipment wrongly supplied and making good any damage to property.
11.5.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

11.6 The CONTRACTOR’S Fee which shall be allowed to CONTRACTOR for CONTRACTOR’S overhead and profit shall be determined as follows:

11.6.1 A mutually acceptable firm fixed price; or if none can be agreed upon,

11.6.2 A mutually acceptable fixed fee based on the estimate of the various portions of the Cost of the WORK.

11.7 The amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost, will be the amount of the actual net decrease. In cases where OWNER performs a direct purchase, the amount of the decrease in cost shall be the amount of the actual net decrease, plus applicable sales tax. When both additions and credits are involved in any one change, the net shall be computed to include overhead and profit, identified separately, for both additions and credits.

11.8 Whenever the cost of any WORK is to be determined pursuant to paragraphs 11.4 and 11.5, CONTRACTOR will submit in form prescribed by OWNER an itemized cost breakdown together with supporting data.

11.9 Allowances: It is understood that the CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the WORK so covered to be done by such materialmen, suppliers, or Subcontractors and for such sums within the limit of the allowances as the OWNER may approve. Upon final payment, the Contract Price shall be adjusted as required and an appropriate Change Order issued. The CONTRACTOR agrees that the original Contract Price includes such sums as CONTRACTOR deems proper for costs and profit on account of cash allowances. No demand for additional cost or profit in connection therewith will be allowed.

11.9.1 These allowances shall cover the cost to the CONTRACTOR, less any applicable trade discount, of the materials and equipment required by the allowance delivered at the site, and all applicable taxes.

11.9.2 The CONTRACTOR’S cost for unloading and handling on the site labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Price and not in the allowance.

11.9.3 Whenever the cost, as described in 11.9.1 above, is more than or less than the allowance, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order will recognize changes, if any, in handling costs on the site, labor, installation costs, overhead, profit and other expenses, except that whenever unit price allowances are stipulated for brick, the Change Order will not include any cost as described as 11.5 above.

ARTICLE 12 - CHANGE OF THE CONTRACT TIME: NO DAMAGES FOR DELAY

12.1 The Contract Time may only be changed by Change Order. Any claim for an extension in the Contract Time shall be based on written notice prepared and delivered by the CONTRACTOR to the OWNER and ENGINEER within ten days of the occurrence of the event giving rise to the claim. Notice of the extent of
the claim with supporting data shall be delivered within fifteen days of such occurrence. Any change in the
Contract Time resulting from any such claim shall be incorporated in a Change Order.

12.2 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of
CONTRACTOR if CONTRACTOR makes a claim therefor as provided in paragraph 12.1. Such delays shall
include, but not be restricted to, acts or neglect by any separate contractor employed by OWNER, fires,
floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.

12.3 It is expressly agreed that the CONTRACTOR shall not be entitled to any damages or compensation
from the OWNER on account of any delays resulting from any of the causes specified above, or for any other
causes which are beyond the control of the CONTRACTOR, but the Contract Time for the WORK so
delayed shall be extended for a period equivalent to the time lost.

12.4 All time limits stated in the Contract Documents are of the essence of the Agreement.

ARTICLE 13 - GUARANTY: TESTS AND INSPECTION

Guaranty:

13.1 The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for
a period of two (2) years from the date when final payment becomes due. The CONTRACTOR warrants and
guarantees for a period of two (2) years from the date when final payment becomes due that the completed
system is free from all defects due to faulty material or workmanship and the CONTRACTOR shall
promptly make such corrections as may be necessary by reason of such defects including the repairs of any
damage to other parts of the system resulting from such defects. The OWNER will give notice of observed
defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs,
adjustments, or the WORK that may be made necessary by such defects, the OWNER may do so and charge
the CONTRACTOR the cost thereby incurred. The Performance Bond shall remain in full force and effect
during the guarantee period. Express warranties are set forth in the Supplementary Conditions or in the
Technical Specifications.

Access to WORK:

13.2 ENGINEER and ENGINEER’S representatives, other representatives of OWNER, testing agencies and
governmental agencies with jurisdictional interests will have access to the WORK at reasonable times for
their observation, inspection and testing. CONTRACTOR shall provide proper and safe conditions for such
access.

Tests and Inspections:

13.3 CONTRACTOR shall give ENGINEER and the OWNER timely notice of readiness of the WORK for
all required inspections, tests or approvals.

13.4 If Laws or Regulations of any public body having jurisdiction require any WORK (or part thereof) to
specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefor, pay
all costs in connection therewith and furnish ENGINEER and the OWNER the required certificates of
inspection, testing or approval. CONTRACTOR shall also be responsible for and shall pay all costs in
connection with any inspection or testing required in connection with the OWNER’S or ENGINEER’S

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acceptance of a Supplier or materials or equipment proposed to be incorporated in the WORK, or of materials or equipment submitted for approval prior to CONTRACTOR’S purchase thereof, for incorporation in the WORK.

13.5 All inspections, tests or approvals other than those required by Laws or Regulations of any public body having jurisdiction shall be performed by organizations acceptable to OWNER and CONTRACTOR (or by ENGINEER, if so specified).

13.6 If any WORK (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of the OWNER, it must, if requested by the OWNER, be uncovered for observation. Such uncovering shall be at CONTRACTOR’S expense.

13.7 Neither observations by ENGINEER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR’S obligations to perform the WORK in accordance with the Contract Documents.

ARTICLE 14 - PAYMENTS AND COMPLETION

Payment to Contractor:

14.1 At least twenty (20) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a Periodic Pay Estimate, on forms provided by the OWNER, filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the Periodic Pay Estimate and supported by such data as the OWNER may reasonably require, including the monthly update of the Project Schedule in the format as required in Article 2.5. If payment is requested on the basis of equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the Periodic Pay Estimate shall also be accompanied by such supporting data, satisfactory to the Director of Brevard County Utility Services Department. The ENGINEER will either indicate in writing ENGINEER’S approval of payment and present the Periodic Pay Estimate to the Director of Brevard County Utility Services Department for processing, or return the unapproved Periodic Pay Estimate to the CONTRACTOR indicating in writing ENGINEER’S reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the Periodic Pay Estimate. The OWNER will within twenty (20) days of presentation to OWNER of an approved Periodic Pay Estimate, pay the CONTRACTOR a progress payment on the basis of the approved Periodic Pay Estimate. The OWNER will retain five percent (5%) of each periodic payment claimed until WORK is one hundred percent (100%) complete.

Contractor’s Warranty of Title:

14.2 The CONTRACTOR warrants and guarantees that title to all WORK and equipment covered by a Periodic Pay Estimate, whether incorporated in the Project or not, will have passed to the OWNER prior to the submission of the Periodic Pay Estimate, free and clear of all claims, security interests and encumbrances (hereafter in these General Conditions referred to as, "Claims"); and that no WORK or equipment covered by a Periodic Pay Estimate will have been acquired by the CONTRACTOR or by any other person performing the WORK at the site or furnishing equipment for the Project, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the CONTRACTOR or such other person.
14.3 Subject to subsection 14.3.1. and 14.3.2. below, upon receipt of the payment bond Surety’s written consent to the release of final payment to the Contractor who has furnished the OWNER with a certified copy of a recorded payment bond and after all guarantees that may be required in the specifications have been furnished and are found acceptable by the Owner,

14.3.1 any partial or final payment on account of this Contract shall be made within twenty (20) days after completion by the Contractor of all work covered by this Contract and acceptance of such work by the Owner, provided,

14.3.2 if the payment bond Surety serves a written revocation of consent to payment or a written direction that the OWNER to withhold a specified amount from a payment, the OWNER shall withhold from the final payment the amount specified by the payment bond Surety pending further written direction from the payment bond Surety.

14.3.3 As an alternative to providing a consent of surety, the CONTRACTOR may submit a completed "Waiver of Right to Claim Against the Payment Bond" Form for each and every subcontractor and vendor that performed WORK or provided supplies during the corresponding pay request period. For the Periodic Pay Estimate, the waiver shall be understood to waive claims up to the previous month’s pay request. When a subcontractor or vendor has completed all WORK or furnished all materials, a completed "Waiver of Right to Claim Against the Payment Bond (Final Payment)" form shall be submitted with the next Periodic Pay Estimate. CONTRACTOR shall provide each subcontractor and vendor submitting such waiver's with written notice that the subcontractor or vendor should not waive their claims against the payment bond unless the subcontractor or vendor has, in fact, been paid as stated in the waiver, and that if the subcontractor or vendor executes a waiver without such payment, the they do so at their own risk.

Approval of Payments:

14.4 The ENGINEER shall approve any payment requested in a Periodic Pay Estimate based on the ENGINEER’S on-site observations of the WORK. However, by approving any such payment the ENGINEER shall not thereby be deemed to have represented that ENGINEER made exhaustive or continuous on-site observations to check the quality or the quantity of the WORK, or that ENGINEER has reviewed the means, methods, techniques, sequences, and procedures of construction or that ENGINEER has made any examination to ascertain how or for what purpose the CONTRACTOR has used the money paid or to be paid CONTRACTOR on account of the Contract Price, or that title to any WORK or equipment has passed to the OWNER free and clear of any Claims.

14.5 The CONTRACTOR shall sign the following certification on each Periodic Pay Estimate form:

“I hereby certify that all items and amounts listed on this Periodic Pay Estimate are correct and that all work has been performed and/or materials supplied in full accordance with the terms and conditions of the Contract between Brevard County and __ (Company Name)__. I further certify that the proceeds from this payment shall be used to make payment in a timely manner to all subcontractors and suppliers for work satisfactorily completed on this project, and that there are no vendors’, mechanics’, or other liens or conditional sales contracts which must be satisfied or discharged before such payment is made."
If this certification is not signed, the Periodic Pay Estimate shall be returned to the CONTRACTOR without processing.

14.6 The ENGINEER’S approval of final payment shall constitute an additional representation by ENGINEER to the OWNER that the conditions precedent to the CONTRACTOR’S being entitled to final payment as set forth in paragraph 14.11 have been fulfilled.

14.7 The ENGINEER may refuse to approve the whole or any part of any payment if, in ENGINEER’S opinion, ENGINEER is unable to make such representations to the OWNER. ENGINEER may also refuse to approve any such payment, or, because of subsequently discovered evidence or the results of subsequent inspection or tests, nullify any such payment previously approved, to such extent as may be necessary in ENGINEER’S opinion to protect the OWNER from loss because:

14.6.1 The WORK is defective, or complete WORK has been damaged requiring correction or replacement;

14.6.2 The WORK for which payment is requested cannot be verified;

14.6.3 Claims have been filed or there is reasonable evidence indicating the probable filing thereof;

14.6.4 The Contract Price has been reduced because of Modifications;

14.6.5 The OWNER has been required to correct defective WORK or complete the WORK in accordance with paragraph 9.6;

14.6.6 Of unsatisfactory prosecution of the WORK, including failure to clean up as required by paragraphs 6.28, 6.29 and 6.30;

14.6.7 Of persistent failure to cooperate with other Contractors on the Project and persistent failure to carry out the WORK in accordance with the Contract Documents;

14.6.8 Of liquidated damages payable by the CONTRACTOR; or

14.6.9 Of any other violation of, or failure to comply with, the provisions of the Contract Documents.

14.8 Prior to Substantial Completion, the OWNER, with the concurrence of the CONTRACTOR, may use any completed or substantially completed portion of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.

14.9 The OWNER shall have the right to enter the premises for the purposes of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agent or employees of the OWNER.

14.10 Upon completion and acceptance of the WORK the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted by ENGINEER under the conditions of the Contract Documents. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within twenty (20) days of completion and acceptance of the WORK.
14.11 The CONTRACTOR will indemnify and save the OWNER or the OWNER’S agents harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, materialmen, and furnishers of machines and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performances of the WORK.

Acceptance of Final Payment as Release:

14.12 The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK, and for every act and neglect of the OWNER, and others, relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the Contract Documents of the Performance Bond and Payment Bond.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

Owner May Suspend WORK:

15.1 The Director of the Brevard County Utility Services Department may, at any time and without cause, suspend the WORK or any portion thereof for a period of not more than ninety days by notice in writing to the CONTRACTOR and the ENGINEER which shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume the WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if CONTRACTOR makes a claim therefor as provided in Articles 11 and 12.

Owner May Stop WORK:

15.2 The OWNER or OWNER’S REPRESENTATIVE may stop the WORK or any portion thereof when it has been determined that the CONTRACTOR is not complying with the Drawings or Specifications or the intent thereof. The Stop Work order may be verbal and the CONTRACTOR shall cease WORK immediately except for leaving the WORK area in a safe and acceptable condition. A verbal Stop Work order will be confirmed in writing. The CONTRACTOR will not be allowed an increase in the Contract Price or an extension of the Contract Time during the Stop Work period. A Start Work order may be verbal and will also be confirmed in writing.

WORK During Inclement Weather:

15.3 No WORK shall be done under these Specifications except by permission of the OWNER when the weather is unfit for good and careful WORK to be performed. WORK damaged during periods of suspension due to inclement weather shall be repaired and/or replaced by the CONTRACTOR. Any compensation for repairs or replacements shall be subject to approval by the OWNER.

Owner May Terminate:

15.4 If the CONTRACTOR is adjudged bankrupt or insolvent, or if the CONTRACTOR makes a general assignment for the benefit of CONTRACTOR’S creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of CONTRACTOR’S property, or if CONTRACTOR files a petition to take
advantage of any debtor’s act, or to reorganize under the bankruptcy or similar laws, or if CONTRACTOR repeatedly fails to supply sufficiently skilled workmen or suitable materials or equipment, or if CONTRACTOR repeatedly fails to make prompt payments to Subcontractors or for labor, materials or equipment or CONTRACTOR disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction, or if CONTRACTOR disregards the authority of the ENGINEER, or if CONTRACTOR otherwise violates any provision of the Contract Documents, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and CONTRACTOR’S surety seven days written notice, terminate the services of the CONTRACTOR and take possession of the Project and of all materials, equipment tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method OWNER 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 Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excess shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR or the Surety will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a Change Order.

15.5 Where the CONTRACTOR’S services have been so terminated by the OWNER, said terminations shall not affect any rights of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of Monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from liability.

15.6 Upon seven days written notice to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Project and terminate the Agreement. In such cases, the CONTRACTOR shall be paid for all WORK executed and any expenses sustained plus a reasonable profit.

Removal of Equipment:

15.7 In the case of termination of this Contract before completion, for any cause whatever, the CONTRACTOR, if notified to do so by the Director of the Brevard County Utility Services Department, shall promptly remove any part or all of this equipment and supplies from the property of the OWNER. Should the CONTRACTOR not remove such equipment and supplies, the OWNER shall have the right to remove them at the expense of the CONTRACTOR. Equipment and supplies shall not be construed to include such items for which the CONTRACTOR has been paid in whole or in part.

Contractor May Stop Work or Terminate:

15.8 If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety days by the OWNER, or under an order of court or other public authority as a result of actions by others not under the control of the CONTRACTOR, or the ENGINEER fails to act on any Application for Payment within thirty days after it is submitted, or the OWNER, fails to pay the CONTRACTOR any sum approved by the ENGINEER or awarded by arbitrators within thirty days of its approval and presentation, then the CONTRACTOR may, upon seven days written notice to the Director of the Brevard County Utility Services Department and the ENGINEER, terminate the Agreement and recover from the OWNER payment for all WORK executed and any expense sustained plus a reasonable profit. In addition and in lieu of terminating the Agreement, if the ENGINEER has failed to act on an Application for Payment or the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon twenty-one (21) days
notice to the Director of the Brevard County Utility Services Department and the ENGINEER, stop the WORK until CONTRACTOR has been paid all amounts then due.

**Owner Furnished Equipment:**

15.9 In case the OWNER furnishes equipment to the CONTRACTOR to install, but fails to deliver it to the CONTRACTOR as required by SUPPLEMENTARY CONDITIONS, and in case such failure causes the CONTRACTOR additional expense or need for extension of time, the CONTRACTOR may make such claims upon the OWNER and obtain adjustments as provided herein.

**Liquidated Damages:**

15.10 If the CONTRACTOR shall fail to complete the WORK within the Contract Time, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount or amounts for liquidated damages as specified in Section 00500, Contract, for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract Documents.

**ARTICLE 16 - MISCELLANEOUS:**

16.1 Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to individual who gives the notice.

16.2 All Specifications, Drawings and copies thereof, furnished by the ENGINEER, shall remain OWNER’S property. They shall not be used on another Project, and, with the exception of those sets which have been signed in connection with the execution of the Agreement, shall be returned to OWNER on request upon completion of the Project.

16.3 The duties and obligations imposed by these Contract Documents and the rights and remedies available hereunder, and in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR and the rights and remedies available to them which are otherwise imposed or available by law, by special guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of the Agreement.

16.4 Should the OWNER or the CONTRACTOR suffer injury or damage to its person or property because of any error, omission or act of the other or of any of his employees or agents or others for whose acts he is legally liable, claim shall be made in writing to the other party within a reasonable time of the first observance of such injury or damage.

16.5 The Contract Documents shall be governed by the law of the place of the Project, and any trial shall be non-jury.

16.6 Before the CONTRACTOR disposes of any existing improvements or equipment which are to be removed as a portion of the WORK, and for which disposition is not specifically provided for elsewhere in
these Specifications, CONTRACTOR will contact the OWNER and determine if the removal items are to be salvaged. Items to be salvaged for the OWNER will be neatly stockpiled or stored in a neat and acceptable manner at the construction site easily accessible to the OWNER. Equipment and materials which will not be salvaged for the OWNER shall become the property of the CONTRACTOR to be removed from the site and disposed of in an acceptable manner.

16.7 In the event of litigation to enforce any provision of this contract, each party shall bear its own attorney's fees and costs, including expert witness fees, provided however, that any Surety incorporating all or a part of the Contract Documents into a performance, maintenance or bid bond shall be liable for the County's attorneys fees where authorized by Florida statutory law, as interpreted by case law, making a surety or insurance company liable for payment of the County's attorneys fees as a result of litigation or a dispute arising out of either a performance bond or a contract incorporated into a performance bond.

ARTICLE 17 - DISPUTE RESOLUTION:

17.1 (a) Within three (3) days after denial of a CONTRACTOR’S change order or contract modification request in an amount, individually or in total, less than the authorized purchasing level approved for the County Manager by the County Commission (currently at $100,000) the CONTRACTOR may submit to the County Manager, or a designee with experience in the oversight of construction projects for a department or business other than the department responsible for monitoring the disputed request, documentation of the CONTRACTOR’S position in the dispute or disagreement. The County Manager or designee, within five (5) days after the receipt of the CONTRACTOR’S documentation, shall review the request and make a final determination as to whether denial was arbitrary or capricious based upon the sufficiency of the work under the terms of the Contract, applicable regulations and relevant construction standards. Based upon the sufficiency and degree of completion, as well as any defects in the work and the amount reasonably required, if any, to correct or repair defective work, the reviewer shall make the final determination as to whether a written change order or Contract modification should be approved by the County Manager.

17.1 (b) If the denied request or disputed amount exceeds the County Manager's purchasing authority, the County Manager shall present a report, recommendation and the CONTRACTOR’S claim and documentation, to the County Commission for a final determination within thirty (30) days after receiving the CONTRACTOR’S documentation for the claim. The Commission shall make its decision using the standards specified in subparagraph (a) above.

17.2 Within thirty (30) days after denial of a request for a change order or Contract modification by the OWNER’S REPRESENTATIVE or ENGINEER involving, (1) an amount in excess of the County Manager's expenditure authority or, (2) for the amount the CONTRACTOR claims to be due at the time the project is ready for beneficial use or occupation, the OWNER may, at the OWNER’S option in lieu of the procedure specified in subparagraphs 17.1, submit the dispute to a mediator with knowledge or experience in construction management, as agreed upon by the parties. Upon referral to a mediator, the OWNER and CONTRACTOR shall each pay half the estimated cost of the mediator, up front. Within fifteen (15) days after the date of submittal, the mediator, applying the standards set forth in subparagraphs 17.1, shall investigate the dispute and submit a written recommendation for disposition of the dispute to the County Manager or a designee with the qualifications specified in subparagraph 17.1. Within fifteen (15) days after receiving the mediator's recommendation, the County Manager shall submit the recommendation to the County Commission, along with a staff report analyzing the dispute and mediator's recommendation. Based on the standards set forth in subparagraphs 17.1 above, the Commission shall decide whether to grant or deny, in whole or in part, the amounts recommended by the mediator. The Commission's decision will be
deemed final action on the disputed claim for the purposes of ripening the decision for judicial review. If the mediator recommends that no change order or Contract modification be granted, the CONTRACTOR shall reimburse the OWNER for any amounts paid by the OWNER to the mediator.

17.3 The deadlines for completing the dispute resolution process described in subparagraphs 17.1 and 17.2 may be extended or shortened by mutual written agreement of the CONTRACTOR and the OWNER.
These Supplementary Conditions supplement the existing General Conditions, Section 00700, for Brevard County and other provisions of the Contract Documents, as indicated below. The supplementary conditions set forth below are to be added to the indicated sections of the General Conditions, or other contract documents specified in this supplement, and all other provisions which are not so supplemented remain in full force and effect.

**Article 2.6** Neighbors immediately adjacent to Lift Station F-10 should also be invited to attend the pre-construction conference.

**Article 6.3** Contractor shall not use potable water from properties adjacent to project site.

**Article 6.28** Incidental or accidental damage to everything beyond the work limits, whether within rights-of-way or on private property, shall be repaired within three (3) days to the property owner’s satisfaction.

**Article 15.3** Contractor is hereby advised that a portion of the Contract Time could fall within the annual potential for seasonal hurricane activity. In the event that tropical weather threatens, the Contractor shall make such plans for security or evacuation, as dictated by local authorities and conditions.

END OF SECTION
These Special Conditions amend or modify the specified general requirements, technical specifications and other provisions of the Contract Documents, as indicated below. All provisions which are not so amended or modified remain in full force and effect.

The Contractor is hereby notified that the detailed specifications are superseded where this section contains differing specifications. In each instance, this section shall be the prevailing authority for conducting such work. Specifications that are superseded by these Special Conditions are referenced within to provide a minimum reference for the Contractor. These are not necessarily the only Specification sections for which these Special Conditions apply.

1.01 NOTICES

A. In conformance with the requirements of the General Conditions, all notices or other papers and administrative documents required to be delivered by the Contractor to the Owner and Engineer shall be delivered to the office of the Owner and Engineer individually. For these purposes, the mailing address of the Owner's Representative is: Craig L. Helpling, Project Manager, Brevard County Utility Services Department, 2725 Judge Fran Jamieson Way, A-213, Melbourne, FL 32940; Telephone (321) 633-2089. For the Engineer, the address is: Rasesh R. Shah PE, Tetra Tech, 201 East Pine Street, Suite 1000, Orlando, FL 32801, Telephone: 407-839-3955.

1.02 RECORD DRAWINGS: Refer to Section 00700, 6.18.

A. During the entire construction operation, the Contractor shall maintain records of all deviations from the Drawings and Specifications and shall prepare therefrom "record" drawings showing correctly and accurately all changes and deviations from the work made during construction to reflect the work as it was actually constructed. Record changed horizontal and vertical information for affected components concurrently with construction progress. Do not bury, cover or conceal any work until the required information is recorded.

B. These drawings must be prepared by a land surveyor registered in the state of Florida and shall conform to recognized standards of drafting and shall be neat and legible. Maintain documents in a clean, dry condition and in good order. Do not use record documents for construction purposes.

C. As a prerequisite for monthly progress payments, the Contractor is to exhibit the currently updated "Record Documents" for review by the Engineer and Owner. Payment may be withheld if record documents are not satisfactorily maintained.
1.03 WORK SCHEDULES AND OVERTIME

A. The normal work shift for the Owner’s Project Representative shall be eight (8) hours. Any excess during the permissible 11 hour work period, or on Saturday, Sunday, or legal holidays shall be considered overtime, and shall be paid for by the Contractor, unless such work is required by the Contract and is in lieu of the daytime schedule. If permission is obtained from the Owner, as an exception, to work between 6:00 p.m. and 7:00 a.m., the Contractor shall bear all expenses for observation, inspection and testing which shall be required. Such overtime expenses will be recovered by deductions from periodic partial payments.

B. All lift station or component shutdowns must be scheduled in advance with Owner’s personnel in advance.

1.04 OWNER’S PROJECT REPRESENTATIVE

A. An Owner’s Project Representative, identified and acting as a Utility Construction Inspector, will be assigned to all utility projects. This person shall be charged by the Owner to observe and document the work performed and inspect the various materials furnished to and by the Contractor to ensure they comply with the shop drawings approved by the Engineer of Record. The Project Representative will keep brief, written notes concerning the progress of the work and will also document the progress with a digital camera. The Contractor shall provide appropriate access to the work for these tasks to be accomplished. The Project Representative shall also act as the contact with plant staff.

B. The Project Representative shall be allowed to observe any construction, testing and materials, and shall inspect preparation, fabrication or manufacture of components, and delivered materials and supplies, for conformance with approved shop drawings.

A. The Project Representative is not authorized to revoke, alter or waive any requirements of the specifications, but is authorized and expected to call to the attention of Engineer and/or Contractor any failure of work or materials to conform to the Drawings and Specifications. Utility Construction Inspectors shall have no authority to permit deviation from or to modify any of the provisions of the Drawings or Specifications without the written permission or instruction of the Owner with the concurrence of the Engineer, or to delay the Contractor by failure to observe the materials and work with reasonable promptness.

C. The Project Representative shall have the authority to reject materials or suspend the work until questions of issue can be resolved to the Owner's satisfaction.

D. The Project Representative shall in no case act as foreman, give advice or perform other duties for the Contractor nor interfere with the management of the work. The Project Representative is not responsible for the quality or acceptability of the Contractor's Work.

E. Project Representative will make routine passes to inspect such items as materials on site, and clearances between conflicting lines. The Contractor is put on notice that advanced scheduling of inspections is required for such work tasks as jacking and boring operations, pressure tests, and any time a connection is to be made to an existing utility system. The Owner may identify other tasks that require advance scheduling for inspection work.
1.05 SURFACE RESTORATION

A. Disturbed surfaces shall be restored to equal or better condition than the original. Where detailed, the Drawings show minimum requirements.

B. For driveways and public roads, restoration to the applicable jurisdiction's highway standards is the minimum requirement.

1.06 STORAGE, HANDLING AND PROTECTION OF MATERIALS AND EQUIPMENT: Refer also to Section 00700, 6.3.

A. Materials shall not be shipped until applicable shop drawings have been approved by the Engineer. The intent of this requirement is to avoid unnecessary delivery of unapproved materials and to reduce on-site storage time prior to installation and/or operation. Under no circumstances shall major equipment or fabricated products be delivered to the site more than one month prior to installation without written authorization from the Engineer. Materials shipped to the site, or temporarily stored off-site in approved locations, shall be stored in accordance with these provisions.

B. Store products in accord with manufacturer's instructions, with seals and label intact and legible.

1. Manufacturer's storage instructions shall be carefully studied by the Contractor and reviewed with the Engineer. These instructions shall be carefully followed and a written record of this kept by the Contractor.

2. Store products subject to damage by the elements in weather tight enclosures.

3. Maintain temperature and humidity within the appropriate ranges required by manufacturers’ instructions.

4. Store fabricated products above the ground, on blocking or skids to prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, provide adequate ventilation to avoid condensation.

5. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.

C. All materials and equipment to be incorporated in the work shall be handled and stored by Contractor before, during and after shipment in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and any injury, theft or damage of any kind whatsoever to the material or equipment.

D. Cement, sand and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All structural and miscellaneous steel, and reinforcing steel shall be stored off the ground or otherwise to prevent accumulations of dirt or grease, and in a position to prevent accumulations of standing water and to minimize rusting. Beams shall be stored with the webs vertical. Precast concrete beams or structures shall be handled and stored in a manner to prevent accumulations of dirt, standing water, staining, chipping or cracking. Brick, block and similar masonry products shall be handled and stored in a manner to reduce breakage, chipping, cracking
and spalling to a minimum.

E. All materials which, in the opinion of Engineer, have become so damaged as to be unfit for the use intended or specified shall be promptly removed from the site of the work, and Contractor shall receive no compensation for the damaged material or its removal.

F. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.

1.07 SALVAGE

A. All existing equipment or material, including but not limited to, valves, pipes, fittings, couplings, etc., which is removed or replaced as a result of construction under this project is hereby designated as salvage, and shall be delivered to the Owner at a location directed by the Owner, at the Contractor’s expense. Items not retained by the Owner shall be properly disposed of by the Owner without obligation of or expense to the Contractor. (See also Section 01640.)

1.08 DEFINITIONS: Refer also to Section 00700, Article 1.

A. Whenever the term ENGINEER is used it is construed to mean ARCHITECT/ENGINEER where the contract involves a building.

B. OWNER'S REPRESENTATIVE: The person or persons designated by the OWNER to represent the Owner as project manager during the administration of this Agreement.

C. PROJECT REPRESENTATIVE: Same as OWNER'S PROJECT REPRESENTATIVE. (See also Paragraph 1.09 herein.)

1.09 SHOP DRAWINGS: Refer to Section 00700.

A. In 2.8, the shop drawing schedule shall list the proposed manufacturers furnishing specified items. This schedule shall also indicate those that are critical to the progress schedule.

B. The Contractor shall submit to the Engineer all drawings and schedules sufficiently in advance of construction requirements to provide no less than thirty (30) calendar days for checking and appropriate action from the time the Engineer receives them.

C. Only the Engineer will utilize the color "red" in marking Shop Drawing submittals.

D. In 6.23, all shop drawing submittals shall be marked for job specific items, sizes, class, etc. Unmarked catalog pages and FAX copies will not be accepted. Electronic transmission is acceptable, but dependent upon concurrence of the Engineer.

E. In 6.23, the number of shop drawing copies required will be determined at the preconstruction meeting.

1.10 OWNER FURNISHED EQUIPMENT: Refer also to Section 01610.
A. The Contractor shall install Owner Furnished Equipment (OFE) as indicated in the Contract Documents. The Contractor's accepted bid prices related to these items are to cover installation labor and associated overhead and profit, only. These materials have been acquired or shall be before needed by the Contractor.

B. Owner Furnished Equipment is located either at a maintenance warehouse on the site of the Owner's Sykes Creek Regional Wastewater Treatment Facility, located at 3630 North Courtenay Parkway, Merritt Island, Florida. The Contractor shall be responsible for retrieving all material and equipment stored at the warehouse, transporting it to the project site, and installing it according to the Contract Documents.

C. The Contractor shall inspect the Owner Furnished Equipment with the Owner prior to loading and any defects shall be noted. The Contractor shall assume ownership of the equipment following inspection and be responsible for properly securing and storing the equipment to prevent damage. Transportation, handling, and storage shall conform to manufacturer recommendations.

D. List of Furnished Items

1. One (1) Emerson Process Management Inc. CONTROLWAVE MICRO RTU Control Panel
2. One (1) Yagi Antenna; SCALA TY-900
3. One (1) 1/2" Heliax Cable, 32 foot length
4. Two (2) Male "N" Type Cable Connectors
5. Two (2) 1/2 inch Heliax Cable Grounding Kits
6. One (1) Pack of Wire Tags
7. One (1) Box Cable Hangers with 316 SS Straps

END OF SECTION
SECTION 00830

CONTRACT FORMS

REQUEST FOR INFORMATION
REQUEST FOR PROPOSAL
NON-COMPLIANCE NOTICE
FIELD ORDER FORM
COMMENCEMENT OF WORK APPROVAL
CHANGE ORDER FORM
WARRANTY OF TITLE
CONTRACTOR AFFIDAVIT TOOwner
CERTIFICATE OF SUBSTANTIAL COMPLETION
WAIVER OF RIGHT TO CLAIM AGAINST THE PAYMENT BOND
WAIVER OF RIGHT TO CLAIM AGAINST THE PAYMENT BOND (FINAL PAYMENT)
# REQUEST FOR INFORMATION

## DISTRIBUTION:

<table>
<thead>
<tr>
<th></th>
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<th>Engineer: Tetra Tech</th>
<th>Architect:</th>
<th>Contractor:</th>
<th>Field Office:</th>
<th>Other:</th>
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**CONTRACTOR REQUEST FOR INFORMATION (RFI) NO.________**

## PROJECT DATA

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Name: Lift Station F-10 Electrical Improvements</td>
<td>Owner's Bid Number: B-4-16-17</td>
</tr>
<tr>
<td>Location: Merritt Island, Florida</td>
<td>Date:</td>
</tr>
<tr>
<td>Owner: Brevard County</td>
<td>Drawing Number:</td>
</tr>
<tr>
<td>Contractor:</td>
<td>Specification Section:</td>
</tr>
</tbody>
</table>

## QUESTION:

____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________

Prepared by:____________________________ Date:_____________________________

Received by:____________________________ Date:_____________________________

## REPLY:

____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________

Engineer Project Number: **200-76510-14001**  Project Number: **MI-RR-98**

Issued by: ___________________________ Date:__________________________
REQUEST FOR PROPOSAL

DISTRIBUTION:

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<th>Owner:</th>
<th>Brevard County</th>
<th>No. Copies</th>
<th>REQUEST FOR PROPOSAL FOR PROPOSED CHANGE (RFP) NO.________</th>
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</thead>
<tbody>
<tr>
<td>Engineer:</td>
<td>Tetra Tech</td>
<td>No. Copies</td>
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<tr>
<td>Architect:</td>
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<td>Contractor:</td>
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<td>Field Office:</td>
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<td>Other:</td>
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PROJECT DATA

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<thead>
<tr>
<th>Name:</th>
<th>Lift Station F-10 Electrical Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Merritt Island, Florida</td>
</tr>
<tr>
<td>Owner:</td>
<td>Brevard County</td>
</tr>
<tr>
<td>Contractor:</td>
<td></td>
</tr>
<tr>
<td>Specification Section:</td>
<td></td>
</tr>
</tbody>
</table>

To: (Contractor)

Please provide the undersigned a proposal for the following change in the work within thirty (30) calendar days from the above date of this request. The written proposal must clearly delineate the scope of the proposed change in work by providing an itemized estimate of time and costs broken down by materials, labor (by trade), subcontracts, overhead costs and profit. Any amount claimed for subcontracts must be similarly supported in detail. If this proposal is accepted and approved by the Owner, a change order will be issued for changes in the work of the Contract in accordance with the Contract Documents.

Description of change in work:

____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________

Change Order Type:  (Deletion)  (Addition)  (Revision)  ( )  ( )

Initiated by:

Proposal must be received by: ______________________________________ (30 days from date above)

Attachments (listing of attached documents that support description):

1. Contractor Request for Information No.: ____________________________
2. ________________________________________________________________
3. ________________________________________________________________
4. ________________________________________________________________
5. ________________________________________________________________

Engineer Project Number: 200-76510-14001

Project Number: MI-RR-98

Issued by: ______________________

Date: ______________________
You are hereby notified that the following work or materials does not conform to the requirements of the Contract Documents noted above. Non-complying work may be required to be removed and replaced at no cost to the Owner. It shall be your responsibility to determine the corrective action necessary, and to determine whether you wish to discontinue operations until additional investigation by the Owner or Engineer confirm or refute the initial findings.

**Description of Non-Conforming Work or Materials:**

____________________________________________________________________________________________________________

____________________________________________________________________________________________________________

____________________________________________________________________________________________________________


Prepared by: ___________________________ Date: ___________________________

Received by: ___________________________ Date: ___________________________

**Proposed Correction:**

____________________________________________________________________________________________________________

____________________________________________________________________________________________________________

____________________________________________________________________________________________________________

Failure to comply with directions to remedy deficiencies in this area will result in rejection of this portion of the work.
**FIELD ORDER**

### DISTRIBUTION:

<table>
<thead>
<tr>
<th>Role</th>
<th>No. Copies</th>
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<tbody>
<tr>
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<td>Engineer</td>
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<td>Architect</td>
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<tr>
<td>Contractor</td>
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<td>Field Office</td>
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<td>Other</td>
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</tbody>
</table>

**FIELD ORDER NO.________**

### PROJECT DATA

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Owner</th>
<th>Drawing Number</th>
<th>Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lift Station F-10 Electrical Improvements</td>
<td>Merritt Island, Florida</td>
<td>Brevard County</td>
<td></td>
<td></td>
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</tbody>
</table>

### CONTRACT DATA

<table>
<thead>
<tr>
<th>Owner’s Bid Number</th>
<th>Date</th>
<th>Specification Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-4-16-17</td>
<td></td>
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</tr>
</tbody>
</table>

TO: (Contractor)

You are hereby directed to execute promptly this Field Order which interprets the Contract Documents or orders minor changes in the work without change in contract price or contract time.

If CONTRACTOR determines that a change in Contract Price or Contract Time is required as a result of this FIELD ORDER, CONTRACTOR must make such a claim prior to starting the Work in accordance with Articles 11 and 12 of the General Conditions of the Contract Documents. If a Change Order is issued in accordance with Article 10 of the Contract Documents, this FIELD ORDER will be invalidated, otherwise, CONTRACTOR shall promptly proceed with the Work described in this FIELD ORDER pursuant to the applicable conditions of the Contract Documents.

**Description of Change in Work:**

____________________________________________________________________________________________

____________________________________________________________________________________________

____________________________________________________________________________________________

**Attachments** (listing of attached documents that support description):

1. _____________________________________________________________________________________________________
2. _____________________________________________________________________________________________________
3. _____________________________________________________________________________________________________
4. _____________________________________________________________________________________________________

Contractor Request for Information No.: ___________________

Engineer Project Number: 200-76510-14001

Reviewed by: ____________________

Project Number: MI-RR-98

Date: ____________________

END OF FIELD ORDER FORM

00830-5
COMMENCEMENT OF WORK APPROVAL

TYPE:  ☐ Construction Contract Change Order  ☐ Construction Change Directive
Project Title: Lift Station F-10 Electrical Improvements  Project Number: MI-RR-98

Proposed Change Order Reason & Description:
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________

Cost: $ ___________________  Cost Basis:  ☐ Contractor Estimate (attached)  ☐ Unit Price

CERTIFICATIONS

Contractor: ________________________________
Contractor Signature: ___________________________  Date: ___________________________

Project Engineer:
Engineer Signature: ___________________________  Date: ___________________________

APPROVALS

Department Director: ___________________________  Date: ___________________________
(County Oversight Agency)

County Manager: _______________________________  Date: ___________________________
CHANGE ORDER NO. _____

County Project No.: _____ MI-RR-98
Engineer Project No.: 200-76510-14001

PROJECT TITLE Lift Station F-10 Electrical Improvements

To: ____________________________________________
________________________________
________________________________

You are hereby authorized to make the following additions and/or deductions to your contract amount:

<table>
<thead>
<tr>
<th></th>
<th>Previous Contract Amount</th>
<th>Increase</th>
<th>Decrease</th>
<th>Net Change</th>
<th>Revised Contract Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

You are hereby authorized to make the following adjustment to the Contract Time:

<table>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Days</td>
<td>Days</td>
<td>Days</td>
<td>Days</td>
<td></td>
</tr>
</tbody>
</table>

DESCRIPTION OF CHANGE: ADD DEDUCT

Item 1:
Recommended by Engineer
Tetra Tech

By: ____________________________
Title: ___________________________
Date: ___________________________

Accepted by Contractor

By: ____________________________
Title: ___________________________
Date: ___________________________

Recommended by Brevard County Utility Services Department

By: ____________________________
Title: Jim Helmer
Interim Director
Date: ____________________________

Approved by Board of County Commissioners

By: ____________________________
Robin Fisher
Title: Chairman
Date: ____________________________

As approved by the Board on
________________________________, 20___

ATTEST:
________________________________
Scott Ellis, Clerk
CHANGE ORDER NO. ____

County  Project No.:   MI-RR-98
Engineer Project No.:  200-76510-14001

PROJECT TITLE   Lift Station F-10 Electrical Improvements

ITEM NO.:   ____

REQUEST AND JUSTIFICATION FOR CHANGE

Necessity for change:

Will proposed change alter size of project:   Yes _____   No _____

If yes, explain:

Affect on operation and maintenance cost of this project:

END OF CHANGE ORDER FORM
WARRANTY OF TITLE

STATE OF _____________________
COUNTY OF___________________

being first duly sworn, deposes and says as follows:

Affiant is __________________________________ of ______________________________________________, a corporation, which is named in the Construction Contract dated the ____ day of ________________, 20___, between said corporation as the CONTRACTOR and the Brevard County Board of County Commissioners as the OWNER, for the **Lift Station F-10 Electrical Improvements** Project and Affiant is authorized to make this Affidavit as, or in behalf of, the CONTRACTOR above.

Title to all work, materials and equipment covered by the attached Periodic Pay Estimate, and which is dated ________________, 20___, passes to the OWNER at the time of payment free and clear of all claims; and all laborers, materialmen and subcontractors have been paid for performing or furnishing the work, labor or materials upon said Contract Work covered by the aforesaid Periodic Pay Estimate.

This statement under oath is given in compliance with Section 713.06 Florida Statutes.

____________________________________________
AFFIANT

Sworn to and subscribed before me
this ____ day of ________________, 20___.

________________________________________
Notary Public, State of Florida At Large
My Commission Expires:

END OF WARRANTY OF TITLE

00830-10
CONTRACTOR'S AFFIDAVIT TO OWNER

STATE OF_______________________
COUNTY OF_____________________

Before me, the undersigned authority, personally appeared ____________________________, who, being by me first duly sworn, on oath deposes(s) and say(s);

1. He/She is (They are) ____________________________ of (a corporation) (a partnership) (an individual) doing business as ____________________________, hereinafter called "Contractor."

2. Contractor heretofore entered into a contract with Brevard County, Florida hereinafter called "Owner," to furnish material, labor and services for the construction of Lift Station F-10 Electrical Improvements, as more specifically described in said contract, on the land and property of the Owner, located at 1350 Central Avenue, Merritt Island, Florida.

3. Contractor has fully completed construction in accordance with the terms of the contract and all subcontractors have been paid in full, except:

<table>
<thead>
<tr>
<th>Name of Subcontractor</th>
<th>Amount Due and Unpaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>______________________</td>
<td>$ _____________________________</td>
</tr>
</tbody>
</table>

4. All Worker's Compensation claims have been settled and no liability claims are pending, in connection with, arising out of or resulting from, the contract.

5. Receipt by the Contractor of the final payment, under the aforementioned contract, shall constitute a full release and discharge by the Contractor to the Owner of any and all claims of the Contractor against the Owner, arising out of, connected with, or resulting from performance of the obligations of the Contractor pursuant to the contract documents.

Contractor's Affidavit to Owner
Page 1 of 2
Signed and sealed in the presence of:

____________________________________

_____________________________________  ________________________________

(SEAL)         (CONTRACTOR)

By:______________________________

(SEAL)

Sworn to and subscribed before me this ______ day of ____________, 20 ___.

Notary Public State of Florida at Large
My Commission Expires:

Contractor's Affidavit to Owner
Page 2 of 2
CERTIFICATE OF SUBSTANTIAL COMPLETION

OWNER'S Project No. MI-RR-98

ENGINEER'S Project No. 200-76510-14001

Project: Lift Station F-10 Electrical Improvements

CONTRACTOR _________________________________________________________________

Contract For: Lift Station F-10 Electrical Improvements

Contract Date ________________________________

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof.

To: BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS

And To: ____________________________________________

CONTRACTOR

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR and ENGINEER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents and tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. When this Certificate applies to a specified part of the Work the items in the tentative list shall be completed or corrected by CONTRACTOR within forty-five (45) days of the above date of Substantial Completion. The date of Substantial Completion is the date upon which all guarantees and warranties begin, except as follows:

___________________________________________________________________________

Date of Substantial Completion

The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities and insurance shall be as follows:

RESPONSIBILITIES:

OWNER: ___________________________________________________________________________  

___________________________________________________________________________  

___________________________________________________________________________  

CONTRACTOR: ___________________________________________________________________________  

___________________________________________________________________________  

___________________________________________________________________________

Certificate of Substantial Completion  
Page 1 of 2
The following documents are attached to and made a part of this Certificate:
____________________________________________________________

Executed by ENGINEER on _________________, 20 ___.

Tetra Tech
(Engineer)

By:_______________________________________

The CONTRACTOR accepts this Certificate of Substantial Completion on:
__________________________, 20 ___.

(Contractor)

By:_______________________________________
WAIVER OF RIGHT TO CLAIM AGAINST THE PAYMENT BOND

The undersigned subcontractor, in consideration of the progress payment made for labor, services or materials provided through __________ in the amount of $ __________________, hereby waives and releases its right to claim against the payment bond for labor, services or materials furnished to (customer) ________________________________________ on the job of (owner project) Lift Station F-10 Electrical Improvements, for improvements to the following described property:

Owner site located at 1350 Central Avenue, Merritt Island, Florida

This waiver and release does not cover any retention of labor, services, or materials furnished after the date specified.

Dated this ____ day of __________, 20___

________________________________
Subcontractor’s Name

________________________________
(Address)

By: __________________________________________

________________________________
Printed Name

STATE OF ____________________________)
COUNTY OF ____________________________)

Sworn to and subscribed before me this ______ day of ______________________ 20___, by __________________________________________, who is either personally known to me or produced ________________________________ as identification, and who did/did not take an oath.

________________________________
Notary Public Signature

________________________________
My Commission expires:

Notary Public (Printed Name)
WAIVER OF RIGHT TO CLAIM
AGAINST THE PAYMENT BOND (FINAL PAYMENT)

The undersigned subcontractor, in consideration of progress payment made for labor, services or materials provided through __________________ in the amount of $________________, hereby (Date) waives and releases its right to claim against the payment bond for labor, services or materials furnished to (customer) ___________________________________ on the job of (owner project) Lift Station F-10 Electrical Improvements, for improvements to the following described property:

Owner site located at 1350 Central Avenue, Merritt Island, Florida

Dated this ____ day of ____________, 20__

________________________________
Subcontractor's Name
______________________________
(Address)

By: ___________________________

________________________________
Printed Name

STATE OF _________________________
COUNTY OF _________________________

Sworn to and subscribed before me this _____ day of _________________________ 20__, by, ____________________________________________________________, who is either personally known to me or produced ____________________________ as identification, and who did/did not take an oath.

________________________________
Notary Public Signature

________________________________
My Commission expires:

________________________________
Notary Public (printed name)

END OF SECTION
SECTION 01000

GENERAL REQUIREMENTS

PART I - GENERAL

1.01 SCOPE AND INTENT

A. The project consists of upgrading the electrical, control and instrumentation equipment
associated with existing Lift Station F-10. This scope of work includes furnishing and
installing a Triplex Pump Control Panel, electrical disconnects, battery charging
system for the existing emergency generator, complete and integrated grounding
system, and making improvements to instruments, controls, alarms, and lighting. This
work also involves the re-installation of an Owner-furnished RTU system and includes
providing and maintaining a temporary bypass pumping system, performing required
demolition of old components, performing all demonstration tests, and furnishing and
installing all hardware, fasteners, conduits, wiring, and other incidentals required for
the complete installation in conformance with the Specifications and Drawings.

B. Work Included:

1. The Contractor shall furnish all supervision, labor, materials, power, light,
heat, fuel, water, tools, appliances, equipment, supplies, and means of
construction necessary for the proper performance and completion of the work.
Contractor shall obtain and pay for all required permits, if identified.
Contractor shall perform and complete the work in the manner best estimated
to promote rapid construction consistent with safety of life and property and to
the satisfaction of the Owner, and in strict accordance with the Contract
Documents. The Contractor shall clean up the work and maintain it during and
after construction, until accepted, and shall do all work and pay all costs
incidental thereto. Contractor shall repair or restore all structures and property
that may be damaged or disturbed during performance of the work.

2. The cost of incidental work described in these General Requirements, for
which there are no specific Contract Items, shall be considered as part of the
general cost of doing the work and shall be included in the prices for the
various Contract Items. No additional payment will be made therefor.

3. The Contractor shall provide and maintain such modern materials, tools, and
equipment as may be necessary, in the opinion of the Engineer, to perform in a
satisfactory and acceptable manner all the work required by this Contract. Only
equipment of established reputation and proven efficiency shall be used. The
Contractor shall be solely responsible for the adequacy of his workmanship,
materials and equipment, prior acceptance of the Engineer notwithstanding.
C. Public Utility Installations and Structures:

1. Public utility installations and structures shall be understood to include all poles, tracks, pipes, wires, conduits, vaults, manholes and all other appurtenances and facilities pertaining thereto whether owned or controlled by the Owner, other governmental bodies or privately owned by individuals, firms or corporations, used to serve the public with transportation, traffic control, gas, electricity, telephone, sewerage, drainage, water or other public or private property which may be affected by the work shall be deemed included hereunder.

2. The Contract Documents contain data relative to existing public utility installations and structures above and below the ground surface. This data is not guaranteed as to their completeness or accuracy and it is the responsibility of the Contractor to make investigations to fully understand the character, condition and extent of all such installations and structures as may be encountered and as may affect the construction operations.

3. The Contractor shall protect all public utility installations and structures from damage during the Work. Access across any buried public utility installation or structure shall be made only in such locations and by means accepted by the Engineer. The Contractor shall so arrange his operations as to avoid any damage to these facilities. All required protective devices and construction shall be provided by the Contractor at no additional expense to Owner or Engineer. All existing public utilities damaged by the Contractor which are shown on the Drawings or have been located in the field by the utility shall be repaired by the Contractor, at his expense, as directed by the Engineer. No separate payment shall be made for such protection or repairs to public utility installations or structures.

4. Public utility installations or structures owned or controlled by the Owner or other governmental body which are shown on the Drawings to be removed, relocated, replaced or rebuilt by the Contractor shall be considered as a part of the general cost of doing the Work and shall be included in the prices bid for the various Contract items. No separate payment shall be made therefor.

5. Where public utility installations of structures owned or controlled by the Owner or other governmental body are encountered during the course of the Work, and are not indicated on the Drawings or in the Specifications, and when, in the opinion of the Engineer, removal, relocation, replacement or rebuilding is necessary to complete the Work under this Contract, such work shall be accomplished by the utility having jurisdiction, or such work may be ordered, in writing by the Engineer, for the Contractor to accomplish. If such work is accomplished by the utility having jurisdiction it will be carried out
expeditiously and the Contractor shall give full cooperation to permit the utility to complete the removal, relocation, replacement or rebuilding as required. If such work is accomplished by the Contractor, it will be paid for as extra work as provided in the Agreement.

6. The Contractor shall, at all times in performance of the Work, employ accepted methods and exercise reasonable care and skill so as to avoid unnecessary delay, injury, damage or destruction of public utility installations and structures; and shall, at all times in the performance of the Work, avoid unnecessary interference with, or interruption of, public utility services, and shall cooperate fully with the owners thereof to that end.

7. The Contractor shall give written notice to Owner, other governmental utility departments and other owners of public utilities of the location of his proposed construction operations, at least forty-eight (48) hours in advance of breaking ground in any area or on any unit of the Work. In accordance with Florida Statute 556, the Contractor shall also call Florida State One Call of Florida, Inc., (also called Sunshine State One Call Center) at least 48 hours prior to excavating in any public rights-of-way. Their telephone number is (800) 432-4770.

8. The maintenance, repair, removal, relocation or rebuilding of public utility installations and structures, when accomplished by the Contractor as herein provided, shall be done by methods approved by the owners of such utilities.

9. The Contractor shall make provisions to avoid impacting existing facilities operation or maintenance activities. If an impact is anticipated, the Contractor shall propose a means to maintain existing activities, subject to approval by the Owner. The Owner will not be responsible for any costs associated with such proposed modification.

1.02 DRAWINGS AND PROJECT MANUAL

A. Drawings: When obtaining data and information from the Drawings, figures shall be used in preference to scaled dimensions, and large scale drawings in preference to small scale drawings.

B. Copies Furnished to Contractor: After the Contract has been executed, the Contractor will be furnished up to five (5) complete sets of plans and five (5) copies of the Project Manual (Contract Requirements and Specifications) and all addenda.

C. Supplementary Drawings:
1. When, in the opinion of the Engineer, it becomes necessary to explain more fully the work to be done or to illustrate the Work further or to show any changes which may be required, drawings known as Supplementary Drawings, with specifications pertaining thereto, will be prepared by the Engineer and the Contractor will be furnished up to five (5) sheets and one (1) reproducible copy of any revised specifications.

2. The Supplementary Drawings shall be binding upon the Contractor with the same force as the Drawings. Where such Supplementary Drawings require either less or more than the estimated quantities of work, credit to the Owner or compensation therefor to the Contractor shall be subject to the terms of the Agreement.

D. Contractor to Check Drawings and Data:

1. The Contractor shall verify all dimensions, quantities and details shown on the Drawings, Supplementary Drawings, schedules, Specifications or other data received from the Engineer, and shall notify him of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction or improper operation resulting therefrom nor from rectifying such conditions at no additional expense to Owner or Engineer. Contractor will not be allowed to take advantage of any errors or omissions, as full instructions will be furnished by the Engineer, should such errors or omissions be discovered.

2. All schedules are given for the convenience of the Owner and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quality of materials and equipment included in work to be done under the Contract and additional work claimed by Contractor.

E. Specifications: The Technical Specifications consist of three parts: General, Products and Execution. The General Section contains General Requirements which govern the work. Products and Execution modify and supplement these by detailed requirements for the work and shall always govern whenever there appears to be a conflict.

F. Intent:

1. All work called for in the Specifications applicable to this Contract, but not shown on the Drawings in their present form, or vice versa, shall be of like effect as if shown or mentioned in both. Work not specified in either the Drawings or in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the Work, is required and shall be
performed by the Contractor as though it were specifically delineated or described.

2. The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

1.03 MATERIALS AND EQUIPMENT

A. Manufacturer:

1. The names of proposed manufacturers, material suppliers, and dealers who are to furnish materials, fixtures, equipment, appliances or other fittings shall be submitted to the Engineer for acceptance, prior to construction, to afford proper investigation and checking. No manufacturer will be accepted for any materials to be furnished under this Contract unless he shall be of good reputation and have a plant of ample capacity. Contractor shall, upon the request of the Engineer, be required to submit evidence that he has manufactured a similar product to the one specified and that it has been previously used for a like purpose for a sufficient length of time to demonstrate its satisfactory performance.

2. All transactions with the manufacturers or subcontractors shall be through the Contractor, unless the Contractor shall request, in writing to the Engineer, that the manufacturer or subcontractor deal directly with the Engineer. Any such transactions shall not in any way release the Contractor from his full responsibility under this Contract and will not impose any liability on the Owner or Engineer.

3. Any two or more pieces of material or equipment of the same kind, type or classification, and being used for identical types of service, shall be made by the same manufacturer.

B. Delivery:

1. The Contractor shall deliver materials to the site in ample quantities to ensure the most speedy and uninterrupted progress of the work so as to complete the work within the allotted time. However, the Contractor shall not store materials on-site for more than ninety (90) days before installation or store equipment for more than thirty (30) days before installation. This will not supersede more stringent requirements noted elsewhere in the Contract Documents.
2. The Contractor shall also coordinate deliveries in order to avoid delay in, or impede, the progress of the work of any related Contractor.

3. All materials and equipment shall be properly stored on site in accordance with these specifications and the manufacturer's recommendations. Items stored improperly will be refused for installation.

C. Tools and Accessories:

1. The Contractor shall, unless otherwise stated in the Contract Documents, furnish with each type, kind or size of equipment, one complete new and unused set of suitably marked high grade special tools and appliances which may be needed to adjust, operate, maintain or repair the equipment. Such tools and appliances shall be furnished in accepted painted steel cases, properly labeled and equipped with good grade cylinder locks and duplicate keys.

2. Each piece of equipment shall be provided with a substantial nameplate, securely fastened in place and clearly inscribed with the manufacturer's name, year of manufacture, serial number, weight and principal rate data.

D. Service of Manufacturer's Engineer:

1. The Contract prices for equipment shall include the cost of furnishing a competent and experienced engineer or superintendent who shall represent the manufacturer and shall assist the Contractor, when required, to install, adjust, test and place in operation, the equipment in conformity with the Contract Documents.

2. Prior to the equipment being placed in permanent operation by the Owner, such engineer or superintendent shall make all adjustments and tests required by the Engineer to prove that such equipment is in proper and satisfactory operating condition, and shall instruct such personnel as may be designated by the Owner in the proper operation and maintenance of such equipment.

1.04 INSPECTION AND TESTING

A. General:

1. For tests specified to be made by the Contractor, the testing personnel shall make the necessary inspections and tests and the reports thereof shall be in such form as will facilitate checking to determine compliance with the Contract Documents. Two (2) originally executed and five copies of the reports shall be submitted and authoritative certification thereof shall be furnished to the Engineer as a prerequisite for the acceptance of any material or equipment.
2. If, in the making of any test of any material or equipment, it is ascertained by the Engineer that the material or equipment does not comply with the Contract Documents, the Contractor will be notified thereof and he will be directed to refrain from delivering said material or equipment, or to remove it promptly from the site or from the work and replace it with acceptable material, without cost to the Owner or Engineer.

3. Tests of electrical and mechanical equipment and appliances shall be conducted in accordance with recognized test codes of the ANSI, ASME, or the IEEE, except as may otherwise be stated herein.

4. The Contractor shall be fully responsible for the proper operation of equipment during tests and instruction periods and shall neither have nor make any claim for damage which may occur to equipment prior to the time when the Owner executes final acceptance of the work.

B. Costs:

1. The cost of preliminary shop and field tests of equipment and certain other tests specifically called for in the Contract Documents shall be borne by the Contractor and such costs shall be deemed to be included in the Contract price.

2. Materials and equipment submitted by the Contractor as the equivalent to those specifically named in the Contract may be tested by the Owner for compliance. The Contractor is responsible for providing sufficient information to allow Engineer to determine that the item of material or equipment proposed is equivalent to that specifically named and an acceptable substitute therefor. If in the sole discretion of the Engineer, tests of the proposed substitute items are necessary for Engineer’s review, the substitute items will be tested by the Contractor at no additional cost to the Owner.

C. Inspection of Materials:

1. The Contractor shall give notice in writing to the Engineer, sufficiently in advance of his intention to commence the manufacture or preparation of materials especially manufactured or prepared for use in or as part of the permanent construction. Such notice shall contain a request for inspection, the date of commencement and the expected date of completion of the manufacture or preparation of materials. Upon receipt of such notice, the Engineer will arrange to have a representative present at such times during the manufacture as may be necessary to inspect the materials or Engineer will notify the Contractor that the inspection will be made at a point other than the point of manufacture.
2. The Contractor must comply with these provisions before shipping any material. Such inspection shall not release the Contractor from the responsibility for furnishing materials meeting the requirements of the Contract Documents.

D. Certificate of Manufacture:

1. The Contractor shall furnish to Engineer authoritative evidence in the form of Certificate of Manufacture that the materials to be used in the work have been manufactured and tested in conformity with the Contract Documents.

2. These certificates shall be notarized and shall include copies of the results of physical tests and chemical analyses, where necessary, that have been made directly on the product to be provided by the manufacturer. Two (2) original and five (5) copies are to be provided to the Engineer.

E. Shop Tests:

1. Testing for pressure, duty, capacity, rating, efficiency, performance, function or special requirements which are specified shall be tested in the shop of the manufacturer in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Documents.

2. No such equipment or materials shall be shipped to the Work site until the Engineer notifies the Contractor, in writing, that the results of such tests are acceptable.

3. Two (2) signed original and five (5) copies of the manufacturer's actual test data and interpreted results thereof, accompanied by two (2) signed original and five (5) copies of a certificate of authenticity sworn to by a responsible official of the manufacturing company and/or independent laboratory, shall be forwarded to the Engineer for acceptance.

4. The cost of shop tests and of furnishing manufacturer's preliminary and shop test data of operating equipment shall be borne by the Contractor.

F. Final Inspection: During such final inspections, the Work shall be clean and functional. In no case will the final estimate be prepared until the Contractor has complied with all requirements set forth and the Engineer and Owner have made their final inspection of the entire Work and are satisfied that the entire Work is properly and satisfactorily constructed in accordance with the requirements of the Contract Documents.

1.05 TEMPORARY STRUCTURES
A. Temporary Fences: If, during the course of the Work, it is necessary to remove or disturb any fence or part thereof, the Contractor shall provide a suitable temporary fence at no additional cost to Owner or Engineer.

B. Responsibility for Temporary Structures: In executing the Contract, the Contractor assumes full responsibility for the sufficiency and safety of all temporary structures or work and for any damage which may result from their failure or their improper construction, maintenance or operation and will indemnify and hold harmless the Owner and Engineer from all claims, suits or actions and damages or costs of every description arising by reason of failure to comply with the above provisions.

1.06 ACCIDENT PREVENTION

A. Precautions shall be exercised at all times for the protection of person and property. The safety provisions of applicable laws, building and construction codes shall be observed.

B. The Contractor shall comply with the U.S. Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596), and under Hours and Safety Standards Act Section 107 of the contract Work. Hours and Safety Standards Act (PL 91-54), except where state and local safety standards exceed the federal requirements and except where state safety standards have been approved by the Secretary of Labor in accordance with provisions of the Occupational Safety and Health Act, shall be complied with.

C. First Aid: The Contractor shall keep upon the site, at each location where work is in progress, a completely equipped first aid kit and shall provide ready access thereto at all times when men are employed on the Work.

1.07 LINES AND GRADES

A. Grade:

1. All work under this Contract shall be constructed in accordance with the lines and grades shown on the Drawings, or as provided by the Engineer. The full responsibility for keeping alignment and grade shall rest upon the Contractor.

2. The Owner will provide available information regarding bench marks and base line controlling points on the drawings. Reference marks for lines and grades as the work progresses will be located by Contractor to cause as little inconvenience to the prosecution of the Work as possible. The Contractor shall so place excavation and other materials as to cause no inconvenience in the use of the reference marks provided. The Contractor shall remove any obstructions placed contrary to this provision.
B. Surveys:

1. The Contractor shall furnish and maintain, at no additional expense to Owner or Engineer, stakes, temporary benchmarks and other such materials.

2. The Contractor shall check such reference marks by such means as he may deemed necessary and, before using them, shall provide written notification to Engineer's regarding presumed inaccuracies.

3. The Contractor shall, at no additional expense to Owner or Engineer, establish all working or construction lines and grades as required from the reference marks made available by the Owner, and shall be solely responsible for the accuracy thereof.

C. Safeguarding Marks:

1. The Contractor shall safeguard all points, stakes, grade marks, monuments and bench marks made or established on the Work, bear the cost of reestablishing them if disturbed, and bear the entire expense of rectifying work improperly installed due to not maintaining or protecting or to removing without authorization such established points, stakes and marks.

2. The Contractor shall safeguard all existing property corners, monuments and marks adjacent to but not related to the Work, whether known or discovered, and shall bear the cost of reestablishing them in identical manner if disturbed or destroyed.

1.08 ADJACENT STRUCTURES AND LANDSCAPING

A. Responsibility:

1. The Contractor shall also be entirely responsible and liable for all damage or injury as a result of Contractor's operations to all other adjacent public and private property, structures of any kind and appurtenances thereto met with during the progress of the Work.

2. The cost of protection, replacement in their original locations and conditions or payment of damages for injuries to such adjacent public and private property and structures affected by the work, whether or not shown on the Drawings, and the removal, relocation and reconstruction of such items called for on the Drawings or specified shall be included in the various Contract Items and no separate payments will be made therefore.
3. Contractor is expressly advised that the protection of buildings, structures, tanks, pipelines, etc. and related work adjacent and in the vicinity of his operations, wherever they may be, is solely their responsibility.

4. Conditional inspection of buildings or structures in the immediate vicinity of the project which may reasonably be expected to be affected by the Work shall be performed by and be the responsibility of the Contractor.

5. Contractor shall, before starting operations, make an examination of the adjacent structures, buildings, facilities, etc., and record by notes, measurements, photographs, etc., conditions which might be aggravated by open excavation and construction. Repairs or replacement of all conditions disturbed by the construction shall be made to the satisfaction of the Owner and Engineer. This does not preclude conforming to the requirements of the insurance underwriters. Copies of surveys, photographs, reports, etc., shall be provided to the Owner. See also Section 01850.

6. Prior to the beginning of any excavations the Contractor shall advise the Owner of all structures on which Contractor intends to perform work or which performance of the Work will affect.

B. Protection of Trees: All trees and shrubs shall be adequately protected by the Contractor with boxes and in accordance with ordinances governing the protection of trees. Excavated materials shall be placed so as not to injure such trees or shrubs. Trees or shrubs destroyed by negligence of the Contractor or Contractor’s employees shall be replaced by Contractor with new stock of similar size and age, at its proper season and at the sole expense of the Contractor.

C. Lawn Areas: Lawn areas shall be left in as good condition as before the starting of the Work. Where sod is to be removed, it shall be carefully removed, and later replaced, or the area where sod has been removed shall be restored with new sod. The price of such work shall have been included in the Bid Total.

D. Restoration of Fences:

1. Any fence, or part thereof, that is damaged or removed during the course of the Work shall be replaced or repaired by the Contractor and shall be left in as good a condition as before the starting of the Work.

2. The manner in which the fence is repaired or replaced and the materials used in such work shall be subject to the acceptance of the Owner and Engineer.

3. The cost of all labor, materials, equipment, and work for the replacement or repair of any fence shall be deemed included in the appropriate Contract Item
or items, or if no specific item is provided therefor, as part of the overhead cost of the work, and no additional payment will be made therefor.

1.09 PROTECTION OF WORK AND PUBLIC

A. Barriers and Lights:

1. During the prosecution of the work, the Contractor shall put up and maintain at all times such barriers and lights as will effectually prevent accidents.

2. The Contractor shall provide suitable barricades, red lights, "danger" or "caution" or "street closed" signs and flagmen at all places where the Work causes obstructions to the normal traffic or constitutes in any way a hazard to the public.

B. Noise:

1. The Contractor shall eliminate noise to as great an extent as practicable at all times. Air compressing equipment shall be equipped with silencers and the exhaust of all gasoline motors or other power equipment shall be provided with mufflers. The Contractor shall construct sound barriers as necessary to eliminate noise.

2. In the vicinity of hospitals and schools, special care shall be used to avoid noise or other nuisances. The Contractor shall strictly observe all local regulations and ordinances covering noise control.

3. Noise levels shall be as specified in Section 01030.

4. If the proper and efficient prosecution of the Work requires operations during the night, the written permission of the Owner shall be obtained before starting such items of the Work.

C. Access to Public Services: Neither the materials excavated nor the materials or equipment used in the construction of the Work shall be so placed as to prevent free access to all fire hydrants, valves or manholes.

D. Dust Prevention: The Contractor shall prevent dust nuisance from Contractor’s operations or from traffic by keeping the roads and/or construction areas dampened with water at all times.

1.10 CUTTING AND PATCHING
A. The Contractor shall do all cutting, fitting or patching of the Work that may be required to make the several parts thereof join and coordinate in a manner satisfactory to the Engineer and in accordance with the Drawings and Specifications.

B. The work must be done by competent workmen skilled in the trade required by the restoration.

1.11 CLEANING

A. During Construction:

1. During construction, the Contractor shall, at all times, keep the site of the Work and adjacent premises as free from material, debris and rubbish as is practicable and shall remove the same from any portion of the site if, in the opinion of the Owner or Engineer, such material, debris, or rubbish constitutes a nuisance or is objectionable.

2. The Contractor shall remove from the site all of Contractor’s surplus materials and temporary structures when no further need therefore develops. Contractor shall be responsible and liable for all spillage and incur all associated costs including, but not limited to, costs related to repair and maintenance resulting from damages thereof, and fines that may be levied as a result of citations given by State or local regulatory agencies.

B. Final Cleaning:

1. At the conclusion of the Work, all erection plant, tools, temporary structures and materials belonging to the Contractor shall be promptly removed, and shall remove and promptly dispose of all water, dirt, rubbish or any other foreign substances to a facility permitted to manage these materials.

2. The Contractor shall thoroughly clean all equipment and materials installed and shall deliver such materials and equipment undamaged in a bright, clean, polished and new operating condition.

1.12 MISCELLANEOUS

A. Protection Against Siltation and Bank Erosion:

1. The Contractor shall arrange Contractor’s operations and construct erosion control devices to minimize siltation and bank erosion on construction sites and on existing or proposed water course and drainage channels.
2. The Contractor, at no additional expense to Owner or Engineer, shall remove any siltation deposits and correct any erosion problems as directed by the Engineer which results from Contractor’s construction operations.

B. Protection of Wetland Areas:

1. The Contractor shall properly dispose of all surplus material, including soil, in accordance with local, state and federal regulations and with Owner’s instruction.

2. Under no circumstances shall surplus material be disposed of in wetland areas as defined by the Florida Department of Environmental Protection.

C. Existing Facilities: The work shall be so conducted to maintain existing traffic lanes in operation, except in accordance with the approved temporary MOT plan.

D. Use of Chemicals: All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfection, polymer, reactant, or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions. Contractor shall obtain written approval from Owner prior to use of chemicals.

E. Cooperation With Other Contractors and Forces:

1. During progress of work under this Contract, it may be necessary for other contractors and persons employed by the Owner to work in or about the project.

2. The Owner reserves the right to put such other contractors to work and to afford such access to the work area to be performed at times as the Owner deems proper.

3. The Contractor shall not impede or interfere with the work of such other contractors engaged in or about the Work and shall so arrange and conduct the work that such other contractors may complete their work at the earliest date possible.

F. Construction shall be conducted and shall result in construction of the improvements of this project in full accordance with the conditions of the permits granted for the project.

1.13 PRE-EXISTING CONDITIONS

A. The Contractor shall conduct a pre-existing conditions survey of each of the existing structures and other areas that are to remain during the Work. The survey shall
establish the state of the property before construction as a basis for any claims of damage that may occur. See also Section 01850.

1.14 NOTICES

A. In conformance with the requirements of the General Conditions all notices or other papers required to be delivered by the Contractor to the Owner, except the bids, shall be delivered to Craig L. Helpling, Project Manager, Brevard County Utility Services Department, 2725 Judge Fran Jamieson Way, Building A-213, Melbourne, Florida 32940.

1.15 COORDINATION OF PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS

A. In case of discrepancy, the most stringent condition will govern from the latest edition of the “Brevard County Criteria”, or the plans or specifications. Computed dimensions shall govern over scaled dimensions. NOTE: CONTRACTOR MUST BE AWARE THAT SOME SECTION(s) OR SUBSECTION(s) DO NOT SPECIFICALLY APPLY TO THIS PROJECT.

1.16 LAYING OUT THE WORK

A. Prior to commencement of construction the Engineer will have established vertical and horizontal controls throughout the work site which the Contractor shall use in setting out the work. The Contractor shall be responsible for establishing all lines and grades together with all reference points as required by the various trades for all work under this Contract. All required layout shall be done using competent and experienced personnel under the supervision of a Land Surveyor registered in the State of Florida.

B. The Contractor shall provide all labor and instruments and stakes, templates, and other materials necessary for marking and maintaining all lines and grades. The lines and grades shall be subject to any checking the Owner or Engineer may decide necessary.

C. No separate cost item is provided for laying out the work; the cost of which shall be included in the unit price for items in the Proposal.

1.17 PRE-BID AND PRECONSTRUCTION CONFERENCES

A. A pre-bid conference will be held to assist interested contractors in submitting proper bids. At this time all questions concerning the contract documents will be addressed. All prospective bidders are strongly encouraged to attend.

B. A preconstruction conference will be held with the awarded Contractor to establish procedures and to obtain working understanding among the parties concerning the project.
1.18 PERMITS AND LICENSES

A. Before starting the work, the Contractor shall obtain and possess all required licenses and permits.

1.19 OBSTRUCTIONS

A. All water pipes, storm drains, force mains, gas or other pipe, telephone or power cables or conduits, and all other buried or unburied obstructions, whether or not shown, shall be temporarily removed from, or supported across pipeline and other excavations. Before disconnecting any pipes or cables, the Contractor shall obtain permission from their owner, or shall make suitable arrangements for their disconnection by their owner. The Contractor shall be responsible for any damage to any such pipes, conduits or cables, and shall restore them to service promptly as soon as the work has progressed past the point involved. Approximate locations of known water, sanitary, drainage, power and telephone installations along the route of new pipelines or in the vicinity of new work are shown, but must be verified in the field by the Contractor. The Contractor shall uncover these pipes, ducts, cables, etc., carefully, by hand, prior to installing new piping. Any discrepancies or differences found shall be brought to the attention of the Owner in order that necessary changes may be made to permit installation of new pipe.

1.20 DAMAGE TO EXISTING STRUCTURES AND UTILITIES

A. The Contractor shall be responsible for and make good all damage to pavement, sidewalks, pedways, buildings, telephone or other cables, water pipes, sanitary pipes, or other structures which may be encountered, whether or not shown on the drawings.

B. Information shown on the Drawings as to the location of the existing utilities has been prepared from the most reliable data available to the Engineer. This information is not guaranteed, however, and it shall be this Contractor’s responsibility to determine the location, character and depth of any existing utilities. They shall assist the utility companies, by every means possible, to determine said locations. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from their activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION
SECTION 01020

ALLOWANCES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Definition and Explanations: Certain requirements of the work related to each allowance are shown and specified in the Contract Documents. The allowance has been established in lieu of additional requirements for that work, and further requirements thereof (if any) will be issued by Change Order.

1. Miscellaneous Changes to the Contractor’s Scope of Work:

   a) If during construction, the Owner wishes to make minor modifications to the Contractor’s scope of work, it may be addressed via this allowance item.

PART 2 - PRODUCTS

2.01 SCHEDULE OF ALLOWANCES

A. General: The following allowance amounts are included in the Total Lump Sum Bid price, for the corresponding units of work as described:

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Miscellaneous revisions</td>
<td>$30,000</td>
</tr>
</tbody>
</table>

Total Allowance $30,000
(included in Total Lump Sum Bid Price)

PART 3 - EXECUTION

3.01 PAYMENT OF ALLOWANCES

A. The Contractor shall maintain records for claims on this section.

B. Any portion of the allowance not used by the Contractor shall be deducted from the final contract price of the project.

END OF SECTION
PART 1 - GENERAL

1.01 SCOPE

A. Payment for the various items of the Bid Schedule, as further specified herein, will include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the Work, all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). The Contractor shall accept the compensation in full payment for all loss or damages arising from the nature of the work, or from any discrepancy between the actual quantities of work and quantities herein estimated by the Engineer, or from the action of the elements or from any unforeseen difficulties which may be encountered during the prosecution of the work until the final acceptance by the Owner. No separate payment will be made for any item that is not specifically set forth in the Bid Schedule, and all costs therefor will be included in the prices named in the Bid Schedule for the various appurtenant items of the completed work.

B. The prices stated in the Bid include all costs and expenses for taxes, labor, equipment, materials, commissions, transportation charges and expenses, patent fees and royalties, labor for handling materials during inspection, together with any and all other costs and expenses for performing and completing the work as shown on the Drawings and specified herein. The basis of payment for an item, task or procedure, at the unit or lump sum price shown in the Bid Schedule, shall be in accordance with the description of that item in this Section.

C. The Contractor’s attention is called to the fact that the quotations for the various items of work are intended to establish a total price for completing the work in its entirety. Should the Contractor feel that the cost for any item of work has not been established by the Bid Schedule or Payment Items, the Contractor shall include the cost for that work in some other applicable bid item, so that the proposal for the project reflects the Contractor’s total price for completing the work in its entirety.

1.02 MEASUREMENT

A. Where indicated for measurement, the quantities for payment under this Contract shall be determined by actual measurement of the completed items, in place, ready for service and accepted by the Owner, in accordance with the applicable method of measurement therefore contained herein. A representative of the Contractor shall witness all field measurements.

B. Subject to all other Contract requirements, the Contractor shall be paid for "as-built" quantities
of work for which a unit price is given in the bid.

C. Where payment limit lines are shown on the Contract Drawings, or specified herein, measurements of a payment item quantity will be made up to, but not beyond such lines.

D. Where the actual work of a payment item falls short of the payment limit line, measurement will be made to the line of the actual work.

E. No measurement for payment will be made for quantities outside of payment limit lines unless authorized in writing by the Owner.

1.03 MOBILIZATION/DEMOBILIZATION, INSURANCE, BONDS (Bid Item No. 1)

A. Periodic payment will be made for these items based upon percent complete, less retainage.

B. Payment for mobilization, demobilization, insurance, and bonds will be made at the lump sum price named in the Bid Schedule under Item No.1, which price shall constitute full compensation for mobilization, demobilization, and providing all required insurance and performance, payment and maintenance bonds in accordance with the requirements of these Contract Documents.

C. The aggregate of these Bid Items may not comprise more than seven percent (7%) of the total Lump Sum Bid Price.

1.04 BY-PASS INSTALLATION AND PUMPING (Bid Item No. 2)

A. Periodic payment will be made for this item based upon percent complete, less retainage.

B. Payment for by-pass pumping services will be made at the lump sum price named in the Bid Schedule under Item No. 2, which price shall constitute full compensation for furnishing, installing, powering, maintaining and then removing all required pumps, piping, equipment, fittings, valves, controls, appurtenances, and temporary electrical power and diesel fuel to provide adequate by-pass pumping meeting the requirements of Specification 02141; including furnishing backup diesel powered pumps as specified, installation and removal of any temporary line stops required for by-pass piping, installation and removal of all temporary manhole plugging, restoration of all existing facilities utilized for by-pass pumping to match existing conditions; and all other incidentals required to successfully perform all temporary lift station by-pass pumping during construction.

1.05 DEMOLITION (Bid Item No. 3)

A. Periodic payment will be made for this item based upon percent complete, less retainage.

B. Payment for all required Demolition will be made at the lump sum price named in the Bid Schedule under Item No. 3, which price shall constitute full and total compensation for demolition, salvaging, abandonment, and proper disposal of the existing systems as indicated on the Drawings and as required in these Contract Documents; including removal of motor control center, transfer switch, main disconnect, wet well pump junction box, and miscellaneous equipment to be replaced at part of the project. Such price shall also include all patching and
repair to existing concrete and walls caused by demolition activities.

1.06 ELECTRICAL EQUIPMENT AND MATERIALS (Bid Item No. 4)

A. Periodic payment will be made for these items based upon percent complete, less retainage.

B. Payment for the Electrical Equipment and Materials will be made at the lump sum price named in the Bid Schedule under Item No. 4, which price shall constitute full and total compensation for furnishing all of the electrical equipment required for the electrical improvements, including but not limited to, a new triplex pump control panel, wet well service rack, room ventilation fan, materials for a building grounding counterpoise, a new battery charging system for the existing emergency generator, and miscellaneous equipment such as light fixtures, fan, switches, junction boxes, conduits, wires, etc. as required to provide a complete and operational system as shown and specified in the Contract Documents.

1.07 ELECTRICAL MODIFICATIONS AND INSTALLATION (Bid Item No. 5)

A. Periodic payment will be made for these items based upon percent complete, less retainage.

B. Payment for the Electrical Modifications and Installation will be made at the lump sum price named in the Bid Schedule under Item No. 5, which price shall constitute full and total compensation for all labor and minor incidentals required to fully install all of the new electrical equipment and components, including but not limited to mounting, securing, fitting and installing the new equipment, installing all conduit and wire, making all electrical connections required, installing and connecting a building grounding counterpoise and connecting the electrical grounding systems, and the relocation of miscellaneous existing components such as switches, junction boxes, etc., as required to provide a complete and operational system as shown and specified in the Contract Documents.

1.08 RTU SYSTEM INSTALLATION (Bid Item No. 6)

A. Periodic payment will be made for this item based upon percent complete, less retainage.

B. Payment for the RTU System Installation will be made at the lump sum price named in the Bid Schedule under Item No. 6, which price shall constitute full and total compensation for installing the Owner-furnished SCADA control system. Such price shall include the pick-up and delivery of the Owner-furnished RTU Kit, constructing the concrete antenna foundation, furnishing and installing a 40-foot Rohn antenna tower, installing the furnished antenna and radio unit, providing and installing all conduit and wire, including making all electrical connections, and providing all hardware and incidentals as required to provide a complete and operational system as shown and specified in the Contract Documents.

1.09 ALLOWANCE (Bid Item No. 7)

A. Payment for work related to this item will be made for resolution of Owner-approved unforeseen construction conflicts, and/or minor amendments to the Contract Documents. The Contractor shall not be entitled to an amount of monies for this item unless authorized in writing by the Owner. Payment for this item will be made based upon a negotiated lump sum or based on time...
and materials. The Contractor shall produce documentation upon request to verify costs. Only fees substantiated and approved by the Owner shall be paid as part of this bid item in accordance with the requirements of the Contract Documents. Any excess remaining at the end of the project will be recovered by deductive change order.

B. Payment for authorized contract amendments shall be made in accordance with the provisions of the Contract Documents. Allowance monies remaining at the completion of the project, inclusive of all authorized contract amendments, will be returned to the Owner.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION
PART 1 - GENERAL

1.01 PAY REQUEST SUBMISSION

A. Submit Periodic Pay Estimates to the Engineer and Owner in accordance with the schedule and format established by the Contract Documents.

1.02 FORMAT AND DATA REQUIRED

A. Submit Periodic Pay Estimates typed on forms provided by the Owner, with itemized data typed on 8 1/2-inch x 11 inch white paper continuation sheets. Please note Section 00830 does not contain a Periodic Pay Estimate form. The Owner shall prepare a custom Periodic Pay Estimate form and shall provide same in electronic or printed format, at the choice of the Contractor, subsequent to issuing the Notice to Proceed.

B. Owner will use the approved Bid Schedule (see Section 00300), or approved Schedule of Values (Section 01370) as the basis for preparing the custom Periodic Pay Estimate form.

1.03 PREPARATION OF PERIODIC PAY ESTIMATES

A. Application Form (Pages 1 and 2):

1. Fill in required information, including that for Change Orders fully executed prior to closing date of the Periodic Pay Estimate. Enter Pay Estimate Number and date.

2. Fill in summary of dollar values to agree with respective totals indicated and derived on continuation sheets.

3. Execute Contractor's certification with signature of a responsible officer of Contract firm. Payments will not be processed without this certification.

B. Continuation Sheets (Page 3 and following, as needed):

1. Fill in total list of all scheduled component items of work, with item number and scheduled dollar value for each item, as shown on approved Schedule of Values. Adhere to Owner’s detailed instructions provided with the original copy of the Periodic Pay Estimate form. Verify each entry with Owner’s project Representative.

2. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored in accordance with the requirements of these Contract Documents. Round off values to nearest dollar, or as specified for Schedule of Values.
3. List each Change Order executed prior to the closing date of submission, at the end of the continuation sheets. List by Change Order Number, and description, as for an original component item of work.

4. Include “Indemnification” and “Compliance with Trench Safety Act” on Pay Schedule.

5. To receive approval for payment on component material stored on site, submit copies of the original paid invoices with the Periodic Pay Estimate. Any materials stored on site that are included in the pay request must be installed prior to the next pay request submitted.

6. As provided for on the first page of the Periodic Pay Estimate form, the Contractor shall certify, for each current pay request, that all previous progress payments received from the Owner, under this Contract, have been applied by the Contractor to discharge in full all obligations of the Contractor in connection with Work covered by the Periodic Pay Estimate, and all materials and equipment incorporated into the Work are free and clear of all claims, security interest and encumbrances.

7. Waivers of Right to Claim Against the Payment Bond: With each Periodic Pay Estimate the Contractor shall submit Waivers of Right to Claim Against the Payment Bond, on the forms provided in the Contract Documents, from all subcontractors (and all suppliers) having any activity for the construction period covered by the application.

   a) Submit Waiver of Right to Claim Against the Payment Bond on each item for the amount requested, prior to deduction for retainage, on each item.

   b) When an application shows completion of an item, submit Waiver of Right to Claim Against the Payment Bond (Final Payment).

   c) The Owner reserves the right to designate which entities involved in the Work must submit waivers, but shall do so in accordance with Section 255.05 of the Florida Statutes.

   d) The Contractor is reminded that periodic and final waivers are required by law from every entity involved with the performance of Work, including material and/or equipment suppliers, covered by any Periodic Pay Estimate, who could lawfully be entitled to a claim.

C. Initial Periodic Pay Estimate: Administrative actions and submittals that must precede or coincide with submittal of the first Periodic Pay Estimate include the following:

1. List of Subcontractors.
2. List of principal suppliers and fabricators.
3. Initial Progress Schedule.
4. Shop drawing submittal schedule.
5. Certificates of insurance and insurance policies.

D. Periodic Pay Estimate at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit a Periodic Pay Estimate. This application shall reflect any Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work. Administrative actions and submittals that shall precede or coincide with this application include:

1. Occupancy permits and similar approvals.
2. Warranties (guarantees) and maintenance agreements.
3. Test/adjust/balance records.
5. Meter readings.
7. Change over information related to owner’s occupancy, use, operation, and maintenance.
8. Final Cleaning.
9. Change of door locks to Owner’s access.
10. Final progress photographs, as applicable.

E. Final Periodic Pay Estimate: Administrative actions and submittals which must precede or coincide with submittal of the Final Periodic Pay Estimate include the following:

1. Completion of Project closeout requirements.
2. Completion of items specified for completion after Substantial Completion.
3. Transmittal of required Project construction records to owner.
4. Removal of temporary facilities and services.
5. Removal of surplus materials, rubbish and similar elements.
6. Certified property survey.
7. Proof that taxes, fees, and similar obligations have been paid.
8. Maintenance Bond.
9. Waiver of Right to Claim Against the Payment Bond (Final Payment) for each Subcontractor, supplier, and vendor.

1.04 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

A. When the Owner or the Engineer requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying:

1. Project.
2. Application number and date.
3. Detailed list of enclosures.
4. For stored products:
a) Item number and identification as shown on application.
b) Description of specific material.

B. Submit one copy of data and cover letter for each copy of application.

C. Construction Progress Schedule:

1. The Contractor shall submit up to date, revised progress schedules on a monthly basis with each Periodic Pay Estimate. See Specification Section 01310 for more information.

2. No Periodic Pay Estimates will be processed by Owner until the corresponding, current construction progress schedule has been received. The submitted progress schedule is subject to Engineer approval each month. If the Contractor does not gain Owner and Engineer approval of any schedule update, the following Periodic Pay Estimate will not be considered until such approval is obtained.

D. Project Record Documents:

1. During construction, Contractor shall keep a marked up, current set of record document drawings on-site as the accurate record of all deviations between work as shown and as installed. These drawings shall be available to the Owner and Engineer for inspection at any time. See Specification Section 01720 for additional information.

2. In accordance with specification section 01050, the Contractor shall retain the services of a registered land surveyor licensed in the State of Florida for purposes including record document preparation.

3. In accordance with Specification Section 01720, the Contractor shall be required to display the current record documents to the Owner and/or Engineer at the weekly progress meeting. The purpose of this submittal is to ensure that "As-Built" records are being kept up to date by the Contractor.

4. If the record documents are not kept up to date to the satisfaction of the Owner or Engineer, or the submission is not made by the requested day and time, monies may be retained from the Contractor's Periodic Pay Estimates.

1.05 PREPARATION OF FINAL PERIODIC PAY ESTIMATE

A. Fill in Application form as specified for progress payments.

B. Indicate appropriate, sequential number in the spaces marked "Pay Estimate No.", and add the word "FINAL" (Ex: "Pay Estimate No. 18 - FINAL")

1.06 SUBMITTAL PROCEDURE

A. Submit Periodic Pay Estimate to the Engineer at the time stipulated in the Agreement.
B. Number of originals (original signature required) for each Periodic Pay Estimate:

1. Owner: Three (3) copies
2. Engineer: One (1) copy
3. Contractor: One (1) copy

C. When the Engineer finds Application properly completed and correct, they will transmit originals for payment to Owner. After Processing, the Owner will then forward one copy for Contractor's files.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION
PART 1 - GENERAL

1.01 WORKMANSHIP, MATERIAL AND EQUIPMENT

A. When a particular product is specified or called for, it is intended and shall be understood that the proposal tendered by the Contractor included those products in his bid. The alternate product or products submitted by the Contractor shall meet the requirements of the specifications and shall, in all respects, be equal to the products specified by name herein.

B. All apparatus, mechanism, equipment, machinery and manufactured articles for incorporation into the Work shall be the new and unused standard products of recognized reputable Manufacturers.

1.02 RESPONSIBILITY OF CONTRACTOR

A. The Contractor shall be responsible for the entire Work determined by the Drawings, Specifications and Contract from the date of the starting of the Work until it is accepted as evidence of approval of the Completion Certificate by the Owner. Contractor shall be responsible for removals, renewals and replacements due to action of the elements and all other causes except as otherwise provided in the Specifications. The Contractor shall keep the Contract under his own control and it shall be his responsibility to see that the Work is properly supervised and carried on faithfully and efficiently. The Contractor shall supervise the work personally or shall have a competent, English speaking superintendent or representative, who shall be on the site of the project at all working hours, and who shall be fully authorized by the Contractor to direct the performance of the work and to make arrangements for all necessary materials, equipment and labor without delay.

B. Renewals or repairs necessitated because of defective materials or workmanship, or due to action of the elements or other natural causes, including fire and flood, prior to the acceptance as determined by the Completion Certificate, as appropriate, shall be done anew in accordance with the Contract and Specifications at the expense of the Contractor.

1.03 PROVISIONS FOR CONTROL OF EROSION

A. Sufficient precautions shall be taken during construction to minimize the run-off of polluting substances such as silt, clay, fuels, oils, bitumens, calcium chloride, or other polluting materials harmful to humans, fish, or other life, into the supplies and surface waters of the state. Control measures must be adequate to assure that turbidity in the receiving water will not be increased more than 10 nephelometric turbidity units (NTUs), or as otherwise required by the state or other controlling body, in water used for public water supply or fish unless limits have been established for the particular water. In surface water used for other purposes, the turbidity must not exceed 25 NTU unless otherwise permitted. Special precautions shall be taken in the use of construction equipment to prevent operations which promote erosion.
B. Erosion evident within the limits of construction shall be the responsibility of the Contractor during the full term of the contract and for the full two (2) year guarantee period. Areas subject to erosion during this time shall be fully restored to original or design conditions (as applicable) within 10 days of notice to the Contractor.

1.04 ON SITE STORAGE

A. The Contractor’s attention is invited to special storage requirements and possible charges for noncompliance of on site storage requirements for materials and equipment as specified in Section 01600.

1.05 HURRICANE PREPAREDNESS PLAN

A. Within 30 days of the date of Notice to Proceed, the Contractor shall submit to the Engineer and Owner a Hurricane Preparedness Plan. The plan should outline the necessary measures which the Contractor proposes to perform at no additional cost to the Owner in case of a hurricane warning. Such measures shall be in accordance with local and state requirements.

B. In the event of inclement weather, Contractor will, and will cause Subcontractors to protect carefully the Work and materials against damage or injury from the weather. If, in the opinion of Engineer, any portion of Work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or Subcontractors to so protect the Work, such Work and materials shall be removed and replaced at the expense of Contractor.

1.06 WARRANTIES

A. Unless specified otherwise in the Contract Documents, all equipment supplied under these Specifications shall be warranted by the Contractor and the equipment Manufacturers for a period of two (2) years. Warranty period shall commence on the date of final acceptance by the Brevard County Board of County Commissioners.

B. The equipment shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment should fail during the warranty period, it shall be replaced in the machine(s) and the unit(s) restored to service at no expense to the Owner.

C. The Manufacturer’s warranty period shall run concurrently with the Contractor’s warranty or guarantee period. No exception to this provision shall be allowed. The Contractor shall be responsible for obtaining equipment warranties in accordance with Section 01740 from each of the respective supplier or Manufacturers for all the equipment specified. The form of warranty is included at the end of this section.

1.07 UTILITY CROSSINGS

A. It is intended that wherever existing utilities such as water, chemical, electrical or other service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated on the Drawings.
B. However, when in the opinion of the Owner or Engineer this procedure is not feasible, Contactor may employ fittings for a utility crossing as directed by the Engineer.

1.08 CONSTRUCTION CONDITIONS AND SUBSURFACE INVESTIGATION

A. The Contractor shall strictly adhere to the specific requirements of the governmental unit(s) or agency(ies) having jurisdiction over the work. Wherever there is a difference in the requirements of a jurisdictional body and these Specifications, the more stringent shall apply.

B. The Contractor shall be responsible for having determined to his satisfaction, prior to the submission of his bid, the nature and location of the work, the conformation of the ground, the character and quality of the substrata, the types and quantity of materials to be encountered, the nature of the groundwater conditions, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions and all other matters which can in any way affect the work under this contract. The prices established for the work to be done will reflect all costs pertaining to the work. Any claims for extras based on substrata, groundwater table, and other such conditions will not be allowed.

1.09 PUBLIC NUISANCE

A. The Contractor shall not create a public nuisance including but not limited to encroachment on adjacent lands, flooding of adjacent lands, excessive noise, or unnecessary and avoidable impacts to motorists, bicyclists, and pedestrians utilizing the streets, driveways and parking lots, or other properties in the project area.

B. If the Contractor requires the use of adjacent lands, a temporary easement or written contract with the property owner must first be negotiated, secured, paid for and obtained by the Contractor. This requirement applies to work areas and to lay down, staging, and temporary storage or office areas.

C. Dewatering activities and any other construction process or method which produces ground water or storm water runoff from the project site shall be conducted in a manner which prevents flooding of adjacent lands. All excess water from any source shall be directed to appropriate drainage systems capable of accommodating the excess flows.

D. Sound levels measured by the Owner shall not exceed 55 dBA 7 PM to 7 AM or 65 dBA 7 AM to 7 PM. This sound level is to be measured at the Owner’s property line. It is the obligation of the Contractor to achieve these limits through proper construction equipment selection, temporary sound attenuation barriers, or other acceptable means. Sound levels in excess of these values are sufficient cause to have the work halted until equipment can be quieted to these levels. Work stoppage by the Engineer or Owner due to excessive noise shall not relieve the Contractor of the other portions of this specification including, but not limited to contract time and contract price.

E. In establishing Maintenance of Traffic Plans, work task schedules, and construction methods, the Contractor must fully consider minimizing impacts to motorists and pedestrians. Work
stoppage by the Engineer or Owner due to unnecessary public impacts shall not relieve the Contractor of the other portions of this specification including, but not limited to contract time and contract price.

F. No extra charge may be made for time lost due to work stoppage resulting from the creation of a public nuisance.

1.10 SUSPENSION OF WORK DUE TO WEATHER

A. During inclement weather, all work which might be damaged or rendered inferior by such weather conditions shall be suspended. The orders and decisions of the Engineer as to suspensions shall be final and binding. The ability to issue such an order shall not be interpreted as a requirement to do so. During suspension of the work from any cause, the work shall be suitably covered and protected so as to preserve it from injury by the weather or otherwise; and, if the Engineer shall so direct, the rubbish and surplus materials shall be removed.

1.11 RELOCATIONS

A. The Contractor shall be responsible for the relocation of structures, including but not limited to light poles, signs, sign poles, fences, piping, conduits and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such relocations shall be included in the bid with the associated item requiring the relocations.

1.12 SALVAGE

A. Any existing equipment or material, including but not limited to, valves, pipes, fittings, couplings, etc., which is removed or replaced as a result of construction under this project may be designated as salvage by the Engineer or Owner and if so, shall be excavated, if necessary and delivered, to the Owner at a location directed by the Owner, at the Contractor’s expense. All such salvage shall be at the Owner’s discretion. Items refused by the Owner shall become the property of or shall be properly disposed of by the Contractor.

1.13 PERMITS

A. Upon notice of award, the Contractor shall immediately apply for all applicable permits not previously obtained by the Owner to do the work from the appropriate governmental agency or agencies. (See also Section 01065.) No work shall commence until all applicable permits have been obtained and copies delivered to the Engineer. Except as provided elsewhere in these Contract Documents, the costs for obtaining all permits shall be borne by the Contractor.

1.14 NOTIFICATION OF WORK ON EXISTING FACILITIES

A. Before commencing work on any of the existing structures or equipment, the Contractor shall notify the Engineer, in writing, at least 10 calendar days in advance of the date he proposes to commence such work.
1.15 EASEMENT FOR WORK ON PRIVATE PROPERTY

A. The Contractor shall maintain his construction operations within the presently existing property boundaries, road rights-of-way, and established easements throughout the project. In the event that the Contractor deems it necessary or advisable to operate beyond the limits of the existing property boundaries, rights-of-way or established easements, Contractor shall be responsible for making special agreements with the affected property owners. The Owner will not secure easements for additional working room.

B. The Contractor shall maintain construction operations within the presently existing property boundaries, road rights-of-way, and established easements throughout the project. In the event that the Contractor deems it necessary or advisable to operate beyond the limits of the existing property boundaries, rights-of-way or established easements, Contractor shall be responsible for making special agreements with the affected property owners. Immediately after an award of contract is made, the Contractor shall submit to the Owner a listing of those areas in which Contractor deems it to be necessary to work outside of the prescribed areas. The listing shall be subject to the approval of the Owner and as construction areas are secured, copies of all written agreements shall be placed on file with the Owner and Engineer.

1.16 CLAIMS FOR PROPERTY DAMAGE

A. Upon notification by the Owner or Engineer, the Contractor shall investigate each claim for property damage and shall file, within ten (10) days of such notification, a statement with Owner and Engineer setting forth all facts and details relative to such claim.

1.17 EXISTING UNDERGROUND PIPING, STRUCTURES AND UTILITIES

A. The locations of existing underground utilities are from information obtained from the respective utility companies and other sources. The locations are shown without express or implied representation, assurance, or guarantee that they are complete or correct or that they represent a true picture of underground piping to be encountered. It is the Contractor’s responsibility to contact the state-sponsored central locate center and/or local existing utilities at least 48 hours prior to planned digging.

1.18 CLEAN-UP AND DUST CONTROL

A. At all times during the prosecution of the work, the Contractor shall maintain sufficient forces to clean up and control dust. Control of blowing litter or dust caused by any re-grading or other task by the Contractor shall be the responsibility of the Contractor.

1.19 CONNECTIONS TOEXISTING SYSTEMS

A. The Contractor shall perform all work necessary to locate, excavate and prepare for connections to the terminus of the existing systems all as shown on the Drawings or where directed by the Engineer. The cost of this work and for the actual connection of the existing mains shall be included in the bid for the project and shall not result in any additional cost to the Owner.
1.20 COORDINATION OF WORK

A. The Contractor shall afford other contractors and the Owner reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work and shall properly connect and coordinate the Work with such other work. The Contractor shall coordinate his Work with the Owner and other contractors to store apparatus, materials, supplies and equipment in such orderly fashion at the site of the Work as will not unduly interfere with the progress of the Work or the work of any other contractors.

B. If the execution or result of any part of the Work depends upon any work of the Owner or of any separate contractor, the Contractor shall, prior to proceeding with the Work, inspect and promptly report to the Owner in writing any apparent discrepancies or defects in such work of the Owner or of any separate contractor that render it unsuitable for the proper execution or result of any part of the Work.

C. Failure of the Contractor to so inspect and report shall constitute an acceptance of the Owner’s or separate contractor’s work as fit and proper to receive the Work.

D. Should the Contractor cause damage to the work or property of the Owner or of any separate contractor on the Project, or to other work on the Site, or delay or interfere with the Owner’s work on ongoing operations or facilities or adjacent facilities or said separate contractor’s work, the Contractor shall be liable for the same; and, in the case of another contractor, the Contractor shall attempt to settle said claim with such other contractor prior to such other contractor’s institution of litigation or other proceedings against the Contractor.

E. If such separate contractor sues the Owner on account of any damage, delay or interference caused or alleged to have been so caused by the Contractor, the Owner shall notify the Contractor, who shall defend the Owner in such proceedings at the Contractor’s expense. If any judgment or award is entered against the Owner, the Contractor shall satisfy the same and shall reimburse the Owner for all damages, expenses, attorney's fees and other costs which the Owner incurs as a result thereof.

F. Should a separate contractor cause damage to the Work or to the property of the Contractor or cause delay or interference with the Contractor’s performance of the Work, the Contractor shall present directly to said separate contractor any claims it may have as a result of such damage, delay or interference (with an information copy to the Owner) and shall attempt to settle its claim against said separate contractor prior to the institution of litigation or other proceedings against said separate contractor.

G. In no event shall the Contractor seek to recover from the Owner or the Engineer, and the Contractor hereby represents to the Owner and the Engineer that it will not seek to recover from them, or either of them, any costs, expenses, (including, but not limited to, attorney's fees) or losses of profit incurred by the Contractor as a result of any damage to the Work or property of the Contractor or any delay or interference caused or allegedly caused by any separate contractor.
H. Any difference or conflict which may arise between the Contractor and other contractors who may be performing work in behalf of the Owner, or between the Contractor and workmen of the Owner in regard to their work shall be adjusted and determined by the Engineer. If the work of the Contractor is delayed because of any acts of omissions of any other contractor of the Owner, the Contractor shall on that account have no claim against the Owner other than for an extension of time.

1.21 FINAL GUARANTEE

A. All work shall be guaranteed by the Contractor for a period of two years from and after the date of acceptance of the work by the Owner.

B. If, within the guarantee period, repairs or changes are required in connection with guaranteed work, which, in the opinion of the Engineer, is rendered necessary as the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, the Contractor shall, promptly upon receipt of notice from the Owner and without expense to the Owner, do the following:

1. Place in satisfactory condition in every particular all of such guaranteed work and correct all defects therein.

2. Make good all damage to the building or site, or equipment or piping or contents thereof, which, in the opinion of the Engineer, is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the contract.

3. Make good any work or material, or the equipment and contents of building, structure or site disturbed in fulfilling any such guarantee.

C. If the Contractor, after notice, fails within ten days to proceed to comply with the terms of this guarantee, the Owner may have the defects corrected, and the Contractor and his surety shall be liable for all expense incurred, provided, however, that in case of an emergency where, in the opinion of the Owner, delay would cause loss or damage, repairs may be started without notice being given to the Contractor and the Contractor shall pay the cost thereof.

D. All special guarantees or warranties applicable to specific parts of the work as may be stipulated in the Contract Specifications or other papers forming a part of this Contract shall be subject to the terms of this paragraph during the first year of life of each such guarantee. All special guarantees and manufacturers’ warranties shall be assembled by the Contractor and delivered to the Engineer, along with a summary list thereof, before the acceptance of the work.

1.22 RIGHTS IN AND USE OF MATERIALS FOUND ON THE WORK

A. The Contractor, with the approval of the Engineer, may use on the project such stone, gravel, sand, or other material determined suitable by the Engineer, as may be found in the excavation and will be paid both for the excavation of such materials at the corresponding Contract unit
price and for the pay item for which the excavated material is used. Contractor shall replace at his own expense with other acceptable material all of that portion of the excavation materials so removed and used which was needed for use in the embankments, backfills, approaches, or otherwise. No charge for the materials so used will be made against the Contractor.

PART 2 - PRODUCTS  (NOT USED)

PART 3 - EXECUTION  (NOT USED)

END OF SECTION
SECTION 01041

PROJECT COORDINATION

PART 1 - GENERAL

1.01 COMMITMENT

A. The Contractor shall furnish personnel and equipment which will be efficient, appropriate and large enough to secure a satisfactory quality of Work and a rate of progress which will ensure the completion of the Work within the time stipulated in the Contract.

1.02 PRIVATE LAND

A. The Contractor shall not enter or occupy private land outside of the site, except by written permission of the appropriate owners. Contractor shall provide Owner a copy of such written permission.

1.03 PIPE AND EQUIPMENT LOCATIONS

A. Pipelines and equipment shall be located substantially as indicated on the Drawings, however, Engineer reserves the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons. Where fittings are noted on the Drawings, such notation is for the Contractor's convenience and does not relieve them from laying and jointing different or additional items where required.

1.04 OPEN EXCAVATIONS

A. All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons, and damage to property. The Contractor shall, at no additional expense to Owner or Engineer, provide suitable and safe bridges and other crossings for accommodating travel by plant operators and workmen.

1.05 TEST PITS

A. Test pits for the purpose of locating underground pipeline or structures in advance of the construction shall be excavated and backfilled by the Contractor. Test pits shall be backfilled and compacted immediately after their purpose has been satisfied and maintained in a manner satisfactory to the Engineer. The costs for such test pits shall be borne by the Contractor.

1.06 MAINTENANCE OF TRAFFIC

A. Unless permission to close a street is received in writing, by Owner from Contractor, from the
proper authority (County, City, FDOT, etc.), all excavated material shall be placed so that
vehicular and pedestrian traffic may be maintained at all times. If the Contractor's operations
cause traffic hazards, Contractor shall repair the road surface, provide temporary ways, erect
wheel guards or fences, or take other measures for safety satisfactory to the Engineer.

B. Detours around construction will be subject to the acceptance of the Owner and the Engineer.
Where detours are permitted, the Contractor shall provide all necessary barricades and signs
as required to divert the flow of traffic. While traffic is detoured the Contractor shall expedite
construction operations and periods when traffic is being detoured will be strictly controlled
by the Owner.

C. The Contractor shall take precautions to prevent injury to the public due to open trenches.
Night watch may be required where special hazards exist, or police protection provided for
traffic while work is in progress. The Contractor shall be fully responsible for damage or
injuries whether or not police protection has been provided.

1.07 CARE AND PROTECTION OF PROPERTY

A. The Contractor shall be responsible for the preservation of all public and private property, and
shall use every precaution necessary to prevent damage thereto. If any direct or indirect
damage is done to public or private property by or on account of any act, omission, neglect, or
misconduct in the execution of the Work on the part of the Contractor, such property shall be
restored by the Contractor, at no additional expense to Owner or Engineer, to a condition
similar or equal to that existing before the damage was done, or Contractor shall make good
the damage in other manner acceptable to the Owner and Engineer.

1.08 COOPERATION WITHIN THIS CONTRACT

A. All firms or persons authorized to perform any Work under this Contract shall cooperate with
the Contractor and his subcontractors or trades, and shall assist in incorporating the work of
other trades where necessary or required.

B. Cutting and patching, drilling, and fitting shall be carried out where required by the trade or
subcontractor having jurisdiction, unless otherwise indicated herein or directed by the
Engineer.

1.09 PROTECTION OF CONSTRUCTION AND EQUIPMENT

A. All newly constructed work shall be carefully protected from injury in any way. No wheeling
or walking or placing of heavy loads on it shall be allowed and all portions injured shall be
reconstructed by the Contractor at no additional expense to Owner or Engineer.

B. All structures shall be protected in a manner accepted by the Engineer. Should any of the
floors or other parts of the structures become heaved, cracked or otherwise damaged, all such damaged portions of the Work shall be completely repaired and made good by the Contractor at no additional expense to Owner or Engineer, and to the satisfaction of the Engineer. If, in the final inspection of the Work, any defects, faults or omissions are found, the Contractor shall cause the same to be repaired or removed and replaced by proper materials and workmanship without extra compensation for the materials and labor required. Further, the Contractor shall be fully responsible for the satisfactory maintenance and repair of the construction and other work undertaken herein, for at least the guarantee period described in the Contract.

C. The Contractor shall take all necessary precautions to prevent damage to any structure due to water pressure during and after construction and until such structure is accepted and taken over by the Owner.

1.10 COOPERATION WITH OTHER CONTRACTS

A. It shall be necessary for the Contractor to plan his work and cooperate with other contractors, if present, insofar as possible to prevent any interference and delay.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION
SECTION 01047

MODIFICATIONS TO EXISTING STRUCTURES, PIPING AND EQUIPMENT

PART 1 - GENERAL

1.01  SCOPE OF WORK

A. Furnish all labor, materials, equipment and incidentals required to modify, alter and/or convert existing structures as shown or specified and as required for the installation of new mechanical equipment, piping and appurtenances. Work shall be performed within the requirements of Special Project Procedures in Section 01030 and required Construction Scheduling in Section 01310. Existing piping and equipment shall be removed and dismantled as necessary for the performance of structural alterations in accordance with the requirements herein specified and shown on the Drawings.

1.02  RELATED WORK

A. General and Supplementary, and Special Conditions of the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01  GENERAL

A. The Contractor shall cut, repair, reuse, excavate, demolish or otherwise remove parts of the existing structures or appurtenances, as indicated on the Contract Drawings, herein specified, or necessary to permit completion of the work under this Contract.

B. Blasting with explosives will not be permitted to complete any work under this Contract. Care shall be taken not to damage any part of existing buildings, foundations and exterior structures both below and above ground.

C. No existing structure, equipment, or appurtenance shall be shifted, cut, removed, or otherwise altered except with the express approval of and to the extent approved by the Engineer.

D. When removing materials or portions of existing structures and when making openings in walls and partitions, the Contractor shall take all precautions and use all necessary barriers and other protective devices so as not to damage the structures beyond the limits necessary for the new work, nor to damage the structures or contents by falling or flying debris.
E. Materials and equipment removed in the course of making alterations and additions shall remain the property of the Owner, except that items not salvageable or not identified as Owner salvage, as determined by the Engineer and the Owner, shall become the property of the Contractor to be disposed of by Contractor off the site of the work at Contractor’s own place of disposal.

F. All work of altering existing structures shall be done at such time and in such manner as will comply with the approved time schedule. So far as possible before any part of the work is started, all tools, equipment, and materials shall be assembled and made ready so that the work can be completed without delay.

G. All workmanship and new materials involved in constructing the alterations shall conform to the General Specifications for the classes of work insofar as such specifications are applicable.

H. All cutting of existing masonry or other material to provide suitable bonding to new work shall be done in a manner to meet the requirements of the respective section of these specifications covering the new work. When not covered, the work shall be carried on in the manner and to extent directed by the Engineer.

I. Where holes in existing masonry are required to be sealed, unless otherwise herein specified, they shall be sealed with grout, cement mortar, or concrete. The sides of the openings shall be provided with keyed joints and shall be suitably roughened to furnish a good bond and make a watertight joint. All loose or unsound material adjacent to the opening shall be removed and, if necessary, replaced with new material. The method of placing the mortar seal shall provide a suitable means of releasing entrapped air.

J. Surfaces of seals visible in the completed work shall be made to match as nearly as possible the adjacent surfaces.

K. Nonshrink grout shall be used for setting wall castings, sleeves, leveling pump bases, doweling anchors into existing concrete and elsewhere as shown.

L. Operating equipment shall be thoroughly cleaned and then lubricated and greased for protection during prolonged storage.

M. The Contractor shall provide flumes, hoses, piping, etc. to divert or provide suitable plugs, bulkheads or other means to hold back the flow of wastewater, water or other liquids, all as required in the performance of the work under this Contract.

3.02 CONNECTING TO EXISTING PIPING AND EQUIPMENT

A. The Contractor shall verify exact location, material, alignment, joint, etc. of existing piping and equipment prior to making the connections called out in the Drawings. The verifications
shall be performed with adequate time to correct any potential alignment or other problems prior to the actual time of connection.

B. The Contractor shall dismantle and remove all existing walkways, supports, equipment, piping and other appurtenances required for the completion of the work. Where called for or required, Contractor shall cut existing pipelines for the purpose of making connections thereto. Anchor bolts for equipment and structural steel removed shall be cut off one inch below the concrete surface. Surface shall be finished as specified in Division 3.

C. Where necessary or required for the purpose of making connections, the Contractor shall cut existing pipe lines in a manner to provide an approved joint. Where required, Contractor shall weld beads, provide alignment flanges or provide Dresser Couplings, all as needed to accomplish the proposed connections, whether or not such additional items of work are indicated on the drawings.
SECTION 01050
FIELD ENGINEERING AND SURVEYING

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Survey work, as required in execution of the Project.

B. Civil, structural or other professional engineering services specified or required to execute Contractor's construction methods.

C. Identify property benchmarks.

D. The accuracy of any method of staking shall be the responsibility of the Contractor. All engineering for vertical and horizontal control shall be the responsibility of the Contractor.

E. The Contractor shall be held responsible for the preservation of all benchmarks, stakes, and marks. If any benchmarks, stakes, or marks are carelessly or willfully disturbed by the Contractor, the Contractor shall not proceed with any work until they have restored such items and have established such points, marks, lines and elevations as may be necessary for the prosecution of the work.

F. The Contractor shall retain the services of a registered land surveyor currently licensed in the State of Florida to identify existing control points and maintain survey and record information during construction.

1.02 QUALIFICATIONS OF SURVEYOR OR ENGINEER

A. Qualified engineer or registered land surveyor, acceptable to the Owner and the Engineer.

B. Registered professional engineer of the discipline required for the specific service on the Project, currently licensed in the State of Florida.

1.03 SURVEY REFERENCE POINTS

A. Contractor shall locate and protect control points prior to starting site work, and preserve all permanent reference points during construction. Contractor shall:

1. Make no changes or relocations without prior written notice to the Engineer.
2. Report to the Engineer when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.

3. Require surveyor to replace Project control points which may be lost or destroyed at no additional cost to the Owner. Establish replacement based on original survey control.

1.04 PROJECT SURVEY REQUIREMENTS

A. Establish a minimum of two permanent bench marks on site, referenced to data established by survey control points.

1. Record locations, with horizontal and vertical data, on Project Record Documents.

B. Establish lines and levels, locate and layout, by instrumentation and similar appropriate means:

1. Site improvements:
   a) Piping slopes, invert elevations, fitting locations and elevations, manhole location and elevations, etc.
   b) Final site elevations
   c) Stormwater structures.
   d) Building foundations, column locations and floor elevations.

C. On a monthly basis, verify layouts by same methods to be submitted as part of each Periodic Pay Estimate.

1.05 RECORDS

A. Maintain a complete, accurate log of all control and survey work as it progresses.

B. At the end of the project, submit a Record Drawing markup set of the original Drawings, indicating the building corners and location of all structures, and road intersections, horizontal and vertical location of all valves, fittings, existing utilities encountered, etc. in accordance with Engineer’s instruction.

1.06 SUBMITTALS
A. Submit name and address of surveyor and professional engineer to the Engineer in the form of a Shop Drawing.

B. Submit documentation to verify accuracy of field engineering work.

C. Submit certificate signed by licensed engineer certifying that elevations and locations of improvements are in conformance with the Contract Documents, or if not in conformance, certify as to variances from the Contract Documents.

D. Submit drawings showing locations of all structures constructed. This drawing shall be included with the project record documents.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION
SECTION 01065

PERMITS AND FEES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Unless otherwise specified, the Contractor shall obtain and pay for all permits and licenses related to his work, including but not limited to, Brevard County Building Division, except as otherwise provided herein.

B. Permits by Owner: The Owner prior to the advertisement of the project has applied for permits with the following agencies. The Contractor shall request copies of these permits and shall comply with all provisions therein:

1. None.

C. NPDES Permit: Any site dewatering for structures or trench work under construction shall conform to the requirements of an NPDES permit and CUP permits, if needed. See also Appendix B.

D. Local Permits: The Contractor shall apply and obtain all other applicable local permits for the construction effort. Payment for such permits, shall be identified by the governing agency after the permit has been applied for, and this amount shall be made known to the Owner for prompt payment by the Owner. This requirement may also include the following tasks to be performed by the Contractor:

1. Pre-stamped and addressed post cards for mailing to subcontractors.


3. Evidence of certification as a Class I or Class II Contractor (State).

4. Copy of Worker's Compensation Certificate of Insurance.

5. Owners authorization.

E. Work shall be conducted and shall result in construction of the requirements of this project in full accordance with the conditions of the permits granted for the project.
PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION
SECTION 01090

REFERENCE STANDARDS

PART 1 - GENERAL

1.01 GENERAL

A. Titles of Sections and Paragraphs: Titles and subtitles accompanying specification sections and paragraphs are for convenience and reference only and do not form a part of the Specifications.

B. Applicable Publications: Whenever in these Specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is indicated, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the Contract is advertised for Bids shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth in the Specifications or shown on the Drawings will be waived because of any provision of or omission from said standards or requirements.

C. Specialists, Assignments: In certain instances, specification text requires (or implies) that specific WORK is to be assigned to specialists or expert entities who must be engaged to perform that WORK. Such assignments shall be recognized as special requirements over which the CONTRACTOR has no choice or option. These requirements shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the WORK; also they are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of WORK is recognized as "expert" for the indicated construction processes or operations. Nevertheless, the final responsibility for fulfillment of the entire set of Contract requirements remains with the CONTRACTOR.

1.02 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. The CONTRACTOR shall construct the WORK in accordance with the Contract Documents and the referenced portions of those referenced codes, standards, and specifications.

is advertised for Bids shall apply to the WORK herein, including all addenda, modifications, amendments, or other lawful changes thereto.

C. In case of conflict between codes, reference standards, drawings, and the other Contract Documents, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the ENGINEER for clarification and direction prior to ordering or providing any materials or furnishing labor. The CONTRACTOR shall bid for the most stringent requirements.

D. References to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

E. References to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

1.03 REGULATIONS RELATED TO HAZARDOUS MATERIALS

A. The CONTRACTOR shall be responsible that all WORK included in the Contract Documents, regardless if indicated or not, shall comply with all EPA, OSHA, RCRA, NFPA, and any other federal, state, and local regulations governing the storage and conveyance of hazardous materials, including petroleum products.

B. Where no specific regulations exist and the OWNER has not waived the requirement in writing, chemical, hazardous, and petroleum product piping and storage in underground locations shall be double containment piping and tanks or be installed in separate concrete trenches and vaults with an approved lining that cannot be penetrated by the chemicals.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION
SECTION 01200

PROJECT MEETINGS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. The Owner will schedule and the Engineer will administer a preconstruction conference. The Contractor shall be responsible for scheduling all monthly construction progress meetings, and specially called meetings throughout the progress of the work. For such meetings, the Contractor shall:

1. Prepare agenda for meetings.
2. Make physical arrangements for meetings.
3. Preside at meetings.
4. Record meeting discussions electronically on a digital audio device.
5. Prepare and distribute either written summary meeting minutes or full, clear copies of the electronic recording files.

B. Representatives of the Contractor, subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.

C. The Owner shall attend meetings to ascertain that Work is expedited consistent with Contract Documents and construction schedules.

1.02 PRECONSTRUCTION CONFERENCE

A. A preconstruction conference shall be scheduled by the Owner and conducted by the Engineer. The Engineer shall prepare and distribute written summary meeting minutes or electronic audio recordings.

B. Location: The location of the conference shall be a central site, designated by the Owner.

C. Attendance Requested:

1. Owner's representative.
2. Resident project representative (RPR).
3. Engineer and their professional consultants.
4. Contractor's representatives.
5. Subcontractor's representatives.
6. Supplier's representatives.
7. Adjacent site neighbors, where appropriate.
8. Others, as appropriate.
D. Suggested Agenda:

1. Introductions and Roles
2. Procedures and processing of:
   a) Requests for Information
   b) Shop Drawings and Submittals
   c) Field Orders
   d) Change Orders
   e) Periodic Pay Estimates
   f) Record drawings
3. Contractor’s Use of Premises, Access, Security
4. Construction Schedule and Sequence of Construction
   a) Schedule Submittal Requirements
   b) Permits
   c) Liquidated Damages
5. Special Work Procedure Plans, as applicable
6. Inspections
7. Testing and acceptance requirements
8. Housekeeping procedures

1.03 MONTHLY PROGRESS MEETINGS

A. Construction progress meetings will be scheduled each month for the duration of the project. The progress meetings will be scheduled by the Contractor at times and locations to be mutually agreed upon.

B. Meetings shall be for the purpose of reviewing the completed progress of the Work and any obstacles or problems that could impact the Contractor’s Project Schedule. See also Section 01310.

C. Location of the meetings: On site, or at other locations selected by the Contractor with the Owner’s consent.

D. Attendance:

1. Engineer and his professional consultants (as needed).
2. Contractor.
3. Owner's representative.
4. Subcontractors (as appropriate to the agenda).
5. Suppliers (as appropriate to the agenda).
6. Others (as appropriate).

E. Suggested Agenda:

1. Review of work progress since previous meeting.
2. Field observations, problems, and conflicts.
3. Problems which impede the Construction Schedule.
4. Review of off-site fabrication and delivery schedules.
5. Corrective measures and procedures to regain projected schedule.
6. Revisions to Construction Schedule.
7. Progress schedule during succeeding work period.
8. Coordination of schedules.
9. Shop Drawing submittals.
11. Pending changes and substitutions.
12. Review proposed changes for:
   a) Effect on Construction Schedule and on completion date.
   b) Effect on other contracts of the Project.
13. Other business.
15. Critical/long-lead items.

F. The Contractor shall lead each construction progress meeting and shall review all previous work efforts to construct the meeting agenda in order to be prepared to discuss pertinent topics regarding progress of the Work.

G. The Contractor is to provide a current Shop Drawing submittal log at each progress meeting in accordance with Section 01340.

H. The Contractor shall distribute summary written minutes or a clear, complete electronic audio recording of each progress meeting to all attendees within three (3) business days after the meeting. Should written minutes be distributed, the Contractor will address any comments received from the Owner or Engineer and shall revise and re-distribute the minutes. All meeting summaries are ultimately subject to the approval of the Owner.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION
SECTION 01300

SUBMITTALS

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

A. This Section specifies the general methods and requirements of submissions applicable to Shop Drawings, Product Data, Samples, Construction Photographs, Submittal Schedules. Additional general submission requirements are contained in the General Conditions. Detailed submittal requirements are specified in the technical Sections.

B. All submittals shall be clearly identified by reference to Section Number, Paragraph, Drawing Number or Detail as applicable. Submittals shall be clear and legible and of sufficient size for presentation of data.

1.02 SHOP DRAWINGS, PRODUCT DATA, SAMPLES

A. Shop Drawings

1. Shop drawings as specified in individual Sections include, custom-prepared data such as fabrication and erection/installation (working) drawings, scheduled information, setting diagrams, actual shopwork manufacturing instructions, custom templates, special wiring diagrams, coordination drawings, individual system or equipment inspection and test reports including performance curves and certifications, as applicable to the work.

2. All shop drawings submitted by subcontractors shall be sent directly to the Contractor for checking. The Contractor shall be responsible for their submission at the proper time so as to prevent delays in delivery of materials.

3. Check all subcontractor's shop drawings regarding measurements, size of members, materials and details to make sure that they conform to the intent of the Drawings and related Sections. Return shop drawings found to be inaccurate or otherwise in error to the subcontractors for correction before submission thereof.

4. All details on shop drawings shall show clearly the relation of the various parts to the main members and lines of the structure and where correct fabrication of the work depends upon field measurements, such measurements shall be made and noted on the drawings before being submitted.

5. Submittals for equipment specified under Divisions 11, 13, 15 and 16 shall include a listing of all installations where identical or similar equipment has been installed and been in operation for a period of at least one year.
B. Product Data

1. Product data as specified in individual Sections include, standard prepared data for manufactured products (sometimes referred to as catalog data), such as the manufacturer's product specification and installation instructions, availability of colors and patterns, manufacturer's printed statements of compliances and applicability, roughing-in diagrams and templates, catalog cuts, product photographs, standard wiring diagrams, printed performance curves and operational-range diagrams, production or quality control inspection and test reports and certifications, mill reports, product operating and maintenance instructions and recommended spare-parts listing and printed product warranties, as applicable to the work.

C. Samples

1. Samples specified in individual Sections include, physical examples of the work such as sections of manufactured or fabricated work, small cuts or containers of materials, complete units of repetitively-used products, color/texture/pattern swatches and range sets, specimens for coordination of visual effect, graphic symbols and units of work to be used by the Engineer or Owner for independent inspection and testing, as applicable to the work.

1.03 CONTRACTOR'S RESPONSIBILITIES

A. Review shop drawings, product data and samples, including those by subcontractors, prior to submission to determine and verify the following:

1. Field measurements

2. Field construction criteria

3. Catalog numbers and similar data

4. Conformance with related Sections

B. Each shop drawing, sample and product data submitted by the Contractor shall have affixed to it the following Certification Statement including the Contractor's Company name and signed by the Contractor: "Certification Statement: by this submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers and similar data and I have checked and coordinated each item with other applicable approved shop drawings and all Contract requirements." Shop drawings and product data sheets 11-in x 17-in and smaller shall be bound together in an orderly fashion and bear the above Certification Statement on the cover sheet. The cover sheet shall fully describe the packaged data and include a listing of all items within the package. Provide to the Resident Project Representative a copy of each transmittal sheet for shop drawings, product data and samples at the time of submittal to the Engineer.

C. The Contractor shall utilize a 10-character submittal identification numbering system in the following manner:

01300-2
1. The first character shall be a D, S, P, or M, which represents Shop/Working Drawing and other Product Data (D), Sample (S), Preliminary Submittal (P), or Operating/ Maintenance Manual (M).

2. The next five digits shall be the applicable Section Number.

3. The next three digits shall be the numbers 001 to 999 to sequentially number each initial separate item or drawing submitted under each specific Section Number.

4. The last character shall be a letter, A to Z, indicating the submission, or resubmission of the same Drawing, i.e., "A=1st submission, B=2nd submission, C=3d submission, etc. A typical submittal number would be as follows:

   D-03300-008-B

   D. = Shop Drawing
   03300 = Section for Concrete
   008 = The eighth initial submittal under this section
   B. = The second submission (first resubmission) of that shop drawing

D. Notify the Engineer in writing, at the time of submittal, of any deviations in the submittals from the requirements of the Contract Documents.

E. The review and approval of shop drawings, samples or product data by the Engineer shall not relieve the Contractor from the responsibility for the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the Contractor and the Engineer will have no responsibility therefor.

F. No portion of the work requiring a shop drawing, sample, or product data shall be started nor shall any materials be fabricated or installed prior to the approval or qualified approval of such item. Fabrication performed, materials purchased or on-site construction accomplished which does not conform to approved shop drawings and data shall be at the Contractor's risk. The Owner will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.

G. Project work, materials, fabrication, and installation shall conform with approved shop drawings, applicable samples, and product data.

1.04 SUBMISSION REQUIREMENTS

A. Make submittals promptly in accordance with approved schedule and in such sequence as to cause no delay in the Work or in the work of any other contractor.

B. Each submittal, appropriately coded, will be returned within 30 working days following receipt of submittal by the Engineer.
C. Number of submittals required:
   1. Shop Drawings: Six copies.
   2. Product Data: Three copies.
   3. Samples: Submit the number stated in the respective Sections.

D. Submittals shall contain:
   1. The date of submission and the dates of any previous submissions.
   2. The Project title and number.
   3. Contractor identification.
   4. The names of:
      a) Contractor
      b) Supplier
      c) Manufacturer
   5. Identification of the product, with the section number, page and paragraph(s).
   6. Field dimensions, clearly identified as such.
   7. Relation to adjacent or critical features of the work or materials.
   8. Applicable standards, such as ASTM or Federal Standards numbers.
   10. Identification of revisions on resubmittals.
   11. A blank space suitably sized for Contractor and Engineer stamps.
   12. Where calculations are required to be submitted by the Contractor, the calculations shall have been checked by a qualified individual other than the preparer. The submitted calculations shall clearly show the names of the preparer and of the checker.

1.05 REVIEW OF SHOP DRAWINGS, PRODUCT DATA, WORKING DRAWINGS AND SAMPLES

   A. The review of shop drawings, data and samples will be for general conformance with the design concept and Contract Documents. They shall not be construed:

   01300-4
1. as permitting any departure from the Contract requirements;

2. as relieving the Contractor of responsibility for any errors, including details, dimensions, and materials;

3. as approving departures from details furnished by the Engineer, except as otherwise provided herein.

B. The Contractor remains responsible for details and accuracy, for coordinating the work with all other associated work and trades, for selecting fabrication processes, for techniques of assembly, and for performing work in a safe manner.

C. If the shop drawings, data or samples as submitted describe variations and show a departure from the Contract requirements which Engineer finds to be in the interest of the Owner and to be so minor as not to involve a change in Contract Price or Contract Time, the Engineer may return the reviewed drawings without noting an exception.

D. Submittals will be returned to the Contractor under one of the following codes.

Code 1 - "APPROVED" is assigned when there are no notations or comments on the submittal. When returned under this code the Contractor may release the equipment and/or material for manufacture.

Code 2 - "APPROVED AS NOTED". This code is assigned when a confirmation of the notations and comments IS NOT required by the Contractor. The Contractor may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product.

Code 3 - "APPROVED AS NOTED/CONFIRM". This combination of codes is assigned when a confirmation of the notations and comments IS required by the Contractor. The Contractor may, at his own risk, release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product. This confirmation shall specifically address each omission and nonconforming item that was noted. Confirmation is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the confirmation.

Code 4 - "APPROVED AS NOTED/RESUBMIT". This combination of codes is assigned when notations and comments are extensive enough to require a resubmittal of the package. This resubmittal is to address all comments, omissions and non-conforming items that were noted. Resubmittal is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the resubmittal.

Code 5 - "NOT APPROVED" is assigned when the submittal does not meet the intent of the Contract Documents. The Contractor must resubmit the entire package revised to bring the submittal into conformance. It may be necessary to resubmit using a
different manufacturer/vendor to meet the Contract Documents.

Code 6 - "COMMENTS ATTACHED" is assigned where there are comments attached to the returned submittal which provide additional data to aid the Contractor.

Codes 1 through 5 designate the status of the reviewed submittal with Code 6 showing there has been an attachment of additional data.

E. Resubmittals will be handled in the same manner as first submittals. On resubmittals the Contractor shall identify all revisions made to the submittals, either in writing on the letter of transmittal or on the shop drawings by use of revision triangles or other similar methods. The resubmittal shall clearly respond to each comment made by the Engineer on the previous submission. Additionally, the Contractor shall direct specific attention to any revisions made other than the corrections requested by the Engineer on previous submissions.

F. Partial submittals may not be reviewed. The Engineer will be the only judge as to the completeness of a submittal. Submittals not complete will be returned to the Contractor and will be considered "Not Approved" until resubmitted. The Engineer may at his option provide a list or mark the submittal directing the Contractor to the areas that are incomplete.

G. Repetitive Review

1. Shop drawings and other submittals will be reviewed no more than twice at the Owner's expense. All subsequent reviews will be performed at times convenient to the Engineer and at the Contractor's expense, based on the Engineer's then prevailing rates. The Contractor shall reimburse the Owner for all such fees invoiced to the Owner by the Engineer. Submittals are required until approved.

2. Any need for more than one resubmission, or any other delay in obtaining Engineer's review of submittals, will not entitle Contractor to extension of the Contract Time.

H. If the Contractor considers any correction indicated on the shop drawings to constitute a change to the Contract Documents, the Contractor shall give written notice thereof to the Engineer at least 7 working days prior to release for manufacture.

I. When the shop drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

1.06 DISTRIBUTION

A. Distribute reproductions of approved shop drawings and copies of approved product data and samples, where required, to the job site file and elsewhere as directed by the Engineer. Number of copies shall be as directed by the Engineer but shall not exceed six.

1.07 CONSTRUCTION PHOTOGRAPHS (Not Used)

01300-6
1.08 SCHEDULES

A. Provide all schedules required herein and in the General Conditions.

B. Provide construction schedule as specified in Section 01310.

C. The monthly Schedule update (monitoring) shall include the following items:

1. Network
   a. Identify activities that are completed or in process by contrasting heavy lines. Each activity worked on should be proportional to the percentage of progress achieved to date.
   b. Identify restraints imposed by material deliveries, precedent activity durations or schedule adjustments on the monthly update of the Network.

2. Computer Print-out
   a. Show the percentage progress status of each activity. The percentage progress status will be used to support each Contractor's periodic pay estimate.
   b. Show actual start and completion dates.
   c. Flag all activities started and in progress.

D. Supplemental to the Critical Path Schedule, the Contractor shall provide a detailed work schedule, projected at least a month in advance. The implementation of the work schedule and the coordination required will constitute the basic agenda of the coordination and planning meetings.

1.09 PROFESSIONAL ENGINEER (P.E.) CERTIFICATION FORM

A. If specifically required in other related Sections, submit a P.E. Certification for each item required, in the form attached to this Section, completely filled in and stamped.

1.10 GENERAL PROCEDURES FOR SUBMITTALS

A. Coordination of Submittal Times: Prepare and transmit each submittal sufficiently in advance of performing the related work or other applicable activities, or within the time specified in the individual work of other related Sections, so that the installation will not be delayed by processing times including disapproval and resubmittal (if required), coordination with other submittals, testing, purchasing, fabrication, delivery and similar sequenced activities. No extension of time will be authorized because of the Contractor's failure to transmit submittals sufficiently in advance of the Work.

END OF SECTION

01300-7
P.E. CERTIFICATION FORM

The undersigned hereby certifies that he/she is a professional engineer registered in the [State] [Commonwealth] of __________________________, and that he/she has been employed by
______________________________________________ to design ________________________________
(Name of Contractor)      (Insert P.E. Responsibilities)
in accordance with Section __________________ for the ______________________________
(Name of Project)

The undersigned further certifies that he/she has performed the design of the _______________________
(Name of Project)      ________________________________, that said design is in conformance
with all applicable local, state and federal codes, rules, and regulations, and that his/her signature and P.E.
stamp have been affixed to all calculations and drawings used in, and resulting from, the design.

The undersigned hereby agrees to make all original design drawings and calculations available to the
______________________________________________ or Owner's representative
(Insert Name of Owner)      within seven days following written request therefor by the Owner.

________________________________________
P.E. Name

______________________________
Signature

______________________________
Company Name

______________________________
Street Address

_________________________________
City, State, Zip Code
PART 1 - GENERAL

1.01 DESCRIPTION

A. Prepare and provide the projected construction schedule, updated monthly, for the duration of the project. **All schedules and all updates must be prepared using Microsoft Office Project, latest edition.** Other scheduling software programs may be used, but only if their products are fully compatible with and can be directly imported into Microsoft Office Project. It shall be the Contractor’s responsibility to ensure compatibility. Schedules prepared by other means that cannot be imported by the Owner without modification will be rejected. See also Section 00700, Article 2.5 and Article 14.

B. Within ten (10) calendar days of the Notice to Proceed, the Contractor shall submit a Summarized Milestone Schedule to the Owner and Engineer for approval. The Contractor shall revise the schedule as necessary to gain Owner and Engineer approval. Within 14 calendar days of the Owner's and Engineer's approval of the Summarized Milestone Schedule, the Contractor shall submit the Detailed Project Task Schedule. The Contractor shall similarly revise this schedule as needed to gain Owner and Engineer approval. Once approved, this schedule will be the baseline from which all construction activities will be measured.

C. No Periodic Pay Estimates will be accepted until both the Summarized Milestone Schedule and the corresponding Detailed Project Task Schedule updates are approved by the Owner and Engineer.

D. Coordination:

1. It will be the responsibility of the Contractor to coordinate schedules of its own and its subcontractors’ schedules as well as construction efforts by others as directed by the Owner or Engineer.

2. Schedules are subject to concurrence by the Owner and Engineer with regards to activity description, logic, sequence, duration and resources required.

1.02 FORM OF SCHEDULES

A. Contractor shall prepare and provide the following construction schedules in the Microsoft Office Project default Gantt Chart view, with project tasks on the left side of the view and horizontal graphical bars corresponding to the task durations on the right side of the view.

1. Summarized Milestone Schedule: Submit a Microsoft Office Project schedule broken down by the major project areas. Required critical path elements will be subject to Owner's and Engineer's concurrence.
2. Detailed Project Task Schedule: Construction schedule and subsequent monthly updates must indicate critical path elements, detailed project tasks and links between dependent tasks, including the duration of each task.

1.03 CONTENT OF SCHEDULES

A. Provide complete sequence of construction by activity.

1. Shop Drawings, product data and samples, submittal dates and dates approved copies will be required, etc., should be indicated.

2. Product procurement, fabrication duration, shipping dates and on-site availability should be indicated. Contractor will prepare format which shall include names of subcontractors; description of material; manufacturers and vendors with address, phone number and person to contact, order number, shop drawings and samples status, manufacturing lead time, shipping dates, proposed delivery date, format of shipping, date material is required and commitments from manufacturers or vendors on their letterhead.

3. Dates for beginning and completion of each element or task of construction.

4. Decision dates for selection of finishes and products.

5. Restraints reflecting impact of related work.

6. Activities as directed by the Owner or Engineer when required to interface activities performed by the Owner or other Contractors.

7. Detailed sub-schedule and special area schedules as directed by the Owner or Engineer to define critical areas of work.

8. The Engineer shall receive and review updates from the Contractor each month indicating the ACTUAL work status or more/less often when directed to do so by the Engineer.

   a) Schedule submission shall be made with the Periodic Pay Estimate. See also Section 01027.

   b) If the Contractor does not gain Owner and Engineer approval of any schedule update, the following Periodic Pay Estimate will not be considered until such approval is obtained.

1.04 CONTRACTOR'S RESPONSIBILITIES

A. Coordinate the scheduled work of all its subcontractors.

B. Incorporate the work of all subcontractors into the construction schedules.
C. Provide schedule update information of all subcontractors.

D. Maintain a management organization to fulfill the requirements of this Section.

E. Attend and participate in scheduling meetings as may be requested by the Owner or Engineer.

1.05 SCHEDULE MAINTENANCE PROCEDURES

A. At or before the Pre-Construction Meeting, provide a preliminary summary bar chart schedule for the major breakdown activities outlined in the Bid Proposal. Critical path items will be discussed using this preliminary schedule at the Pre-Construction Meeting.

B. Summarized Milestone Schedule: Within 10 calendar days of Notice to Proceed, the Contractor shall provide the following to the Owner and Engineer:

1. A Summarized Milestone Schedule, prepared in Microsoft Office Project Gantt Chart format, identifying the major areas of the Project. The Summarized Milestone Schedule shall, as a minimum, identify all established milestones specified in the Contract Documents and agreed to at the Pre-Construction Meeting, to constitute one complete program for the entire work.

2. The Summarized Milestone Schedule shall be used for the life of the Contract to delineate the interdependence and order of construction of the project Work areas. Also, it shall be employed as a framework for developing the Detailed Project Task Schedule described below.

3. The Owner reserves the right to reject any submitted schedule by the Contractor, if, in the view of the Owner, said schedule reflects unreasonable assumptions on the part of the Contractor, its subcontractors or Owner's other Contractors. The Contractor shall be responsible for resubmitting within five (5) working days the actual reflection of current and projected status.

4. This schedule shall include an overall project duration consistent with the specified contract time and the date of the official Notice to Proceed. Schedules with any but the specified contract duration period will not be accepted.

5. The schedule shall include a minimum of 30 days of float due to inclement weather or other delays normally associated with construction work of this nature.

C. Detailed Project Task Schedule: Within 14 calendar days of Owner's and Engineer's approval of the Summarized Milestone Schedule, the Contractor shall provide the following:

1. A Detailed Project Task Schedule shall be prepared in Microsoft Office Project Gantt Chart format. The Detailed Project Task Schedule shall identify the work, by task and duration, to be performed in order to support the critical path milestones agreed to. It shall also identify links between dependent tasks, indicating the expected duration of each.
2. The Detailed Project Task Schedule shall be utilized to monitor progress and shall, therefore, be maintained throughout the duration of the Project.

3. Activities represented on the Detailed Project Task Schedule shall dovetail the Summarized Milestone Schedule so as to constitute one complete program for the whole of the project.

4. The Contractor shall provide a detailed successor/predecessor report, in a format acceptable to the Engineer, sorted by major project area. This report shall also include the duration of each activity and logic relationship.

D. Updating:

1. Show all changes which have occurred since the previous update and submittal. Provide the following update information:
   a) Progress of each activity.
   b) Completion dates.
   c) Activities modified.
   d) Revision of schedule restraints.
   e) Revision in duration to any activities.

2. With each schedule update provide a NARRATIVE REPORT, including:
   a) Discussion of problem areas, including current and anticipated delay factors and their impact on the schedule.
   b) Corrective action taken or proposed and its effect or intended effect on schedule.
   c) Detailed description of revisions to schedule.

1.06 SUBMITTALS

A. Submit to both the Owner and the Engineer one electronic file copy, via e-mail attachment or CD, of the Summarized Milestone Schedule within 10 days after Notice to Proceed.

B. Submit to both the Owner and the Engineer one electronic file copy, via e-mail attachment or CD, of the Detailed Project Task Schedule within 14 calendar days of approval of the Summarized Milestone Schedule.

C. Each month, (along with the signed original copies of the monthly Periodic Pay Estimate), submit one printed copy of the previous Detailed Project Task Schedule, with annotations showing status and changes, and one printed copy of the Detailed Project Task Schedule updated for the close of
that month to indicate the planned schedule for the next period. In addition, besides the printed copy, provide to both the Owner and the Engineer one electronic file copy of the updated Detailed Project Task Schedule via e-mail attachment or by CD.

D. Along with the updated schedule, submit:

1. A NARRATIVE REPORT explaining modifications.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION
SECTION 01340

SHOP DRAWINGS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. The Contractor shall submit to the Engineer for review, shop drawings, test reports and data on materials and equipment (hereinafter in this article called data), and material samples (hereinafter in this article called samples) as are required for materials and equipment to be supplied by the Contractor as required by the Specifications and the Contract Drawings.

2. Within ten (10) calendar days of the Notice to Proceed, the Contractor shall submit to the Engineer a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way expressed or implied relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the Specifications.

3. The Contractor is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting with the Owner and the Engineer. This log should include the following items:

   a) Submittal-Description and Number assigned.

   b) Date to Engineer.

   c) Date returned to Contractor (from Engineer).

   d) Status of Submittal:

      • NO EXCEPTIONS TAKEN
      • MAKE CORRECTIONS NOTED
      • MAKE CORRECTIONS NOTED - CONFIRM
      • AMEND - RESUBMIT
• REJECTED - RESUBMIT

• NOT REVIEWED

e) Date of Resubmittal and Return (as applicable).

f) Date material release (for fabrication).

g) Projected date of fabrication.

h) Projected date of delivery to site.

i) Status of O&M manuals submittal.


k) Contract Drawing Number(s).

1.02 CONTRACTOR'S RESPONSIBILITY

A. It is the responsibility of the Contractor to check all drawings, data and samples prepared before submitting them to the Engineer for review. Each and every copy of the Drawings and data shall bear Contractor's shop drawing stamp showing that they have been so checked, (Refer to Figure 01340-1, Contractor's Shop Drawing Stamp). Shop drawings submitted to the Engineer without the Contractor's stamp will be returned without review to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the Contract Documents. If the Contractor takes exception to the specifications, the Contractor shall note the exception in the letter of transmittal to the Engineer. However, shop drawing submittals shall not be used as a vehicle for requesting approval of substitute or alternative equipment and materials. Substitution requests will be considered only when submitted in accordance with the applicable provisions provided elsewhere in these Contract Documents.

B. Determine and verify:

1. Field measurements.

2. Field construction criteria.

3. Catalog numbers and similar data.

4. Conformance with Specifications.
WITH RESPECT TO THIS SHOP DRAWING OR SAMPLE, I HAVE DETERMINED AND VERIFIED ALL QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS, AND SIMILAR DATA WITH RESPECT THERETO AND REVIEWED OR COORDINATED THIS SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.

☐ NO VARIATION FROM CONTRACT DOCUMENTS
☐ VARIATION FROM CONTRACT DOCUMENTS AS SHOWN

C. Within twenty (20) days of the Notice to Proceed, the Contractor shall furnish the Engineer a schedule of Shop Drawing submittals fixing the respective dates for the submission of shop and working drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.

D. The Contractor shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to them by the Engineer with approval.

E. The Contractor shall submit to the Engineer and Design Engineer all drawings and schedules sufficiently in advance of construction requirements to provide no less than thirty (30) calendar days for checking and appropriate action from the time the Engineer receives them.

F. All submittals shall be accompanied with a transmittal letter prepared in duplicate containing the following information:
1. Date

2. Project Title and Number

3. Contractor's name and address

4. The number of each Shop Drawing submitted.


6. Submittal Log Number referencing the Specification Section Number.

The numbering system shall be specification section number followed by a 1 for original submittal, 1A for first resubmittal and so forth, (for example: 15050-1, 15050-1A, 15050-1B...).

G. The Contractor shall submit three (3) copies of descriptive or product data information and shop drawings plus the number of copies, which the Contractor requires, returned. All shop drawings shall be a maximum of 24-inch by 36-inch in size.

H. The Contractor shall be responsible for and bear all costs of damages which may result from the ordering of any material, or from proceeding with any part of work, prior to the completion of the review by Engineer of the necessary Shop Drawings.

I. The Contractor shall be fully responsible for observing the need for and making any changes in the arrangement of piping, connections, wiring, manner of installation, etc., which may be required by the materials/equipment they proposed to supply both as pertains to their own work and any work affected under other parts, headings, or divisions of the Contract Documents.

1.03 ENGINEER'S REVIEW OF SHOP DRAWINGS

A. Review by the Engineer of drawings, data and samples submitted by the Contractor will cover only general conformity to the Specifications, Owner’s Criteria, external connections, and dimensions which affect the installation. The Engineer's review and exceptions, if any, will not constitute an approval of dimensions, quantities, and details of the material, equipment, device, or item shown.

B. The review of drawings and schedules will be general, and shall not be construed:

1. as permitting any departure from the Contract requirements;
2. as relieving the Contractor of responsibility for any errors, including details, dimensions, and materials;

3. as approving departures from details furnished by the Engineer except as otherwise provided herein.

C. If the drawings or schedules as submitted describe variations or show a departure from the Contract requirements or Owner's Criteria which Engineer finds to be in the interest of the Owner and to be so minor as not to involve a change in Contract Price or time for performance, the Engineer may return the reviewed drawings without noting an exception. Such deviations must be indicated by the Contractor as a variation or departure from the requirement of the Contract Documents.

D. When reviewed by the Engineer, each of the Shop Drawings will be identified as having received such review being so stamped and dated. Shop Drawings stamped "REVIEWED, COMMENTS AS NOTED" OR "REJECTED, REVISE AND RESUBMIT" and with required corrections shown will be returned to the Contractor for correction and resubmittal.

E. Resubmittals will be handled in the same manner as first submittals. On resubmittals the Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, to revisions other than the corrections requested by the Engineer on previous submissions. The Contractor shall address and make any corrections required by the Engineer.

F. If the Contractor considers any correction indicated on the drawings to constitute a change to the Contract Drawings or Specifications, the Contractor shall immediately give written notice thereof to the Engineer.

G. **Shop drawings and submittal data shall be reviewed by the Engineer for each original submittal and first resubmittal; thereafter review time for subsequent resubmittals shall be charged to the Contractor in accordance with the terms of the Engineer's Agreement with the Owner.**

H. When the Shop Drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the procurement and construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

I. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor for resubmittal.

J. All drawings, schematics, manufacturer's product data, certifications and other shop drawing submittals required by a system specification shall be submitted at one time as a package to facilitate interface checking.
1.04 SHOP DRAWINGS

A. When used in the Contract Documents, the term "Shop Drawings" shall be considered to mean Contractor's plans for materials and equipment, which become an integral part of the Project. These drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, erection and setting drawings, manufacturer's scale drawings, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance and test data shall be considered only as supportive to required Shop Drawings as defined above. As used herein, the term "manufactured" applies to standard units usually mass-produced; and "fabricated" means items specifically assembled or made out of selected materials to meet individual design requirements.

The Contractor shall not reproduce the Engineer's project drawings for shop drawings without written approval of the Engineer.

B. Manufacturer's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data shall be clearly marked to identify pertinent materials, product or models. **Delete information, which is not applicable to the Work, by striking or cross-hatching.**

C. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor's stamp of approval as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval shall be returned to the Contractor for resubmission.

D. Each Shop Drawing shall have a blank area 6-inches by 2 1/2-inches, located adjacent to the title block. The title block shall display the following:

1. Project Title and Number.
2. Name of project building or structure.
3. Number and title of the shop drawing.
4. Date of shop drawing or revision.
5. Name of contractor and subcontractor submitting drawing.
6. Supplier/distributor/manufacturer.
7. Separate detailer when pertinent.
E. If drawings show variations from Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in their letter of transmittal. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. If the Contractor fails to describe such variations, they shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such drawings have been reviewed.

F. Data on materials and equipment shall include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams, verification of conformance with applicable standards or codes, materials of construction and similar descriptive material. Materials and equipment lists shall give, for each item thereon, the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish and all other pertinent data.

G. For all mechanical and electrical equipment furnished, the Contractor shall provide a list including the equipment name, and address and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.

H. All manufacturers or equipment suppliers who propose to furnish equipment or products shall submit an installation list to the Engineer along with the required shop drawings. The installation list shall include at least five (5) installations where identical equipment has been installed and has been in operation for a period of at least one (1) year.

I. Only the Engineer will utilize the color "red" in marking Shop Drawing submittals.

1.05 WORKING DRAWINGS

A. When used in the Contract Documents, the term "working drawings" shall be considered to mean the Contractor's plan for temporary structures such as temporary bulkheads, support of open cut excavation, support of utilities, ground water control systems, forming and falsework, for underpinning, and for such other work as may be required for construction but does not become an integral part of the Project.

B. Copies of working drawings shall be submitted to the Engineer where required by the Contract Documents or requested by the Engineer, and shall be submitted at least thirty (30) calendar days (unless otherwise specified by the Engineer) in advance of their being required for work.

C. Working drawings shall be signed by a registered Professional Engineer, currently licensed to practice in the State of Florida and shall convey, or be accompanied by, calculation or other sufficient information to completely explain the structure, machine, or system described and its intended manner of use. Prior to commencing such work, working drawings must have been reviewed without specific exceptions by the Engineer, which review will be for general
conformance and will not relieve the Contractor in any way from their responsibility with regard to the fulfillment of the terms of the Contract. All risks to new or existing work are assumed by the Contractor; the Owner and Engineer shall have no responsibility therefor.

1.06 SAMPLES

A. The Contractor shall furnish, for the approval of the Engineer, samples required by the Contract Documents or requested by the Engineer. Samples shall be delivered to the Engineer as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until approved by the Engineer.

B. Samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integrally related parts and attachment devices.

2. Full range of color, texture and pattern.

3. A minimum of two samples of each item shall be submitted.

C. Each sample shall have a label indicating:

1. Name of Project.

2. Name of Contractor and Subcontractor.

3. Material or Equipment Represented.

4. Place of Origin.

5. Name of Producer and Brand (if any).

6. Location in Project.

7. Submittal number.

(Samples of finished materials shall have additional marking that will identify them under the finished schedules).

D. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples. They shall enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer. Approval of a sample shall be only for the characteristics or use named in such approval and shall not be construed to change or modify any Contract requirements.
E. Approved samples not destroyed in testing shall be sent to the Engineer or stored at the site of the work. Approved samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the approved samples. Samples, which failed testing or were not approved, will be returned to the Contractor, who shall bear the expense, if so requested at time of submission.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION
SECTION 01370
SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. The Contractor shall submit to the Engineer a detailed Schedule of Values allocated to the various portions of the work, within 10 days after date of Notice to Proceed.

B. Upon request of the Engineer, the Contractor shall support the individual values with data which will substantiate their correctness.

C. The Schedule of Values shall be used by the Owner only as the basis for preparing the Contractor's Applications for Payment, called a Periodic Pay Estimate.

1.02 RELATED REQUIREMENTS

A. Conditions of the Contract.

B. Request for Payment.

1.03 FORM AND CONTENT OF SCHEDULE OF VALUES

A. Contractor's standard forms and automated printout will be considered for approval by Engineer upon Contractor's request. Identify schedule with:

1. Title of Project and location.
2. Project number.
3. Name and address of Contractor.
5. Date of submission.

B. Schedule shall list the installed value of the component parts of the work in sufficient detail to serve as a basis for computing values for progress payments during construction.

C. Follow the table of contents for the Contract Document as the format for listing component items for structures:

1. Identify each line item with the number and title of the respective major section of the specification.
2. For each line item, list subvalues of major products or operations under item.

D. The sum of all values listed in the schedule shall equal the total Contract Sum.

1.04 SUBSCHEDULE OF UNIT MATERIAL VALUES

A. Submit a subschedule of unit costs and quantities for products on which progress payments will be requested for stored products.

B. The form of submittal shall parallel that of the Schedule of Values with each item identified the same as the line item in the Schedule of Values.

C. The unit quantity for bulk materials shall include an allowance for normal waste.

D. The installed unit value multiplied by the quantity listed shall equal the cost of that item in the Schedule of Values.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION
SECTION 01410
TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Purpose:

1. The Contractor must retain the services of an independent testing laboratory service to provide unbiased quality control information necessary to protect the interests of the Owner and to furnish such technical knowledge as may be of benefit to the project.

2. The independent testing laboratory chosen by the Contractor is subject to approval by the Owner. However, the Contractor shall pay for all required testing services.

B. Extent of services and procedures:

1. The Contractor will direct testing laboratory as to which services will be required for Work, and the type and extent of reports which will be required.

   a) All test interpretations shall be made by the Engineer.

   b) Contractor shall provide Owner and Engineer each with a copy of all test reports.

C. Testing laboratory will:

1. Perform and report all specified tests, and additional tests which may be ordered by Contractor.

2. Conduct tests and provide reports as soon as possible so as not to delay the Work.

D. Testing laboratory is not authorized to:

1. Release, revoke, alter, or enlarge upon requirements of Contract Documents.

2. Approve or accept any portion of the Work.

3. Perform any duties of the Contractor.

E. Employment of testing laboratory in no way relieves Contractor of their obligation to perform Work in accordance with Contract requirements.
F. Contractor shall pay all costs for testing.

G. Contractor shall also pay all costs for retesting required due to defective Work or materials, or as evidenced by failed test results.

H. Cost for testing materials or procedures that are deviations or substitutions from Contract requirements shall be borne by the Contractor if the tests are conducted to determine the acceptability of the proposed deviation or substitution.

1.02 CONTRACTOR'S RESPONSIBILITIES

A. Cooperate with laboratory personnel. Provide access to Work, and to manufacturer's shops as may be required by laboratory personnel to complete inspections and/or tests.

B. Provide to laboratory in required quantities, all representative samples of materials to be tested.

C. Furnish copies of any and all test reports which may be required by testing laboratory.

D. Furnish incidental labor and facilities:
   1. To provide access to Work to be tested.
   2. To obtain and handle samples at the Project site or at the source of the product to be tested.
   3. To facilitate inspections and tests.
   4. For storage and curing of test samples.

E. Notify laboratory sufficiently in advance of need, to allow for its assignment of personnel, scheduling, and tests.

F. Arrange with laboratory and pay for all samples and tests required by the Contract or for Contractor's convenience.

G. Provide storage and protection of materials. Remove as necessary for inspection, and replace after inspections have been performed by the inspection agency.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)  END OF SECTION
PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Provide temporary facilities required which may include, but are not necessarily limited to the following:

1. Telephone
2. Storage sheds
3. Temporary water source and service
4. Temporary sanitary facilities
5. Temporary electrical source and service
6. Owner/Engineer's field office – not required

1.02 WATER

A. The Owner will furnish reasonable quantities of potable and reclaimed water for use throughout the construction period.

1. Contractor shall make all necessary temporary connections to the appropriate water source and shall remove such connections at the completion of construction. All connections and uses shall be coordinated with, and approved by, the Owner.

B. The Contractor shall maintain strict supervision of use of temporary services.

1. Enforce conformance with applicable codes and standards.
2. Enforce sanitary practices.
3. Prevent abuse of services.
4. Prevent wasteful use of water.

C. Contractor Requirements of Regulatory Agencies:

1. Obtain, pay for permits, fees, deposits required by governing authorities.
2. Comply with federal, state and local codes.

1.03 ELECTRICITY

A. The Contractor shall furnish and install temporary or permanent electric power service for construction needs throughout construction period.

1. Power centers for miscellaneous tools and equipment used in construction work.
   a) Locate so that power is available at any desired point with no more than 100 feet extension.
   b) Provide weatherproof distribution box with minimum of four (4) 20 amp, 120 volt grounded outlets, with GFCI protection.
   c) Provide circuit breaker protection for each outlet.
   d) Provide equipment grounding continuity for entire system.
   e) Users shall provide grounded, UL approved extension cords from power center to point of operations.

2. Power for construction equipment.

3. Power for testing and checking equipment.

4. Power for welding units and for other equipment having special power requirements.

5. Power for field offices – not required.

B. Capacity:

1. Power shall be adequate electrical service for construction use by all trades during construction period.

2. Notify Power Company if unusually heavy loads such as welding, and other special power requirements, will be connected.
   a) Provide special circuits for heavy load requirements.
   b) Do not overload any circuit.

C. Power Source: Provide minimum 120 volt, single phase, 60 hertz power service to project site. The use of portable generators is allowed, but it is recommended to secure temporary power from a separate metered power supply from FP&L.
D. The Contractor shall maintain strict supervision of use of temporary services:

1. Enforce conformance with applicable standards.
2. Enforce safe practices.
3. Prevent abuse of services.

E. Costs of Installation and Operation: The Contractor shall pay all costs of temporary electrical power used.

F. Contractor Requirements of Regulatory Agencies:

1. Obtain and pay for permits as required by governing authorities.
2. Comply with applicable codes.
   a) National Electrical Code.
   c) National Fire Protection Association.
   d) Federal, state and local codes and utility company regulations.

1.04 TEMPORARY SANITARY FACILITIES

A. Contractor shall furnish and install temporary sanitary facilities for use throughout construction period.

1. Potable water for construction personnel:
   a) Portable containers to dispense drinking water.
   b) Maintain temperature between 45 degrees F (7.5 degrees C) and 55 degrees F (13 degrees C).

2. Enclosed toilet facilities for construction personnel.

3. General employee washing facilities.

4. Owner's existing facilities shall not be used by any construction personnel.

B. Minimum number of fixtures:
1. Toilets and Urinals
   a) For less than 20 employees: 1 toilet
   b) For 20 or more employees: 1 toilet and 1 urinal per 40 workers.

2. Washing Facilities: Adequate for number of employees, for type of work requiring washing facilities.

C. Contractor shall maintain strict supervision of use of facilities:
   1. Enforce conformance with applicable standards.
   2. Maintain, service and clean facilities.
   3. Enforce proper use of sanitary facilities.
   4. Prohibit Contractor personnel use of existing facilities in Owner's buildings.

D. Contractor Cost of Installation and Operation:
   1. Pay costs of temporary sanitary facilities, including costs of installation, maintenance and removal.
   2. Costs of Water: As specified in paragraph "Water".
   3. Pay service charges for use of portable units.

E. Facility Locations:
   1. Within the project site.
   2. Drinking Water: Convenient to work stations.
   3. Toilet and washing facilities.
      a) Secluded from public observation.
      b) Convenient for use of personnel in relation to work stations.
   4. Obtain acceptance of Engineer.

F. Enclosure for Toilet Facilities:
   1. Weatherproof, sight-proof, sturdy temporary enclosures.
2. Insect-proof screening, adequate natural ventilation.

G. Contractor Requirements of Regulatory Agencies:
1. Obtain and pay for permits as required by governing authorities.
2. Comply with federal, state, and local codes, and utility company regulations.

PART 2 - PRODUCTS

2.01 MATERIALS

A. General:
1. Materials may be new or used, but must be adequate for purpose required, sanitary and must not violate requirements of applicable codes.
2. At Contractor's option, patented specialty products may be used, in compliance with applicable codes.

2.02 ELECTRICITY (See Section 1.03)

A. Provide required facilities, including transformers, conductors, poles, conduits, raceways, breakers, fuses and switches.

B. Provide appropriate enclosures for environment in which used, in compliance with NEMA standards.

2.03 TEMPORARY SANITARY FACILITIES (See Section 1.04)

A. Drinking Water Facilities (Portable Containers):
1. Tightly closed, and equipped with dispensing tap.
2. Clearly label contents.
3. Do not use for other purposes.
4. Provide single-service disposable cups, with sanitary container for unused cups, and receptacles for used cups.

B. Toilet Facilities
1. Portable Toilets; either:
a) Chemical toilets.

b) Recirculating toilets.

c) Combustion toilets.

2. Toilet Tissue: Provide at each toilet, on suitable dispenser.

2.04 OWNER/ENGINEER'S FIELD OFFICE - not required

PART 3 - EXECUTION

3.01 GENERAL

A. Install work in a neat and orderly manner.

B. Make structurally sound throughout.

C. Maintain to provide continuous service.

D. Modify and extend service as work progress requires.

3.02 WATER

A. Locate piping and outlets.

1. Provide service convenient to work stations.

2. Avoid interference with:

   a) Traffic and work areas.

   b) Materials handling equipment.

   c) Storage areas.

B. Do not run piping on floor or on ground.

C. When necessary to maintain pressure, provide pumps, tanks, and compressors.

3.03 ELECTRICITY

A. Service and distribution may be overhead or underground.

B. Locate to avoid interference with:
1. Traffic and work areas.
2. Cranes.
3. Material handling equipment.
4. Storage areas.

C. Do not run branch circuits on floor or on ground.
D. Wire all safety devices specified for final operation of equipment.
E. Check operation of safety devices.

3.04 TEMPORARY SANITARY FACILITIES

A. Portable Toilets:
   1. Erect securely, and anchor to prevent dislocation.
   2. Service weekly or more often as necessary to prevent accumulation of wastes, and creation of unsanitary conditions.
   3. Shall be used unless sewer and water service can be provided to site.

B. Washing Facilities: Provide faucets and other wash facilities suitable for the type of work requiring washing.

3.05 LOCATION OF CONSTRUCTION TRAILERS

A. The Contractor shall locate trailers for construction purposes away from normal traffic use and view. The location of construction trailers will be as designated by Owner.

3.06 REMOVAL

A. Completely remove temporary materials and equipment after the final completion inspection.
B. Clean, and repair damage caused by installation and restore to specified, or original condition.

END OF SECTION
PART 1 - GENERAL

1.01 GENERAL

A. The Contractor shall protect all existing facilities, including all utilities and improvements not designated for removal, and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than prior to such damage or temporary relocation, all in accordance with the Contract Documents.

1.02 EXISTING UTILITIES AND IMPROVEMENTS

A. General: The Contractor shall protect both aboveground and underground utilities and other improvements which may be impaired during construction operations, regardless of whether or not the utilities are indicated on the Drawings. The Contractor shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary.

B. Except where the Drawings indicate utilities have been field located during design or certain utility locations shall be exposed as part of the Work, the Contractor shall be responsible for exploratory excavations as it deems necessary to determine the exact locations and depths of utilities which may interfere with its work. All such exploratory excavations shall be performed as soon as practicable after Notice to Proceed and, in any event, a sufficient time in advance of construction to avoid possible delays to the Contractor's progress. When such exploratory excavations show the utility location as shown on the Drawings to be in error, the Contractor shall so notify the Engineer.

C. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment and grade of the utility.

D. Utilities to be Moved: In case it shall be necessary to move the property of any public utility or franchise holder, such utility company or franchise holder will, upon request of the Contractor, be notified by the Owner to move such property within a specified reasonable time. When utility lines that are to be removed are encountered within the area of operations, the Contractor shall notify the Engineer a sufficient time in advance for the necessary measures to be taken to prevent interruption of service.

E. Utilities to be Removed: Where the proper completion of the Work requires the temporary or permanent removal and/or relocation of an existing utility or other improvement which is
indicated, the Contractor shall remove and, without unnecessary delay, temporarily replace or
relocate such utility or improvement in a manner satisfactory to the Engineer and the Owner of
the facility. In all cases of such temporary removal or relocation, restoration to the former
location shall be accomplished by the Contractor in a manner that will restore or replace the
utility or improvement as nearly as possible to its former locations and to as good or better
condition than found prior to removal.

F. Owner's Right of Access: The right is reserved to the Owner and to the owners of public utilities
and franchises to enter at any time upon any public street, alley, right-of-way, or easement for
the purpose of making changes in their property made necessary by the Work of this Contract.

G. Underground Utilities Indicated: Existing utility lines that are indicated or the locations of which
are made known to the Contractor prior to excavation and that are to be retained, and all utility
lines that are constructed during excavation operations shall be protected from damage during
excavation and backfilling and, if damaged, shall be immediately repaired or replaced by the
Contractor, unless otherwise repaired by the owner of the damaged utility. If the owner of the
damaged facility performs its own repairs, the Contractor shall reimburse said owner for the
costs of repair.

H. Underground Utilities Not Indicated: In the event that the Contractor damages existing utility
lines that are not indicated or the locations of which are not made known to the Contractor prior
to excavation, a verbal report of such damage shall be made immediately to the Engineer and a
written report thereof shall be made promptly thereafter. The Engineer will immediately notify
the owner of the damaged utility. If the Engineer is not immediately available, the Contractor
shall notify the utility owner of the damage. If directed by the Engineer, repairs shall be made by
the Contractor under the provisions for changes and extra work contained in Articles 10, 11, and
12 of the General Conditions.

I. Costs of locating and repairing damage not due to failure of the Contractor to exercise reasonable
care, and removing or relocating such utility facilities not indicated in the Contract Documents
with reasonable accuracy, and for equipment on the project which was actually working on that
portion of the Work which was interrupted or idled by removal or relocation of such utility
facilities, and which was necessarily idled during such Work will be paid for as extra Work in
accordance with the Contract Documents.

J. Approval of Repairs: All repairs to a damaged utility or improvement are subject to inspection
and approval by an authorized representative of the utility or improvement owner before being
concealed by backfill or other Work.

K. Maintaining in Service: Unless indicated otherwise, oil and gasoline pipelines, power, and
telephone or the communication cable ducts, gas and water mains, irrigation lines, sewer lines,
storm drain lines, poles, and overhead power and communication wires and cables encountered
along the line of the Work shall remain continuously in service during all the operations under
the Contract, unless other arrangements satisfactory to the Engineer are made with the owner of
said pipelines, duct, main, irrigation line, sewer, storm drain, pole, or wire or cable. The Contractor shall be responsible for and shall repair all damage due to its operations, and the provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.

1.03 LAWN AREAS

A. Lawn or landscaped areas damaged during construction shall be repaired to match the pre-construction condition to the satisfaction of the land owner and the Owner.

1.04 NOTIFICATION BY THE CONTRACTOR

A. The Contractor must contact “Sunshine State One Call” at (800) 432-4770 a minimum of 48 business hours prior to excavation. The Contractor shall provide the Sunshine State One Call verification number for the project to the Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION
PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work: Contractor shall be responsible for all cutting, fitting and patching, including all pipes, conduits, steel, concrete, pavement, or other materials, and attendant excavation and backfill, required to complete the Work or to:

1. Make its several parts fit together properly.
2. Uncover portions of the Work to provide for installation of ill-timed work.
3. Remove and replace defective work.
4. Remove and replace work not conforming to requirements of Contract Documents.
5. Remove samples of installed work as specified for testing.
6. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

1.02 SUBMITTALS

A. Submit a written request to the Engineer at least 10 days prior to executing any cutting or alteration which affects:

1. Work of the Owner or any separate contractor.
2. Structural value or integrity of any element of the Project.
3. Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems.
4. Efficiency, operational life, maintenance or safety of operational elements.
5. Visual qualities of sight-exposed elements.
B. Request shall include:

1. Identification of the Project.
2. Description of affected work.
3. The necessity for cutting, alteration or excavation.
4. Effect on work of Owner or any separate contractor, or on structural or weatherproof integrity of Project.
5. Description of proposed work:
   a) Scope of cutting, patching, alteration, or excavation.
   b) Trades who will execute the work.
   c) Products proposed to be used.
   d) Extent of refinishing to be done.
6. Alternatives to cutting and patching.
7. Cost proposal, when applicable.
8. Written permission or any separate contractor whose work will be affected.

C. Submit written notice to the Engineer designating the date and the time the work will be uncovered.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Comply with specifications and standards for each specific product involved.

PART 3 - EXECUTION

3.01 INSPECTION

A. Inspect existing conditions of Project, including elements subject to damage or to movement during cutting and patching.
B. After uncovering work, inspect conditions affecting installation of products, or performance of work.

C. Report unsatisfactory or questionable conditions to the Engineer in writing; do not proceed with work until the Engineer has provided further instructions.

3.02 PREPARATION

A. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of Work.

B. Provide devices and methods to protect other portions of project from damage.

C. Provide protection from elements for that portion of the project which may be exposed by cutting and patching work, and maintain excavations free from water.

3.03 PERFORMANCE

A. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs.

B. Execute excavating and backfilling by methods which will prevent settlement or damage to other work.

C. Employ original installer or fabricator to perform cutting and patching for:
   1. Weather-exposed or moisture-resistant elements.
   2. Sight-exposed finished surfaces.

D. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.

E. Restore work which has been cut or removed; install new products to provide completed Work in accord with requirements of the Contract Documents.

F. Fit work airtight or watertight, as applicable, to pipes, sleeves, ducts, conduit and other penetrations through surfaces or structures.

G. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:
   1. For continuous surfaces, refinish to nearest intersection.
2. For an assembly, refinish entire unit.

3.04 GENERAL RESTORATION

A. The restoration of existing roadway paving, including underdrains if any are encountered and broken into, shall be restored by the Contractor and shall be replaced or rebuilt using the same type of construction as was in the original. The Contractor shall be responsible for restoring all such work, including subgrade and base courses where present. The Contractor shall obtain and pay for at Contractor’s own expense such local or other governmental permits as may be necessary for the opening of roadways and shall satisfy himself as to any requirements, other than those herein set forth, which may affect the type, quality and manner of carrying on the restoration of surfaces by reason of local jurisdiction or other such governmental bodies.

B. This Section does not describe the specifications applicable to the construction of new road surfaces or the complete resurfacing of existing pavements.

END OF SECTION
PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work: Material and equipment incorporated into the Work:

1. Conform to applicable specifications and standards.

2. Comply with size, make, type and quality specified, or as specifically approved in writing by the Engineer.

3. Manufactured and fabricated products:
   a) Design, fabricate and assemble in accordance with the best engineering and shop practices.
   b) Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
   c) Two or more items of the same kind shall be identical, and shall be produced by the same manufacturer.
   d) Products shall be suitable for service conditions.
   e) Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing by the Engineer.

4. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.02 APPROVAL OF MATERIALS

A. Only new materials and equipment shall be incorporated in the work. All materials and equipment furnished by Contractor shall be subject to the inspection and approval of the Owner. No material shall be delivered to the work without prior approval of the Engineer, with the consent of the Owner. See also Section 01340.
B. The Contractor shall submit to the Engineer data relating to materials and equipment proposed to be furnished for the work in accordance with Section 01340. Such data shall be in sufficient detail to enable the Engineer to identify the particular product and to form an opinion as to its conformity to the specifications.

C. Facilities and labor for handling and inspection of all materials and equipment shall be furnished by the Contractor. Either prior to beginning or during progress of the work, Contractor shall submit samples of materials for such special tests as may be necessary to demonstrate that they conform to the specifications. Such samples shall be furnished, stored, packed and shipped as directed by the supplier at Contractor's expense. Except as otherwise noted, Contractor shall make arrangements for and pay for the tests.

D. Contractor shall submit data and samples sufficiently early to permit consideration and approval before materials are necessary for incorporation in the work. Any delay of approval resulting from Contractor's failure to submit samples or data promptly shall not be used as a basis of claim against Owner or Engineer.

E. In order to demonstrate the proficiency of workers or to facilitate the choice among several textures, types, finishes and surfaces, Contractor shall provide such samples of workmanship or finish as may be required.

F. The materials and equipment used on the work shall correspond to the approved samples or other data.

1.03 SUBSTITUTIONS AND PRODUCT OPTIONS

A. The substitution requirements of this Section are in addition to the requirements of the General Conditions and Supplementary Conditions.

B. The intent of these Specifications is to provide the Owner with a quality facility without discouraging competitive bidding. Substitutions may be submitted and will be evaluated as specified herein.

C. A Request for Substitution of Product may be submitted after the Contractor:

1. Has investigated the proposed product and determined that it is equal to or superior to the specified product, furnishes a certification to that effect, and waives all rights to additional payment or time that may subsequently become necessary due to the failure of the substituted product to perform adequately.

2. Agrees to provide same warranties or bonds for product substitution as for product specified.

3. Agrees to be responsible for coordinating and paying for any necessary changes to other work required by approved substitutions or product options which Contractor
selects and shall pay all such costs including the costs of the services of the design professional to revise the Contract Documents, if such revisions are required.

4. Waives all claims for additional costs due to substitution which may subsequently become apparent.

5. Is offering either a substantial credit to the Owner for acceptance of the substitution or a convincing justification that the product to be provided as the substitution is substantially superior in quality, performance, compatibility with adjacent products, durability, vandal-resistance or in other important ways.

D. If the Contractor proposes to provide products as "equals" to those specified, it shall be his responsibility to furnish complete, specific, detailed information to the Engineer for approval from the manufacturer or supplier of the product Contractor proposes to provide in which the requirements of the Contract Documents are shown to be met. This shall consist of a point-by-point comparison of the Contract requirements with the product proposed to be provided. In the event the Contract Document mentions a manufacturer, a point-by-point comparison of the product specified and that proposed to be provided shall be furnished by the Contractor. The burden of responsibility in furnishing this information is with the Contractor. If incomplete or irrelevant data is submitted as evidence of compliance with this subparagraph, the request for approval to provide this specific substitute product will be denied and no further submission will be considered.

E. Engineer's Action:

1. Engineer will consider written requests for product substitution for a period of 45 calendar days after the effective date of the Agreement. Engineer will review requests for substitutions with reasonable promptness and notify Contractor in writing of Owner's decision to accept or reject requested substitutions. Only the Owner may accept a substitution, based upon the Engineer’s recommendation.

2. Substitution requests made by means of shop drawings or product data submittal will not be considered.

3. After the period of 45 days has elapsed, the only substitution requests which will be considered are those which are made necessary by the removal of the specified products from the market or by other similar, unavoidable circumstances beyond the control of the Contractor.

1.04 MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION

A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, Contractor shall obtain and distribute copies of such instructions to parties involved in the installation, including five copies to Engineer.
1. Maintain one set of complete instructions at the job site during installation and until completion.

B. Handle, install, connect, clean, condition and adjust products in strict accordance with such instructions and in conformity with specified requirements.

1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Engineer for further instructions.

2. Do not proceed with work without clear instructions.

C. Perform work in accordance with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.05 TRANSPORTATION AND HANDLING

A. Arrange deliveries of products in accordance with construction schedules, coordinate to avoid conflict with work and conditions at the site.

1. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.

2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that products are properly protected and undamaged.

B. Provide equipment and personnel to handle products by manufacturer’s approved methods to prevent soiling or damage to products or packaging.

1.06 STORAGE AND PROTECTION

A. The Contractor shall furnish a covered, weather-protected storage structure providing a clean, dry, noncorrosive environment for all mechanical equipment, valves, architectural items, electrical and instrumentation equipment, and special equipment to be incorporated into this project. Storage of equipment shall be in strict accordance with the "instructions for storage" of each equipment supplier and manufacturer including connection of heaters, placing of storage lubricants in equipment, etc. Corroded, damaged or deteriorated equipment and parts shall be replaced before acceptance of the project. Equipment and materials not properly stored will not be included in a payment estimate.

B. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible.
1. Store products subject to damage by the elements in weathertight enclosures, such as buildings or trailers which have a concrete or wooden floor, a roof and fully closed walls on all sides.

2. Maintain temperature and humidity within the ranges required by manufacturer's instructions, (e.g., especially for electrical and instrumentation equipment).

3. Protect mechanical and electrical equipment from being contaminated by dust, dirt and moisture.

4. Store fabricated products above the ground, on blocking or skids, and prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, but provide adequate ventilation to avoid condensation.

5. Provide heated storage space for material which would be damaged by freezing.

6. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.

7. Prior to the installation of equipment, it shall be stored at locations designated and approved by the Engineer.

C. All materials and equipment to be incorporated in the work shall be handled and stored by Contractor before, during and after shipment in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and any injury, theft or damage of any kind whatsoever to the material or equipment.

D. Cement, sand and lime shall be stored under a roof and off the ground and shall be kept completely dry at all times. All structural and miscellaneous steel, and reinforcing steel shall be stored off the ground or otherwise to prevent accumulations of dirt or grease, and in a position to prevent accumulations of standing water and to minimize rusting. Beams shall be stored with the webs vertical. Precast concrete beams shall be handled and stored in a manner to prevent accumulations of dirt, standing water, staining, chipping or cracking. Brick, block and similar masonry products shall be handled and stored in a manner to reduce breakage, chipping, cracking and spalling to a minimum.

E. All materials which, in the opinion of Engineer, have become so damaged as to be unfit for the use intended or specified shall be promptly removed from the site of the work, and Contractor shall receive no compensation for the damaged material or its removal.

F. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.
G. Protection After Installation: Provide substantial coverings as necessary to protect installed products from damage from traffic, dust, weather and subsequent construction operations. Remove covering when no longer needed.

H. The Contractor shall be responsible for all material, equipment and supplies sold and delivered to Owner under this Contract until final inspection of the work and acceptance thereof by Owner. In the event any such material, equipment and supplies are lost, stolen, damaged or destroyed prior to final inspection and acceptance, Contractor shall replace same without additional cost to Owner.

I. Should Contractor fail to take proper action on storage and handling of equipment supplied under this Contract within seven days after written notice to do so has been given, Owner retains the right to correct all deficiencies noted in previously transmitted written notice and deduct the cost associated with these corrections from Contractor's Contract. These costs may be comprised of expenditures for labor, equipment usage, administrative, clerical, engineering and any other costs associated with making the necessary corrections.

1.07 SPECIAL TOOLS

A. Manufacturers of equipment and machinery shall furnish any special tools, (including grease guns or other special lubricating devices), required for normal adjustment, operations and maintenance, together with instructions for their use. Contractor shall preserve and deliver to Owner these tools and instructions in good order no later than upon achievement of Substantial Completion.

1.08 STORAGE AND HANDLING OF EQUIPMENT ON SITE

A. Attention shall be given to the storage and handling of equipment on site. As a minimum, the procedure outlined below shall be followed:

1. Equipment shall not be shipped until approved by Engineer and Owner. The intent of this requirement is to reduce on-site storage time prior to installation and/or operation. Under no circumstances shall equipment be delivered to the site more than one month prior to installation without written authorization from Engineer. Equipment shipped to the site shall be stored in accordance with Paragraph 1.06, herein. Operation and maintenance data as described in Section 01730 shall be submitted to Engineer for review prior to shipment of equipment.

2. All equipment having moving parts, such as gears, electric motors, etc., and/or instruments shall be stored in a temperature and humidity controlled building approved by Engineer, until such time as the equipment is to be installed.

3. All equipment shall be stored fully lubricated with oil, grease, etc., unless otherwise instructed by the manufacturer.
4. Manufacturer's storage instructions shall be carefully studied by Contractor and reviewed with Engineer by the Contractor. These storage instructions shall be carefully followed and a written record of this kept by the Contractor.

5. Moving parts shall be rotated a minimum of once weekly to ensure proper lubrication and to avoid metal-to-metal "welding" or seizing. Upon installation of the equipment, Contractor shall start the equipment, at least half load, once weekly for an adequate period of time to ensure that the equipment does not deteriorate from lack of use.

6. Lubricants shall be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance. Mechanical equipment to be used in the work, if stored for longer than ninety (90) days, shall have the bearings cleaned, flushed and lubricated prior to testing and startup, at no extra cost to Owner.

7. Prior to acceptance of the equipment, Contractor shall have the manufacturer inspect the equipment and certify that its condition has not been detrimentally affected by the long storage period. Such certifications by the manufacturer shall be deemed to mean that the equipment is judged by the manufacturer to be in a condition equal to that of equipment that has been shipped, installed, tested and accepted in a minimum time period. As such, the manufacturer will guarantee the equipment equally in both instances. If such a certification is not given, the equipment shall be judged to be defective. It shall be removed and replaced at Contractor's expense.

1.09 SPARE PARTS

A. Spare parts for certain equipment have been specified in the pertinent sections of the Specifications, or are common to the component as specified by the manufacturer. Contractor shall collect and store all spare parts so required in an area to be designated by Owner. In addition, Contractor shall furnish Engineer an inventory listing all spare parts, the equipment they are associated with, the name and address of the supplier, and the delivered cost of each item. Copies of actual invoices for each item shall be furnished with the inventory to substantiate the delivered cost.

B. All spare parts shall be properly packaged and shall be labeled on the part itself and on the exterior of any packaging.

1.10 GREASE, OIL AND FUEL

A. All grease, oil and fuel required for testing of equipment shall be furnished with the respective equipment. Owner shall be furnished with a year's supply of required lubricants including grease and oil of the type recommended by manufacturer with each item of equipment supplied.
B. Contractor shall be responsible for changing the oil in all drives and intermediate drives of each mechanical equipment after initial break-in of the equipment, which in no event shall be any longer than three weeks of operation.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION
PART 1 - GENERAL

1.01 THE REQUIREMENT

A. The Owner has purchased or already owns some equipment for the project which is to be installed or re-installed by the Contractor.

B. The Contractor shall install, complete and operable, the Owner furnished equipment (OFE), all in accordance with the Requirements of the Contract Documents.

C. A list of the OFE is provided in Part 2 of this specification.

1.02 DELIVERY, UNLOADING, AND ACCEPTANCE

A. The OFE is located either on site or in a maintenance warehouse on the site of the Owner’s Sykes Creek Regional Wastewater Treatment Facility, located at 3630 North Courtenay Parkway, Merritt Island, Florida.

B. The Contractor shall be responsible for retrieval of the OFE from the Owner’s storage location, transportation of the OFE to the project site, unloading of the OFE at the project site, storage of the OFE until the time of installation, and installing the OFE according to the Contract Documents. The Contractor shall coordinate with the Owner in scheduling retrieval of the OFE.

C. At the time of retrieval and prior to loading, the Contractor, along with the Owner, shall visually inspect the OFE and note in writing any apparent defects or deficiencies. Both the Owner and Contractor shall sign a form indicating the type and number of the OFE provided to the Contractor, the date and time of acceptance, any visual defects observed, and the names and signatures of all individuals inspecting and providing/receiving the materials.

D. The Contractor shall accept the equipment and assume ownership of the equipment following inspection and signing for the OFE and shall be responsible for properly transporting, loading, unloading, storing, and securing the equipment to prevent damage or theft. The transportation, handling, and storage of the OFE shall fully conform to appropriate manufacturer recommendations.

E. The Contractor shall protect and maintain the OFE in a manner that will prevent damage in accordance with the manufacturer’s instructions and recommendations until final acceptance of the Work.

F. Any and all OFE equipment which suffers damage, deterioration, or corrosion, after the Contractor’s acceptance, shall be replaced by the Contractor or repaired to the satisfaction of the Engineer at the Contractor’s expense. Any OFE that is lost by the Contractor shall be replaced in kind at the Contractor’s expense.
1.03 SUBMITTALS

A. Shop Drawings: Copies of the final shop drawings, including installation instructions, will be made available to the Contractor by the Owner for the Contractor’s use in performing the Work under this section. The Contractor shall return this information in good condition to the Owner following completion of the Work.

B. Operations and Maintenance Manuals: Operations and Maintenance Manuals will be made available to the Contractor by the Owner for the Contractor’s use in performing the Work under this section. The Contractor shall return this information in good condition to the Owner following completion of the Work.

1.04 QUALITY ASSURANCE

A. Field Tests: All completed units shall be field tested after installation to demonstrate satisfactory operations. The Contractor shall coordinate with the equipment supplier to review the installation and complete field testing. The Contractor shall notify the Owner that equipment is ready for testing a minimum of 10 days prior to testing.

1.05 INSURANCE

A. The Contractor shall include in his insurance coverage for the Work under this Contract, sufficient coverage to protect the OFE and materials against all losses during loading, transport, unloading, storage, and installation until final acceptance of the Work by the Owner. The Owner shall be named as co-insured for this equipment.

PART 2 - PRODUCTS

2.01 EQUIPMENT ITEMS FURNISHED BY THE OWNER

A. The following equipment shall be furnished by the Owner for installation or re-installation by the Contractor:

*Remote Telemetry Unit (RTU) Kit provided by the Owner, including:*

1 - Emerson Process Management Inc. CONTROLWAVE MICRO RTU Control Panel
1 - Yagi Antenna; SCALA TY-900
1 - 1/2" Heliax Cable, 32' length
2 - Male "N" Type Cable Connectors
2 - 1/2" Heliax cable Grounding Kits
1 - Pack of Wire Tags
1 - Box Cable Hangers with 316 SS Straps

B. Except for equipment specifically identified as OFE, all other materials required to complete the Work shall be provided by the Contractor. Such materials to be provided by the Contractor include, but are not limited to all connecting piping, pumps, valves, fittings, flanges, pipe joint restraints, bolts, nuts, gaskets, hangers, stainless steel straps, pipe supports, hoses, sheet metal, anchors, additional hardware, conduit, power, control and instrumentation wiring,
miscellaneous appurtenances and accessories, prime and finish painting, cement and stucco, expendable materials, and lubricants, all as necessary to provide complete and properly functioning systems.

C. All materials provided by the Contractor are subject to approval by the Engineer prior to their installation into the Work. The Contractor shall provide submittals for all materials and components it proposes to furnish along with such data as necessary to allow the Engineer to determine their fitness for the Work.

PART 3 - EXECUTION

3.01 INSTALLATION

A. General: ALL OFE shall be installed in accordance with the manufacturer’s instructions and as indicated on the Drawings and specified in the Specifications, unless otherwise approved in writing by the Engineer.

B. Responsibility for Complete System: The Contractor shall assume complete responsibility for necessary storing, installing, adjusting, lubricating, testing, and operational start-up of the OFE under this section. The Contractor shall be fully responsible for coordinating the construction of interconnecting equipment, piping, and appurtenances to effect installation and operation of the equipment.

C. Except for equipment specifically identified as OFE, all other materials required to complete the Work shall be furnished by the Contractor to provide a complete operable system.

D. The Contractor shall provide all supervision, labor, tools, construction equipment, incidental materials, and the necessary service to complete the installation and testing of OFE.

E. Mechanical, electrical, and all other work required to install the OFE shall conform to the Contract Document requirements, applicable standards, and approved shop drawings.
3.02 PROTECTIVE COATING

A. All exposed materials, except corrosion resistant materials which have not been shop painted, shall be field coated. Shop painted items which suffered damage to the shop coating shall be touched up as approved by the Engineer.

3.03 FIELD TESTING

A. Following installation, a functional test on all OFE shall be performed by the Contractor in the presence of the Engineer or Owner. The Contractor shall prepare all OFE for startup and testing, including all cleanup, lubrication, equipment tolerance adjustments, and providing incidental materials required for testing.

B. Prior to commissioning, all OFE shall be performance tested under actual or approved simulated operating conditions in accordance with the Contract Documents. Such testing shall be performed by the Contractor and coordinated with the Owner, Engineer, and manufacturer’s representative.

3.04 CERTIFICATE OF PROPER INSTALLATION

A. Following the successful performance testing and acceptance of the Work, the authorized representative of the manufacturer of OFE shall provide the Owner and the Contractor with a written certificate of proper installation. Such certification shall indicate the date of test, testing performed, statement of conformance to proper installation, and statement of meeting the performance requirements.

END OF SECTION
1.01 THE REQUIREMENT

A. The Contractor shall demolish and reconstruct existing facilities as indicated, in accordance with the Contract Documents.

1.02 COORDINATION

A. The Contractor shall carefully coordinate the Work in areas where existing facilities are interconnected with new facilities and where existing facilities remain operational. The Work as indicated is not all inclusive, and the Contractor shall be responsible to perform the reconstruction indicated plus that which can be reasonably inferred from the Contract Documents as necessary to complete the Project. The Specifications and Drawings identify the major facilities that shall be demolished and reconstructed, but auxiliary utilities such as water, air, chemicals, drainage, lubrication, fluid power, electrical wiring, controls, and instrumentation are not necessarily shown.

B. The Contractor shall note that the Drawings used to indicate demolition and reconstruction are based on record drawings of the existing facilities. These record drawings have been reproduced to show existing conditions and to clarify the scope of Work as much as possible. Prior to bidding, the Contractor shall conduct a comprehensive survey at the Site to verify the correctness and exactness of the Drawings, the scope of Work, and the extent of auxiliary utilities.

C. While demolition and reconstruction are being performed, the Contractor shall provide adequate access for the continued operation and maintenance of equipment as required by the Owner. The Contractor shall erect and maintain fences, warning signs, barricades, and other devices around the reconstruction as required for the protection of the Contractor's employees and the Owner's personnel. The Contractor shall remove such protection when reconstruction activities are complete, or as Work progresses, or when directed by the Engineer.

1.03 Contractor SUBMITTALS

A. Demolition and reconstruction procedures shall provide for safe conduct of the Work, careful removal and disposition of materials and equipment, protection of existing facilities which are to remain undisturbed, coordination with existing facilities to remain in service, and timely disconnection and reconnection of utility services.

1.04 DEMOLITION AND SALVAGE
A. Existing structures, equipment, piping, valves, electrical gear, instrumentation, and related appurtenances such as anchors, supports, and hardware indicated or required to be demolished as part of the Work shall be removed and disposed of unless otherwise indicated.

B. Unless otherwise noted, all demolished items become the property of the Contractor and shall be removed and disposed of properly as dictated by local regulations. The Owner reserves the right to retain any item noted for demolition with advanced notice to the Contractor. The Contractor shall remove and provide to the Owner, on site, such items requested to be salvaged by the Owner. Items to be salvaged shall be removed without any degradation in condition from that prior to removal.

C. Salvaged items shall be stockpiled and protected on the Site at a location directed by the Owner. The Contractor shall be responsible to properly safeguard the salvaged items against damage and loss during removal and handling.

D. Removed items shall be disposed of offsite by the Contractor in compliance with applicable local, state, and federal codes and requirements. The Contractor shall pay all applicable disposal fees.

1.05 RELOCATION

A. Items of existing piping required to be relocated shall be removed without any degradation in condition from that prior to removal. The Contractor shall be responsible to properly safeguard the relocated items against damage and loss during removal, handling, storage, and installation in the new location.

1.06 DISPOSAL

A. The Contractor shall be responsible for the offsite disposal of debris resulting from reconstruction in compliance with local, state, and federal codes and requirements.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 GENERAL

A. The Contractor shall coordinate demolition and reconstruction Work with the Owner and Engineer. Unless otherwise indicated, the Contractor shall be responsible for the sequence of activities. Work shall be performed in accordance with applicable safety rules and regulations.

B. The Contractor shall verify that any utilities connected to structures, equipment, and facilities to be removed, relocated, or salvaged are rendered inoperable, replaced with new utilities, or adequately bypassed with temporary utilities before proceeding with demolition and reconstruction.
C. The Contractor shall take precautions to avoid damage to adjacent facilities and to limit the Work activities to the extent indicated. If reconstruction beyond the scope indicated is required, the Contractor shall obtain approval from the Engineer prior to commencing.

3.02 PROTECTION OF EXISTING FACILITIES

A. Before beginning any reconstruction, the Contractor shall carefully survey the existing facilities and examine the Specifications and Drawings to determine the extent of reconstruction and coordination with the Work. Existing facilities not subject to reconstruction shall be protected and maintained. Damaged existing facilities shall be repaired to the previous condition or replaced.

B. Persons, including Owner’s staff and employees, shall be afforded safe passages around areas of demolition in order to accomplish assigned work tasks.

C. Structural elements shall not be overloaded. The Contractor shall be responsible for shoring, bracing, or adding new supports as may be required for adequate structural support as a result of Work performed under this Section. The Contractor shall remove temporary protection when the applicable Work is complete or when so authorized by the Engineer.

D. The Contractor shall carefully consider bearing loads and capacities before placement of equipment and material on Site. In the event of any questions as to whether an area to be loaded has adequate bearing capacity, the Contractor shall consult with the Engineer prior to the placement of such equipment or material.

3.03 DEMOLITION, SALVAGE, AND RELOCATION

A. The Contract Documents indicate any existing facilities which are to be demolished, salvaged, and/or relocated. Auxiliary utilities including such services as water, air, chemicals, drainage, lubrication, fluid power, electrical wiring, controls, and instrumentation are not necessarily indicated. The Contractor shall verify the scope of the Work to remove the equipment indicated, coordinate its shutdown, removal, replacement, or relocation, and submit an outage plan. The removal of existing facilities for demolition, salvage, and relocation shall include the following requirements:

1. Equipment supports, including concrete pads, baseplates, mounting bolts, and support hangers, shall be removed. Damage to the existing structure shall be repaired as indicated.

2. Exposed piping, including vents, drains, and valves, shall be removed. Where exposed piping penetrates existing floors and walls, the piping, including wall thimbles, shall be removed to a minimum depth of 2-inches. Resultant openings in the structure shall be repaired as indicated in the Contract Documents.

3. Electrical control panels, junction boxes, motor control centers, and local switches and pushbuttons shall be removed.
4. Exposed electrical conduits and associated wiring shall be removed. Resultant openings in structures shall be repaired as indicated.

5. Connections to embedded electrical conduits shall be removed a minimum of 2-inches inside the finished surface of the existing structure. Wiring shall be removed and the resulting openings shall be repaired as indicated.

6. Associated instrumentation devices shall be removed.

7. Auxiliary utility support systems shall be removed.

8. The area shall be thoroughly cleaned such that little or no evidence of the previous equipment installation will remain.

9. Below-grade areas and voids resulting from demolition of structures shall be completely filled and compacted. After fill and compaction, surfaces shall be graded to meet adjacent contours and to provide flow to surface drainage structures, or as indicated, and shall be finished to conform to applicable future use of the area.

10. When existing piping is removed from existing structures, the Contractor shall fill resulting openings in the structures and repair any damage such that the finished, rehabilitated structure shall appear as a new homogeneous unit with little or no indication of where the new and old materials join. The openings in water-bearing structures shall be filled with non-shrink grout to be watertight and reinforced as required or indicated. In locations where the surface of the grout will be exposed to view, the grout shall be recessed approximately 1/2-inch and the recessed area filled with cement mortar grout.

11. Electrical reconstruction shall be conducted by the Contractor in a safe and proper manner to avoid injury from electrical shock to the Owner's and Contractor's personnel. Electrical equipment to be shut off for a period of time shall be tagged, locked out, and sealed with a crimped wire and lead seal and made inoperable. At no time shall electrical wiring or connections which are energized or could become energized be accessible to Contractor, Owner, or other personnel without suitable protection or warning signs.

B. The Contractor shall perform a functional test of existing equipment that is relocated and reinstalled to ensure the equipment functions in the manner documented during the initial inspection. The Contractor shall inform the Engineer in writing a minimum of five (5) Days prior to the functional testing in order for the Owner and Engineer to witness the test. If, in the opinion of the Engineer, the relocated equipment does not function in a satisfactory manner, the Contractor shall make repairs and modifications necessary to restore the equipment to its original operating condition at no additional cost to the Owner.

3.04 DISPOSAL

A. Site debris, rubbish, and other materials resulting from reconstruction operations shall be legally removed and disposed of.
B. Refuse, debris, and waste materials resulting from demolition and clearing operations shall not be burned.

3.05 OCCUPANCY AND POLLUTION CONTROL

A. Water sprinkling, temporary enclosures, chutes, and other suitable methods shall be used to limit dust and dirt rising and scattering in the area or surrounding areas. The Contractor shall comply with government regulations pertaining to environmental protection.

B. Water shall not be used in such quantities that it creates hazardous or objectionable conditions such as ice, flooding, or pollution from sediment transport run-off.

3.06 CLEANING

A. During and upon completion of Work, the Contractor shall promptly remove tools and equipment, surplus materials, rubbish, debris, and dust and shall leave areas affected by Work in a clean, approved condition.

B. Adjacent structures shall be cleaned of dust, dirt, and debris caused by reconstruction, as directed by the Engineer or governing authorities, and adjacent areas shall be returned to condition existing prior to start of Work.
SECTION 01650

START-UP AND DEMONSTRATION

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work: Provide material, personnel, and testing or measuring equipment as needed and as specified herein to perform the required start-up and demonstration tests of appropriate equipment and systems.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 PRELIMINARY MATTERS AND FIELD TESTS

A. Start-up Certification: Prior to system start-up, successfully complete all the field testing required of the individual components of the work. Submit six (6) copies of CHECK-OUT MEMO's for each individual component, signed by Contractor, Sub-contractor and the manufacturer's representative. A sample CHECK-OUT MEMO form is provided at the end of this section. All copies shall be provided with the respective copies of the Operation and Maintenance Manual. This form shall be completed and submitted before Instruction in Operation to Owner or a request for initiating any final inspection(s).

B. Demonstrate to the Owner's Representative and Engineer that all temporary jumpers and/or bypass works have been removed and that all of the components are operating under their own controls as designated.

C. Coordinate start up activities with the Owner's Representative and with the Engineer prior to commencing system start-up.

3.02 START-UP TESTS

A. Confirm that all equipment is properly energized, that the valves are set to their normal operating condition and that the flow path through the new work is unobstructed.

B. Slowly fill each hydrostatic structure in the process flow stream with water.
C. Initiate start-up and training in accordance with and with the use of the plant operation and maintenance manuals.

D. Observe the component operation and make adjustments as necessary to optimize the performance of the Work.

E. The start-up tests will be conducted for seven consecutive days. The Work must operate successfully during the seven-day testing period in the manner intended. If the Work does not operate successfully, or if the start-up is interrupted due to problems, the problems will be corrected and the test will start over from day one. During the start-up tests, instruct designated plant operating personnel in the function and operation of the Work.

F. Coordinate with Owner for any adjustments desired or operational problems requiring debugging.

G. Make adjustments as necessary.

3.03 DEMONSTRATION TESTS

A. After all Work components have been constructed, field tested and started-up in accordance with the individual specifications and manufacturer requirements, perform the Demonstration Tests in the presence of the Engineer and the Owner. The demonstration shall be held upon completion of all systems at a date to be agreed upon in writing by the Owner or his representative.

B. During the demonstration test, operate the Work and cause various operational circumstances to occur. As a minimum, these circumstances will include average and peak flows, random equipment or process failures, tank overflows, surcharges and interlocks. Demonstrate the essential features of the equipment and its relationship to other equipment. Prior to the demonstration test, the Contractor shall submit two (2) copies of a detailed schedule of operational circumstances to describe the proposed test procedures for approval of completeness. These approved procedures will then be used as the agenda at the demonstration. Coordination of the test schedule will be accomplished through the Engineer.

C. The demonstration test procedures shall follow the example test procedure form provided at the end of this section. Provide similar test procedure forms for each section of the work to cover all aspects and features specified. The test procedures may be broken down into specific areas as follows:

1. Triplex Pump Station, electrical and RTU equipment

D. Acceptability of the Work's performance will be based on the Work performing as specified, under these actual and simulated operating conditions as defined in the Contract Documents.
The intent of the demonstration tests is for the Contractor to demonstrate to the Owner and the Engineer that the Work will function as a complete and operable system under normal as well as emergency operating conditions and is ready for acceptance.

E. Demonstrate the essential features of the whole system as it applies to the Work, including the mechanical equipment, piping, structures, finishes, controls, instrumentation, power distribution and lighting systems. Use the approved procedures and circumstances to demonstrate the system. Any minor deficiencies found shall be noted and included on a punch list attached to the Certificate of Completed Demonstration. The system shall be demonstrated only once, after completion of start-up tests. If circumstances arise that interrupt the test procedures (such as weather, unforeseen process problems, or problems caused by the Contractor whether or not the problems are the fault of the Contractor, etc.), then the test shall be terminated and rescheduled to a later date after the problem is corrected. The test shall be run in its entirety if so directed by the Engineer.

F. Certificate of Completed Demonstration: Submit six (6) copies of the CERTIFICATE OF COMPLETED DEMONSTRATION for the work, signed by the Contractor, Subcontractor, Engineer, and Owner and insert one copy in each Operation and Maintenance Manual. A sample CERTIFICATE OF COMPLETED DEMONSTRATION form is provided at the end of this section.
MANUFACTURER'S CHECK-OUT CERTIFICATION

OWNER: Brevard County, Florida  No. Copies ___ 5
ENGINEER: Tetra Tech  No. Copies ___ 1  Date _________
ARCHITECT:  No. Copies  
CONTRACTOR:  No. Copies  Check-out
FIELD:  No. Copies  Memo No. ______
OWNER:  No. Copies

PROJECT DATA

NAME: Lift Station F-10  NUMBER: ___________________
Electrical Improvements  DATE: _______________________
DRAWING NO: _______________
LOCATION: Lift Station F-10  SPECIFICATION SECTION: ___

OWNER: Brevard County, Florida

OTHER: ____________________________

________________________________
Name of Equipment Checked:__________________________________

________________________________
Name of Manufacturer of Equipment:____________________________

1. The equipment furnished by us has been checked on the job by us. We have reviewed (where applicable) the performance verification information submitted to us by the Contractor.

2. The equipment is properly installed, except for items noted below.*

3. The equipment is operating satisfactorily, except for items noted below.*

4. The written operating and maintenance information (where applicable) has been presented to the Contractor, and gone over with him in detail. Five (5) copies of all applicable operating and maintenance information and parts lists have been furnished to him for insertion in each of the Operation and Maintenance Manuals.

Checked By:________________________________  _____________________________
Name of Manufacturer's Rep.  Name of General Contractor

________________________________
Address and Phone No. of Rep.  Authorized Signature/Title/Date

________________________________
Signature/Title/Person Making Check  Name of Subcontractor

________________________________
Date Checked  Authorized Signature/Title/Date

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* Manufacturer's Representative Notations: Exceptions noted at time of check were:


Manufacturer's Representative to note any limitations on adequacy of related equipment that directly affects operation, performance or function of equipment checked. (No comment presented herein will indicate complete adequacy of related systems or equipment):


01650-5
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<th>PROJECT DATA</th>
<th>CONTRACT DATA</th>
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<td>SPECIFICATION SECTION:</td>
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<td>OWNER: Brevard County, Florida</td>
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<tr>
<td>OTHER:</td>
<td></td>
</tr>
<tr>
<td>TEST AREA: F-10 Lift Station</td>
<td>SHEET:  ___ OF ___</td>
</tr>
<tr>
<td>TEST DESCRIPTION:</td>
<td>DATE VERIFIED</td>
</tr>
<tr>
<td></td>
<td>VERIFIED ____ BY</td>
</tr>
</tbody>
</table>

01650-6
CERTIFICATE OF COMPLETED DEMONSTRATION

OWNER: Brevard County, Florida No. Copies 5
ENGINEER: Tetra Tech No. Copies 1
ARCHITECT: Certificate of
CONTRACTOR: Completed
FIELD: Demonstration
OWNER: Issue Date

PROJECT DATA

NAME: Lift Station F-10
DATE: 
LOCATION: Lift Station F-10
DRAWING NO: 
OWNER: Brevard County, Florida

NOTE TO CONTRACTOR:
Submit five (5) copies of all information listed below for checking in order to receive approval at least one week before scheduled demonstration of the Work. After all information has been approved by the Engineer, give the Owner a Demonstration of Completed Systems as specified and have the Owner sign five copies of this form. After this has been done, a written request for a final inspection of the system shall be made.

MEMORANDUM:
This certificate is for the information of all concerned that the Owner has been given a Demonstration of Completed Systems on the work covered under this Specification Section. This conference consisted of the system operation, a tour on which all major items of equipment were explained and demonstrated, and the following items were given to the Owner:

(a) Owner's copy of Operation and Maintenance Manual for equipment or systems specified under this section containing approved submittal sheets on all items, including the following:

(1) Maintenance information published by manufacturer on equipment items.
(2) Printed warranties by manufacturers on equipment items.
(3) Performance verification information as recorded by the Contractor.
(4) Check-out Memo's on equipment by manufacturer's representative.

(5) Written operating instructions on any specialized items.

(6) Explanation of guarantees and warranties on the system.

(b) Prints showing actual "As-Built" conditions.

(c) A demonstration of the System in Operation and of the maintenance procedures which will be required. Minor deficiencies to be corrected which were noted in the demonstration are attached, along with a copy of the actual test procedures performed.

(Name of Contractor)

By: _____________________________________

(Authorized Signature, Title & Date)

(Name of Subcontractor)

By: _____________________________________

(Authorized Signature, Title & Date)

Operations and Maintenance Manual, Instruction Prints, Demonstration & Instruction in Operation Received:

BREVARD COUNTY, FLORIDA

(Name of Owner)

By: _____________________________________

(Authorized Signature, Title & Date)

By: _____________________________________

(Authorized Signature, Title & Date)

END OF SECTION
PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work: Comply with requirements stated in the General Conditions and Requirements of the Contract and in specifications for administrative procedures in closing out the Work.

1.02 SUBSTANTIAL COMPLETION

A. Subject to the definition of “Substantial Completion” in the General Conditions, the work may not be considered substantially complete unless the punch list items that remain, as identified by the Engineer and Owner, can be completed within thirty (30) days. All painting, finishes, fencing, cleanup, final grading, grassing and planting shall have been completed and ready for inspection before Substantial Completion is approved. Also, all building occupancy certificates shall have been obtained. After (or concurrent with) the Demonstration Tests, with any minor deficiencies noted, the Contractor wishing to consider the Work substantially complete, shall submit to the Engineer:

1. A written notice that the Work is substantially complete.

2. A list of items to be completed or corrected and explanations thereof.

B. Within a reasonable time after receipt of such notice, the Engineer will make an inspection, if necessary, to determine the status of completion.

C. Should Engineer determine that the Work is not substantially complete:

1. The Engineer will promptly notify Contractor in writing, giving the reasons therefore.

2. Contractor shall remedy the deficiencies in the Work and send a second written notice of Substantial Completion to Engineer.

3. Engineer will reinspect the Work.

D. When Engineer finds that the Work is substantially complete, he will:
1. Prepare a tentative Certificate of Substantial Completion on form provided herein (see Section 00830), with a tentative list of items to be completed or corrected before final inspection.

2. After consideration of any objections made by the Owner as provided in the General Conditions of the Contract, the Engineer will execute the Certificate of Substantial Completion with a revised tentative list of items to be completed or corrected.

1.03 FINAL INSPECTION AFTER COMPLETION

A. When Contractor considers the Work is complete with all minor deficiencies completed or corrected, he shall submit written certification that:

1. Contract Document requirements have been met.

2. Work has been inspected for compliance with Contract Documents.

3. Work has been completed in accordance with Contract Documents.

4. Equipment and systems have been tested in the presence of Owner's representative and are operational.

5. All minor deficiencies have been corrected or completed and the Work is ready for final inspection.

6. All operation and maintenance manuals have been submitted and are acceptable.

7. Project record documents are complete and submitted.

8. Transfer of all spares and expendables has been made to the Owner with a full accounting of the quantities and amounts due.

B. Engineer will make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.

C. Should Engineer consider that the Work is incomplete or defective:

1. Engineer will promptly notify the Contractor in writing, listing the incomplete or defective work.

2. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to Engineer that the Work is complete.

3. Engineer will reinspect the Work.
D. When the Engineer finds that the Work is acceptable under the Contract Documents, he shall request the Contractor to make closeout submittals.

1.04 REINSPECTION FEES

A. Should the Engineer perform reinspections due to failure of the Work to comply with the claims of status of completion made by Contractor:

1. Owner will compensate the Engineer for such additional services.

2. Owner will deduct the amount of such compensation from the final payment to the Contractor.

1.05 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER

A. Evidence of compliance with requirements of governing authorities.

B. Project Record Documents: To requirements of Section 01720.

C. Operating and Maintenance Data, Instructions to Owner's Personnel: To requirements of Section 01730.

D. Spare Parts and Maintenance Materials: To requirements of the General Conditions and the Technical Sections of the Specifications.

E. Evidence of Payment and Release of Liens: To requirements of the General and Special Conditions.

F. Certificate of Insurance for Products and Completed Operations.

1.06 FINAL ADJUSTMENT OF ACCOUNTS

A. Submit a final statement of accounting to the Engineer.

B. Statement shall reflect all adjustments to the Contract Sum:

1. The original Contract Sum.

2. Additions and deductions resulting from:

   a) Previous change orders or written amendment.

   b) Allowances
c) Unit prices

d) Deductions for uncorrected work

e) Penalties and bonuses

f) Deductions for liquidated damages

g) Deductions for reinspection payments

h) Other adjustments

3. Total Contract Sum, as adjusted.

4. Previous payments.

5. Sum remaining due.

6. Evidence of transfer of inventory for all spares, and expendables used to return and supply the full specified amounts and quantities due.

C. Engineer will prepare a final Change Order, reflecting approved adjustments to the Contract Sum which were not previously made by Change Orders.

D. Submit Maintenance Bond to Owner.

1.07 FINAL PERIODIC PAY ESTIMATE

A. Contractor shall submit the executed final Periodic Pay Estimate in accordance with procedures and requirements stated in the Conditions of the Contract.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION
SECTION 01710
CLEANING

PART 1 - GENERAL

1.01 DESCRIPTION

A. Maintain job site, surrounding areas, and all public or private properties free from improperly stored materials, accumulations of waste, debris, and rubbish caused by operations.

B. At completion of Work, remove waste materials, rubbish, tools, equipment, machinery, surplus materials, and clean all sight-exposed surfaces. Leave job site clean and ready for occupancy and operation.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Use only cleaning materials recommended by manufacturer of materials of surface to be cleaned.

1. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.01 CLEANING - GENERAL

A. Cleaning and Disposal:

1. Conduct cleaning and disposal operations in accord with legal requirements.

2. Do not burn or bury rubbish and waste materials on job site. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in either storm or sanitary drains.

B. Burning:

1. Burning of the trees, shrubs, bushes, etc., cleared on the project site will not be allowed within the project site unless prior approval is obtained from the appropriate
governmental authorities and the Owner or the Engineer. All approved burning shall be completed with the use of an air curtain.

C. Hazards Control:

1. Store volatile wastes in covered metal containers, and remove from premises daily.

2. Prevent accumulation of wastes which create hazardous conditions.

3. Provide adequate ventilation during use of volatile or noxious substances.

3.02 CLEAN-UP DURING CONSTRUCTION

A. Perform routine cleaning to ensure job site, premises, private properties and adjacent properties and rights-of-way are maintained free from accumulations of waste materials and rubbish.

B. During Construction:

1. During construction, the Contractor shall, at all times, keep the site of the Work and adjacent premises as free from material, debris and rubbish as is practicable and shall remove the same from any portion of the site if, in the opinion of the Owner or Engineer, such material, debris, or rubbish constitutes a nuisance or is objectionable.

2. The Contractor shall remove from the site all of his surplus materials and temporary structures when no further need therefore develops. Contractor shall be responsible and liable for all spillage and incur all associated costs including, but not limited to, costs related to repair and maintenance resulting from damages thereof, and fines that may be levied as a result of citations given by State or local regulatory agencies.

3. Wet down dry materials and rubbish to lay and control dust.

4. At reasonable intervals during progress of Work, clean job site and public properties, and dispose of waste materials, debris and rubbish.

5. Provide dump containers on job site and pay for regular collection of waste materials, debris and rubbish.

6. Remove waste materials, debris and rubbish from job site, premises, adjacent and public properties and legally dispose of at public or private dumping areas.

7. Handle materials in a controlled manner with as few handlings as possible. Do not drop or throw materials from height.
8. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

3.03 FINAL CLEANING

A. In preparation for Substantial Completion or occupancy, conduct final inspection of sight-exposed interior and exterior surfaces, and of concealed spaces.

1. At the conclusion of the Work, all erection tools, temporary structures and excess materials belonging to the Contractor shall be promptly removed, and Contractor shall remove and promptly dispose of all water, dirt, rubbish or any other foreign substances to a facility permitted to manage these materials.

2. The Contractor shall thoroughly clean all equipment and materials installed and shall deliver such materials and equipment undamaged in a bright, clean, polished and new operating condition.

3. Remove grease, dust, dirt, stains, labels, furniture, fingerprints, and other foreign materials, from sight-exposed interior and exterior finished surfaces.

4. Clean and polish all factory finished surfaces such as plastic laminate, plated metals, stainless steel, and factory baked-on enamel or other painted surfaces.

5. Repair, patch and touch-up marred surfaces to specified finish, and to match adjacent surfaces as appropriate.

6. Broom clean paved surfaces; rake clean other surfaces of grounds.

7. Owner will assume responsibility for cleaning as of time designated on Certificate of Substantial Completion for Owner's acceptance of project or portion thereof.

3.04 GENERAL REQUIREMENTS

A. If the Contractor fails to comply with the requirements of this Article, in the opinion of the Owner or the Engineer, the Owner shall perform the necessary clean-up and deduct the cost of work from the monies due or to become due to said Contractor.
PART 1 - GENERAL

1.01 MAINTENANCE OF DOCUMENTS

A. Maintain at job site, one copy of each of the following as record documents:

1. Contract drawings. (Blueline, or blackline prints, as furnished by the Engineer, or printed from electronic format.)
2. Project Manual including Addenda/Bulletins.
3. Approved shop drawings and samples.
4. Modifications: Change Orders, Field Orders, Directives, and other written amendments to the Contract.
5. Field Test records.

B. Adhere to following guidelines for maintenance of record documents:

1. Store record documents in temporary field office, apart from documents used for construction purposes.
2. Provide files and racks for storage of record documents.
3. Maintain record documents in clean, dry and legible condition.
4. Do not use record documents for construction purposes.
5. Make the record documents available at all times for inspection by Engineer and other authorized users.

C. General Requirements

1. Progress Record Drawings:

   a) During construction, Contractor shall keep a marked up-to-date set of record document drawings on the site as an accurate record of all deviations between the work as shown and as installed. These drawings shall be available to the Owner and Engineer for inspection at any time.

   b) The Engineer will provide to the Contractor one (1) set of Contract Drawings for the sole purpose of Progress Record Drawings. The Contractor shall be required to submit these drawings to the Engineer at each Progress meeting for review. The purpose of this submittal is to ensure that "As-Built" records are being kept up-to-date by the Contractor.
c) **If these drawings are not kept up-to-date to the satisfaction of the Owner or Engineer or the submission is not made by the requested day and time, funds may be retained from the Contractor’s Periodic Pay Estimate.**

2. Final Record Drawings:
   a) Upon completion of Work, the Contractor shall furnish the Engineer with a complete set of marked-up Record Document drawings with "PROJECT RECORD DOCUMENT" clearly printed on each sheet.
   b) Contractor shall accurately and neatly transfer all deviation from progress record documents to final record documents. Record document drawings shall be provided to reflect as-built conditions.

3. Progress Record Specifications:
   a) During construction, Contractor shall keep on site a marked-up, up-to-date, set of record specifications annotated to clearly indicate all substitutions that are incorporated into the work. Where selection of more than one product is specified, annotation shall be available for inspection at any time by the Owner or Engineer.

4. Final Record Specifications:
   a) Upon completion of work, Contractor shall furnish the Engineer with a complete set of marked-up record specifications with "PROJECT RECORD DOCUMENTS" clearly printed on the cover.
   b) The Engineer, at no extra cost, will furnish Contractor with a set of specifications for mark-up by Contractor. Contractor shall accurately and neatly transfer all annotations from progress record specifications to the final record specifications.

1.02 MARKING DEVICES
   A. Provide fine ball-point colored pens for marking.

1.03 RECORDING
   A. Label each record document 'RECORD DOCUMENT' in 2-inch high printed letters.
   B. Within the title block on each drawing, update the Record Documents as the latest revision. Label each record document 'Field Conditions' and date each record drawing.
   C. Keep record documents current.
   D. Do not permanently conceal any work until required information has been recorded.
   E. On the Record Contract Drawings, legibly mark to record actual construction, including but not limited to the following items:
1. Depths of various elements of foundation in relation to design survey datum.

2. Horizontal and vertical location of all underground utilities and appurtenances referenced to at least two (2) readily visible permanent surface features such as edge of pavement, curbs, buildings, utility poles, manhole covers, valve boxes, etc.

3. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.

4. Field changes of dimension and detail.


6. Details not in the original contract drawings.

7. Horizontal locations and elevations for all structures and pipes, fittings, valves, casings, laterals, sleeves, pull boxes, junction boxes, changes in vertical or horizontal direction, and any other miscellaneous items installed under this Contract. At a minimum, the ends of each line must have the coordinate and elevation indicated. On curved lines installed by deflection, horizontal and vertical elevations shall be provided every 75 feet as a minimum.

8. Horizontal locations, elevations and size of sanitary sewer service laterals and water services encountered or crossed.

9. Horizontal locations and elevations of pipes that exceed minimum cover requirements, such as beneath ditch bottoms, culverts, or other pipes.

F. On the Record Specifications and Addenda, legibly mark-up each Section to record actual information, including but not limited to the following items:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.


3. Other matters not originally specified in the Contract Documents.

G. Shop drawings and samples: Maintain as record documents. Legibly annotate shop drawings and samples to record changes made after approval.

1.04 AUDIT

A. Project record documents will be reviewed periodically, as outlined within Paragraph 1.01 C. of this section, by the Engineer, who will use the current completeness of the record documents in evaluating the monthly progress payment request.

1.05 SUBMITTAL

A. At completion of project, deliver record documents to the Engineer.

B. Accompany submittal with transmittal letter, in duplicate, containing:
1. Date
2. Project Title and number
3. Contractor's name and address
4. Title and number of each record document
5. Certification that each document as submitted is complete and accurate
6. Signature of Contractor, or its authorized representative.

C. THE FINAL RECORD DOCUMENTS SHALL BE PREPARED, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION
PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. Compile product data and related information appropriate for Owner's maintenance and operation only of products furnished by the Contractor under this Contract.

2. Prepare operating and maintenance data as specified in this Section and as referenced in other pertinent sections of Contract Documents.

3. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.

1.02 QUALITY ASSURANCE

A. Preparation of data shall be done by personnel:

1. Trained and experienced in maintenance and operation of described products.

2. Familiar with requirements of this Section.

3. Skilled as a technical writer to the extent required to communicate essential data.

4. Skilled as draftsman competent to prepare required drawings.

1.03 FORM OF SUBMITTALS

A. Prepare data in form of an instructional manual for use by Owner's personnel.

B. Format:

1. Size: 8 1/2-inches x 11 inches.

2. Paper: 20 pound minimum, white, for typed pages.
3. Text: Manufacturer's printed data, or neatly typewritten.

4. Drawings:
   a) Provide reinforced punched binder tab, bind in with text.
   b) Reduce larger drawings and fold to size of text pages but not larger than 11 inches x 17 inches.

5. Provide fly-leaf for each separate product, or each piece of operating equipment.
   a) Provide typed description of products and major component parts of equipment.
   b) Provide indexed tabs.

6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List:
   a) Title of Project.
   b) Identity of separate structure, as applicable.
   c) Identity of general subject matter covered in the manual.

C. Binders:
   1. Commercial quality three O-ring or D-ring binders with durable and cleanable plastic or vinyl covers provided with slip-pockets for typed or printed title pages.
   3. When multiple binders are used, correlate the data into related consistent groupings.

1.04 CONTENT OF MANUAL

A. Provide neatly typewritten table of contents for each volume, arranged in systematic order.
   1. Contractor, name of responsible principal, address and telephone number.
   2. A list of each product required to be included, indexed to content of the volume.
   3. List, with each product, name, address and telephone number of:
a) Subcontractor or installer, manufacturer and supplier name, address and telephone number.

b) A list of each product required to be included, indexed to content of the volume.

c) Identify area of responsibility of each.

d) Local source of supply for parts and replacement name, address and telephone number.

4. Identify each product by product name and other identifying symbols as set forth in Contract Documents.

B. Product Data:

1. Include only those sheets which are pertinent to the specific product.

2. Annotate each sheet to:

   a) Clearly identify specific product or part installed.

   b) Clearly identify data applicable to installation.

   c) Delete references to inapplicable information.

3. Operation and maintenance information as herein specified.

4. Record shop drawings as submitted and approved with all corrections made for each product.

C. Drawings:

1. Supplement product data with drawings as necessary to clearly illustrate:

   a) Relations of component parts of equipment and systems.

   b) Control and flow diagrams.

2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
3. Do not use Project Record Documents as maintenance drawings.

D. Written text, as required to supplement product data for the particular installation:
   1. Organize in consistent format under separate headings for different procedures.
   2. Provide logical sequence of instructions of each procedure.

E. Copy of each warranty, bond and service contract issued.
   1. Provide information sheet for Owner's personnel, give:
      a) Proper procedures in event of failure.
      b) Instances which might affect validity of warranties or bonds.

1.05 MANUAL FOR MATERIALS AND FINISHES

A. Submit six copies of complete manual in final form.

B. Content: for applied materials and finishes:
   1. Manufacturer's data, giving full information on products.
      a) Catalog number, size, composition.
      b) Color and texture designations.
      c) Information required for reordering special manufactured products.
   2. Instructions for care and maintenance.
      a) Manufacturer's recommendation for types of cleaning agents and methods.
      b) Cautions against cleaning agents and methods which are detrimental to product.
      c) Recommend schedule for cleaning and maintenance.

C. Content, for moisture protection and weather-exposed products:
   1. Manufacturer's data, giving full information on products.
a) Applicable standards.
b) Chemical composition.
c) Details of installation.

2. Instructions for inspection, maintenance and repair.

D. Additional requirements for maintenance data: Respective sections of Specifications.

1.06 MANUAL FOR EQUIPMENT AND SYSTEMS

A. Submit six copies of complete manual in final form.

B. Content, for each unit of equipment and system, as appropriate:

1. Description of unit and component parts.
   a) Function, normal operating characteristics, and limiting conditions.
   b) Performance curves, engineering data and tests.
   c) Complete nomenclature and commercial number of replaceable parts.
   d) Summary of information listed on equipment and motor data plates.

2. Operating procedures:
   a) Start-up, break-in, routine and normal operating instructions.
   b) Regulation, control, stopping, shut-down and emergency instructions.
   c) Summer and winter operating instructions.
   d) Special operating instructions.

3. Maintenance procedures:
   a) Routine operations.
   b) Guide to "trouble-shooting".
   c) Disassembly, repair and reassembly.
d) Alignment, adjusting and checking.

4. Servicing and lubrication required.

5. Manufacturer's printed operating and maintenance instructions.

6. Description of sequence of operation by control manufacturer.

7. Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for maintenance.

   a) Predicted life of parts subject to wear.

   b) Items recommended to be stocked as spare parts.

8. As-installed control diagrams by controls manufacturer.


10. Charts of valve tag numbers, with location and function of each valve.

11. List of original manufacturer's spare parts, manufacturer's current prices and recommended quantities to be maintained in storage.

12. Other data as required under pertinent sections of specifications.

13. Approved record shop drawings with all corrections made, and a copy of the warranty statement, check-out memo, and demonstration test procedures and certification.

C. Content, for each electric and electronic system, as appropriate:

1. Description of system and component parts.

   a) Function, normal operating characteristics, and limiting conditions.

   b) Performance curves, engineering data and tests.

   c) Complete nomenclature and commercial number of replaceable parts.

2. Circuit directories of panelboards.

   a) Electrical service
b) Controls

3. As installed, color coded wiring diagrams.

4. Operating procedures:
   a) Routine and normal operating instructions.
   b) Sequences required.
   c) Special operating instructions.

5. Maintenance procedures:
   a) Routine operations.
   b) Guide to "trouble-shooting”.
   c) Disassembly, repair and reassembly.
   d) Adjustment and checking.

6. Manufacturer's printed operating and maintenance instructions.

7. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.

8. Other data as required under pertinent sections of specifications.

D. Prepare and include additional data when the need for such data becomes apparent during instruction of Owner's personnel.

E. Additional requirements for operating and maintenance data: Respective sections of Specifications.

1.07 SUBMITTAL SCHEDULE

A. Submit two copies of preliminary draft of proposed formats and outlines of contents of Operation and Maintenance Manuals within 90 days after Notice to Proceed. Sets of example O&M manuals are available for examination upon request.
B. Submit two copies of completed data in preliminary form no later than 20 days following Engineer's review of the last shop drawing of a product and/or other submittal specified under Section 01340, but no later than delivery of equipment. One copy will be returned with comments to be incorporated into the final copies and the other copy will be retained on-site for use in any early training.

C. Submit six (6) copies of approved manual in final form directly to the offices of the Engineer, within 10 days after the reviewed copy or last item of the reviewed copy is returned.

D. Provide six (6) copies of addenda to the operation and maintenance manuals as applicable and certificates as specified within 30 days after final inspection.

1.08 INSTRUCTION OF OWNER'S PERSONNEL

A. Prior to demonstration test, fully instruct Owner's designated operating and maintenance personnel in operation, adjustment and maintenance of products, equipment and systems.

B. Operating and maintenance manual shall constitute the basis of instruction. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

PART 2 - PRODUCTS  (Not used)

PART 3 - EXECUTION  (Not used)

END OF SECTION
SECTION 01740
WARRANTIES AND BONDS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. Compile specified warranties and bonds, as required by the Contract Documents.
2. Co-execute submittals when so specified.
3. Review submittals to verify compliance with Contract Documents.
4. Submit to Engineer for review and transmittal to Owner.

1.02 SUBMITTAL REQUIREMENTS

A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.

B. Number of original signed copies required: Two each.

C. Table of Contents: Neatly typed or printed, in an orderly sequence. Provide complete information for each item:

1. Product or work item.
2. Firm, with name of principal, address and telephone number.
4. Date of beginning of warranty, bond or service and maintenance contract.
5. Duration of warranty, bond or service maintenance contract.
6. Information for Owner's personnel: Instances which might affect the validity or warranty or bond.
7. Contractor, name of responsible principal, address and telephone number.
1.03 FORM OF SUBMITTALS

A. Prepare in duplicate packets.

B. Format:

1. Size 8 1/2-inches x 11 inches, punch sheets for standard three-post binder. Fold larger sheets to fit into binders.

2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". List:
   a) Title of Project.
   b) Name of Contractor.

C. Binders: Commercial quality, three-ring binder, with durable and cleanable plastic or vinyl covers and maximum ring size of two inches.

1.04 WARRANTY SUBMITTALS REQUIREMENTS

A. For all material, submit a warranty from the product manufacturer. The manufacturer's warranty period shall be concurrent with Contractor's for two (2) years, unless otherwise specified, commencing at the time of final acceptance by Owner.

B. The Contractor shall be responsible for obtaining certificates for material warranty for all major items which list for more than $1,000. The Engineer reserves the right to request warranties for material not classified as major. The Contractor shall still warrant material not considered to be "major" in the Contractor's two-year warranty period even though certificates of warranty may not be required.

C. In the event that the material manufacturer or supplier is unwilling to provide a two-year warranty commencing at the time of Owner acceptance, the Contractor shall obtain from the manufacturer a three (3) year warranty commencing at the time of equipment delivery to the job site. This three-year warranty from the manufacturer shall not relieve Contractor of the two-year warranty starting at the time of Owner acceptance of the equipment.

D. Owner shall incur no labor or equipment shipping cost during the guarantee period.

E. Guarantee shall cover all necessary labor, and materials resulting from faulty or inadequate design, improper assembly or erection, defective workmanship and materials, leakage, breakage or other failure of all equipment and components furnished by Manufacturer.
PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION
PART 1 - GENERAL

1.01 SCOPE

A. **Prior to commencing any work**, the Contractor shall have a continuous color audio-video recording made along the entire length and width of the Project area or areas to serve as a record of the pre-construction conditions.

1.02 APPROVAL

A. The recording shall be delivered to the Owner within 10 days after execution.

B. No construction shall begin prior to review and approval of the recording covering the specific construction area by the Engineer and Owner. The Engineer shall have the authority to reject all or any portion of a recording not conforming to these specifications and order that it be redone at no additional charge. The Contractor shall reschedule unacceptable coverage within five days after being notified. The Engineer shall designate those areas, if any, to be omitted from or added to the audio-video coverage. Recordings shall not be made more than 90 days prior to construction in any area. All recordings and written narrative records shall become property of Owner.

1.03 PROFESSIONAL ELECTROGRAPHERS

A. The Contractor shall engage the services of a professional electrographer to produce the recording. The color audio-video record shall be prepared by a responsible commercial firm known to be skilled and regularly engaged in the business of preconstruction color audio-video documentation. The Contractor, as a shop drawing, shall have the electrographer furnish for the Engineer a list of all equipment to be used for the audio-video recording, including the manufacturer’s name, model number, technical specifications and other pertinent information. Additional information to be furnished by the electrographer includes the names and addresses of two references that the electrographer has performed color audio-video recording for projects of a similar nature, at least one of which must have been within the last 12 months.

PART 2 - PRODUCTS

2.01 GENERAL
A. All equipment must meet generally accepted standards for professional video production, (e.g., ENG equipment), and be suited for the application. Video recording equipment sold and intended for home use is **NOT** acceptable.

B. The equipment used may employ any standard, professional format, such as:

1. Analog Video and Audio
   a. VHS Videotape
   b. VHS-C Videotape

2. Digital Video and Audio
   a. DVCAM
   b. DVCPRO
   c. MiniDV
   d. HDV

2.02 DELIVERABLES

A. The media used for the audio-video recordings delivered to the Owner and Engineer shall be clearly and fully labeled and shall be compatible with current industry standards and the format utilized. Acceptable examples include:

1. Videotape
   a. Videotapes shall be new. Reprocessed tapes will not be acceptable. The tapes shall be one-half inch high energy, extended still frame capable, video cassette, and shall be compatible for playback with a VHS system.

2. Digital Video Disk (DVD)
   a. DVD’s shall be new and protected by a hard-plastic case.

PART 3 - EXECUTION

3.01 EQUIPMENT

A. All equipment, accessories, materials and labor to perform this service shall be furnished by the professional electrographer.
B. The total audio-video system shall reproduce bright, sharp, clear pictures with accurate colors and shall be free from distortion, tearing, rolls or any other form of imperfection. The audio portion of the recording shall reproduce the commentary of the camera operator with proper volume, clarity and be free from distortion and interruptions.

C. When conventional wheeled vehicles are used, the distance from the camera lens to the ground shall be adequate to properly show the existing conditions. In some instances, audio-video coverage may be required in areas not accessible by conventional wheeled vehicles. Such coverage shall be obtained by walking or special conveyance approved by the Engineer.

D. The color video camera used in the recording system shall have a minimum horizontal resolution of 300 lines at center, a luminance signal to noise ratio of 545 dB or better and a minimum illumination requirement of 25 foot-candles.

3.02 RECORDED INFORMATION - AUDIO

A. Each recording shall begin with the current date, project name and municipality and be followed by the general location, i.e., name of street, house address, viewing side and direction of progress. The audio track shall consist of an original live recording. The recording shall contain the narrative commentary of the electrographer, recorded simultaneously with the fixed elevation video record of the zone of influence of construction.

3.03 RECORDED INFORMATION - VIDEO

A. All video recordings must, by electronic means, display continuously and simultaneously generated with the actual taping transparent digital information to include the date and time of recording, and stations numbers as shown on the Drawings. The date information shall contain the month, day and year. The time information shall contain the hour, minutes and seconds. Additional information shall be displayed periodically. Such information shall include but not be limited to project name, contract number, name of street, house address, direction of travel and the viewing side. This transparent information shall appear on the extreme upper left hand third of the screen.

3.04 LIGHTING

A. All video recording shall be done during times of good visibility. No recording shall be done during precipitation, mist or fog. The recording shall only be done when sufficient sunlight is present to properly illuminate the subjects of the recording and to produce bright, sharp video images of those subjects.

3.05 SPEED OF TRAVEL

A. The rate of speed in the general direction of travel of the vehicle, dolly or technician during recording shall not exceed 44 feet per minute. Panning, zoom-in and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object throughout the view.
3.06 AREA OF COVERAGE

A. Video coverage shall include all surface features located within the zone of influence of construction supported by appropriate audio coverage. Such coverage shall include, but not be limited to, existing parking lots, driveways, sidewalks, curbs, pavements, ditches, mailboxes, green space, landscaping, culverts, headwalls, fences, signs, amenities, houses, walls, other buildings, and all other features visible within the area covered.

B. Should a damage claim be brought by any citizen or public official concerning a feature not included or not adequately depicted in the pre-construction audio-video coverage, the Contractor shall bear the full burden of proof regarding liability.

END OF SECTION
PART 1 - GENERAL

1.01 DESCRIPTION

A. The Owner is required to maintain proper operation of Lift Station F-10 at all times during the execution of the Contract. The Contractor shall follow a sequence of construction consistent with that requirement. Down time of specific components is anticipated, but must be kept to a minimum so operations and service to the customers is not interrupted.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 OVERALL SEQUENCE OF CONSTRUCTION

A. Erosion control measures must be established prior to commencement of construction. The pre-construction video must also be completed before starting construction.

B. The Owner is required to maintain proper operation of Lift Station F-10 at all times during the execution of the Contract. Therefore, the Contractor shall follow a sequence of construction consistent with that requirement, as suggested below.

C. Suggested Construction Sequence:

1. Remove Flow Chart and level recorder from equipment building.

2. Construct new electrical equipment rack between building and wet well for pump disconnects, junction box for level sensor/float interface. Mount disconnect for Pump #1 and Pump #2 and provide conduit with seal from rack to wet well. Mount pump wiring junction box on outside of east wall of equipment building.

3. Install 7.5KVA transformer and new low voltage panel “LP” on north wall of building. Install conduit to new Pump Control Panel location.

4. Mount new SCADA panel on east wall of equipment room.

5. Run conduit to outdoor motor disconnect equipment rack motor disconnects for Pump #1 and Pump #2.
6. Mount new generator battery charger next to existing and pre-wire to panel “LP”.
7. Install ground counterpoise, lightning protection and ground available equipment to counterpoise.
8. Patch accessible holes in exterior wall to match building new construction.
9. Once by-pass pumping is established and operation is verified, coordinate with Florida Power & Light (FPL), for temporary shutdown of electrical service to building.
10. Complete demolition of existing motor control center, transfer switch, and main service entrance disconnect.
11. Install new Pump Control Panel, Transfer Switch and Main Service Disconnect.
12. Re-establish interconnect between existing generator power and control wiring and new Transfer Switch.
13. Connect existing Pumps #1 and #2 to new Pump Control Panel via outside rack and junction box located outside building.
14. Connect level sensor manufacturers cable and floats to pump control panel.
15. Complete and verify installation of sealing material in conduit seals between equipment rack and wet well.
17. Coordinate with FPL to energize pump control panel as soon as possible to minimize bypass pumping requirements.
18. Install Pump Control Panel outside warning light.
19. Complete equipment power wiring in building. (Interior lighting, receptacles, SCADA panel, exterior lighting, day tank, flow meter, and new exhaust fan.)
20. Complete control wiring for interface between SCADA panel, pump control panel and new SCADA antenna outside building. Test equipment.
21. Schedule substantial completion site visit.
22. Address punch list items.
23. Bring new equipment online after receipt of Substantial Completion Certificate.
24. Remove all bypass pumping system, complete demobilization.

END OF SECTION