LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

181st Street Neighborhood Gravity Sewer System



ISSUED FOR BID

CONTRACT SPECIFICATIONS

November 2020

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NOTICE TO CONTRACTORS

Bid # 21-005-00104 181st Street Neighborhood Gravity Sewer System

Sealed Bids will be received by the Loxahatchee River Environmental Control District (the "District,") via DemandStar until 3:00 p.m. local time on January 12, 2021. Any Bids received after 3:00 p.m. local time on January 12, 2021, will not be accepted under any circumstances. Any uncertainty regarding the time a Bid is January 14, 2021 at 3:00 p.m. local time in the Governing Board room of the District, at the above address. The Work to be performed is located in Palm Beach County, and consists of furnishing all labor, tools, materials, and equipment to include:

The installation of approximately 1,220 linear feet of 8" gravity sewer, three manholes, one connections to existing manhole; right of way restoration; and all associated labor, materials, equipment, permits and maintenance of traffic to result in a complete and functional installation as shown on the construction plans and specifications.

The District reserves the right to determine material elements of the Bid and to award the Contract, if at all, to the lowest, qualified, responsive, and responsible Bidder. The District further reserves the right to reject any and all Bids; to not proceed with the Project; and/or to waive any irregularities contained in a Bid.

A pre-bid conference will be held at **3:00 p.m.**, local time on **December 15, 2020** via Microsoft Teams. A meeting invite will be distributed to all plan holders prior to the scheduled date and time. If a bidder downloads Bid Documents from the District's website the bidder must send a request to be included in the pre-bid conference meeting invite to **purchasing@lrecd.org**. All contractors planning to submit Bids on this Project are encouraged to attend.

Bid Documents may be downloaded at the District's website, https://loxahatcheeriver.org/governance/purchasing-bids/ or DemandStar. Bid Documents will be available on **November 30, 2020** after **8:00 a.m.** local time. The Bid Documents are made available on the above terms solely for the purpose of obtaining Bids and do not confer a license or grant for any other use.

Character and amount of security to be furnished by each Bidder are stated in the Instruction to Bidders. The Bidder shall hold its Bid open for acceptance by the District for a period of not less than ninety (90) calendar days following the date of the Bid opening.

The solicitation Invitation to Bid **21-005-00104** has been issued as an Electronic Bid with the same title on DemandStar. To submit a response for this bid electronically follow the instructions on DemandStar. Electronic responses are the only method allowed for Bidders to respond to this solicitation. Bids shall be submitted on or before the date and time specified.

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

Stephen B. Rockoff, Chairman

INSTRUCTIONS TO BIDDERS

ARTICLE 1

- 1. The following defined terms shall govern this Section and all other Contract Documents unless otherwise noted in the Contract Documents:
 - a. "Bid" shall mean the documents that comprise the submission for the Work of this Project.
 - b. "Bid Period" shall mean the time period from when the Bid Documents will become available to the deadline for submitting Bids.
 - c. "Bidder" shall mean one who submits a Bid directly to the District, as distinct from a sub-bidder, who submits a Bid to the Bidder.
 - d. "Bid Documents" include the Advertisement for Bids, Instructions to Bidders, Proposal, Questionnaire, the Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipts of Bids).
 - e. "Change Order" shall mean a written change, addition, or deletion to the Contract Documents signed by both Contractor and the District.
 - f. "Contract" shall mean the agreement between the Successful Bidder and the District for performance of the Work.
 - g. "Contract Documents" shall mean all documents that comprise the agreement of the parties related to the Project. The Contract Documents include the Notice to Contractors, Instructions to Bidders, Proposal, Questionnaire, Bid Security, Contract, Public Construction Bond, Sworn Statement of Public Entity Crimes, Opinion of District's Attorney, Releases of Liens, Special Conditions, General Conditions, Technical Specifications, Standard Details and Plans, Plans and Specifications including all modifications, addenda, and Change Orders contained in any documents before or after execution of the Contract.
 - h. "Contract Sum" shall mean the total amount due to Contractor as a result of the Work performed on the Project, including any amounts due as a result of Change Orders.
 - i. "Contract Time" shall mean the time to complete the Project as set forth in the Contract Documents. Reference to "days" shall mean calendar days unless otherwise noted.
 - j. "Contractor" shall mean the Successful Bidder with whom the District executes a contract for the Work or its duly authorized agents.
 - k. "County" shall mean Palm Beach County, as may be applicable.
 - "Defective" shall mean the Work does not conform to the Contract Documents or does not meet the requirements of any applicable inspection, reference standard, test, or approval.

- m. "District" shall mean the Loxahatchee River Environmental Control District, acting through its properly authorized representatives.
- n. "Engineer" shall mean the engineer designated by the District as its engineering representative during the course of construction to make appropriate inspection and computation of payments, whether acting directly or through properly authorized agents, inspectors or representatives of the Engineer, acting within the scope of duties entrusted to them. The Engineer may or may not be an employee of the District.
- o. "Final Completion" shall mean the time when Engineer determines that all of the Work and associated punch list items have been completed in accordance with the Contract Documents.
- p. "Notice of Award" shall mean the District's notification of award of the Contract to the Successful Bidder.
- q. "Plans" shall mean any and all drawings, plans, sketches, diagrams, designs, lists, or other graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work for the Project.
- r. "Project" shall mean the entire construction to be performed as provided in the Contract Documents.
- s. "Specifications" shall mean the written requirements for materials, equipment, systems, standards, and workmanship for the Work, and performance of related services.
- t. "Substantial Completion" shall mean the date as certified by Engineer when the construction of the Project is sufficiently completed, in accordance with the Contract Documents, so that the Project can be utilized for the purposes for which it was intended; or if there be no such certification, the date when final payment is due in accordance with the Contract.
- u. "Successful Bidder" shall mean the lowest, qualified, responsible, and responsive Bidder to whom the District, based on the District's evaluation hereinafter provided, makes an award.
- v. "Work" shall mean 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, services, and other incidentals and the furnishing, installation, and delivery thereof and all Work reasonably inferable therefrom.
- 2. **Bids**: Sealed Bids will be received by the Loxahatchee River Environmental Control District (the "District,") via DemandStar until **3:00 p.m**. local time on **January 12, 2021**. Any Bids received after **3:00 p.m**. local time on **January 12, 2021**, will not be accepted under any circumstances. Any uncertainty regarding the time a Bid is received will be resolved against the Bidder. The Bids will be publicly opened and read aloud on **January 14, 2021** at **3:00 p.m**. local time in the Governing Board room of the District, at the above address. The Bidder shall hold its Bid open for acceptance by the District for a period not less than ninety (90) calendar days following the date of the Bid opening.

Bid Documents may be downloaded at the District's website, https://loxahatcheeriver.org/governance/purchasing-bids/ or via DemandStar. Bid Documents will be available on **November 30, 2020** after **8:00 a.m.** local time. The Bid Documents are made available on the above terms solely for the purpose of obtaining Bids and do not confer a license or grant for any other use.

A pre-bid conference will be held at **3:00 p.m.**, local time on **December 15, 2020** via Microsoft Teams. A meeting invite will be distributed to all plan holders prior to the scheduled date and time. If a bidder downloads Bid Documents from the District's website the bidder must send a request to be included in the pre-bid conference meeting invite to purchasing@lrecd.org. All contractors planning to submit Bids on this Project are encouraged to attend.

All Bids shall be made on the blank form of proposal attached hereto. All blanks on the Bid Forms must be printed in blue or black ink or typed. Completed Bid Forms shall be scanned to PDF format and uploaded to DemandStar. The Bid shall contain an acknowledgment of receipt of all Addenda. A single Bid shall be submitted for all portions of the Work. Bids by corporations must be executed in the corporate name by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature. Bids by partnerships must be executed in the partnership name and signed by a general partner, whose title must appear under the signature. The official address of the partnership must also be shown below the signature. If requested, the person signing a Bid for a corporation or partnership must produce evidence satisfactory to the District of the person's authority to bind the corporation or partnership. All names must be typed or printed below the signature. The address and telephone number for communications regarding the Bid must be shown.

After commencement of the Bid Period, no Bidder, or its agents, representatives, or persons acting at the request of such Bidder shall contact, communicate with or discuss any matter relating to the Bid with any District officer, agent, Board member, or employee other than Engineer or their designee. This prohibition ends upon execution of the final contract for the Work or when the Bid has been cancelled. A Bidder who violates this provision will be to subject discipline, including at a minimum a written reprimand and up to and including rejection of its Bid and/or cancellation of the Contract.

3. **Bid Security**: Each Bid must be accompanied by bid security in the form of a certified check or Bidder's Guaranty Bond ("Bid Bond") issued by a surety meeting the requirements of this Instruction to Bidders Section 3 and payable to the District for ten percent (10%) of the total amount of the Bid ("Bid Security"). Bidders will send the ORIGINAL Bid Bond to the District immediately after the Bid Due Date. The District will hold all bids unopened for 48 hours from the Bid Due Date. The original Bid Bond is to be received within 48 hours of the Bid Due Date or the bid will be deemed non-responsive. The Bid Security of the Successful Bidder will be retained until the Bidder has executed the Contract and furnished the required payment and performance bonds in the form of a Public Construction Bond, whereupon the Bid Security will be returned. If the Successful Bidder fails to execute and deliver the Contract and furnish the required Bonds within fourteen (14) calendar days after the Notice of Award, the District may annul the Notice of Award and the Bid Security of that Bidder will be forfeited to the District. The Bid Security of any Bidder whom the District believes to have a reasonable chance of receiving the award may be retained by the District for ninety (90) calendar days after the date of the opening of the Bid. The Bid Security of other Bidders will be returned seven (7) calendar days after the opening of the Bids. The Bid Bond shall be issued by a company having a registered agent in the State of Florida.

4. **Bonds and Qualification of Security Companies**: Upon award of the Contract, Contractor shall execute a Public Construction Bond, in the amount of the total Contract Sum with a qualified surety company, covering performance of the Project and payment of subcontractors, substantially similar in form to that provided in Article 5 of the Contract Documents and in compliance with the requirements of Section 255.05, Florida Statutes.

In order to be acceptable to the District, Bid Bonds, Public Construction Bonds, or Maintenance Bonds shall, at a minimum be written by a surety company that:

- a. is admitted/authorized to do business in the State of Florida and complies with the provisions of Section 255.05, Florida Statutes;
- b. has been in business and has a record of successful continuous operations for at least five (5) years;
- c. files a certified copy of a power of attorney with the signed Bid, Public Construction, or Maintenance bonds;
- d. lists the surety's agency name, address, and telephone number on all bonds; and
- e. has at least the following minimum ratings based on the following contract amounts:

| CONTRACT AMOUNT | BEST'S RATINGS |
|------------------------------|-----------------------|
| \$ 25,000.00 to \$100,000.00 | B+ Class V or better |
| \$100,000.01 to \$500,000.00 | A Class VI or better |
| \$500,000.01 and over | A Class VII or better |

The life of the Construction Bonds or Maintenance Bonds shall extend twelve (12) months beyond the date of Final Completion and shall contain a waiver of alteration to the terms of the Contract, extensions of time, and/or forbearance on the part of the District.

Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended).

5. **Subject of Bids**: All Work for the Project shall be constructed in accordance with the Plans and Specifications prepared by the District. Bids shall be submitted for furnishing, delivering, and installing all materials, equipment, incidentals and services, including labor for the Work as specified in the Contract Documents and all items reasonably inferable therefrom. Engineer will compute the quantities that will be the basis for payment applications, both progress and final.

All Work shall be done as set forth in the Contract Documents and substantially completed, tested, cleaned, and ready for operation within the periods stated in Article 4 of the Contract, Section 2.

6. **Modification and Withdrawal of Bids**: Bids may be withdrawn or modified by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted during the Bid Period. A request for withdrawal or a modification must be in writing and signed by a person duly authorized to withdraw or modify the

Bid. If signed by a deputy or subordinate, the principal's written authorization to such deputy or subordinate granting the power to act on the principal's behalf must accompany the request for withdrawal or modifications. Withdrawal of a Bid will not prejudice the rights of a Bidder to submit a new Bid within the Bid Period. After expiration of the Bid Period, no Bid may be withdrawn or modified, except as provided below.

If, within twenty-four (24) hours after Bids are opened, any Bidder files a duly signed, written notice with the District and within five (5) calendar days thereafter demonstrates to the reasonable satisfaction of the District that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid Security will be returned. Thereafter, the Bidder will be disqualified from further bidding on the Project.

7. **Award, Waiver, and Rejection of Bids**: The Contract will be awarded pursuant to the requirements of applicable federal, state, and local laws and regulations. The Contract award will be made to the lowest cost, qualified, responsive, and responsible Bidder whose proposal materially complies with all the requirements. The District reserves the option to award or rebid the Project at any time if deemed to be in the best interest of the District.

It is the intention of the District to award the Contract to a Bidder competent to perform and complete the Work in a timely and satisfactory manner. Additionally, the District may conduct such investigations as the District deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications, and financial ability of Bidders, proposed subcontractors, suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to the District's satisfaction and within the prescribed time.

To the extent permitted by applicable federal, state, and local laws and regulations, the District reserves the right to: determine materiality of Bid components; determine qualifications of the Bidder; determine responsibility of Bidder; determine responsiveness of Bidder; reject any and all Bids; waive any informality or irregularities in any Bid received; or accept the Bid deemed by the District to be in its best interest. Bids may be rejected at the option of the District if the District determines in its sole discretion the Bid is materially incomplete, unbalanced, conditional, or obscure; the Bid contains additions not called for, erasures, alterations, irregularities of any kind; the Bid does not comply materially with the Notice to Contractors and/or Instruction to Bidders; or the Bid is from a Bidder that does not meet pre-bid conference attendance requirements.

Documented poor performance of contractors on previous contracts with the District or other governmental entity will be considered during evaluation and may be sufficient cause not to award.

- 8. **Construction Schedule**: Prior to signing the Contract, the Successful Bidder shall submit on a form acceptable to the District and Engineer, the overall proposed construction schedule for the Project. The schedule shall conform to the requirements of Special Conditions Section 9.36. This construction schedule shall specify the Project completion date as set forth in the Contract.
- 9. **Execution of the Contract:** When the District gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Contract and all other written Contract Documents. Within fourteen (14) calendar days thereafter, Contractor shall sign and deliver the counterparts of the Contract and other written Contract Documents to the District with the required bonds and insurance certificates. Within fourteen (14) calendar days thereafter, the District shall deliver one fully signed counterpart to Contractor. Each counterpart is to be

accompanied by a complete set of the appropriately identified Plans and Specifications. Following execution of the Contract by the District, the construction schedule shall be modified to begin upon the execution of the Contract by both Parties of the Contract.

10. **Examination of Contract Documents and Site**: It is the responsibility of each Bidder, prior to submitting a Bid to (a) examine the Bid and Contract Documents thoroughly, (b) visit the site of the Work and become familiar with local conditions that may in any manner affect cost, progress, performance or furnishing of the Work, (c) consider federal, state, and local laws, ordinances, rules, and regulations that may affect cost, progress, performance or furnishing of the Work in any manner, (d) examine the Plans and Specifications, requirements of the Work, and the accuracy of the quantities of the Work to be completed, and (e) notify Engineer of all conflicts, errors, or discrepancies in the Contract Documents.

Bidder may rely upon the accuracy of the technical data contained in the reports of exploration and tests of subsurface conditions at the site of the Work which have been utilized by Engineer in preparation of the Contract Documents. Bidder may not rely upon the completeness of the documents, non-technical data, interpretations or opinions of the reports of exploration and tests of subsurface conditions, for the purposes of bidding and/or construction. Further, information and data reflected in the Contract Documents with respect to underground facilities at or contiguous to the site are based upon information and data furnished to the District and Engineer by the owners of such underground facilities or others. The District does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions. Elevations of the ground are shown on the Plans and Specifications and are believed to be reasonably correct. However, such elevations are not guaranteed and are presented only as an approximation. Bidders shall satisfy themselves as to the correctness of all elevations.

The lands upon which the Work is to be performed, right-of-ways and easements for access thereto, and other lands designated for use by Contractor in performing Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage materials and equipment shall be provided by Contractor.

Before submitting a Bid, each Bidder shall, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests, studies and any additional information and/or data which pertain to the physical conditions (subsurface, surface and underground facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance, or furnishing of the Work in accordance with the time, price, and other terms and conditions of the Contract Documents. In advance, the District will provide each Bidder access to the site of the Work at reasonable times to conduct such explorations and tests as each Bidder deems necessary for the submission of the Bid, provided Bidder provides two (2) business days written notice prior to the date access is requested.

The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with the requirements as set for in the Instructions to Bidders and all other Contract Documents; the Bid is premised upon performing and furnishing the Work required by the Bid and Contract Documents; the means, methods, techniques, sequences, or procedures of construction as may be indicated in or required by the Bid and Contract Documents will be followed; and that the Bid and Contract Documents are sufficient in scope and detail to indicate and convey an understanding of all terms and conditions of performance and furnishing of the Work.

The Contract Documents contain the detailed provisions required for the construction of the Project. No information, verbal or written, obtained from any officer, agent or employee of the District on any such matter shall in any way affect the risk or obligation assumed by Contractor, or relieve Contractor from fulfilling any of the conditions of the Contract Documents.

11. **Interpretations and Addenda:** All questions about the meaning or intent of the Contract Documents are to be directed to Engineer. All questions must be submitted to Engineer in writing as early as possible during the Bid Period. No oral answers or interpretations will be provided. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by addenda mailed to all persons recorded by Engineer as having received the Bid Documents. Questions received less than ten (10) calendar days prior to the deadline to submit Bids will not be answered. Only questions answered by formal written addenda will be binding. Oral responses and other interpretations or clarifications will be without legal effect, and shall not be relied upon by a Bidder.

Addenda may also be issued to modify the Bid Documents as deemed necessary by the District and/or Engineer. Contractor agrees to use the products and methods designated or described in the Plans and Specifications and as amended by any addenda. Addenda shall control in the event of conflict with Contractor's Bid.

- 12. **Substitute Material and Equipment:** The Contract will be based on material and equipment described in the Plans and Specifications without consideration of possible "substitute" or "equal" items. Whenever it is indicated in the Plans and Specifications that a Contractor may furnish or use a "substitute" or "equal" item of material or equipment, written application for such acceptance will not be considered by Engineer until after the effective date of the Contract. The written application for acceptance of a substitute item of material or equipment will be handled in accordance with the field order procedure.
- 13. Subcontractors: Each Bid must identify the names and addresses of the subcontractors. If requested by the District or Engineer, the Successful Bidder, and any other Bidder so requested, shall, within seven (7) days after the date of the request, submit to the District an experience statement with pertinent information as to similar projects and other evidence of qualification for each such subcontractor, person, and organization. The amount of subcontract work shall not exceed sixty percent (60%) of the Work. If the District or Engineer, after due investigation, has reasonable objection to any proposed subcontractor, supplier, other person, or organization, either party may, before issuing the Notice of Award, request the Successful Bidder to submit an acceptable substitute without an increase in Contract sum or Contract Time. If the apparent Successful Bidder declines to make any such substitution, the District may award the Contract to the next lowest qualified, responsive, and responsible Bidder that proposes to use acceptable subcontractors, suppliers, and other persons and organizations. Declining to make requested substitutions will not constitute grounds for sacrificing the Bid Security of any Bidder. Any subcontractor, supplier, other person or organization listed and not objected to in writing by the District or Engineer prior to giving of the Notice of Award, will be deemed acceptable to the District and Engineer, subject to revocation of such acceptance after the Effective Date of the Contract. The Successful Bidder shall be solely responsible for all payment to its subcontractors. No Contractor shall be required to employ any subcontractor, manufacturer, other person or organization against whom it has reasonable objection.
- 14. **Taxes:** Contractor shall pay all applicable sales, consumer, use, and other similar taxes required by law.

15. **Compliance with Laws:** Bidders must comply with all applicable federal, state, or local laws and regulations, including, but not limited to, the Department of Labor Safety and Health Regulations for construction promulgated under the Occupations Safety and Health Act of 1970 (PL 91-956) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54).

Any chemicals used in the performance of this Project by the Bidder must have prior approval of the Environmental Protection Agency (EPA) and/or United States Department of Agriculture (USDA).

Bidders shall comply with the requirements of Sections 553.60-553.64, Florida Statutes (the "Trench Safety Act") and 29 CFR Section 1926.650 Subpart P (the "Occupational Safety and Health Administration's Excavation Safety Standards"). If the Project provides for trench excavation in excess of five (5) feet deep, the Bidder shall include in its Bid a reference to the Trench Safety Act and the standards that will be in effect during the period of construction of the Project; written assurance by the Bidder, that if selected, the Bidder will comply with applicable trench safety standards; and a separate item identifying the cost of compliance with the Trench Safety Act, in accordance with Section 553.64, Florida Statutes.

- 16. **Liquidated Damages and Additional Delay Damages:** Bidder and the District recognize the Work is of a critical nature, that time is of the essence, and the difficulty associated with ascertaining the extent of delay damages the District will suffer as a result of delay in the Work. As a result, if awarded the Contract, Bidder agrees to pay the District as liquidated damages, and not as a penalty, the amount of Liquidated Damages and Additional Delay Damages as outlined in Article 4- Contract Section 2.
- 17. **Insurance:** Contractor shall provide and maintain throughout the terms of this Contract, liability insurance with all the subject features in accordance with the instruction given in the Special Conditions Section 9.08.
- 18. **Required Disclosures:** With its Bid submission, Bidder shall disclose all material facts pertaining to any felony conviction or any pending felony charges in the last three (3) years in this state, any other state, or the United States against (i) Bidder, (ii) any business entity related to or affiliated with Bidder, or (iii) any present or former executive employee, officer, director, stockholder, partner or owner of Bidder or of any such related or affiliated entity. This disclosure shall not apply to any person or entity which is only a stockholder, owning twenty percent (20%) or less of the outstanding shares of a Bidder and whose stock is publicly owned and traded.

At its sole discretion the District may reject the Bid of any Bidder whose present or former executive employees, officers, directors, stockholders, partners, or owners are currently accused of or have ever been convicted of bidding violations. The discretion of the District may be exercised based on the disclosure required herein. By submitting a Bid, Bidder recognizes and accepts that the District may reject the Bid based upon the exercise of its sole discretion, and Bidder waives any claim it might have for damages or other relief resulting from the rejection of its Bid based on these grounds.

19. **Public Entity Crime/ Convicted Vendor List:** 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, Florida Statutes, Category Two, for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

20. **License and Permits:** The District has obtained the permits specified within the Contract Documents. Contractor shall obtain and pay for all permits and licenses required for the Work as defined in Section 01010 of the Technical Specifications, including the cost of all Work performed in compliance with the terms and conditions of such permits, whether by itself or others.

No construction Work shall commence until all applicable licenses and permits have been obtained and copies delivered to Engineer.

- 21. **Protest:** The District is responsible for resolution of protests of contract awards, claims, disputes, alleged patent infringements, alleged license fee(s) and other related procurement matters in accordance with sound business judgment and good administrative practice. By submitting a Bid to the District, Bidders agree to the procedures outlined in the District's Procurement Policy which can be found on the District's website, www.loxahatcheeriver.org/purchasing.php, to resolve all protests.
- 22. The Contract Documents include various divisions, sections, and conditions which are essential parts of the Work to be provided by the Contractor. A requirement occurring in one is binding as though occurring in all. The Contract Documents are intended to be complementary and to describe and provide for complete Work. In case of discrepancy, the following precedence will govern the interpretation of the Contract Documents prior to award of the Contract:
 - 1. Addenda
 - 2. Bid Documents, including the Contract
 - 3. Special Conditions
 - 4. Technical Specifications / Plans and Specifications
 - 5. General Conditions
 - 6. Bidder's Response

After award, in the event of a conflict, Change Orders, supplemental agreements, and revisions to Plans and Specifications will take precedence over any of the above. Detailed plans shall have precedence over general plans. In the event that any conflicts cannot be resolved by reference to this governing order of Contract Documents provision, then the District shall resolve the conflict in any manner which is acceptable to the District and which comports with the overall intent of the Contract Documents.

23. To render a Bid responsive, the Bidder's Proposal must be accompanied by the Bid Form provided in Article 2 of the Contract Documents. Acceptable references and projects to be included shall be those related to modifications of lift station access hatches. References provided shall be from the "owner" of the Project, not the project engineer or Contractor. The District will not award a Bid

to any Bidder who cannot prove to the satisfaction of the District that the corporation/partnership/individual identified on the signature of Bidder form has satisfactory written references for similar work. References that are from a parent corporation or affiliated subsidiary will not be considered by the District.

- 24. **Notice to Proceed:** The Notice to Proceed for this project will be issued within 180 days of the Award of Contract at a time mutually agreed to by the District and lowest responsive bidder.
- 25. **Health, Safety and Environmental Performance:** The District shall evaluate Bidder's health, safety and environmental performance based on the following performance metrics and documentation reviews. The selected Bidder is solely responsible for all applicable health, safety, and environmental requirements, and the health, safety, and environmental evaluation conducted by the District is not an assumption of any responsibility for health, safety, and environmental requirements by the District. Bidders which fail to submit with their Bid information demonstrating compliance with the following criteria shall be considered non-responsive/non-responsible:
 - U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Incident Rates and Recordable Injuries:

Total Days Away, Restricted, Transferred (DART)

(U.S. Bureau of Labor Statistics, Table 1). Incidence rates of nonfatal occupational injuries and illnesses by industry and case types, 2018, 25th percentile or better for size 11-49, NAICS 237110, Water and sewer line and related structures construction). Bidder's DART must be less than or equal to benchmark.

Total Recordable Incident Rate (TRIR)

(U.S. Bureau of Labor Statistics, Table 1. Incidence rates of nonfatal occupational injuries and illnesses by industry and case types, 2018,

25th percentile or better for size 11-49, NAICS 237110, Water and sewer line and related structures construction). Bidder's TRIR must be less than or equal to benchmark.

Fatalities: **0** Work related fatalities resulting in OSHA citations within the last three years, OR if 1 or more work related fatalities resulting in an OSHA citation exist within the last three years, the contractor must have mitigated risk of recurrence by implementing adequate industry standard safety procedures and training as determined by OSHA by providing such OSHA determination to the District.

Bidder shall submit a health, safety and environmental plan for Construction and General Industry. The health, safety and environmental plan must address the following minimum requirements:

Lockout/Tagout Excavation Trenching and Shoring Permit Required Confined Space Injury Reporting/Investigation Operator Qualifications Hot Work
Personal Protective Equipment
Electrical Safety
Near Miss, Behavioral Based Safety
Qualified, Certified and Competent Employees

OSHA Inspection Detail review must show no Serious or Willful violations in the previous 36 months and no unresolved Failure to Abate Prior Violation in the previous 36 months and no active Failure to Abate Prior Violation.

Bidder shall submit with their Bid OSHA Form 300A completed for the previous year, an Experience Modification Rating letter from its insurance carrier for the current period and a copy of its written health, safety and environmental program with training records for the previous 36 months.

- 26. **Previous Performance on District Projects:** The District has implemented a Contractor Evaluation Report in an effort to document contractor performance on District projects. Bidders who have received Unsatisfactory ratings on previous District projects must submit with their Bid a mitigation plan detailing previous unsatisfactory ratings and measures implemented to address the unsatisfactory performance. Bidders with unsatisfactory ratings not submitting a mitigation plan with their bid shall be deemed Non-Responsive/Non-Responsible.
- 27. **Experience:** The District shall evaluate the Bidder's experience relative to the work to be performed based on the following requirements:

Have successfully performed as Prime Contractor on a minimum of 5 similar projects in the past 5 years. Similar projects shall include gravity sewer installations with a minimum contract value of \$100,000. Qualifying projects shall be complete and shall not have been assessed Liquidated Damages, terminated, suspended or defaulted.

Bidder shall submit Project Resumes for all qualifying projects. Resumes shall include project name, description, construction cost, completion date, District's project manager contact information (name, phone number and email), Engineer of Record's contact information (name, phone number and email). See Proposal, Article 2A, Questionnaire.

| LO | XAHATCHEE RIVER |
|-----|------------------------------|
| EN | VIRONMENTAL CONTROL DISTRICT |
| | |
| By: | |
| | Stephen B. Rockoff |
| | Chairman |

I hereby acknowledge receipt of the Notice to Contractors and Instruction to Bidders and have familiarized myself with the contents therein and all other Contract Documents

| By: | | | |
|-----|--------|------|--|
| • | Bidder | Date | |

PROPOSAL

ARTICLE 2

LOXAHATCHEE RIVER DISTRICT 181st Street Neighborhood Gravity Sewer System

| To the LOXAHATCHEE RIVER DISTRICT of Jupiter, Florida, as | the party of the first part: |
|--|------------------------------|
| Proposal made by:as Bidder, | |
| whose business address is: | |
| State whether Bidder is an individual, a partnership or a corporation: | |
| Accompanying this Proposal is a Bid Security for \$ | (Numbers) |
| | (Amount Written) |
| From:(Name of Surety) | |

- 1. The undersigned Bidder hereby declares that the Bidder has carefully examined the Contract Documents relating to the above entitled matter and the Work, and has personally inspected the location of the Work. The undersigned Bidder has correlated the results of all observations, examinations, investigations, tests, reports, and studies with the terms and conditions of the Contract Documents.
- 2. The undersigned Bidder hereby declares that the Bidder is the only person or persons interested in its Bid; that it is made without any connection with any person submitting another bid for the same Contract; that the Bid is in all respects fair and without collusion, fraud, or mental reservations; that no official of the District or any person in the employ of the aforesaid is directly or indirectly interested in said Bid or in the supplies of Work to which it relates, or in any portion of the profits thereof.
- 3. The undersigned Bidder does hereby offer and agree to furnish all materials, to fully and faithfully construct, perform and execute all Work in the above entitled matter in accordance with the Plans and Specifications relating thereto, and to furnish all labor, tools, implements, machinery, forms transportation, and materials necessary and proper for the said purpose at the prices named below for the various items of Work.
- 4. The undersigned Bidder does hereby declare that the prices so stated cover all expenses of every kind incidental to the completion of said Work and the Contract, including all claims that may arise through damages or other cause whatsoever. The undersigned Bidder agrees to complete the Work for the price(s) indicated in the Bid Form.
- 5. The undersigned Bidder does hereby declare that the Bidder shall make no claim on an account of any variation of the approximate estimate in the quantities of Work to be done, nor on account of any misunderstanding or misconceptions of the nature of the Work to be done or the grounds or place where it is to be done.
- 6. The undersigned Bidder does hereby agree that it will execute the Contract which will contain the material terms, conditions, provisions, and covenants necessary to complete the Work according to the Plans and Specifications, within fourteen (14) calendar days after receipt of written Notice of Award of this proposal by the District; and if the Bidder fails to execute said Contract within said period of time, that the District shall have the power to rescind said award and also retain for the District the Bid Security accompanying Bidder's proposal which shall become forfeited as liquidated damages.
- 7. The undersigned Bidder also declares and agrees that the Bidder will commence the Work within ten (10) calendar days after receipt of written Notice to Proceed and will complete the Work fully and in every respect on or before the time specified in the Contract Documents, and so authorize the party of the District in case of failure to complete the Work within such specified time to employ such persons, equipment, and materials as may be necessary for the proper completion of said Work and to deduct the cost therefore from the amount due under the Contract.
- 8. The undersigned Bidder accepts all of the terms and conditions of the Bid Documents, including without limitation those dealing with the disposition of the Bid Security. The undersigned Bidder also makes all representations required by the Instructions to Bidders.

- 9. The undersigned Bidder agrees to provide Unit Prices of major construction elements of the Work in order to better determine the value of progress payment, in a format as provided in Article 6 Forms for Use During Construction.
- 10. The undersigned Bidder hereby agrees that the Bidder will, at Bidder's expense, insure all persons employed by it in prosecuting the Work hereunder against accident as provided by the Workers' Compensation Law of the State of Florida.
- 11. The price for the Work shall be stated in both words and figures in the appropriate place in the proposal form. Discrepancies in the multiplication of units of Work and unit prices will be resolved in the favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in the favor of the correct sum. In the event that there is a discrepancy between the price in written words and the price written in figures, the former shall govern.
- 12. The undersigned Bidder acknowledges receipt of the addenda, if any, as listed herein and agrees that Bidder will be bound by all addenda whether or not listed herein.

| Receipt of | Addendum | No | Date | _ |
|------------|--|---|--|----------------------|
| | | No | Date | _ |
| | | No | Date | _ |
| | | No | Date | _ |
| | ne following documents are provided): | e attached to and ma | de a condition of this Bi | d (initial each item |
| a. | Initial Instruction Section 287.133(3)(a), F | - | osal, Questionnaire, Swor blic Entity Crimes, Scheo | |
| b. | Initial Bid Sec | urity | | |
| c. | Initial Power of | of Attorney (for Surety | y Bond only) | |
| d. | Initial Corpora president or vice preside | • | ute Bid (any corporate en | mployee other than |
| e. | Initial Copies Statutes and/or appropria | | . , | lance with Florida |
| f. | Initial OSHA's | nitial OSHA's Form 300A completed for the previous year | | |
| g. | Initial Experie | ence Modification Ra | ting letter (issued by ins | surance carrier) for |

| | Written health, safety and environmental program with training records evious 36 months. |
|--------------------|--|
| i. Initial 26) | Contractor's Unsatisfactory Rating Mitigation Plan (if required, see ITB |
| j. Initial | Project Resume's for qualifying experience (see ITB 27). |
| | Contractor: |
| | By: |
| | Title: |
| | Address: |
| (Corporation Seal) | |
| | Attest: |
| | Title: |
| | Contractor's License No: |

BID FORM — BASE BID LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT 181ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM

UNIT PRICES

| No. | Description | Unit | Qty. | Unit Cost | Total |
|---------|---|------|------|-----------|-------|
| General | | | | | |
| 1 | Mobilization | LS | 1 | | |
| 2 | Maintenance of Traffic | LS | 1 | | |
| 3 | Record Drawings | LS | 1 | | |
| 4 | Pre-Construction Video | LS | 1 | | |
| 5 | NPDES Permit/Erosion Control | LS | 1 | | |
| 6 | Trench Safety Act | LS | 1 | | |
| Gravity | Sewer | | | | |
| 7 | 8" SDR-26: 0'-6' | LF | 250 | | |
| 8 | 8" SDR-26: 6'-8' | LF | 450 | | |
| 9 | 8" SDR-26: 8'-10' | LF | 440 | | |
| 10 | 8" SDR-26: 10'-12' | LF | 80 | | |
| 11 | 4' Diameter MH: 4'-6' | EA | 1 | | |
| 12 | 4' Diameter MH: 6'-8' | EA | 1 | | |
| 13 | 4' Diameter MH: 8'-10' | EA | 1 | | |
| 14 | 4" or 6" Single Service Lateral < 45' | EA | 9 | | |
| 15 | Connect to Existing MH and install Drop | LS | 1 | | |
| 16 | Dewatering | LS | 1 | | |
| Roadwa | y | | | | |
| 17 | 12" Compacted Subgrade | SY | 2300 | | |
| 18 | 12" Compacted Limerock Base | SY | 2300 | | |
| 19 | 6" Asphalt Millings | SY | 2300 | | |

| | Total Base Bid Items 1 – 19: |
|-------------------------------------|------------------------------|
| Total Base Bid Items 1-19 in words: | Dollars |
| | Cents |

THE CONTRACT AWARD SHALL BE EVALUATED BASED ON THE TOTAL BASE BID PRICE FOR ITEMS 1 THROUGH 19 AS SUBMITTED BY THE LOWEST, QUALIFIED, RESPONSIBLE, RESPONSIVE BIDDER.

| | (Name of Bidder) |
|--------------------------------|-------------------------------|
| | Bidders Name: |
| | By: |
| | Print Name of Person signing: |
| | Title: |
| | Business Address: |
| | |
| | |
| | |
| Incorporated or formed under t | he laws of the State of |

PROPOSAL ARTICLE 2a

QUESTIONNAIRE For 181ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM

INSTRUCTIONS

- 1. The following information must be filled out by <u>all Bidders</u>.
- 2. Please print legibly, type, or word process. Sign in ink. When attaching sheets, please place the question number to which you are responding in the upper right hand corner of each sheet and number the sheets.
- 3. Note that the person signing this Application must swear that the information provided below is true, accurate, and complete.

1. Basic Information

| | [Same as on Cover Page of ' | The Proposal] |
|--------------------|--------------------------------|---------------|
| Contact Person(s): | | |
| Telephone No: | Fax No: | E-mail |
| Address: | | |
| | | |
| | cense: Primary classification: | |
| CONTRACTOR'S li | | |
| CONTRACTOR'S lic | cense: Primary classification: | |

| 1.7 | Name of person and title who inspected site of proposed WORK for your firm: |
|----------------|---|
| | Name:Date of Inspection: Title: |
| | 2. Organizational Structure & History |
| 2.1 | The Contractor is duly organized under the laws of the State of |
| 2.2 | The Contractor has the following organizational structure. |
| | () individual () corporation () partnership () limited liability company () joint venture () other: |
| 2.3 organ | Provide the year the Contractor (and not any Predecessor Entities or Related Entities) was first nized |
| 2.4 | List all Predecessor Entities below (or on attached sheets if necessary). |
| 2.5 | Please list all Related Entities below (or on attached sheets if necessary). |
| 2.6 all lav | If organized in any state other than Florida or in a foreign country, are you in compliance with ws and regulations necessary to legally do business in the State of Florida? YES NO |

3. Officers and Owners

| | Name | Title | A | ddress |
|--------------|-------------------------------------|---|---|--|
| | | | | |
| | | Attach additional sheet | s as necessary.] | |
| 3.2 ownin | | the name, address, and per of the Contractor, in descen Add | nding order of percent | |
| | | | | |
| | | [Attach additional sheet | s as necessary.] | |
| 3.3 | Employees. Please I Crew Discipline | list total quantity of employ Number of e | yees, # of crews, and d mployees in crew | liscipline of each crew. % of total firm |
| | | | | |
| | | | s as necessary.] | |

4. Experience

| | erience that the Contractor h | | fic project, list the approximate actor or as a subcontractor with |
|---|--|---------------------------|---|
| | Project Type | | <u>Years</u> |
| • | Construction (primary) Construction (subcontractor) | | |
| last ten contracts com recently completed pr | pleted by the Contractor. oject first, next most recen | Please list in reve | wing information regarding the erse chronological order (most ject, etc.). [Please feel free to s it contains all the information |
| Contract Amount | Project Type & Location | Month / Year Completed | Name, Address, Contact Person & Tel. # of Owner |
| | | | |
| | | | |
| | | | eted as Prime Contractor for a Bid may be considered non- |
| Project: | | | - |
| Year Complete | : | | |

4.4 ATTACH TO THIS BID the experience resume of the person who will be designated chief construction superintendent or on site construction manager.

similar type and complexity that you have completed as Prime Contractor for a government entity in Florida. See Instructions to Bidders, Paragraph 27, Experience. If 5 projects have not been completed, Contractor must so state (this must be filled out below or Bid may be considered nonresponsive).: a. Project Name: Contract Price: \$ Detailed Description of Work: Name, Address and Telephone Number of Government/Contact Person: b. Project Name: Contract Price: \$ Detailed Description of Work: Name, Address and Telephone Number of Government/Contact Person: c. Project Name: Contract Price: \$ Detailed Description of Work: Name, Address and Telephone Number of Government/Contact Person: d. Project Name: Contract Price: \$

List 5 projects completed as Prime Contractor in last 5 years in Florida involving work of

4.5

| | Detailed Desc | eription of Work: | | | |
|--------------------------|--|-------------------------|--|--|--|
| | Name, Address and Telephone Number of Government/Contact Person: | | | | |
| e. | Project Name | : | | | |
| | Contract Price Detailed Desc | | | | |
| | Name, Addre | ss and Telephone Num | ber of Government/0 | Contact Person: | |
| currently | in progress, in | descending order of | contract amount. [| rmation regarding all contracts Please feel free to provide this as all the information requested. | |
| | et Amount | Project Type & Location | % Completed | Name, Address, Contact Person & Tel. # of Owner | |
| | | | | | |
| | | | | | |
| number an Entities) a | nd contact person contract durin | _ | e Contractor (or any ttach additional shee | ent agencies, including telephone Predecessor Entities and Related ets as necessary. | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

4.8 <u>Subcontractors</u>. This proposal is being submitted by the CONTRACTOR who proposes to perform the Work as required by the Contract Documents. If the CONTRACTOR will be utilizing a Subcontractor for a category of Work set forth below then the CONTRACTOR <u>must</u> identify the Subcontractor by name and provide the Subcontractor's address and telephone number. Only <u>one</u> Subcontractor may be identified for each category set forth below. If the CONTRACTOR does not identify a Subcontractor for a category of Work specified, this shall constitute a representation and warranty by the CONTRACTOR that the CONTRACTOR is not utilizing a Subcontractor for such Work and will perform such Work with CONTRACTOR's own employees. After submitting this bid the CONTRACTOR may not add to, subtract from, modify or make substitutions regarding the Supplier/Subcontractor identification and listing without the express written request and consent of the District. Any substitutions must be for legitimate and proper reasons. All Subcontractors listed are subject to the approval of the District.

CONTRACTOR represents and warrants to the District that all of said Subcontractors and their authorized vendors have been made aware of all the appropriate portions of the Contract Documents and agree that their portion of the Work and materials furnished in connection therewith will meet all of the requirements of the Contract Documents and that deliveries will be scheduled so as not to impede the progress of the Work.

| Subcontractors: | |
|-----------------|-------------------------|
| Surveyor | Name: |
| | Address & Telephone No. |
| Dewatering | Name: |
| | Address & Telephone No. |
| Videographer | Name: |
| | Address & Telephone No. |

| Other | |
|---|--|
| 1 | Name: |
| | |
| | |
| - | Address & Telephone No. |
| 4.10 <u>Liquidated Damages</u> Within the or Related Entities) had liquidated dar | e last five years, has the Contractor (or any Predecessor Entities mages assessed against it? |
| Y | TES NO |
| damages, the original contract time, | and the number of days for which liquidated damages were written summary of your position on the matter. |
| 4.11 <u>Terminations / Suspensions / Def</u> | <u>Faults</u> |
| (a) Within the last five years, has a con Entities) been terminated or suspended | ntract of the Contractor (or any Predecessor Entities or Related d for cause? |
| Y | ES NO |

| (b) Within the last five years, has another party (e.g. surety) completed Work which the Contractor (or any Predecessor Entities or Related Entities) was originally responsible to perform? YES NO |
|--|
| (c) Within the last five years, has the Contractor (or any Predecessor Entities or Related Entities) been considered in default of a contract that was not cured within the time frame allowed by the contract? YES NO |
| If the answer to any of questions 4.6(a)-(c) is YES, please provide full details on attached sheets. Please feel free to include a written summary of your position on the matter. |
| 4.12 <u>Denial of Qualification or Award</u> |
| (a) Within the last 5 years, has any federal, state, or local government or procurement agency denied the Contractor (or any Predecessor Entities or Related Entities) qualification? |
| YES NO |
| (b) Within the last 5 years, has any federal, state, or local government or procurement agency, after the Contractor (or any Predecessor Entities or Related Entities) submitted the apparent low bid, refused to award a contract for reasons related to the Contractor's qualifications, experience, competence, or financial situation? YES NO |
| If the answer to either of questions 4.7(a) or (b) is YES, please provide full details on attached sheets. Please feel free to include a written summary of your position on the matter. |
| 4.13 Debarments, Etc. |
| (a) Within the last 5 years, has the Contractor (or any Predecessor Entities or Related Entities) been debarred for any reason by any federal, state, or local government or procurement agencies? |
| YES NO |
| (b) Within the last 5 years, has the Contractor (or any Predecessor Entities or Related Entities) refrained from bidding for any reason, such as suspension or agreement not to bid, or as part of the settlement of a Dispute of any type with any federal, state, or local government or procurement agencies? |
| YES NO |
| If the answer to either of questions 4.8(a) or (b) is YES, please provide full details on attached sheets. Please feel free to include a written summary of your position on the matter. |
| 4.14 <u>Claims History</u> Within the last 5 years, has the Contractor (or any Predecessor Entities or Related Entities) been a party to a Claim with an originally claimed amount in excess of \$50,000? |
| YES NO |

If YES, please provide full details for each Claim on attached sheets including (a) whether the Claim was brought by or against the Contractor (or any Predecessor Entities or Related Entities), (b) the nature of the Dispute underlying the Claim, (c) originally claimed amounts, (d) the resolution of such Claims (including the amount) or if unresolved, the current status of such Claims, and (e) the name, address and phone number of the primary adverse party who is to be contacted for additional information, and (f) a written summary of your position on the matter (if desired).

4.15 <u>Bid or Other Crimes</u> Within the last 10 years, has the Contractor (or any Predecessor Entities or Related Entities), or any officers, owners, or Key Personnel of the same ever been indicted on, convicted of, or plead or consented to a violation of a bid crime including bid collusion or any other crime involving fraud or knowing misrepresentation?

| YES NO |
|--|
| If YES, please provide full details on attached sheets. Please feel free to include a written summary of your position on the matter. |
| 4.16 Quality Control Does the Contractor have a written organizational-level quality control plan (as opposed to project-level plans)? YES NO |
| If YES, please answer the following two questions. |
| (a) What year was it first adopted? (b) In what year was its substance last revised? |
| 4.17 <u>Contractor Evaluation Report</u> Has the Contractor performed work with the District where a Contractor Evaluation Report was completed as part of the work? |
| YES NO |
| If YES, did the Contractor receive any UNSATISFACTORY ratings? |
| YES NO |

If YES, include with the Bid Contractor's UNSATISFACTORY RATING MITIGATION PLAN.

5. Key Personnel

5.1 Please provide the following information for all Key Personnel whose duties consist primarily of one or more the following functions: (a) project management, (b) quality control and (c) safety oversight. [Please feel free to provide this information on attached sheets in another format as long as it contains all the information requested.]

| Name | Job Duties | Relevant Licenses | Experience | Education |
|--|---------------|-------------------------|-------------|--------------------|
| 1 | | or Certifications | (# of Yrs.) | (Degree or # Yrs.) |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| | [Attach addit | ional sheets as necessa | ary.] | |
| | | 6. Bonding | | |
| 6.1 Is the Contractor capable of obtaining from a Qualifying Bonding Company a performance bond and a payment bond each in the amount of the bid prices that the Contractor will be submitting to the OWNER. A Qualifying Bonding Company is an insurance, bonding, and/or surety company rated in accordance with contract requirements. | | | | |
| | YES | NO | | |
| If NO, please explain why you cannot meet the bonding standards set forth in question 6.1 above on attached sheets. | | | | |
| 7. Environmental | | | | |
| 7.1 <u>Environmental Record.</u> Within the last 5 years, has the Contractor (or any Predecessor Entities or Related Entities) been found to be in violation of any federal, state or local environmental law or regulation in an administrative, civil or criminal proceeding in which the fact finder found that the Contractor committed the violation and/or failed to comply after having been notified of the violation? | | | | |
| | YES _ | NO | | |
| If YES, please provide full details, including a summary of your position, on attached sheets. | | | | |

PROPOSAL – Article 2 30

financial condition.

8.1 ATTACH TO THIS BID an abbreviated financial statement on the attached form, references, and other information, sufficiently comprehensive to permit an evaluation of CONTRACTOR'S current

8. Financial

9. Certifications Under Oath

By signing below, the person signing below hereby certifies and swears, **ON OATH**, as follows.

- 1. I have personal knowledge of all the information contained in this Questionnaire OR I am responsible for the accuracy of all such information.
- 2. The information contained in this Application is true and complete.
- 3. I hereby authorize the Loxahatchee River District to contact any person or entity necessary to verify or supplement any of the information requested by or provided in this Application without liability, and I hereby further authorize any person or entity contacted to provide any and all information requested without liability.
- 4. The Contractor has read, understands, and agrees to all terms of the Qualification Questionnaire.
- 5. I am duly authorized by law and by the Contractor to sign this Qualification on behalf of the Contractor.

| | CONTRACTOR |
|-----------|--|
| Date | |
| Witness | [Signature] |
| | By: |
| | [Name and Title Printed] |
| State of | |
| County of | Date: |
| 20 by | acknowledged before me this day of, who is personally known to me or who has use as identification and who did take an oath. |
| | [Signature of Notary Public] |
| | Name Printed: |
| | My Commission Expires: |

SWORN STATEMENT UNDER SECTION 287.133(3)(a),

FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

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

| 1. | This sworn statement is submitted with Bid, Proposal or Contract No for 181 ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM . | | | | | |
|----|--|------------------------------|-------------------|----|-----------------------|------------|
| 2. | This | sworn | statement | is | submitted | by |
| | (name of entity | submitting sworn statement | t) | | | |
| | whose business address is and | | | | | |
| | (if applicable) its Federal Employer Identification Number (FEIN) is | | | | | |
| | (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: | | | | | |
| 3. | My name named | is (please print_name_of_ine | dividual signing) | ar | nd my relationship to | the entity |
| | above is _ | | | | _• | |
| 4. | I understand that a "public entity crime: as defined in Paragraph 287.133(1)(g), Florida Statutes , means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United states and involving antitrust, fraud, theft, bribery collusion, racketeering, conspiracy, or material misrepresentation. | | | | | |
| 5. | I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes , means a finding of guilt or a conviction of a public entity crime, with or without ar adjudication of guilt, in any federal or state trial court of record relating to charges brought by 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. | | | | | |
| 6. | I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes means | | | | | |
| | 1. A predecessor or successor of a person convicted of a public entity crime: or | | | | | |

PROPOSAL – Article 2

2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "Affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when

not for fair market value under an arm's length agreement, shall be prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding thirty-six (36) months shall be considered an affiliate.

- 7. I understand that a "person" as defined in Paragraph 287.133(1)(e), **Florida Statutes** means any natural person or entity organized under the laws of any state or of the United states with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
- 8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. [Indicate which statement applies.] Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989. The entity submitting this sworn statement, or one of more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. [attach a copy of the final order]. There has been a proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. [Please attach a copy of the final order]. The person or affiliate was placed on the convicted vendor list. There has been a

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

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

| | (Signature) |
|---|--|
| | (Date) |
| STATE OF | |
| COUNTY OF | |
| The foregoing instrument was acl 20 by, wh Driver's License as identification | knowledged before me this day of, to is personally known to me or who has produced a valid and who did take an oath. |
| | Notary Public |
| | Printed/Typed Name |
| | My Commission Expires: |

Condensed current financial statement for (Name of Contractor)

181^{ST} STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM

| Condition at close of business | | , 20 | | |
|--------------------------------------|--|-------------------------|--|--|
| | | | | |
| | ASSETS | | | |
| 1. Cash: (a) On Hand \$ Elsewhere | , (b) In bank \$ | , (c) | | |
| Elsewhere\$ | | | | |
| 2. Notes receivable \$ | • | | | |
| (b) Due | after 90 days | | | |
| (c) Past | Due | | | |
| 3. Accounts receivable from (| completed contracts, exclusive of claims n | ot approved for payment | | |
| 4. Sums earned on uncomplet | ed contracts as shown by Engineer's or An | rchitect's estimate | | |
| | ount receivable after deducting retainage | | | |
| | ninage to date, due upon completion of cor | ntracts | | |
| 6. Accounts receivable from s | sources other than construction contracts | | | |
| 6. Deposits for bids or other g | guarantees | | | |
| \$(a) Reco | overable within 90 days | | | |
| \$ | overable after 90 days | | | |
| 7. Interest accrued on loans, s | ecurities, etc. | | | |

| | (a) Used for business purposes |
|---------------------|---|
| | (b)Not used for business purposes |
| | nds (a) Listed – present market value |
| \$ | (b) Unlisted – present value |
| 10. Materials in s | tock not included in Item 4: |
| \$ | (a) For uncompleted contracts (present value) |
| | (b) Other materials (present value) |
| 11. Equipment, b | ook value |
| | fixtures, book value |
| 13. Other assets | |
| | TOTAL ASSETS |
| · | LIABILITIES |
| 1. Notes payable \$ | (a) To banks regular |
| \$ | (b) To banks for certified checks |
| \$\$ | (c) To others for equipment obligations |
| | (d) To others exclusive of equipment obligation |
| | able * (a) Not past due |
| Ψ | (b) Past due |

| 3. | Real Estate encumbrances \$ | |
|----|--|------------------------------|
| 4. | Other liabilities \$ | |
| 5. | Reserves \$ | |
| 6. | Capital stock paid up: (a) Common \$ | |
| | (b) Common | |
| | (c) Preferred | |
| | (d) Preferred | |
| 7. | Surplus (net worth) Earned | \$ Unearned \$ |
| | \$ \$ | TOTAL LIABILITIES |
| | CO | ONTINGENT LIABILITIES |
| 1. | Liability on notes receivable, disc | ounted or sold |
| 2. | Liability on accounts receivable, p | oledged, assigned or sold |
| 3. | Liability as bondsman \$ | |
| 4. | Liability as guarantor on contracts \$ | s or on accounts of others. |
| 5. | Other contingent liabilities \$ | |
| | | TOTAL CONTINGENT LIABILITIES |

| *Include all amounts owing subcontractors for all work in place and accepted on completed and uncompleted contracts, including retainage |
|--|
| Certified and Signed By: |
| Certified Public Accountant |

AUTHORITY TO EXECUTE BID AND CONTRACT

If the Bidder is a Corporation, attach to this page a certified copy of corporate resolutions of the Board of Directors of the Corporation authorizing an officer of the Corporation to execute the Contract contained within this document on behalf of the Corporation.

(End of Article.)

BID SECURITY

ARTICLE 3

| , | The undersigned Bidder does hereby declare and stipulate that this proposal is made in good without collusion or connection with any other person or persons bidding for the same Work, at it is made pursuant to and subject to all the terms and conditions of the Notice to Contractors, |
|--------------------|---|
| | ctions to Bidders, the Contract Documents, the Technical Specifications, and the Plans and |
| | ications pertaining to the Work, all of which have been examined by the undersigned. |
| 2. \$ Bidder | Accompanying this proposal is a certified check or standard bid bond in the sum of00, in accordance with the Notice to Contractors and Instruction to rs. Such amount shall be equal to ten percent (10%) of the Bid amount. |
| Award | The undersigned Bidder agrees to execute the Contract, and the Public Construction Bond for all amount of the Bid within fourteen (14) calendar days from the date when written Notice of of the Contract is delivered at the address given on this proposal. The name and address of the ate surety with which the Bidder proposes to furnish the specified Public Construction Bond is ows: |
| | |

4. The undersigned Bidder agrees to begin the Work with an adequate work force and equipment within ten (10) calendar days from the date of receipt of official Notice to Proceed, and to complete all of the Work within the number of calendar days specified in the Special Conditions from the date of official Notice to Proceed.

Bond Company's most recent "Best's Key Rating":

- 5. The Bid Security will be returned to all, except the three (3) lowest qualified responsive, responsible Bidders, within seven (7) business days after the opening of the Bids and the remaining securities will be returned to the three (3) lowest Bidders within forty-eight (48) hours, after the District and Contractor have executed the Contract, or, if no Contract has been so executed, within one hundred twenty (120) calendar days after the date of the opening of Bids upon demand of the Bidder at any time thereafter so long as it had not been notified of the acceptance of the Bid.
- 7. All the phases of Work enumerated in the Contract Documents Technical Specifications with their individual jobs and overhead, whether specifically mentioned, included by implication or appurtenant thereto, are to be performed by Contractor under the applicable Bid item irrespective of whether it is named in said list.

| 7. | This Bid is also based on addenda: | No | Date | | |
|--------|------------------------------------|--------------------------|------|--|--|
| | | No | | | |
| | | No | Date | | |
| | | No | Date | | |
| | | | | | |
| | | | | | |
| | Contractor: | | | | |
| | D | | | | |
| | Ву: | | | | |
| | Address | | | | |
| | Address. | | | | |
| (SEAL) | Contractor's Licer | Contractor's License No. | | | |
| () | | | | | |
| | Attest: | | | | |
| | | | | | |
| | Title: | | | | |

CONTRACT

ARTICLE 4

| T | HIS CONTRA | ACT, is made and ent | ered into this | day of | , Two Thousand |
|---------|------------|----------------------|----------------|--------------|-------------------------|
| and | (20_ |), by and between _ | | | (the "Contractor"), and |
| the LOX | AHATCHEE | RIVER ENVIRON | MENTAL CONTR | OL DISTRICT, | (the "District.") |

WITNESSETH: That whereas the District has awarded to Contractor the Work of performing certain construction:

SECTION 1. Scope of Work: Contractor shall furnish, install and deliver all of the labor, including engineering design, materials (except District-furnished materials), tools, equipment, services, and everything necessary to perform the Work; and shall construct in accordance with the Contract Documents and the terms of this Contract, the Project known and identified as 181st Street Neighborhood Gravity Sewer System and shall do everything required by or reasonably inferable from the Contract Documents. The Work is generally described as follows:

The installation of approximately 1,220 linear feet of 8" gravity sewer, three manholes, one connections to existing manhole; right of way restoration; and all associated labor, materials, equipment, permits and maintenance of traffic to result in a complete and functional installation as shown on the construction plans and specifications.

Applicable reference drawings are entitled 181st Street Neighborhood Gravity Sewer System as prepared by the District.

SECTION 2. Time of Completion: Construction of the Work must begin within ten (10) calendar days from the date of receipt of official Notice to Proceed. Substantial Completion shall be achieved within **150 days** consecutive calendar days from the date of Notice to Proceed. For projects with a value of less than ten million dollars (\$10,000,000.00), Final Completion shall be achieved within **sixty-five** (**65**) consecutive calendar days from the date of actual Substantial Completion. For projects with a value of more than ten million dollars (\$10,000,000.00), Final Completion shall be achieved within **ninety-five** (**95**) consecutive calendar days from the date of actual Substantial Completion. The rate of progress and the time of completion are essential conditions of this Contract.

Deduction for Not Completing on Time: The District and Contractor recognize that because the Work is of a critical nature, time is of the essence. Therefore, the District will suffer direct financial loss and damage if the Work is not completed within the times specified above. The District and Contractor also recognize that it is difficult to ascertain the extent of those damages in advance and it will be difficult and expensive to determine those damages in a legal proceeding. Accordingly, Contractor shall pay to the District as liquidated damages, and not as a penalty, the amounts set out in (a) and (b) ("Liquidated Damages") below for each and every calendar day the above deadlines are delayed, as said date may be adjusted as provided in the Special Conditions. Delay shall not include delays caused by factors beyond Contractor's reasonable control, including but not limited to delays because of strikes, lockouts, work slowdowns or stoppages, accidents, acts of God, failure of any governmental or other regulatory authority to act in a timely manner, failure of the District to furnish timely information or to obtain the cooperation of the District's design professionals and/or Engineer, or delays caused by faulty performance by the District or by Engineer.

a. Substantial Completion Delay. Contractor shall pay to the District as Liquidated Damages, and not

as a penalty, \$125.00 per day for each and every calendar day Substantial Completion is delayed.

b. **Final Completion Delay**. If Final Completion is not reached within **sixty-five** (**65**) **days** of actual Substantial Completion, Contractor shall pay to the District as Liquidated Damages, and not as a penalty, **\$75.00** per day for each and every calendar day Final Completion is delayed.

In addition Contractor shall be responsible for the costs for engineering and other professional fees, delay damage settlements or awards owed by the District to others, fines or penalties imposed by regulatory agencies, and professional fees, including attorneys' fees, incurred in connection with such settlements, awards, penalties or fines (collectively "Additional Delay Damages"). Engineering and inspection fees shall include direct labor costs, indirect costs, and overhead and profit as specified in Section 01010 of the Technical Specifications of the Contract Documents. The District and Contractor agree that the amounts set out in (2)(a) and (2)(b), above are to be paid by Contractor as Liquidated Damages and represent a reasonable estimate of the District's anticipated expenses for delays, inspection, and administrative costs associated with such delays. However, such amounts do not represent additional District costs for Additional Delay Damages. Therefore, in addition to these Liquidated Damages amounts, there shall be other amounts for Additional Delay Damages incurred by the District caused by avoidable delays by Contractor.

Where Liquidated Damages and Additional Delay Damages in connection with the Work of this Contract are duly and properly imposed against Contractor in accordance with the terms of this Contract, Federal law, State law, and/or governing ordinances or regulations, the total amount that Contractor owes to the District may be withheld and reduced from any monies due or to become due Contractor under the Contract, and when deducted, shall be deemed and taken as payment for such Liquidated Damages and Additional Delay Damages. If monies due from the District are not sufficient to cover such Liquidated Damages, Contractor agrees to immediately pay to the District any balance due.

<u>SECTION 3.</u> General: Contractor hereby certifies that it has read each and every clause of the Contract Documents and that it has made such examination of the location of the proposed Work as is necessary to understand fully the nature of the obligation herein made; and will complete the same in the time limits specified herein, in accordance with the Contract Documents. Contractor shall work with and report to Engineer to complete the Work set forth in the Contract Documents. Contractor has given Engineer written notice of all conflicts, errors, and discrepancies in the Contract Documents and the written resolution thereof by Engineer is acceptable to Contractor.

All Work under this Contract shall be done to the satisfaction of Engineer, who shall, in all cases, determine the amount, quality, fitness, and acceptability of the Work and materials, which may arise, as to the fulfillment of the Contract on the part of Contractor, Engineer's decision thereon shall be final and conclusive, and such determination shall be a condition precedent to the right of Contractor to receive any payment hereunder.

At any time during the performance of the Contract, Contractor shall allow and provide the District access to all of the documents, papers, letters or other materials made or received by Contractor in conjunction with the Contract and Work. Should Contractor fail to provide access to these documents in response to the District's request, the District may unilaterally cancel the Contract. At the conclusion of the Contract, Contractor shall provide the District all public records related to the Project or the Work.

Any clause or section of this Contract or the Contract Documents which may, for any reason, be declared invalid, may be eliminated therefrom; and the intent of this Contract or the Contract Documents and the remaining portion thereof will remain in full force and effect as completely as though such invalid clause or section has not been incorporated herein.

No assignment by a party hereto of any rights, responsibilities, or interests in the Contract Documents will be binding on another party hereto without the written consent of both parties. Unless specifically stated to the contrary in a written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents. Notwithstanding the foregoing, the District may assign this Contract to the State of Florida or any political subdivision, municipality, special district or authority thereof without Contractor's consent and without recourse.

The District and Contractor each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

<u>SECTION 4.</u> Contract Sum: The District shall pay Contractor as just compensation for the performance of this Contract, subject to any additions or deductions as provided in the Contract Documents, based on unit prices, the amounts set forth in the Pricing Schedule attached hereto ("Contract Sum"). The District and Contractor agree that all payments will be processed in accordance with the Local Government Prompt Payment Act, Sections 218.70-218.80, Florida Statutes.

SECTION 5. Progress Payments: On or before the tenth (10th) day of every month, except as provided for in the Special Conditions, Contractor shall prepare and submit on a form approved by Engineer a detailed estimate and invoice to Engineer setting forth the schedule of values of the total amount of the Work which has been completed from the start of the job up to and including the last day of the preceding month and the value thereof, less any percentage retained in accordance with the Special Conditions, and the aggregate of any previous payment ("Progress Payment Application"). Contractor shall provide such supporting evidence as may be required by the District and/or Engineer.

As a strict condition precedent to payment, each Progress Payment Application must be accompanied by: a Contractor's Progress Payment Affidavit submitted by Contractor to Engineer indicating that all lienors under Contractor's direct contract have been paid in full; and a waiver and release of lien upon progress payment ("Partial Release of Lien") from all persons with a potential lien interest in the Project, including but not limited to subcontractors, sub-subcontractors, suppliers, and materialmen.

Upon receipt of the Progress Payment Application, Engineer shall either provide the District with its written approval of the Progress Payment Application, or notify the District in writing that it rejects the Progress Payment Application, the reason(s) for such rejection, and its recommendation as to the amount Contractor is owed, if any, within ten (10) days of receipt of the Progress Payment Application.

The District shall review Engineer's recommendation as set forth above. If the District agrees that the Progress Payment Application is complete and accurately reflects the amount Contractor is owed, the District shall pay Contractor the amount set forth on the Progress Payment Application within twenty-five (25) days of Engineer's receipt of the Progress Payment Application.

In the event the District finds the Progress Payment Application is incomplete or does not accurately reflect the amount Contractor is owed, the District shall reject the Progress Payment Application in writing within twenty (20) days of Engineer's receipt of the Progress Payment Application. The rejection shall state with specificity the reason for the rejection and any action necessary to make the Progress Payment Application acceptable to the District. If Contractor submits a corrected Progress Payment Application within ten (10) days of the rejection, acceptable to the District, the District shall pay the corrected Progress Payment Application within ten (10) business days after the corrected Progress Payment Application is received.

In the event the District disputes the corrected Progress Payment Application, the District shall notify Contractor in writing of such dispute and pay to Contractor the amount not in dispute, if any, within twenty-five (25) days of the District's receipt of the corrected Progress Payment Application. In exchange for such payment, Contractor shall submit to Engineer a Progress Payment Affidavit indicating that all lienors under Contractors direct contract have been paid in full for the Work related to the non-disputed amount.

Contractor and the District agree that prior to instituting any litigation for damages under this Section 5, the parties shall conduct a non-binding mediation to attempt to resolve their dispute. In the event the parties cannot agree upon a mediator, each party shall select a mediator and such mediators shall select a third mediator who shall serve as the mediator for the dispute. In the event such mediation does not occur within thirty (30) days of a written request of either party, the parties shall be free to pursue litigation without first conducting mediation.

Contractor shall promptly pay each subcontractor and supplier within ten (10) days of receipt of payment from the District. The amount shall be determined in accordance with the terms of the applicable subcontracts and purchase orders. The District shall not have responsibility for payments to a subcontractor.

Contractor warrants that title to all Work covered by the Progress Payment Application will pass to the District no later than the time payment. Contractor further warrants that upon submittal of a progress payment application, all Work previously paid for by the District shall, to the best of Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or other encumbrances adverse to the District's interests.

A progress payment by the District shall not constitute acceptance of Work not in accordance with the requirements of the Contract Documents.

<u>SECTION 6.</u> Acceptance and Final Payment: When the Work has been fully completed, including all punch list items as provided for in the Special Conditions, in accordance with the terms of the Contract Documents, a Final Payment Application shall be prepared by Contractor and provided to Engineer within thirty (30) calendar days after the date of Final Completion stating the final Work performed to complete the Project plus or minus any Change Orders, and less the aggregate of any previous payment.

As a strict condition precedent to final payment, Contractor shall submit to Engineer with the Final Payment Application:

- 1. a Final Payment Affidavit stating that all subcontractors, suppliers, and other materialmen have been paid;
- 2. Waiver and Release of Lien upon Final Payment ("Final Release of Lien") from Contractor and all persons or entities that have, or potentially have, a lien on the Project, including but not limited to all subcontractors and vendors;
- 3. all close-out documents including, but not limited to the Maintenance Bond, warranties, guarantees, owner's manuals, and start-up certificates by the designer or manufacturer demonstrating that the equipment meets design intent;
- 4. data establishing payment or satisfaction of obligations, such as receipts, claims, security interests or encumbrances arising out of the Contract.

Upon receipt of the Final Payment Application, Engineer will inspect the Work, the Final Payment Application, and supporting documentation. If Engineer finds the Work acceptable, Engineer will issue a certificate of acceptance stating that the quality Work has been fully completed to Engineer's satisfaction in substantial

compliance with the Contract Documents. The Certificate of Final Completion shall constitute Engineer's determination as to the quality of the Work only; it shall not include an opinion as to the timeliness of completion of the Work. If the Engineer finds the Contract fully and timely performed, and the Final Payment Application accurately reflects the final amount Contractor is owed, the Engineer shall issue its written approval to the District of the Final Payment Application within ten (10) calendar days of receipt the Final Payment Application.

If Engineer disputes the Final Payment Application, finds the Work unsatisfactory, or determines that amounts should be deducted as Liquidated Damages and Additional Delay Damages, Engineer shall notify the District in writing of its findings, the support for such findings, and its recommendation as to the amount Contractor is owed, if any, within ten (10) calendar days of receipt of the Final Payment Application.

The District shall review Engineer's recommendation as set forth above. If the District finds that the Work is acceptable, the Contract has been fully and timely performed, and the Final Payment Application is complete and accurately reflects the amount Contractor is owed, the District shall pay Contractor the amount of the Final Payment Application within twenty-five (25) calendar days of Engineer's receipt of the Final Payment Application.

In the event the District finds the Work is not acceptable, the Contract has not been fully and timely performed, or the Final Payment Application is incomplete or does not accurately reflect the amount Contractor is owed, the District shall reject the Final Payment Application in writing within twenty (20) calendar days of Engineer's receipt of the Final Payment Application. The rejection shall state with specificity the reason for the rejection and any action necessary to make the Final Payment Application acceptable to the District. If Contractor submits a corrected Final Payment Application acceptable to the District, the District shall pay the corrected Final Payment Application within ten (10) calendar days after the corrected Final Payment Application is received.

In the event the District disputes the corrected Final Payment Application, the District shall notify Contractor in writing of such dispute and pay to Contractor the amount not in dispute, if any, within twenty-five (25) calendar days of the District's receipt of the corrected Final Payment Application. This payment shall constitute a progress payment and shall not be deemed final payment. In exchange for such payment, Contractor shall submit to Engineer a Progress Payment Affidavit indicating that all lienors under Contractor's direct contract have been paid in full for the Work related to the non-disputed amount.

The District and Contractor agree that prior to instituting any litigation for damages under this Section, the parties shall conduct a non-binding mediation to attempt to resolve their dispute. In the event the parties cannot agree upon a mediator, each party shall select a mediator and such mediators shall select a third mediator who shall serve as the mediator for the dispute. Such mediation shall occur within forty-five (45) calendar days of the District's rejection of the corrected Final Payment Application. In the event such mediation does not occur within thirty (30) calendar days of a written request of either party, the parties shall be free to pursue litigation without first conducting mediation.

Acceptance of final payment by Contractor, a subcontractor, or material supplier shall constitute a waiver of claims by the payee.

In the event that a lien is filed or claimed against the Work by any subcontractor, supplier, or laborer, Contractor agrees to immediately (i) pay such subcontractor, supplier, or laborer for work which Contractor has been paid by the District and deliver to the District a Final Release of Lien signed by such subcontractor, supplier, or laborer; or (ii) cause the immediate removal of such lien by providing a bond in accordance with Florida law. If Contractor fails to do the above, the District may, at is option, and at the sole expense and liability of Contractor, bond such lien or cause the lien to be discharged and deduct the cost of said bond from the amount owed Contractor under any pending invoice or the next invoice. This Section shall survive the termination or expiration of this Contract.

SECTION 7. WARRANTY: Contractor warrants to the District and Engineer that (1) materials and equipment furnished under the Contract will be new and of good quality unless otherwise required or permitted by the Contract Documents; (2) the Work will be free from defects not inherent in the quality required or permitted; and (3) the Work will conform to the requirements of the Contract Documents.

SECTION 8. CORRECTION OF THE WORK: In addition to the warranties provided for in Article 4 – Contract Section 7, Contractor shall promptly correct Work rejected by Engineer and/or District as failing to conform to the requirements of the Contract Documents. Contractor shall bear the cost of correcting such rejected Work, including the costs of uncovering, replacement, and additional testing.

In addition to Contractor's other obligations including warranties under the Contract, Contractor shall, for a period of one (1) year after Substantial Completion, correct Work not conforming to the requirements of the Contract Documents.

If Contractor fails to correct nonconforming Work within a reasonable time, the District may correct it in accordance with the Contract Documents.

This period of one (1) year shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This Section 8 shall survive acceptance of the Work under the Contract Documents and termination of the Contract Documents.

(Remainder of this page left blank intentionally)

| · • | arties hereto have executed this Contract this day of ortions of the Contract Documents have been signed or identified by | | |
|---|---|--|--|
| the District and Contractor or by Engineer or | | | |
| ATTEST: | OWNER: LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT | | |
| Witness | - | | |
| Witness | Stephen B. Rockoff Chairman Address for notice: 2500 Jupiter Park Dr. Jupiter, Florida 33458 | | |
| | CONTRACTOR: | | |
| Witness | _ | | |
| Witness | As its: | | |
| | Address for notice: (Affix Corporate Seal) | | |

STATE OF FLORIDA COUNTY OF PALM BEACH

| I HEREBY CERTIFY that on this day, before | re me, personally appeared, as |
|---|---|
| described in or who produced as identification a executed and acknowledged to and before on behalf o acknowledged in the presence of two subscribing witne expressed. | t the District, the foregoing Contract, and that he |
| WITNESS my hand and official seal in the C, 20 | County and State last aforesaid this day of |
| | Notary Public, State of Florida Print Name: Commission No.: My Commission Expires: |
| (Notary Ink Stamp) | |
| known to be the person described in or who produced as ide of ID) and who executed and acknowledge. | ledged to and before on behalf of ompany Name), Contractor, the foregoing Contract, |
| witness my hand and official seal in of, 20 | County and State last aforesaid this day |
| (Notary Ink Stamp) | Notary Public, State of Florida Print Name: Commission No.: My Commission Expires: |
| (Notary nik Stamp) | |

PRICING SCHEDULE — BASE CONTRACT LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT 181ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM UNIT PRICES

| No. | Description | Unit | Qty. | Unit Cost | Total |
|---------|---|------|------|-----------|-------|
| General | | | | | |
| 1 | Mobilization | LS | 1 | | |
| 2 | Maintenance of Traffic | LS | 1 | | |
| 3 | Record Drawings | LS | 1 | | |
| 4 | Pre-Construction Video | LS | 1 | | |
| 5 | NPDES Permit/Erosion Control | LS | 1 | | |
| 6 | Trench Safety Act | LS | 1 | | |
| Gravity | Sewer | | | | |
| 7 | 8" SDR-26: 0'-6' | LF | 250 | | |
| 8 | 8" SDR-26: 6'-8' | LF | 450 | | |
| 9 | 8" SDR-26: 8'-10' | LF | 440 | | |
| 10 | 8" SDR-26: 10'-12' | LF | 80 | | |
| 11 | 4' Diameter MH: 4'-6' | EA | 1 | | |
| 12 | 4' Diameter MH: 6'-8' | EA | 1 | | |
| 13 | 4' Diameter MH: 8'-10' | EA | 1 | | |
| 14 | 4" or 6" Single Service Lateral < 45' | EA | 9 | | |
| 15 | Connect to Existing MH and install Drop | LS | 1 | | |
| 16 | Dewatering | LS | 1 | | |
| Roadwa | y | | | | |
| 17 | 12" Compacted Subgrade | SY | 2300 | | |
| 18 | 12" Compacted Limerock Base | SY | 2300 | | |
| 19 | 6" Asphalt Millings | SY | 2300 | | |

| TOTAL BASE BID ITEMS 1-19 in words: Dollars | |
|--|--|

THE CONTRACT AWARD SHALL BE EVALUATED BASED ON THE TOTAL BID PRICE FOR ITEMS 1 THROUGH 19 AND ANY SELECTED ALTERNATE AS SUBMITTED BY THE LOWEST, QUALIFIED, RESPONSIBLE, RESPONSIVE BIDDER.

| | (Name of Bidder) |
|-----------------------------|---|
| | Bidders Name: |
| | By: Signature of Authorized Officer, Partner, Member, Manager |
| | Print Name of Person signing: |
| | Title: |
| | Business Address: |
| | - |
| | |
| | |
| acorporated or formed under | the laws of the State of |

PUBLIC CONSTRUCTION BOND

ARTICLE 5

Bond No.

| | 201101101 |
|--|---|
| | |
| KNOW ALL PERSONS BY THESE PRESENTS: The | nat we, |
| (Name of Contractor) as "Principal" at the address of | |
| and | as "Surety" at the address of |
| - | re bound to the LOXAHATCHEE |
| RIVER ENVIRONMENTAL CONTROL DISTRICT (the "D | District"), at the address of 2500 Jupiter |
| Park Drive, Florida 33458, in the sum of | ,, |
| (Written Amount) (\$ | - · |
| WHEREAS, Principal has entered into a contract (the RIVER ENVIRONMENTAL CONTROL DISTRICT dated | ne "Contract") with LOXAHATCHEE , 2020, in the amount of) for the 181st |
| Street Neighborhood Gravity Sewer System, which Contract, | is by reference made a part hereof. |
| | |

- THE CONDITION of this Bond is that if Principal:
- 1. Performs the Contract with the District at the times and in the manner prescribed in the Contract; and
- 2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statute, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the Work provided for in the Contract; and
- 3. Pays the District all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that the District sustains because of a default by Principal under the Contract; and
- 4. Performs the guarantee of all Work and materials furnished under the Contract for the time specified in the Contract, then this Bond is void; otherwise, it remains in full force.
- 5. Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this Bond.
- 6. To a claimant who is not in privity with the Principal and who has not received payment for labor, materials, or supplies, that written notice must be delivered to the Principal. This Bond is furnished pursuant to the statutory requirements for bonds on public works projects, Section 255.05, Florida Statutes. A claimant, except a laborer, who is not in privity with the Principal and who has not received payment for labor, materials, or supplies, is hereby notified that Section 255.05(2), Florida Statutes specifically requires that written notice be given to Principal within forty-five (45) days after beginning to furnish labor, materials, or supplies for the prosecution of the Work that claimant intends to look to the Bond for protection. Further notice is hereby given to a claimant who

is not in privity with the Principal and who has not received payment for labor, materials, or supplies, that written notice must be delivered to the Principal and to the Surety, of the performance of the labor or delivery of the materials or supplies and of the non-payment, within ninety (90) days after performance of the labor or after complete delivery of the materials or supplies (but not before 45 days after the first furnishing of labor, services, or materials), or with respect to rental equipment, within ninety (90) days after the date that rental equipment was last on the job site available for use. No action for the labor, material, or supplies may be instituted against Principal of the Surety unless both notices have been given. Further notice is hereby given that no action for labor, materials, or supplies may be instituted against the Principal or the Surety on the Bond after one (1) year from the performance of the labor or completion of delivery of the materials or supplies.

7. Without modifying the foregoing, this Bond shall require no more and no less of the Principal and Surety than is specified in Section 255.05, Florida Statutes. The notice and time limitation provisions of Section 255.05, Florida Statutes are incorporated herein by reference.

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed above, do cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

The provisions and limitations of Section 255.05, Florida Statutes including but not limited to the notice and time limitations in Sections 255.05(2) and 255.05(10), Florida Statutes are incorporated in this bond by reference.

(Remainder of Page Intentionally Left Blank)

| SIGNED AND SEALED ON | , 202_ |
|----------------------------|--|
| Name of Principal | Name of Surety |
| Traine of Timespar | Traine of Barety |
| By: | By: |
| By: Signature of Principal | By: As Attorney-in-Fact (Attach Power of Attorney) |
| STATE OF FLORIDA COUNTY OF | |
| | me this day of, 202, by to me who produced as identification a |
| | Notary Public, State of Florida |
| | Print Name: |
| (Notary Ink Seal) | Commission Expires: |
| | My Commission Expires: |
| COUNTERSIGNATURE | |
| RV· | |

ARTICLE 6

FORMS FOR USE DURING CONSTRUCTION

- **6-1** Notice of Award of Contract
- **6-2** Notice to Proceed
- 6-3 Progress Payment Affidavit
- 6-4 Final Payment Affidavit
- 6-5 Certificate of Substantial Completion
- **6-6** Certificate of Final Completion
- 6-7 Partial Release of Lien
- 6-8 Final Release of Lien
- 6-9 Change Order
- **6-10 Application and Certificate of Payment** Contractor shall utilize American Institute of Architect Form G702 and G703

Loxahatchee River District



Water Reclamation | Environmental Education | River Restoration 2500 Jupiter Park Drive, Jupiter, Florida 33458-8964 Telephone (561) 747-5700 •Fax (561) 747-9929 • www.loxahatcheeriver.org D. Albrey Arrington, Ph.D., Executive Director

| [Date] | |
|--|--|
| [Contractor N [Contractor A | |
| SUBJECT: | Loxahatchee River Environmental Control District 181 ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM Notice of Award of Contract |
| Dear | ; |
| | to advise you that the District Governing Board has elected to Award the Contract for oject to your firm. You are the apparent successful Bidder and have been awarded a |
| | 181 ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM |
| The Contract | Price of your Contract is \$ |
| Notice of Aw a.) 4 co b.) A co c.) Ar Se d.) A | e with the contract specifications you will have 14 calendar days from the date of this ard, that is by (Day), (Date), to provide the following: executed sets of the attached Contract Documents, and Public Construction Bond with power of attorney in the amount of 100% of the ntract (\$ |

Failure to comply with these conditions within the time specified will entitle District to consider your Bid abandoned, to annul this Notice of Award and to declare your Bid Security forfeited.

Within 20 calendar days after you comply with the above conditions, the District will return 1 fully executed contract after execution.

Your attendance will be requested at an Open House meeting to be held with property owners in the affected area prior to construction. This will provide an opportunity to coordinate activities and provide a schedule of activities and how services will be maintained during construction.

Should you have any questions in regard to this correspondence, please feel free to contact me or [ENGINEER]

Regards,

Kris Dean, P.E.

Deputy Executive Director/Director of Engineering Services

Enclosures: 3 sets of Contract Documents

Loxahatchee River District



Water Reclamation | Environmental Education | River Restoration 2500 Jupiter Park Drive, Jupiter, Florida 33458-8964 Telephone (561) 747-5700 •Fax (561) 747-9929 • www.loxahatcheeriver.org

D. Albrey Arrington, Ph.D., Executive Director

| [Date] |
|--|
| [Contractor Name] [Contractor Address] |
| SUBJECT: 181 ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM Notice to Proceed |
| Dear: |
| You have already received one (1) copy of the fully executed contract for the subject project. With the execution of this document completed by both parties and a Planning Meeting held [DATE], you are hereby provided with NOTICE TO PROCEED as of [Day], [Date] . |
| In accordance with the contract documents, you will have consecutive calendar days from to Substantial Completion, and calendar days from actual Substantial Completion to Final Contract Completion, therefore: |
| Substantial Completion Date is: Contract Completion Date is: |
| We look forward to working with you toward the successful completion of another project. |
| Should you have any questions in regard to this matter please feel free to contact me or [ENGINEER]. |
| Kris Dean, P.E. Deputy Executive Director/Director of Engineering Services |
| [ENGINEER] |

PROGRESS PAYMENT AFFIDAVIT

| COUNTY OF | | | |
|---|--------------|---------------------------|-------------------------|
| BEFORE ME, the undersigned authority, person who, after being by me first duly sworn, deposes | | | |
| 1. He/She is the does business in the State of Florida, hereinafter | ofof | as "Contractor". | , which |
| 2. Pursuant to a contract with Loxahatchee Rive services for the purpose of improving real prope | | | |
| 181 ST STREET NEIGHBORHO | OOD GRA | VITY SEWER SYS | STEM |
| 3. This affidavit is executed in accordance with S of obtaining a progress payment in the amount of | Section 713. | .06(3)(c), Florida St | atutes, for the purpose |
| of obtaining a progress payment in the amount o | | Dollars (\$ |). |
| 4. All lienors under Contractor's direct Contract lienors: NAME OF LIENOR (Use blank sheet if necessary) | AMOU | - | BECOME DUE FOR |
| SIGNED, SEALED, AND DELIVERED this | day of _ | Ву | , 20 |
| | | Contractor | |
| SUBSCRIBED AND SWORN TO before me | this | day | of 20, by |
| , personal | lly known t | NOTARY PUBLIC Print Name: | C, State of |
| (Notary Ink Stamp) * THIS FORM SHALL BE SUBMITTED WITH | н еусп р | | Expires: |

FINAL PAYMENT AFFIDAVIT

| STATE OF FLORIDA COUNTY OF | |
|---|---|
| BEFORE ME, the undersigned authority, person who, after being by me first duly sworn, depose | nally appeared |
| who, after being by me first duty sworn, depose | s and says of his personal knowledge that. |
| 1. He/She is thedoes business in the State of Florida, hereinafter | of, which referred to as "Contractor". |
| 2. Pursuant to a contract with Loxahatchee Rive services for the purpose of improving real proper | er District, Contractor has furnished and will furnisherty, more particularly described as: |
| 181 ST STREET NEIGHBORH | OOD GRAVITY SEWER SYSTEM |
| 3. This affidavit is executed in accordance with S of obtaining final payment in the amount of | Section 713.06(3)(c), Florida Statutes, for the purpose |
| | Dollars (\$). |
| 4. All lienors under Contractor's direct Contract lienors: | have been paid in full, except for the following listed |
| NAME OF LIENOR (Use blank sheet if necessary) | AMOUNT DUE OR TO BECOME DUE FOR LABOR, SERVICES OR MATERIAL |
| SIGNED, SEALED, AND DELIVERED this _ | day of, 20 |
| | ByContractor |
| SUBSCRIBED AND SWORN TO before me, persona | this day of 20, by ally known to me or who produced as identification a |
| ·· | • |
| | NOTARY PUBLIC, State of Print Name: |
| | Commission No.: |
| (Notary Ink Stamp) | My Commission Expires: |

Certificate of Substantial Completion

[Date] [NAME] [ADDRESS]

> Loxahatchee River Environmental Control District 181ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM Substantial Completion

| Dear [| Name]: |
|----------------------------|--|
| Inspec attach Sectio | the District, [PARTY NAMES] conducted a Substantial Completion ction for the above referenced project. The Substantial Completion inspection resulted in the ed [#] page Punchlist, containing [#] items for completion or correction. Please note per Spec in 01700 all punch list items are to be corrected prior to Final Payment and before Final letion is granted. |
| Based as of [| on the above referenced inspection, [name] has <u>deemed the project Substantially Complete</u> [date]. |
| | all of the attached punch list items have been completed or corrected, please contact our office ting so that we can schedule a time for final inspection. |
| If you | have any questions regarding these items, please call me at |
| Sincer | rely, |
| | |
| [Name [Title] | |
| Enclos | sure: Substantial Completion Punchlist |
| cc: | Kris Dean, LRECD Lenny Giacovelli, LRECD |

Certificate of Final Completion

[DATE] [NAME] [ADDRESS]

Loxahatchee River Environmental Control District 181ST STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM *Final Completion*

| Dear [Name]: | | |
|-------------------------------------|--|--------------------------|
| | the Loxahatchee River Environmental Control Dis , and condu- he above referenced project. Per our inspection, the below | cted a Final Completion |
| determined to be | e incomplete. | |
| letter for your re | erified that all of the Punch List Items have been complete ecords, that as ofh ect to be fully complete and in compliance with the Contra | as deemed the above |
| We are currently Final Payment A | y preparing the Final Balancing Change Order to complete Application. | e the processing of your |
| If you have any | questions regarding these items, please call me at | · |
| Sincerely, | | |
| [Name] [Title] | | |
| Enclosure | | |
| cc: Kris Dea | an, LRECD | |

Lenny Giacovelli, LRECD

WAIVER AND RELEASE OF LIEN UPON PROGRESS PAYMENT:

| The undersigned lienor, in consideration of the | he sum of \$, hereb | y |
|--|---|----|
| waives and releases its lien and right to claim | m a lien for labor, services, or materials furnishe | d |
| through <u>(insert date)</u> to <u>(insert the name of y</u> | your customer) on the job of (insert the name of the | ıe |
| owner) to the following property: | | |
| 181 ST STREET NEIGHBORH | OOD GRAVITY SEWER SYSTEM | |
| This waiver and release does not cover any reto | ention or labor, services, or materials furnished after | er |
| the date specified. | | |
| DATED on , <u>(year)</u> . <u>(Lien</u> | or)_ | |
| WITNESS: | | |
| | By: | |
| | Contractor (SEAL) | |
| | Attact | |
| | Attest: | |
| | IE, THIS day of 20, b | |
| , persona | ally known to me or who produced as identification | a |
| | • | |
| | | |
| | NOTADY BUDI IC C C.E. 11 | |
| | NOTARY PUBLIC, State of Florida | |

WAIVER AND RELEASE OF LIEN UPON FINAL PAYMENT

| | Th | ie un | dersigi | ned | lienor, | in | cons | iderat | ion o | f the | final | pay | ment | in t | he amo | ount of |
|--------|----------|-------------------------------------|---------|------|---------|-------|--------|--------|---------|-------|---------|-------|--------|--------|---------------------|----------|
| \$ | | | | | , rece | ipt c | of whi | ch is | nereby | ackn | owled | ged, | hereby | y waiv | ves and | releases |
| its | | | _ | | | | | | | | | | | | furnis | |
| | | | | | | | | on t | ne job | of t | he Lo | xahat | chee I | River | Enviro | nmenta |
| | | | | | | | | | | to th | e follo | wing | prope | erty | 181 ST S | TREET |
| NE | IGHB(| ORHO | OOD G | RAV | VITY S | EW1 | ER SY | YSTE | M | | | | | | | |
| | | | | | | | | | | | | | | | | |
| wi | TNESS | S: | | | | | | | | | | | | | | |
| | 11 (20) | | | | | | | _ I | By: | | | | | | | |
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| | | | | | | | | _ A | Attest: | | | | | | | |
| SW | ORN . | AND | SUBSO | CRIE | RED TO |) RF | FORI | E ME | THIS | | dav | | | | _ of 20_ | by |
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| (No | otary Ir | nk Sta | mp) | | | | | | | | Iy Con | | | | | |
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LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

2500 JUPITER PARK DRIVE, JUPITER, FLORIDA 33458 (561) 747-5700 FAX (561) 747-9929

CHANGE ORDER #1

| | DATE: | _ | |
|-----------------------|---|------------------------|-----------|
| PROJECT NAME: | 181 ST STREET NEIGHBORHO | OOD GRAVITY SEWER S | SYSTEM |
| OWNER: | Loxahatchee River Environmen | ntal Control District | |
| CONTRACTOR: | | | |
| THE FOLLOWING C | HANGES: | | |
| <u>JUSTIFICATION:</u> | | | |
| CHANGE TO CONTR | ACT PRICE: | | |
| Original CONTRACT | PRICE: | \$ | |
| Current CONTRACT | PRICE | \$ | |
| | ue to this Change Order D/DECREASED by: | \$ | |
| The New CONTRACT | <u> </u> | \$ | |
| CHANGE TO CONTR | ACT TIME: | | |
| The DATE OF COMP | LETION of all work will be: UN | CHANGED | |
| APPROVED BY CON | TRACTOR: | | DATE |
| APPROVED BY ENG | INEER: | | _ DATE |
| APPROVED BY OWN | IER: LOXAHATCHEE RIVER ENVIRONMI | ENTAL CONTROL DISTRICT | DATE |

ARTICLE 7

CERTIFICATE OF DISTRICT'S ATTORNEY

181^{ST} STREET NEIGHBORHOOD GRAVITY SEWER SYSTEM

| THIS IS TO CERTIFY that on this d | day of _ | | , 20, I have |
|---|----------|-------------------------------|------------------|
| examined the attached Contract Documents, S | | | |
| thereto, and I am of the opinion that each of the | - | | • |
| proper parties thereto acting through their du | | | • |
| have full power and authority to execute said | - | <u>.</u> | |
| therein; and that the foregoing agreements as | - | - | _ |
| agreement between the parties. | is being | legany sufficient in form con | stitute a omanig |
| agreement setween the parties. | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| E | By: | | |
| | - | atrick J. McNamara, Esq. | |
| | | e la Parte & Gilbert, P.A. | |
| | | attorney for the | |
| | | OYAHATCHEE DIVED | |

ENVIRONMENTAL CONTROL DISTRICT

ARTICLE 8

RESERVED

RESERVED – Article 8 67

SPECIAL CONDITIONS

ARTICLE 9

| | TITLE |
|------|--|
| 9.01 | Governing Order of Contract Documents |
| 9.02 | Time of Completion and Amount of Liquidated Damages |
| 9.03 | Reimbursement of Additional Delay Damages |
| 9.04 | Percentage of Progress Payments to be Retained |
| 9.05 | Left Intentionally Blank |
| 9.06 | Surety Bonds |
| 9.07 | Subcontractors |
| 9.08 | Contractor's Insurance |
| 9.09 | Water Supply |
| 9.10 | Pipeline and Manhole Locations |
| 9.11 | Elevation Datum |
| 9.12 | Easements |
| 9.13 | Occupying Private Land |
| 9.14 | Work in State, County and Town Rights-of-Way |
| 9.15 | Interference with and Protection of Streets |
| 9.16 | Traffic Control |
| 9.17 | Work Adjacent to Telephone, Power, Cable TV and Gas Company Structures |
| 9.18 | Storage of Materials |
| 9.19 | Salvaged Materials and Excavated Materials |
| 9.20 | Planning Meeting |
| 9.21 | Alterations |
| 9.22 | Extra and Deleted Work |
| 9.23 | Extension of Time on Account of Extra Work |
| 9.24 | Changes Not to Affect Bonds |
| 9.25 | Non-Assignable |
| 9.26 | District Remedies |
| 9.27 | Contractor's Remedies |

| 9.28 | Discontinuance of Construction |
|------|--|
| 9.29 | Contractor's Responsibility |
| 9:30 | District's Right to Terminate |
| 9.31 | Venue, Disputes and Attorney's Fee |
| 9.32 | Coordination with District's Existing Facilities |
| 9.33 | Permits |
| 9.34 | Coordination of Construction |
| 9.35 | Field Layout of Work |
| 9.36 | Submittals |
| 9.37 | Inspection and Testing |
| 9.38 | Utilities and Services |
| 9.39 | Security |
| 9.40 | Special Controls |
| 9.41 | Field Offices, Storage and Construction Areas |
| 9.42 | Equipment and Materials |
| 9.43 | Project Closeout |
| 9.44 | Open Specifications |
| 9.45 | Spare Parts List |
| 9.46 | Applicable Standards and Codes |
| 9.47 | Copies of Plans and Specifications |
| 9.48 | Restoration – Special |
| 9.49 | Contractor Performance Reviews and Ratings |

9.01 Governing Order of Contract Documents

In the event of discrepancy, the interpretation of Contract Documents shall follow the order of precedence as identified in Article 1 Instruction to Bidders Section 22.

9.02 Time of Completion and Amount of Liquidated Damages

Contractor agrees to commence Work on or before a date to be specified in a written Notice to Proceed. In the event Contractor does not reach Substantial Completion or Final Completion of the Work within the time specified in the Notice to Proceed, Contractor shall pay to the District as liquidated damages, and not as a penalty the amounts set forth in Article 4- Contract Section 2.

9.03 Reimbursement of Additional Delay Damages

In the event Substantial Completion and Final Completion of the Work set forth in the Contract Documents and any subsequent modifications, is delayed beyond the time set forth in Article 4-Contract Section 2, Contractor shall also be responsible for Additional Delay Damages as set forth in the Article 4 - Contract Section 2.

9.04 Percentage of Progress Payments to be Retained

The percentage of estimated value to be retained under that heading of the Contract, entitled Progress Payments shall conform to the following schedule:

- a. Retention of up to 10% of payments claimed.
- b. For Projects over \$200,000, when the Project is fifty percent (50%) complete, the retainage amount shall be reduced to 5% from each subsequent progress payment made to the Contractor.
- c. After fifty percent (50%) completion of the Work, Contractor may present a payment application for up to one-half of the retainage held by the District for the first fifty percent (50%) of the Work.
- d. A cash bond or irrevocable letter of credit will be accepted if offered in lieu of cash retainage.

The above retainage reductions shall not require the District to release any amount that is the subject of a good faith dispute or a claim pursuant to Section 255.05, Florida Statutes.

The above retainage reductions shall not apply if the Project is funded, in whole or in part, with federal funds that are subject to federal grantor laws and regulations that are contrary to any provision of the Florida Local Government Prompt Payment Act, or if the retainage reduction is otherwise not required by the Florida Local Government Prompt Payment Act.

9.05 Left Blank Intentionally

9.06 Surety Bonds

Contractor, at the time of execution of the Contract, must deposit with the District a Public Construction Bond providing for the satisfactory performance and completion of the Work and providing security for payment of all persons performing labor and/or providing materials or supplies

in connection with this Contract. The bond shall be furnished in an amount equal to the amount of the contract award. The form and conditions of the bond and the surety shall be in accordance with the statutory requirements of Section 255.05(2), Florida Statutes, and are subject to the District's approval.

A maintenance bond in the amount of 50% of the contract price guaranteeing the repair of all damages due to improper materials or workmanship for a period of one (1) year after Final Completion will also be required. The maintenance bond shall be submitted with the final payment request.

The bonds shall be written by a surety company that has the following ratings based upon amount of the Contract:

| CONTRACT AMOUNT | BEST'S RATINGS |
|------------------------------|-----------------------|
| \$ 25,000.00 to \$100,000.00 | B+ Class V or better |
| \$100,000.01 to \$500,000.00 | A Class VI or better |
| \$500,000.01 and over | A Class VII or better |

The surety must be licensed to do business in the State of Florida, and the bonds must be executed by an Attorney-in-Fact for the surety company with a certified copy of its Power of Attorney attached to the bonds.

The Maintenance Bond shall remain in effect for one (1) year beyond the date of Final Completion and acceptance of the entire Work to repair any Defective Work done under the Contract Documents. The Public Construction Bond shall remain in effect to pay valid claims for payment of labor, supplies, and/or materials submitted after completion of the Work and for items covered under the performance aspect of said bond.

9.07 Subcontractors

Prior to award of the Contract, Engineer shall notify Contractor of any objection to the subcontractors proposed for the Work, and Contractor shall not employ any subcontractor with whom Engineer or District has an objection.

Contractor shall be responsible to the District for the acts and omissions of any subcontractor and any person directly or indirectly employed by a subcontractor, to the extent Contractor is responsible for the acts and omissions of persons directly employed by Contractor. Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and the District.

9.08 Contractor's Insurance

Contractor shall maintain and pay for, as applicable, through an insurance company or insurance companies acceptable to the District at Contractor's sole expense: Fire, Extended Coverage, Vandalism and Malicious Mischief coverage on buildings and structures in the course of construction. Such coverage shall include 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.

Contractor shall provide the District, prior to the execution of the Contract, with a satisfactory Certificate of Insurance certifying that the required insurance is in force.

During the life of the Project, Contractor shall provide, pay for and maintain insurance of the types and in the amounts described herein. All such insurance shall be provided by responsible companies with A.M. Best ratings of at least A-, authorized to transact business in the State of Florida, and which are satisfactory to the District. Promptly after the District's issuance of the Notice of Award of this Contract, and prior to commencing the Work, Contractor shall provide evidence of insurance coverages of the types and in the amount required by submitting executed Certificates of Insurance, in the form preferred by the District. Each Certificate of Insurance shall set forth the original manual signature of the authorized representative of the insurance company/companies identified therein and shall have attached thereto proof that said representative is authorized to execute the same. In addition, certified true and exact copies of all required policies shall be provided to the District upon request.

Contractor shall obtain and maintain in full force and effect during the life of this Contract, Worker's Compensation Insurance covering all employees in performance of Work under this Contract. Contractor shall make this same requirement of any of its subcontractors. Contractor shall indemnify and save the District and Engineer harmless from any damages resulting from either Contractor or any subcontractor's failure to secure and/or maintain such insurance.

All policies of insurance required shall require that the insurer give the District thirty (30) days written notice of any cancellation, intent not to renew, or reduction in coverage; and ten (10) days written notice of any non-payment of premium. Such notice shall be delivered by U.S. Registered Mail to: Loxahatchee River District, 2500 Jupiter Park Drive, Jupiter, Florida 33458, Attn: Kris Dean, P.E. In the event of any reduction in the aggregate limit of any policy, Contractor shall immediately restore such limit to the amount required herein.

Receipt by the District of any Certificate of Insurance or copy of any policy evidencing the insurance coverages and limits required by the Contract Documents does not constitute approval or agreement by the District that the insurance requirements have been satisfied or that the insurance policies shown on the Certificates of Insurance are in compliance with the requirements of the Contract Documents.

The insurance coverages and limits required of Contractor under the Contract Documents are designed to meet the minimum requirements of the District. They are not designed as a recommended insurance program for Contractor. Contractor shall be responsible for the sufficiency of its own insurance program. Should Contractor have any questions concerning its exposures to loss under the Contract Documents or the insurance coverages needed therefore, it should seek professional assistance.

If the insurance coverage initially provided by Contractor is to expire prior to the completion of the Work, renewal Certificates of Insurance shall be furnished to the District thirty (30) days prior to the expiration of current coverages.

All liability insurance policies obtained by Contractor to meet the requirements of the Contract Documents, other than the Worker's Compensation and Employer's Liability Policy, shall provide that the District, its officers, employees, and agents, and Engineer and its shareholders, officers, and directors, and any other person or entity designated by the District, shall be named "additional

insureds" under the Policy and shall also incorporate a Severability of Interest and Cross Liability provision. All insurance coverages provided under this Special Conditions Section 9.08 shall apply to all of Contractor's activities under the Contract Documents without regard for the location of such activity. The policy shall include a waiver of subrogation provision in favor of the additional insured. This policy shall include, but not be limited to, all of the following coverage in the following minimum amounts:

a. Vehicle – Owner, Hired, Non-owner – Any Automobile Coverage

| Injury or death of any one person: Injury or death of more than one person | \$1,000,000 |
|--|-------------|
| in any one occurrence: | \$1,000,000 |
| Property Damage- any one occurrence: | \$ 300,000 |

b. Comprehensive General Liability, other than vehicle, including:

Comprehensive Premises Operations

Explosions and Collapse Hazard

Underground Hazard

Products/Completed Operations Hazard

Broad Form Property Damage Independent Contractors

Personal Injury

| Per Occurrence | \$1,000,000 |
|--|-------------|
| Aggregate | \$1,000,000 |
| Injury or death of any one person: | \$1,000,000 |
| Injury of death of more than one person in any one occurrence: | \$1,000,000 |
| Property Damage: Each occurrence: | \$ 300,000 |
| Aggregate operations: | \$ 500,000 |

Neither Contractor nor any subcontractor shall commence Work under this Contract until they have obtained all insurance required under this Special Conditions Section 9.08, and have supplied the District with evidence of such coverage in the form of the Certificate of Insurance, and such Certificate has been approved by the District in writing. All such insurance policies shall provide for at least thirty (30) calendar days written notice to the District prior to cancellation. Contractor's and subcontractor's insurance shall be primary to any other insurance carried by the District, its

Aggregate protective:

Aggregate contractual:

c.

500,000

500,000

consultants, or Engineer. The District's, its consultants', or Engineer's coverage shall be excess insurance only, and Contractor's insurance policies shall so state.

Contractor shall be responsible for and shall obtain and file insurance certificates on behalf of all its subcontractors within ten (10) calendar day of the subcontractor's start of Work. All Certificates of Insurance shall be filed with the District in the office designated in the Contract Documents.

Should Contractor fail to maintain the insurance coverages required by the Contract Documents, the District may, at its option, either terminate this Contract for default or procure and pay for such coverage, charge Contractor, and deduct the costs from payments due Contractor. A decision by the District to procure and pay for such insurance coverages shall not operate as a waiver of any of its rights under the Contract Documents.

Failure of Contractor to submit the required Certificates of Insurance within the times required by this Special Conditions Section 9.08 may result in a delay in issuing the Notice to Proceed. The parties specifically agree that such a delay is neither excusable nor compensable and will not entitle Contractor to a change in the Contract Sum or time.

9.09 Water Supply

Contractor shall, at its own expense, provide all water needed for construction purposes and for testing.

9.10 Pipeline and Manhole Locations

Pipelines and manholes will be located substantially as indicated on the Plans and Specifications, but Engineer may make such modifications in locations as may be found desirable to avoid interferences with existing structures or for other reasons.

9.11 Elevation Datum

The datum adopted by Engineer is based on National Geodetic Vertical Datum of 1929. All elevations on the Plans and Specifications refer to this datum.

9.12 Easements

The District has obtained, or will obtain, permanent easements and temporary construction easements through private property, where required. The temporary construction easements entitle Contractor to the occupancy and use of the designated area near or adjacent to the Work for purposes related to the Work.

Easements are shown on the Plans and Specifications.

Contractor will not encroach on any property unless it has been established that easements have been obtained or that the property owner has given the District permission in writing. On all other land, Contractor has no rights unless he obtains written consent from the proper parties.

9.13 Occupying Private Land

Contractor shall not (except after written consent from the proper parties) enter or occupy with persons, tools, equipment or materials, any land outside the rights-of-way or property of the District. A copy of the written consent shall be given to Engineer.

9.14 Work in State, County, and Town Rights-of-Way

Attention is directed to the fact that Work will be going on in County rights-of-way. The District has obtained written consent for Contractor to encroach on these rights-of-way for the Work. Any damage to the areas within these rights-of-way shall be repaired or restored in accordance with their respective standards, specifications, latest revisions and permit requirements.

9.15 Interference with and Protection of Streets

Contractor shall not close or obstruct any portion of the street, road, or private way without obtaining permits therefor from the proper authorities. During the course of the Work, if any street or private way shall be rendered unsafe by Contractor's operations, Contractor shall make such repairs or provide such temporary ways or guards as shall be acceptable to Engineer.

Streets, roads, private ways, and walks not closed, shall be maintained passable by Contractor at Contractor's expense, and Contractor shall assume full responsibility for the adequacy and safety of provisions made.

Contractor shall, at least forty-eight (48) hours in advance, notify the proper authorities including, but not limited to, the police, ambulance squad, fire departments, and school district, and any other public authority with jurisdiction in writing, with a copy to Engineer, if a closure of a street is necessary. Contractor shall cooperate with the proper authorities in the establishment of alternate routes. Contractor shall provide adequate detour signs, plainly marked and well lit, in order to minimize confusion. All expenses of street closure shall be the responsibility of Contractor.

Contractor shall, when required by Engineer, schedule its Work so as to interfere as little as possible with the operations of adjacent users and to minimize loss of access by public or private agencies to their place of business.

9.16 Traffic Control

For control of traffic, Contractor shall provide an adequate number of flagmen in accordance with the latest revisions of the Florida Department of Transportation specifications. Contractor shall bear the costs of employing such flagmen.

9.17 Work Adjacent to Telephone, Power, Cable TV and Gas Company Structures

In all cases where Work is to be performed near telephone, power, water, cable TV, or gas company facilities, Contractor shall provide written notification to the respective companies of the areas in which Work is to be performed, within a minimum of forty-eight (48) hours prior to any Work in these areas. Contractor shall comply with all applicable regulations of the State of Florida regarding the location of underground facilities prior to excavating any area (Sunshine State-One Call of Florida).

9.18 Storage of Materials

Suitable storage facilities shall be furnished by Contractor. All materials, supplies and equipment intended for use in the Work shall be stored by Contractor to prevent damage from exposure, contamination by foreign substances, or vandalism. Engineer shall not accept, or sample for testing, materials, supplies or equipment that have been improperly stored. Materials found unfit for use shall not be incorporated in the Work and shall immediately be removed from the construction or storage site.

9.19 Salvaged Materials and Excavated Materials

In the absence of special provisions to the Contract, salvage materials, equipment or supplies excavated during the course of the Work are the property of the District and shall be cleaned and stored as directed by Engineer.

All excavated materials needed for backfilling operation shall be stored on site. Contractor shall take the appropriate steps to secure any necessary additional area for stockpiling. Contractor shall include in its bid price the removal of such material from site to an area designated by Engineer. The haul distance shall not exceed six (6) miles each way. All excess materials not wanted by the District shall be hauled and disposed of at an approved site, at Contractor's expense.

9.20 Pre-Construction Meeting

Within ten (10) calendar days after the execution of the Contract and prior to start of construction, a planning meeting will be scheduled by Engineer which must be attended by Contractor. This conference will include representatives of Contractor, Engineer, the District, local utilities, regulatory agencies, other contractors performing Work in the area for the District, and any other party that the District may deem as necessary for the orderly performance of the Contract. However, this does not relieve Contractor of the responsibility of contacting local utilities and any other necessary agencies as the circumstances may require. At this meeting the parties shall coordinate the sequence of construction.

9.21 Alterations

Engineer may make alterations in the line, grade, plan, form, dimensions, or materials of the Work or any part thereof, either before or after the commencement of construction of the Work. If such alterations increase or diminish the quantity of Work to be done, compensation for increased Work shall be made at the Contract Unit Prices or under the item for extra Work. For decreased Work, Contractor shall allow the District a credit based on the Contract Unit Prices or by such other means as determined by Engineer. If such alterations diminish the quantity of Work to be done, they shall not warrant any claim for damages or for anticipated profits on the Work that is eliminated.

9.22 Extra and Deleted Work

Contractor shall perform any unforeseen additional Work necessary to the proper completion of the Contract and not otherwise provided for herein, when and as ordered in writing by Engineer and approved by the District ("Extra Work"). For Extra Work, Contractor shall be compensated either:

- a. At the price agreed upon before the Extra Work is commenced and named in the order for the Work, or
- b. If Engineer so elects, for the reasonable cost of said Work, as determined by Contractor and approved by Engineer, plus a percentage of such cost, as set forth below, or
- c. At the unit price indicated in the Contract.

Contractor must submit written notification to Engineer within fifteen (15) days of any event Contractor claims to result in a change in the Scope of the Work or in Extra Work, and Contractor shall quantify such change within thirty (30) days of the event. The District shall provide a response to the Contractor within thirty (30) days from receipt of Contractor's quantification of the change. The cost of Extra Work performed shall include the cost to Contractor of materials used, equipment installed, common and skilled labor and foremen, and the fair rental price of all machinery used on the Extra Work for the period of such use.

At the request of Engineer, Contractor shall furnish itemized statements of the cost of the Work ordered and give Engineer access to all accounts, bills, and vouchers relating thereto.

Contractor may include in the cost for Extra Work the amounts of additional premiums paid to obtain and maintain the required insurance on account of such Extra Work, including but not limited to: Social Security or other direct assessments upon Contractor's payroll by Federal or other properly authorized public agencies; and other approved assessments made by Contractor directly to Contractor's employees, which are recognized to be part of the cost of doing Work.

Compensation for the rental of machinery used for Extra Work shall be based upon an appropriate fraction of the approved monthly rate schedule. The cost of transportation, not exceeding a distance of one hundred (100) miles, of such machinery to and from the Work shall be added to the compensation for rental property provided; however, compensation for rental property shall only apply to machinery or equipment used for Extra Work and not already required to be furnished under the terms of the Contract.

Contractor shall not include in the cost of Extra Work, any cost or rental of small tools, buildings, or any portion of the time of Contractor, its superintendent, or its office and engineering staff.

Contractor may add up to fifteen percent (15%) to the cost of Extra Work done by Contractor's own forces to cover its overhead allowance for use of capital the premium on the Bond as assessed upon the amount of this extra Work, and profit.

Where Extra Work done is performed by a subcontractor, the subcontractor shall compute the cost for the Extra Work, as stated above plus fifteen percent (15%). Contractor shall be allowed an additional five percent (5%) of the subcontractor's charge for the Extra Work to cover the cost of Contractor's overhead, use of capital, the premium on the Bonds as assessed upon the amount of this Extra Work, and profit.

If Extra Work is done, Contractor and/or subcontractor shall keep daily records of such Extra Work. The daily record shall include the names of persons employed, hours worked, materials and

equipment incorporated, and machinery used, if any, in the execution of such Extra Work. This daily record shall be signed by Contractor's authorized representative and approved by Engineer, verifying that such Work has been done. A separate daily record shall be submitted for each Extra Work order.

Notwithstanding anything contained herein the markup to Contractor and/or subcontractor, for overhead, profit, use of capital, and the premium on the Bonds as the same relates to Extra Work within the scope of Section 01020 of the Technical Specifications, shall not exceed twenty percent (20%).

9.23 Extension of Time on Account of Extra Work

When Extra Work is ordered at any time during the progress of the Work which requires, in the opinion of Engineer, an unavoidable increase of time for the completion of the Contract, additional time shall be certified in writing by Engineer.

9.24 Changes Not To Affect Bonds

It is distinctly agreed and understood that any changes made in the Plans and Specifications for this Work (whether such changes increase or decrease the amount thereof) of any change in the manner of time of payments made by the District to Contractor shall in no way annul, release, or affect the liability and surety on the bonds given by Contractor.

9.25 Non-Assignable

Neither the Contract Documents, nor any monies due hereunder, or any part thereof, shall be assigned, transferred, or sublet by Contractor; nor shall the District be liable to any assignee or transferee, or sub-lessee, without the written consent of the District. Any assignment, transfer, or sublease, shall not release or discharge Contractor from any obligation hereunder.

9.26 District Remedies

If Contractor defaults or neglects to carry out any of its obligations under this Contract, or should liens be filed, bills of sale, conditional bills of sale, chattel mortgages, assignments of this Contract without the consent of Contractor, or orders for the payment of money for materials or labor or either, or should Contractor become insolvent or file Bankruptcy, the District shall have the right, in addition to any other rights and remedies provided by law, to (a) perform and furnish through itself or through others any such labor or materials for the Work and to deduct the cost thereof from any money due or to become due to Contractor for all or any portion of the Work; (b) enter upon the premises and take possession for the purpose of completing the Work of all equipment, scaffolds, tools, appliances, and any other items thereon; and (c) to employ any person or persons to complete the Work and provide all labor services, materials, equipment, and other items required therefor. In case of such termination of the employment of Contractor, Contractor shall not be entitled to receive any further payment under this Contract. However, if the unpaid balance of the amount to be paid under this Contract shall exceed the cost and expense incurred by the District in completing the Work, such excess shall be paid by the District to Contractor; but if such cost and expenses shall exceed the unpaid balance, Contractor shall promptly pay the difference to the District on demand. Said cost and expense shall include not only the cost of completing the Work to the satisfaction of the District and of performing and furnishing all labor, services, materials, equipment, and other items required therefor, but all losses, damages, costs and expenses including attorney's fees sustained, incurred, or suffered by reason of or resulting from Contractor default, or by reason for litigation over this Contract.

9.27 Contractor's Remedies

If the District fails to make a payment as provided for in the Contract Documents for a period of thirty (30) days after the date the payment is due, through no fault of Contractor, Contractor may, upon seven (7) additional days' written notice to the District terminate the Contract and recover from the District payment for Work executed including reasonable overhead and profit and costs incurred by reasons of such termination.

9.28 Discontinuance of Construction

Contractor agrees and guarantees to perform the above mentioned Work in accordance with the terms herein, irrespective of any strikes, lockouts, or stoppages and Contractor shall not employ persons, means, materials, or equipment which may cause strikes, Work stoppages, or any disturbances by workmen employed by Contractors.

In the event the District is prevented from proceeding with any or all of this Work as stated in this Contract, due to a declaration of war, or national emergency, by the United States government, whereas the construction of the type contracted for herein is specifically prohibited by statute or governmental edict, or due to the stoppages of construction caused by any governmental agency, State, City, Town, or County regulations, orders, restrictions, or due to circumstances beyond the District's control, or for any reasons whatsoever, then the District herein reserves the right to either suspend the Work to be done for an indefinite period of time or to cancel this Contract outright by giving notice by registered mail for such intention to Contractor herein. In the event of any conditions above mentioned occurring after the Work herein has already been commenced, then the District herein shall be liable only for the Work completed up to the cancellation or suspension without the addition of prospective profits or other charges whatsoever.

9.29 Contractor's Responsibility

It is specifically agreed, that all materials shall be supplied and Work shall be done in accordance with the rules, requirements, regulations and directives of various Building Departments, other State, County, or Town departments having jurisdiction over the same; mortgagees, if any; and the Federal Housing Administration or the Veteran's Administration, or their Bureaus, Agencies, Subdivisions, or Agencies or any other governmental bureau, agency, or department interested in this job directly or indirectly.

Contractor shall, at its own cost, obtain all necessary permits, licenses, inspections and certificates pertaining to the Work and shall comply with all Federal, State, Municipal and local laws, ordinances, rules, regulations, orders, notices and requirements, whether or not provided by the Plans, Specifications, General Conditions or other Contract Documents without additional expense to the District. Contractor shall also be responsible for and correct at its own cost and expense, any violations thereof resulting from and in connection with its performance of its Work. Engineer shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by Contractor or the safety precautions and programs incident to the Work of Contractor. Engineer's efforts will be directed toward providing assurance for the District that the completed

Project will conform to the Contract Documents, but Engineer shall not be responsible for the failure of Contractor to perform the construction Work in accordance with the Contract Documents.

Engineer shall have the authority to reject Work which does not conform to the Contract Documents, and shall have authority, but not the obligation, to stop the Work in the event of any unsafe conditions or unsafe practices on the part of Contractor, any subcontractor or any of their employees. Engineer's ability to stop the Work shall not affect Contractor's liability for the existence of unsafe conditions or practice.

9.30 The District's Right to Terminate

The District may terminate this Contract and take possession of all or some of Contractor's materials, tools, equipment and appliances and complete the Work by any means the District deems fit if any of the following occur: if at any time there shall be filed by or against Contractor in any court a petition in bankruptcy, insolvency, for reorganization, or for the appointment of a receiver or trustee of all or a portion of Contractor's property, where Contractor fails to secure a discharge within thirty (30) days of any such petition; if Contractor makes an assignment for the benefit of creditors or petitions for or enters into an agreement or arrangement with its creditors; if Contractor fails to prosecute the Work properly, fails to complete the Work entirely on or before any date established for partial or final completion; fails to make prompt payment to subcontractors, for materials or labor; or without limitation, fails to perform any provisions of this Contract. The District may terminate this Contract by giving Contractor seven (7) calendar days prior written notice of any such default to Contractor. Such termination shall be without prejudice to any other remedy that the District may have. In case of termination, Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Sum shall exceed (1) the expense of completing the Work including compensation for additional managerial and administrative services, plus (2) the District's losses and damages because of Contractor's default, such excess shall be paid to Contractor. If such expense, plus the District's losses and damages shall exceed such unpaid balance, Contractor shall pay the difference to the District promptly on demand.

The District may terminate this Contract without cause by giving seven (7) calendar days prior written notice to Contractor, and in such event, the District will pay Contractor for that portion of the Contract Sum, less the aggregate of previous payments, allocable to the Work completed as of the date of termination. The District also will reimburse Contractor for all costs necessarily incurred for organizing and carrying out the stoppage of the Work and paid directly by Contractor, not including overhead, general expenses or profit. The District will not be responsible to reimburse Contractor for any continuing contractual commitments to subcontractors or materialmen or penalties or damages for canceling such contractual commitments inasmuch as Contractor shall make all subcontracts and other commitments subject to this provision.

In the event of termination by the District, the District may require Contractor promptly to assign to it all or some subcontracts, construction, plant, materials, tools, equipment, appliances, rental agreements, and any other commitments which the District may in its sole discretion, choose to take by assignment, and in such event Contractor shall promptly execute and deliver to the District written assignments of the same.

The District may, at any time, terminate the Contract for the District's convenience and without cause. Contractor shall be entitled to receive payment for Work executed and costs incurred by reason of such termination

9.31 Venue, Disputes and Attorney's Fees

This Contract shall be governed by the laws of the State of Florida as now and hereafter in force. The venue for actions arising out of this Contract is fixed in Palm Beach County, Florida.

Contractor and the District agree that prior to instituting any litigation for damages under this Special Conditions Section 9.31, the parties shall conduct a non-binding mediation to attempt to resolve their dispute. In the event the parties cannot agree upon a mediator, each party shall select a mediator and such mediators shall select a third mediator who shall serve as the mediator for the dispute. In the event such mediation does not occur within thirty (30) days of a written request of either party, the parties shall be free to pursue litigation without first conducting mediation.

In any dispute arising out of the Contract Documents and/or relating to the Work, the Prevailing Party shall be entitled to recover all costs and expenses incurred, including, without limitation, attorneys' and paralegals' fees and costs whether before suit is filed, after suit is filed, on any appeal, and in any bankruptcy proceedings.

9.32 Coordination with District's Existing Facilities

Contractor shall cooperate and coordinate its activities with those of the District when connecting to the existing District facilities, while working on the District plant site, and as specified in the Contract Documents.

The District has adopted a Standard Operating Procedure (SOP) for System Shutdowns and Bypass included in the Appendix and made part of this Contract. The Contractor is responsible for compliance with the SOP including planning all work requiring system shutdowns and/or bypasses to be completed within the Low Risk Holding Time and the Contractors Wastewater Management/Spill Response Plan. Details required for this compliance are included in the Appendix including the allowable duration of the shutdown or bypass (low risk holding time), the location of the isolation facilities, required facility information to determine residual wastewater volume disposal requirements and disposal locations, anticipated continuous flow the Contractor may expect and other pertinent information.

The Contractor is also responsible for all costs associated with the Emergency Operation Measures should these be implemented due to negligence on the Contractor's part or failure of the Contractor to perform the work within the allowed time frame.

9.33 Permits

Unless otherwise identified in Section 010 of the Technical Specifications, Contractor shall be responsible for obtaining any and all permits (i.e. building permits) necessary for the Work under this Contract and pay the costs thereof, said permits may be included as part of the Contract Documents. If differences between the specifications and conditions of the permits exist, the permits shall govern.

9.34 Coordination of Construction

A. General

Contractor shall be responsible for the maintenance of utility operations during construction as specified in the Section 01500 of the Technical Specifications.

B. Temporary Facilities

District personnel must have ready access at all times to all existing structures. Temporary facilities shall include any equipment, materials, controls, services and accessories temporarily needed for access to, and for protection of all existing structures and equipment, and to maintain an operating system, in accordance with the provisions of these Specifications.

The size or capacity of the temporary facility shall generally be equal to the size or capacity of the facility replaced, unless otherwise indicated on the Contract Plans and Specifications or otherwise directed and approved by the District. All temporary facilities shall be removed when they are no longer required unless otherwise agreed upon in writing. To substitute an unscheduled temporary facility for an existing or new facility, Contractor shall prepare and submit a plan and description of the proposed temporary facility to the District. Upon receipt of the written approval of the District, Contractor shall then submit the notification of intent to commence Work.

C. Coordination with District Personnel

Before commencing Work involving removing or placing in operation existing or new facilities, Contractor shall notify the District in writing at least thirty (30) calendar days in advance in writing. The District shall be responsible for removing facilities from operation. Only the District can authorize the shutdown of any portions of the sanitary system. Contractor shall, under no circumstances, interfere with any existing lift station or collection system.

9.35 Field Layout Work

All Work under this Contract shall be constructed in accordance with the lines and grades shown on the Contract Plans and Specifications or as directed by Engineer. Elevation of existing ground, structures and appurtenances are believed to be reasonably correct but are not guaranteed to be absolute and therefore are presented only as an approximation. Any error or apparent discrepancy in the date shown or omissions of data required for accurately accomplishing the stake-out survey shall be referred immediately to Engineer for interpretation or correction.

All survey Work for construction control purposes shall be made by Contractor at its expense as set forth in General Conditions Section 10.11.

Contractor shall establish all base lines for the location of the principal component parts of the Work together with benchmarks and batter boards adjacent to the Work. Based upon the information provided by the Contract Plans and Specifications, Contractor shall have the responsibility to carefully preserve the benchmarks, reference points and stakes. In case of destruction thereof by

Contractor or resulting from its negligence, Contractor shall be held liable for any expense and damage resulting therefrom and shall be responsible for any mistakes that may be caused by the unnecessary loss or disturbance of such marks, reference points, and stakes.

Existing or new control points, property markers, and monuments that will be established or are destroyed during the normal causes of construction shall be reestablished by Contractor; and all reference ties recorded therefore shall be furnished to Engineer. All computations necessary to establish the exact position of the Work shall be made and preserved by Contractor.

9.36 Submittals

A. Progress Schedule

Prior to executing the Contract, but after the award of the Contract to the Successful Bidder, the Successful Bidder shall prepare and submit the proposed progress schedule to Engineer for review and comments. The schedule shall be prepared using Oracle - Primavera P6. The contractor shall supply the electronic Primavera P6 schedule and a PDF copy of the Primavera P6 gantt chart.

The schedule shall be prepared using the Critical Path Method ("CPM") and shall depict in detail the proposed sequence of the Work and identifying construction activities for each structure, collection, transmission, or treatment facility. The schedule shall be time scaled, identifying the first day of each week, with the estimated date of starting and completion of each stage of the Work in order to complete the Project within the Contract time.

Contractor shall revise the progress schedule to reflect Engineer's comments prior to approval.

An updated schedule shall be submitted monthly with each Progress Payment Application depicting progress to the last day of the month. Subsequent changes to the schedule shall be accompanied by a letter of explanation with appropriate references and revision dates on the schedule.

B. Operation and Maintenance Instruction for all Valves and Mechanical Devices

1. Individual Instructions

When required by Engineer, Contractor, through manufacturer's representatives, shall provide instruction to the District's designated employees regarding the operation and care of all equipment furnished by Contractor and installed hereunder.

2. Written Instructions

When required by Engineer, Contractor shall furnish and deliver to Engineer, prior to final payment, six (6) complete sets of instructions, technical bulletins, and any other printed matter such as diagrams, prints or drawings, containing full information required for the proper operation, maintenance, and repair of all Contractor furnished equipment. Included in this submission shall be a spare parts diagram and complete spare parts list. The information provided shall include a source of replacement parts and names of service representatives,

including addresses and telephone numbers. Extensive pictorial cuts of equipment are required for operator reference in servicing. These requirements are a prerequisite to the operation and acceptance of equipment. Each set of instructions shall be bound together in appropriate three-ring binders. A detailed table of contents shall be provided for each set. Written operation and maintenance instructions shall be required for all equipment items supplied for this Project. The amount of detail required shall be commensurate with the complexity of the equipment item.

Information not applicable to the specific piece of equipment installed on this Project shall be removed from the submission.

When written instructions include shop drawings and other information previously reviewed by Engineer, only those editions thereof which were accepted by Engineer, and which accurately depict the equipment installed, shall be incorporated in the instructions.

C. Maintenance and Lubrication Schedules

When required by Engineer, Contractor shall furnish complete Equipment Maintenance and Lubrication Schedules for each piece of mechanical equipment such as valves, gates, etc. The complete forms (six copies), as provided in Section 01300 entitled "Submittals" of the Technical Specifications shall be submitted along with the shop drawings and included with the furnished O&M Manuals.

D. Schedule of Values

Contractor shall submit as a shop drawing a Schedule of Values for Engineer's review at the Pre-Construction Meeting. The Schedule of values shall contain the installed value of the component parts of the Work for the purpose of making progress payments during the construction period. The Schedule shall provide sufficient detail for the proper identification of Work accomplished. Each item shall include its proportional share of all costs, including Contractor's overhead contingencies and profit. The sum of all scheduled items shall equal the total value of the Contract. For payments on acceptable stored material items, Contractor shall also submit a separate list covering the cost of materials, delivered, and unloaded at the project site along with delivery invoices with taxes paid. Stored materials will be paid for items to be used within thirty (30) days of delivery. In addition, the listing shall also include the installed value of the item with coded reference to the Work items in the Schedule of Values.

Contractor shall expand or modify the above schedule and materials listing as required by Engineer's initial and subsequent reviews.

E. Schedule of Payments

Contractor shall submit a Schedule of Payments at the Pre-Construction meeting to be approved by the District. The Schedule of Payments shall contain Contractor's expected Progress Payment values throughout the construction period, for the purpose of assuring that the District will have sufficient monies available to make payments in the expected amounts

for each payment period. Contractor shall provide an updated Schedule of Payments with each Progress Payment Application.

F. Contractor's Shop and Working Drawings

Contractor shall submit shop and Work drawings in accordance with General Conditions Section 10.07.

9.37 Inspection and Testing

The Contractor shall employ and pay for the services of an independent test laboratory for specified testing.

The Work or actions of the testing laboratory shall in no way relieve Contractor of its obligations under the Contract. The laboratory testing Work shall include such inspections and testing required by the Contract Document, existing laws, codes, ordinances, etc. The testing laboratory will have no authority to change the requirements of the Contract Documents, nor perform or approve any of Contractor's Work.

Contractor shall allow Engineer ample time and opportunity for testing materials and equipment to be used in the Work. Contractor shall advise Engineer promptly upon placing orders for materials and equipment so that arrangements may be made, if desired, for inspection before shipment from place of manufacture. Contractor shall at all times furnish Engineer and Engineer's representatives, facilities including labor, and allow proper time for inspecting and testing materials, equipment, and workmanship. Contractor must anticipate that possible delays may be caused in the execution of the Work due to the necessity of materials and equipment being inspected and accepted for use. Contractor shall furnish, at Contractor's own expense, all samples of materials required by Engineer for testing. Contractor shall make its own arrangements for providing water, electric power, or fuel for the various inspections and tests of structures and equipment.

Contractor shall furnish the services of representatives of the manufacturers of certain equipment, as prescribed in other sections of the Specifications. Contractor shall also place orders for such equipment on the basis that, after the equipment has been tested prior to Final Completion of the Work; the manufacturer will furnish the District with certified statements that the equipment has been installed properly and is ready to be placed in functional operation. Tests and analyses required of equipment shall be paid for by Contractor, unless otherwise specified in writing.

The Contractor will pay the cost of all tests, inspections, or investigations undertaken by the order of Engineer for the purpose of determining conformance with the Contract Documents if such tests, inspections, or investigations are not specifically required by the Contract Documents, and if conformance is ascertained thereby. Whenever nonconformance is determined by Engineer as a result of such tests, inspections, or investigations, Contractor shall bear the full cost thereof or shall reimburse the District for said cost. The cost of any additional tests and investigations, which are ordered by Engineer to ascertain subsequent conformance with the Contract Documents, shall be borne by Contractor.

9.38 Utilities and Services

A. General

Contractor shall provide for utilities and services for its own operations, as well as field offices. These shall include electrical power, water, ventilation, sanitary facilities and telephone service. Contractor shall furnish, install and maintain all temporary utilities during the Contract period including removal upon completion of the Work. Such facilities shall comply with regulations and requirements of the National Electrical Code, OSHA, Florida Power and Light, and applicable Federal, State, and local codes, etc.

B. Temporary Power

Contractor shall arrange with Florida Power and Light for construction period service and pay all costs for the work and power. In addition to providing for a safe construction period distribution system, Contractor shall provide a safe and adequate artificial lighting system for work areas which do not have sufficient natural light. Temporary lighting shall be maintained during non-working periods if the area is subject to access by the public or plant personnel. Contractor shall furnish all electrical or other power required for construction, testing and trial operation prior to final acceptance by the District or at the time of Beneficial Occupancy.

C. Permanent Power

Utility charges for power consumed by permanent electrical facilities used for normal operations and maintenance of the treatment plant will be paid by the District.

D. Temporary Water

Contractor shall pay for all water used for construction, flushing, testing and temporary sanitary facilities. Contractor shall provide and maintain all piping, fittings, adapters, and valves required.

E. Temporary Ventilation

Contractor shall provide and maintain adequate ventilation for a safe working environment. In addition, forced air ventilation shall be provided for the curing of installed materials, humidity control and the prevention of hazardous accumulations of dust, gases or vapors.

F. Temporary Sanitary Facilities

Contractor shall provide and maintain adequate and clean sanitary facilities for the construction work force and visitors. The facilities shall comply with local codes and regulations and be situated at approved locations.

9.39 Security

Contractor shall employ watchmen and security guards in its sole discretion, as it deems necessary to protect the job site against vandalism, burglary, theft, trespassing, etc. Contractor shall care for and

protect against loss or damage all material to be incorporated in the construction, including but not limited to, the existing plant structures, equipment and materials for the duration of the Contract, shall repair or replace damaged or lost materials and damaged structures at no additional cost to the District.

Contractor shall be responsible for providing, maintaining and securing gates used for construction purposes for the duration of the Project.

9.40 Special Controls

A. Chemicals

All chemicals used during Project construction or furnished for testing or Project operation, whether herbicide, pesticide, disinfectant, polymer, reactant of other classification, must be approved by either EPA or HUD. The handling, use, storage and disposal of such materials, containers or residues shall be in strict conformance to the manufacturer and/or supplier's instructions. Unless otherwise authorized, such materials shall be kept in secured storage. Copies of antidote literature shall be kept at the storage site and at Contractor's job site office. A supply of antidotes shall be kept at Contractor's office.

B. Dust

During construction Contractor shall, by the application of water and/or calcium chloride or other means, approved by Engineer, eliminate dust annoyance to adjacent property owners, business establishments, and all vehicular traffic. Contractor shall take all protective measures, to the satisfaction of Engineer, necessary to ensure that dust and debris do not enter any adjacent property or roadway. Contractor shall be responsible for the cleanup of existing property and roadways which have become soiled due to lack of proper dust control as determined by Engineer.

C. Noise

Noise resulting from Contractor's Work shall not exceed the noise levels and other requirements stated in local ordinances. Contractor shall be responsible for curtailing noise resulting from its operation. Contractor, upon written notification from Engineer or the noise control officers, shall make any repairs, replacements, adjustments, additions to and/or furnish mufflers when necessary to fulfill noise level requirements.

D. Erosion Abatement and Water Pollution

It is imperative that any Contractor dewatering operation does not contaminate or disturb the environment of the properties adjacent to the plant. Contractor shall, therefore, schedule and control its operations to confine all runoff water from disturbed surfaces, and water from dewatering operations that becomes contaminated with lime, silt, muck, and other deleterious matter, fuels, oils, bitumens, calcium chloride, chemicals and other polluting materials.

Contractor shall construct temporary stilling basin(s) of adequate size and provide all necessary temporary materials, operations, and controls including, but not limited to, filters,

coagulants, screens, and other means necessary to attain the required discharge water quality.

Contractor shall be responsible for providing, operating, and maintaining materials and equipment used for conveying clear water to the point of discharge. All pollution prevention procedures, materials, equipment and related items shall be operated and maintained until such time as the dewatering operation is discontinued. Upon the removal of the materials, equipment and related items, Contractor shall restore the area to the existing condition prior to commencing the Work.

E. Pests and Rodents

Contractor shall be responsible for maintaining the job site free from litter, rubbish and garbage. Contractor shall provide containers for the disposal of garbage and other materials that attract and are breeding places for pests and rodents. Contractor shall, at its expense, provide the services of an exterminator on a periodic basis to inspect the job site and to provide services as required to control pests and rodents.

F. Periodic Clean-Up; Basic Site Restoration

During construction, Contractor shall regularly remove from the site all accumulated debris and surplus materials of any kind which result from the construction. Unused equipment and tools shall be stored at Contractor's yard or base of operations for the Project.

Contractor shall perform the clean-up Work on a regular basis and/or as frequently as ordered by Engineer. Basic site restoration in a particular area shall be accomplished immediately following the installation or completion of the required facilities in that area. Furthermore, such site restoration shall also be accomplished, when ordered by Engineer, if partially completed facilities must remain incomplete for some time period due to unforeseen circumstances.

Upon failure of Contractor to perform periodic clean-up and basic restoration of the site to Engineer's satisfaction, Engineer may, upon five (5) calendar days prior written notice to Contractor, employ such labor and equipment as he deems necessary for the purpose, and all costs resulting therefrom shall be charged to Contractor and deducted from any amounts of money that may be due it.

9.41 Storage and Construction Areas

A. Storage and Construction Areas

Contractor shall confine its construction operations within the Contract limits shown on the Plans and Specifications and/or property lines and/or fence lines. All on-site Contractor Staging Areas shall be confined to designated areas as shown on the Plans and Specifications. Any additional staging and storage areas required by Contractor shall be provided by Contractor.

Contractor shall be solely responsible for the protection and safekeeping of equipment and materials at or near the sites. No claim shall be made against the District for any act of an

employee or trespasser. Should an occasion arise necessitating access to an area occupied by stored equipment and/or materials, Contractor shall immediately move such equipment or materials. No equipment or materials shall be placed upon the District's property until written approval has been received from the District.

Upon completion of the Contract, Contractor shall remove from the staging areas all equipment, fencing, surplus materials, rubbish, etc., from the construction, storage, and staging areas, and restore the areas to their original condition.

9.42 Equipment and Materials

A. General

All equipment, materials, instruments or devices incorporated in this Project shall be new and unused, unless indicated otherwise in the Contract Documents or in writing signed by the District and Contractor. All equipment, materials, instruments or devices shall be the products of reliable manufacturers who, unless otherwise specified, have been regularly engaged in the manufacture of such material and equipment for the use as identified for this Project for, at least five (5) years.

Equipment and materials to be incorporated in the Work shall be delivered sufficiently in advance of their installation and use to prevent delay in the execution of the Work, and they shall be delivered as nearly as feasible in the order required for executing the Work.

Contractor shall protect all equipment and materials from deterioration and damage. The equipment and materials shall be handled and stored by the manufacturer, fabricator supplier and Contractor before, during, and after shipment in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and any injury, damage or theft of any kind whatsoever. Any equipment exhibiting any of the above, shall be removed and replaced at Contractor's expense; such expense shall include both labor and materials.

B. Storage

Contractor shall store its equipment and materials in accordance with Special Conditions Section 9.18, Storage of Materials, at the job site in accordance with the manufacturer's recommendations and as directed by Engineer. Contractor shall not store unnecessary materials or equipment on the job site and shall prevent any structure from being overloaded or kept in a condition that would endanger the safety of others. Contractor shall enforce the instructions of the District and Engineer regarding the posting of regulatory signs for loading structures, fire safety, and smoking areas.

C. Handling and Maintenance

The manufacturer's storage instructions shall be carefully followed and any deviations shall be approved by the manufacturer in writing with a copy to Engineer. Equipment with moving parts, such as gears, electric motors, etc., and/or instruments, control panels, and switch gears, shall be stored in a temperature and humidity controlled building until the equipment is to be installed, and such equipment shall be rotated per the manufacturer's recommendations while

in storage and during the period between installation and acceptance of the Work.

The equipment shall be stored fully lubricated unless otherwise instructed by the manufacturer. Lubricants shall be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance of the Work. New lubricants shall be put into the equipment at the time of acceptance of the Work.

Equipment with electric motors having space heaters shall have the space heaters energized unless stored in a temperature and humidity controlled building. Space heaters shall be energized at the time of installation and maintained until acceptance of the equipment.

9.43 Project Closeout

A. General

As construction of the Project enters the final stages of completion, Contractor shall, in accordance with the requirements set forth in the Contract Documents, attend to or have already completed the following items:

- 1. Schedule equipment manufacturer's visits to site.
- 2. Calibrate instruments and controls.
- 3. Required testing of Project components.
- 4. Schedule facilities start-up and initial operation.
- 5. Schedule and furnish skilled personnel during initial facilities operation.
- 6. Correct and/or replace Defective Work, including completion of items previously overlooked or Work which remains incomplete, all as evidenced by Engineer's "Punch List".
- 7. Attend to any other items listed herein or brought to Contractor's attention by Engineer.

B. Substantial Completion

Items to be completed and provided prior to issuance of Substantial Completion shall include but not be limited to the following:

- 1. All equipment mfg. visits to the site
- 2. Startup tests completed and documentation provided to the Engineer
- 3. All instruments and controls calibrated and tested
- 4. All components of the Project successfully tested
- 5. Instruction provided to personnel on operation of equipment as required by the Technical Specification.
- 6. Project and its constituent pieces must be fully operational in accordance with Contract requirements and permits.
- 7. Restore areas disturbed by construction activities.

C. Cleaning and Restoration

Before the Final Completion of the Project, Contractor shall accomplish the cleaning and final adjustments of the various facility components as specified in the Specifications, including:

- 1. Clean and lubricate all finish hardware after adjustment for proper operation.
- 2. Touch up marks or defects in painted surfaces and touch up any similar defects in factory finished surfaces.
- 3. Remove all stains, marks, fingerprints, soil, spots, and blemishes from all finish surfaces.
- 4. Restore all areas disturbed by construction operations to conditions equal to or better than that which existed prior to the Work.

D. Project Record Drawings and Documents

Contractor shall keep a set of drawings at the jobsite. As-built plans shall be submitted for Work completed at the end of each pay period. The payment application will not be processed until the as-built plans are approved by Engineer. Contractor shall be held responsible for the accuracy of such data, and shall bear any costs incurred in finding utilities as a result of incorrect data furnished by Contractor.

Before the Final Completion of the Project, Contractor shall submit to Engineer (or to the District if indicated) certain records, certifications, etc., which are specified elsewhere in the Contract Documents. Missing, incomplete, or unacceptable items, as determined by Engineer or the District, shall constitute grounds for withholding Final Payment to Contractor. A partial list of such items appears below, but it shall be Contractor's responsibility to submit any other items which are required in the Contract Documents:

- 1. Test results of Project components.
- 2. Performance affidavits for equipment.
- 3. Operation and maintenance instructions or manuals for equipment.
- 4. Month-to-month records containing all deviations from the Plans and Specifications, Addenda, and Modifications of Shop drawings. Such records shall be prepared from record drawings showing correct and accurate changes and deviations from the Work made during construction so as to reflect the Work as it was actually constructed. These drawings shall conform to recognized standards of drafting, be neat, legible and be on Mylar or other approved reproducible material. Contractor shall secure and pay for the services of a registered land surveyor for a final survey at every 100 feet of the location of the pipeline upon completion of construction. Signed and sealed "As Built" record drawings showing pipe location, slopes, depths of cover, offsets, and location of all fittings, valves, manholes, and all related appurtenances shall be submitted to Engineer. Missing, incomplete or inaccurate drawings as specified herein and as determined by Engineer, shall constitute grounds for withholding final payment to Contractor.
- 5. In addition to items specified under Article 4 Section 6 of the Contract, all technical documentation as specified elsewhere in the Contract Documents and particularly in the Technical Specifications.

E. Grease, Oil and Fuel

All grease, oil, and fuel required for testing of equipment shall be furnished by Contractor. Contractor shall also furnish a one (1) year's supply of lubricants including grease and oil in the type recommended by the manufacturer for each item of equipment supplied.

F. Touch-Up and Repair

Contractor shall touch-up and repair damage to all field painted and factory finished equipment. Touch-up of equipment, panels, etc. shall match as nearly as possible to the original finish. If in the opinion of Engineer the touch-up Work is not satisfactory, Contractor shall repaint the item.

G. Chemicals

All chemicals required for testing of equipment or the process shall be furnished by Contractor. Contractor shall also furnish chemicals for the District's use where specified.

H. Closeout and Punch Lists

Contractor shall notify Engineer and the District in writing when the Work has reached Substantial Completion. Engineer will make an inspection of the Project for the purposes of determining the Work has reached Substantial Completion and for discovering and developing a list of Work not found acceptable and requiring cleaning, repair or replacement ("Punch List"). If Engineer determines the Project to be substantially complete, Engineer shall issue the Certificate of Substantial Completion. If the Project has an estimated cost of less than \$10 million, the Punch List shall be developed within thirty (30) days following actual Substantial Completion of the Project. If the Project has an estimated cost of more than \$10 million, the Punch List shall be developed within sixty (60) days following actual Substantial Completion of the Project. The Punch list shall be delivered to Contractor within five (5) days of the development of the Punch List. The Final Completion date shall not be less than thirty (30) days following delivery of the Punch List.

Upon receipt of the Punch List, Contractor shall perform all work necessary to complete the Punch List. Work that has been inspected and accepted by Engineer shall be maintained by Contractor, until Final Completion of the entire Project. Upon completion of the items on the Punch List, Contractor shall notify Engineer in writing that the Project is ready for inspection. This procedure will continue until the entire Project is accepted by Engineer. "Final Payment" will not be processed until the entire Project has been accepted by Engineer in writing by issuance of the Certificate of Final Completion and all of the requirements in Special Conditions Section 9.43 D. - Project Record Drawings and Documents have been satisfied. Contractor's acceptance of final payment from the District shall constitute a full waiver and release by Contractor of all claims against the District arising out of or relating to the Project or Work.

Final cleaning and repairing shall be scheduled upon completion of the Project.

I. Partial Utilization

Prior to the completion of the Project, it may be necessary to place into service various facilities, structures, equipment and processes in accordance with the Sequence of Operation and Construction. Whenever a structure, equipment, or process has been completed and tested, Contractor shall notify Engineer that it is ready for inspection. Any Work not found acceptable will be noted on the "Punch List." Whenever Contractor has completed the Work and it has been accepted by Engineer, the District shall take possession, operate and maintain the facility, and equipment warranties begin ("Partial Utilization"). Partial Utilization shall not constitute Substantial Completion.

J. Tools and Spare Parts

1. Tools

Any special tools (including grease guns or other lubricating devices) which may be necessary for the adjustment, operation, and maintenance of any equipment shall be furnished with the respective equipment. Contractor shall furnish a complete list of tools and instructions for their use, recommended by the manufacturer or supplier with the Shop Drawing Submittal.

2. Spare Parts

Spare parts for equipment shall be furnished where indicated in the equipment specifications and/or as recommended by the equipment manufacturer. Spare parts shall be identical and interchangeable with original parts. Parts shall be supplied, prepared for storage, in clearly identified containers, except large or bulky items which may be wrapped in polyethylene.

The parts shall be stored separately in a locked area, maintained by Contractor, and shall be delivered to the District at a location designated by the District. Contractor shall furnish an inventory listing all spare parts in the form included herein for each piece of equipment.

K. Start-Up and Field Instructions

The bid prices for the equipment furnished by Contractor shall include the cost of competent manufacture representatives of all equipment to supervise the installation, adjustment and testing of the equipment and to instruct the District's operating personnel in their operation and maintenance of all equipment. The supervision may be divided into two or more time periods as required by the installation program or as directed by Engineer.

The manufacturer's representatives shall certify in writing that the installation and testing of the equipment has satisfactorily been completed and that the equipment is ready for operation and the District's operating personnel have been instructed in the operation, maintenance, and lubrication of the equipment.

Contractor shall provide the services of the manufacturer's representative(s) for additional time as required should difficulties arise in the operation of the equipment due to the

manufacturer's design or fabrication of the equipment or faulty installation by Contractor. This additional service shall be provided at no cost to the District for the duration of the Contract and one (1) year maintenance period.

L. Final Clean-Up and Site Restoration

Before finally leaving the site, Contractor shall wash and clean all exposed surfaces which have become soiled or marked. Contractor shall remove from the site of the Work all accumulated debris and surplus materials of any kind which result from its operation, including construction equipment, tools, sheds, sanitary enclosures, etc. Contractor shall leave all equipment, fixtures, and Work, which he had installed, in a clean condition. The completed Project shall be turned over to the District in a neat and orderly condition.

All damage, as a result of Work under this Contract, to existing structures, pavement, driveways, curb and gutters, sidewalks, utility poles, utility pipelines, conduits, drains, catch basins, fences, and other obstructions not specifically mentioned herein shall be repaired.

9.44 Open Specifications

Where materials or equipment are specified by a trade or brand name, it shall not be the intention of the District to discriminate against an equal product of another manufacturer but rather to set a definite standard of quality or performance and to establish an equal basis for the evaluation of bids. Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases, fully equal to approved samples. Where a trade or brand name is specified with the words "or equal" or "equivalent," this is understood to mean that other trade or brand names may be substituted that are, in the opinion and judgment of Engineer, equal in quality and performance. Even though the words "or equal" or "equivalent" are used in the Specifications, unless a substitute is approved in writing by Engineer, Engineer shall have the right to require the use of the material or equipment specified by trade or brand name.

9.45 Spare Parts List

The equipment supplier shall prepare a recommended spare parts list. Six (6) copies of the recommended spare parts list shall be submitted with the shop drawings.

9.46 Applicable Standards and Codes

Whenever reference is made to any published standards, codes, or standard specifications, such reference shall mean the latest issue of that standard, code, specifications, or tentative specification of the technical society, organization, or body referred to which is in effect at the date of invitation for bids.

9.47 Copies of Plans and Specifications

Contractor shall be provided with three (3) complete sets of Plans and Specifications for its use at no charge. Signed and sealed drawings which are necessary to obtain Building Permits will also be provided to Contractor by Engineer at no charge.

9.48 Restoration – Special

Existing areas of special landscaping materials, irrigation systems, ground cover and any other improvements that are damaged shall be restored with new materials to equal or better than existing conditions. Technical Specifications may contain additional requirements.

9.49 Contractor Performance Reviews and Ratings

The District shall develop a Contractor performance evaluation report. This report shall be used to periodically review and rate the Contractor's performance under the contract with performance rating as follows:

Satisfactory Performance meets contractual requirements. The contractual

performance of the element being assessed may contain some minor problems for which corrective actions taken by the Contractor were

satisfactory

Unsatisfactory Performance does not meet most contractual requirements and

recovery is not likely in a timely manner. The contractual performance contains a serious problem(s) for which the contractor's corrective

actions appear or were ineffective.

The report shall also list discrepancies found during the review period. The Contractor shall be provided with a copy of the report and may respond in writing if he takes exception to the report or wishes to comment on the report. Contractor performance reviews and subsequent reports will be used in determining the Contractor's satisfactory performance record on future Contracts.

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GENERAL CONDITIONS

ARTICLE 10

TITLE

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10.01 General

Contractor shall furnish all labor, materials, tools and equipment necessary to do all Work required for the completion of each item of this Contract as specified herein. The Work to be done and paid for under any item shall not be limited to the exact extent mentioned or described, but shall include all incidental Work necessary or customarily done for the completion of that item.

10.02 Definitions

Wherever the words or terms defined in this Section or pronouns used in their stead occur in the Specifications or other Contract Documents, they shall have the meanings herein given.

- a. "AASHTO" shall mean the American Association of State Highway and Transportation Officials.
- b. "ACI" shall mean the American Concrete Institute.
- c. "Addendum" shall mean modification of the Contract Documents issued in writing by Engineer prior to opening the bids.
- d. "ANS" shall mean American National Standard, as approved by the American National Standards Institute, Inc.
- e. "ASTM" shall mean the American Society for Testing and Materials.
- f. "AWWA" shall mean the American Water Works Association.
- g. "Bid" shall mean the documents that comprise the submission for the Work of this Project.
- h. "Bid Period" shall mean the time period from when the Bid Documents will be available to the deadline for submitting Bids.
- i. "Bidder" shall mean one who submits a Bid directly to District, as distinct from a sub-bidder, who submits a Bid to the Bidder.
- j. "Bid Documents" include the Advertisement for Bids, Instructions to Bidders, Proposal, Questionnaire, the Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipts of Bids).
- k. "Change Order" shall mean a written change, addition, or deletion to the Contract Documents signed by both Contractor and the District.
- 1. "Contract" shall mean the agreement between the Successful Bidder and the District for performance of the Work.
- m. "Contract Documents" shall mean all documents that comprise the agreement of the parties related to this Project. The Contract Documents include the Notice to Contractors, Instructions to Bidders, Proposal, Questionnaire, Bid Security, Contract, Public Construction

Bond, Sworn Statement of Public Entity Crimes, Opinion of District's Attorney, Final Release of Lien, Special Conditions, General Conditions, Technical Specifications, Standard Details and Plans, including all modifications, addenda, and Change Orders contained in any documents before or after execution of the Contract

- n. "Contract Sum" shall mean the total amount due to Contractor as a result of Work on the Project, including any amounts as a result of Change Orders.
- o. "Contract Time" shall mean the time to the complete the Project as set forth in the Contract Documents. Reference to "days" shall mean calendar days unless otherwise noted.
- p. "Contractor" shall mean the Successful Bidder with whom the District signs the Contract for the Work or its duly authorized agents.
- q. "County" shall mean Palm Beach County, as may be applicable.
- r. "Defective" shall mean the Work does not conform to the Contract Documents or does not meet the requirements of any applicable inspection, reference standard, test, or approval.
- s. "District" shall mean the Loxahatchee River Environmental Control District, acting through its properly authorized representatives.
- t. "Engineer" shall mean the engineer designated by the District as its engineering representative during the course of construction to make appropriate inspection and computation of payments, whether acting directly or through properly authorized agents, inspectors or representatives of Engineer, acting within the scope of duties entrusted to them.
- u. "Final Completion" shall mean the time when Engineer determines that all Contract Document requirements have been completed.
- v. "IEEE" shall mean the Institute of Electrical and Electronic Engineers, Inc.
- w. "Notice of Award" shall mean the District's notification of the Contract to the Successful Bidder.
- x. "Notice to Proceed" shall mean the written notice from the District to the Contractor to proceed with the Work.
- y. "Plans" shall mean any and all drawings, plans, sketches, diagrams, designs, lists, exhibits, or other graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work for the Project.
- z. "Pricing Schedule" shall be based upon the Bid item(s) and shall establish the value of the Contract Award.
- aa. "Project" shall mean the entire construction to be performed as provided in the Contract Documents.

- bb. "Schedule of Values" is established between Contractor and Engineer to determine the appropriate cost of component items that were used to establish the "Pricing Schedule," and the value to be paid as Work is completed. The Schedule of Values shall be determined during the Pre-Construction Meeting.
- cc. "Specifications" shall mean the written requirements for materials, equipment, systems, standards, and workmanship for the Work, and performance of related services.
- dd. "Substantial Completion" shall mean the date as certified by Engineer when the construction of the Project or a specified part thereof is completed, in accordance with the Contract Documents and applicable permits, so that the Project or specified part can be utilized for the purposes for which it was intended; or if there be no such certification, the date when final payment is due in accordance with the Contract.
- ee. "Successful Bidder" shall mean the lowest cost, qualified, responsive, responsible Bidder to whom the District, based on the District's evaluation hereinafter provided, makes an award.
- ff. "Work" shall mean 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, services, and other incidentals and the furnishing, installation, and delivery thereof and all Work reasonably inferable therefrom.

10.03 Plans and Specifications are Supplementary

The Plans and Specifications are intended to supplement each other, and together constitute one complete set of Contract Documents, so that any Work exhibited in the one and not the other shall be executed just as if it has been set forth in both, in order that the Work shall be completed in every respect according to the complete design or designs as decided and determined by Engineer. In the event of a conflict in the Plans and Specifications, the Specifications shall be considered prevailing. Should Contractor find that anything is omitted from the Plans and Specifications which is necessary for a clear understanding of the Work, or that there is an error in either Plans or Specifications, Contractor shall promptly notify Engineer. From time to time during the progress of the Work, Engineer may furnish supplementary or working drawings necessary to show changes or define the Work in more detail, and these also shall be part of the Contract Documents.

10.04 Handling and Distribution

Contractor shall, at its own expense, handle, haul, deliver, and distribute all materials and all surplus materials on the different portions of the Work, as necessary. Contractor shall provide suitable and adequate storage room for materials and equipment, until the Final Completion of the Work.

Storage charges and demurrage charges by transportation companies and vendors, which result from delays in handling, shall be borne by Contractor.

10.05 Materials, Samples, Inspection, Approval

Unless otherwise indicated on the Plans and Specifications or specified, only new materials and equipment shall be incorporated in the Work. All materials and equipment furnished by Contractor to be incorporated in the Work shall be subject to the inspection and approval of Engineer.

No material shall be processed for, fabricated for, or delivered to the Work without prior approval of Engineer.

Within thirty (30) calendar days after the award of the Contract, Contractor shall submit to Engineer the names and addresses of the manufacturers and suppliers of all materials and equipment proposed to be incorporated into the Work. When shop and working drawings are required as specified below, such information shall be submitted prior to the submission of the drawings so that Engineer may consider and approve or disapprove the manufacturer and/or the supplier as to the its ability to furnish a product meeting the Specifications, subject to final approval of the particular material or equipment. As requested, Contractor shall also submit data relating to the material and equipment proposed to be incorporated into the Work, in sufficient detail to enable Engineer to identify the particular product in question and to form an opinion as to its conformity to the Contract requirements.

Such data shall be submitted in a manner similar to that specified for shop and working drawings.

Facilities and labor for the handling and inspection of all materials and equipment shall be furnished by Contractor. Defective materials and equipment shall be removed immediately from the site of the Work. The Contractor will make arrangements for, and pay for soil density tests wherever and whenever the District desires, but at no less than every 1 foot lift and 400 LF of trench backfill, 1 foot lift and 100 SF of roadway subgrade and base and 1 foot lift and 100SF of fill beneath concrete on grade. If the results of a soil density test indicate that compaction is less than that specified, Contractor shall recompact and retest soil density with no additional cost to the District.

If Engineer so requires, either prior to beginning or during the 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, including concrete test cylinders, shall be furnished, taken, stored, packed and shipped as directed, at the expense of Contractor. Contractor shall, at its expense, furnish approved molds for making concrete test cylinders. Except as otherwise specified, the District shall make arrangements for, and pay for, the tests. All samples shall be packed so as to reach their destination in good condition, and shall be labeled to indicate the material represented, the name of the building or Work and location of which the material is intended, and the name of Contractor submitting the sample. To ensure consideration of samples, Contractor shall notify Engineer by letter that the samples have been shipped and shall properly describe the samples in the letter. In no case shall the letter of notification be enclosed with the samples.

Contractor shall submit data and samples to Engineer, or place its orders, sufficiently early to permit Engineer to consider, inspect, test, and approve the materials and equipment before they are incorporated in the Work. Delay resulting from Contractor's failure to do so shall not be used as a basis of a claim against the District or Engineer. When required, Contractor shall furnish to Engineer three (3) sworn copies of manufacturer's shop or mill tests (or reports from independent testing laboratories) relative to materials, concrete and equipment data.

After Engineer approval of the samples, data, etc., the materials and equipment used in the course of the Work shall correspond therewith.

10.06 Inspection of Work Away from the Site

If Work done off the construction site is to be inspected on behalf of the District during its fabrication, manufacture, or testing, or before shipment, Contractor shall give notice to Engineer of the place and time where such fabrication, manufacture, testing or shipping is to be done. Such notice shall be in writing and delivered to Engineer in ample time so that the necessary arrangements for the inspection can be made.

10.07 Contractor's Shop and Working Drawings

Contractor shall submit for approval six (6) copies (unless otherwise specified in writing) of shop and working drawings of concrete reinforcement, structural details, piping layout, wiring, materials fabricated especially for this Contract, and materials and equipment for which such drawings are specifically requested. All shop and working drawing submittals shall be prepared and submitted in accordance with Section 01300 of the Technical Specifications.

10.08 Health, Safety and Environmental Program

The Contractor shall adhere to all applicable federal and state occupational safety and health laws as they apply to this Contract.

The Contractor will enforce the Loxahatchee River Environmental Control District's safety rules and practices as they apply to the Contractor's employee's, in addition to the Contractor's own safety rules and procedures.

The Contractor shall provide all of its subcontractors with copies of all safe working procedures and shall ensure their enforcement.

10.09 Insufficiency of Safety Precautions

Failure of Contractor to provide these required conditions shall be a material breach of this Contract and the District shall be entitled to stop the Work until such time as Contractor corrects these conditions, without payment to Contractor of extension of time to complete the Work.

10.10 Sanitary Regulations

Contractor shall provide adequate sanitary conveniences for the use of those employed on the worksite. Such conveniences shall be made available when the first employees arrive on the worksite, shall be properly secluded from public observation, and shall be constructed and maintained in suitable numbers and at such points and in such manner as may be required or approved.

Contractor shall maintain the sanitary facilities in a satisfactory and sanitary condition at all times and shall enforce their use. Contractor shall rigorously prohibit the committing of nuisances on the

worksite, on the lands of the District, or any adjacent property. Contractor is solely responsible for the use and maintenance of the sanitary facilities.

The District and Engineer shall have the right to inspect any building or other facility erected, maintained, or used by Contractor, to determine whether or not the sanitary regulations have been complied with.

10.11 Lines, Grades and Measurements

Contractor shall employ, at its own expense, a land surveyor who shall be registered in the State of Florida and who shall be thoroughly experienced in field layout work. Said surveyor shall establish all lines, elevations, reference marks, etc., needed by Contractor during the progress of the Work, and from time to time Contractor shall verify such marks by instrument or by other appropriate means.

Alignment and grade of all pipe, tunnels and borings shall be controlled by use of lasers, levels or other equipment as required to assure proper alignment and grade. Contractor shall furnish all lasers and accessories as required and approved by Engineer. Contractor's engineer will set and check each laser each day that Work is in progress or more often as required to assure continuous accurate control. Contractor's engineer responsible for lines and grades shall certify to the District in writing that the Work has been constructed to lines and grades as shown on the Plans and Specifications. This certification shall accompany each request for payment.

Engineer shall be permitted at any time to review the lines, elevations, reference marks, lasers, etc., set by Engineer employed by Contractor, and Contractor shall correct any errors in lines, elevations, reference marks, lasers, etc., disclosed by engineer. Such a review shall not be construed to be an approval of Contractor's Work and shall not relieve Contractor of the responsibility for the accurate construction of the entire Work.

Contractor shall make all measurements and review all dimensions necessary for the proper construction of the Work called for by the Plans and Specifications. During the prosecution of the Work, Contractor shall make all necessary measurements to prevent misfitting in said Work, for the accurate construction of the entire Work.

10.12 Dimensions of Existing Structures

Where the dimensions and locations of existing structures are of critical importance in the installation or connection of new Work, Contractor shall verify such dimensions and locations in the field before the fabrication of any materials or equipment which is dependent on the correctness of such information.

10.13 Work to Conform

During its progress and on its completion, all Work shall conform to the lines, levels, and grades indicated on the Plans and Specifications or given by Engineer and shall be built in a thoroughly substantial and workmanlike manner, in accordance with the Plans and Specifications and the directions given from time to time by Engineer. In no case shall any Work in excess of the requirements of the Plans and Specifications be paid for unless ordered in writing by Engineer.

All Work done without instructions having been given therefore by Engineer, done without proper lines or levels, or done during the absence of Engineer, or its agent, will not be estimated or paid for except when such Work is authorized by Engineer in writing. Work so done may be ordered uncovered or taken down, removed, and replaced at Contractor's expense.

10.14 Pipe Location

Pipelines will be located substantially as indicated on the Plans and Specifications, but the right is reserved by the District, acting through Engineer, to make such modifications in location as may be found desirable to avoid interference with existing structures or for other reasons. Where fittings, etc., are noted on the Plans and Specifications, such notation is for Contractor's convenience and does not relieve Contractor from laying and joining different or additional items where required without additional compensation.

10.15 Planning and Progress Schedules

Contractor shall prepare and submit all schedule submittals in accordance with Section 01300 of the Technical Specifications.

10.16 Precautions During Adverse Weather

In the event of, or the possibility thereof, adverse weather, including high tides, and against the possibility thereof, Contractor shall take all necessary precautions so that the Work may be properly done and satisfactory in all respects. When required, protection shall be provided by use of tarpaulins, wood, building paper shelters, and other approved means. Contractor shall be responsible for all changes caused by adverse weather, including tidal fluctuations and Contractor shall take such precautions and procure insurance as Contractor deems prudent.

Engineer may suspend construction operations at any time when, in its sole discretion, the conditions are unsuitable or the proper precautions are not being taken, whatever the weather or tidal conditions may be, in any season.

Contractor shall provide a written tropical storm/hurricane plan consistent with District requirements to Engineer prior to commencement of construction.

10.17 Electrical Energy

Contractor shall make all necessary applications and arrangements and pay all fees and charges for power and light and other electrical energy as necessary for the proper completion of this Contract during its entire progress. Contractor shall provide and pay for all temporary wiring, switches, connections, and meters.

There shall be sufficient electrical lighting so that all Work may be done in a workmanlike manner when there is not sufficient daylight.

10.18 Bolts, Anchor Bolts and Nuts

All necessary bolts, anchor bolts, nuts, washers, plates and bolt sleeves shall be furnished by Contractor in accordance herewith.

10.19 Concrete Inserts

Concrete inserts shall be designed to safely support, in the concrete that is used, the maximum load that can be imposed by the bolts used in the inserts. Inserts shall be of a type which will permit locking of the bolt head or nut. All inserts shall be 316 stainless steel.

10.20 Operating Instructions and Parts Lists

Operations and Maintenance (O&M) Manuals for each item of equipment shall be submitted in accordance with Section 01300 of the Technical Specifications entitled "Submittals."

10.21 Lubricants

During testing and prior to acceptance, Contractor shall furnish all lubricants necessary for the proper lubrication of all equipment furnished under this Contract and as specified in the Contract Documents.

10.22 Special Tools

For each type of equipment furnished by Contractor, Contractor shall provide a complete set of all special tools (including calibration and test equipment) which may be necessary for the adjustment, operation, maintenance, and disassembly of such equipment.

Special tools are considered to be those which, because of their limited use, are not normally available, but which are necessary for the particular equipment.

Special tools shall be delivered at the same time as the equipment to which they pertain. Contractor shall properly store and safeguard such special tools to ensure they are in a proper functioning condition, as determined by Engineer. At the completion of the Work the special tools shall be delivered to the District.

10.23 Protection Against Electrolysis

Where dissimilar metals are used in conjunction with each other, suitable insulation shall be provided between adjoining surfaces so as to eliminate direct contact and any resultant electrolysis. The insulation shall be bituminous impregnated felt, heavy bituminous coatings, nonmetallic separators or washers, or other materials approved by Engineer.

10.24 Indemnification and Confidentiality

For specific consideration received by Contractor, included in the Contract sum beyond the cost of the Work, Contractor shall indemnify and hold harmless the District, its officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of Contractor and persons employed or utilized by Contractor in the performance of the Contract. The monetary limitation on the extent of the indemnification that bears a reasonable commercial relationship to the

Contract and is part of the Project specifications or Bid Documents, is up to three (3) times the monetary value of the Contract. Notwithstanding the foregoing, the monetary limitation on the extent of the indemnification provided shall not be less than one million dollars (\$1,000,000.00) per occurrence. The District and the insurance carrier shall have the right to "mutually approve" the choice of attorney(s) to provide the defense, with such approval not to be unreasonably withheld. If no agreement on the choice of attorney(s) can be reached in a reasonable length of time, the final authority to choose an attorney will rest with the claims manager in the office where the claim originated.

In any and all claims against the District or any of their officers or employees by an employee of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone else for whose acts any of them may be liable, the indemnification obligation under this General Conditions Section 10.24 shall not be limited in any way on the amount or type of damages, compensation or benefits payable by or for Contractor or any subcontractor under worker's compensation acts, disability benefits or other employee benefit acts. The intention of these two clauses above is to provide for the legal indemnification allowed for under Section 725.06, Florida Statutes, no more and no less, so as to be completely legal and not void as against public policy. If any provision of this indemnification is determined by a court of law to be void, it shall be severed from this provision and the remainder of this provision shall be given full force and effect under Section 725.06, Florida Statutes.

In the performance of the Work, Contractor may be exposed to the confidential information of the District and other. Contractor shall not disclose to anyone not employed by the District nor use, except on behalf of the District, any such confidential information acquired in the performance of the Work except as authorized by the District in writing and, regardless of the term of this Contract, Contractor shall be bound by this obligation until such time as said confidential information shall become part of the public domain. Information regarding all aspects of the District's business and information concerning the Work (either directly or indirectly disclosed to it or developed by it in the performance of the Work) shall be presumed to be confidential except to the extent that same shall have been published or otherwise made freely available to the general public without restriction. Contractor also agrees that it will not disclose to the District any information it holds subject to any obligation or confidence to any third persons.

10.25 Work by Others

The District may perform additional Work related to the Project itself, or the District may engage others to perform Work on the Project which such engagement shall be governed by similar General Conditions. Contractor shall afford the other contractors who are parties to such direct contracts (or the District, if it is performing the additional Work), reasonable opportunity for the introduction and storage of materials and equipment and the execution of the Work, and shall properly connect and coordinate Contractor's Work with the Work of others. If any part of Contractor's Work depends for proper execution or results upon the Work of any such other contractor (or the District), Contractor shall inspect and promptly report to Engineer, in writing, any defects or deficiencies in such Work that render it unsuitable for such proper execution and results. Contractor's failure so to report shall constitute an acceptance of the other Work as fit and proper for the relationship of its Work except as to defects and deficiencies which may appear in the other Work after the execution of Contractor's Work.

Contractor shall do all cutting, fitting and patching of its 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. Contractor shall 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 Engineer and of the other contractors whose Work will be affected.

If the performance of additional Work by other contractors or the District is not noted in the Contract Documents prior to the execution of the Contract, written notice thereof shall be given to Contractor prior to the state of any such additional Work.

10.26 Record Drawings

Contractor shall keep and maintain one record copy of all Specifications, Plans and Specifications, Addenda, Change Orders, Modifications and Shop drawings at the site in good order and annotated to show all changes made during the construction process as specified in the Contract Documents. All record drawings shall be kept maintained and updated by Contractor in accordance with Section 01720 of the Technical Specifications entitled "Project Record Drawings."

10.27 Non-Waiver

Progress or final payments shall not be acceptance of improper, faulty, or defective work or material, and shall not release Contractor of any of its obligations under the Contract Documents, and shall not constitute a waiver of any rights or provisions of the Contract Documents by the District.

10.28 Mutuality of Provisions

If any provision of the Contract Documents shall for any reason be held to be invalid, illegal, or unenforceable in any respect under the laws of the State of Florida, any such invalidity, illegality or unenforceability shall not affect any other provision of the Contract Documents and the Contract Documents shall be construed as if such invalid, illegal, or unenforceable provision had never been incorporated herein and the rights of the parties hereto shall be construed and enforced accordingly.

10.29 Restoration of Property

Existing structures and facilities, including but not limited to buildings, utilities, topography, streets, curbs, walks landscape materials and other improvements that are damaged or removed due to the Work, shall be patched, repaired, or replaced by Contractor to the satisfaction of the owner of such structure and facility, and authorities having jurisdiction. In the event that authorities having jurisdiction require that such repairing and patching be done with their own labor and materials, Contractor shall abide by such regulations and pay for such work.

10.30 Notice

Any notice or writing given hereunder shall be delivered by depositing the notice contained in a sealed envelope, postage prepaid in the United States Postal System as registered or certified mail, with return receipt requested, or by overnight express carrier. Any such notice so deposited shall be conclusively deemed delivered to and received by the addressee forty-eight (48) hours after the deposit if all of the foregoing conditions of notice have been satisfied and addressed as follows:

| DISTRICT: | | | |
|-------------|--|--|--|
| CONTRACTOR: | | | |

10.31 Legally Binding

Contractor agrees that the Contract Documents are legally binding documents and has had the opportunity to permit its attorney to review them. The Contract Documents are the joint work product of the Parties hereto and, accordingly, no term or provision shall be more strictly construed against any party.

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EXCAVATION, PIPE EMBEDMENT, FILL AND GRADING

100.01 Description

All excavations shall be made in such manner and to such widths as will provide suitable room for building the structures or laying and jointing the piping. All sheeting, bracing, supports, coffer dams, pumping and draining shall be performed to render the bottom of the excavations firm, dry and acceptable in all respects.

100.02 Sheeting and Bracing

Sheeting and bracing shall be furnished as may be necessary to support the sides of the excavation and to prevent any movement of earth which could in any way diminish the width of the excavation to less than that necessary for proper construction, or could otherwise injure or delay the work, or endanger adjacent structures.

All timber sheeting and bracing shall be left in place unless otherwise directed by the Design Engineer to remove same or cut off at a specified elevation.

All sheeting and bracing, including trench boxes not to be left in place, shall be carefully removed in such manner as not to endanger the construction or other structures. All voids left or caused by the withdrawal of sheeting shall be backfilled immediately with approved material and compacted by ramming with tools especially adapted to that purpose, by watering, or by other means as may be directed by the Design Engineer.

100.03 Drainage

100.03.01 <u>General</u>

To ensure proper conditions at all times during construction, all means shall be used to intercept and/or remove promptly and dispose properly of all water entering trenches and other excavations. Such excavations shall be kept dry until the structures, pipes and appurtenances to be built therein have been completed to such extent that they will not be floated or otherwise damaged.

All water pumped or drained from the work shall be disposed of in a suitable manner without undue interference with other work, damage to pavements, other surfaces, or property. Suitable temporary pipes, flumes, or channels shall be provided for water that may flow along or across the site of the work. All requirements of all regulatory agencies regarding dewatering and the discharge of water from the project shall be complied with.

All labor, materials, tools, and equipment shall be provided, as necessary, to properly control the quality of the discharge from the dewatering operations as described herein. All applicable laws, rules and regulations governing the discharge of water from dewatering operations shall be

complied with. All dewatering shall be accomplished by the use of sanded well points and other techniques deemed necessary by the Contractor to properly dewater the trench excavations.

The water discharged from the Contractor's dewatering operation shall not exceed the turbidity limits promulgated by the State of Florida Department of Environmental Protection discharge standards for the Loxahatchee River or its tributaries.

Unless otherwise directed by the Design Engineer, an approved siltation tank shall be installed ahead of dewatering discharge points. In addition, silt screens and other devices and techniques may be required to maintain the discharge quality at turbidity levels below the required limits.

Any and all methods approved by the Design Engineer to control the bacteriological quality of well point discharge into existing drainage ditches and/or canals shall be utilized. Levels for fecal coliform in a discharge which ultimately leads to the Loxahatchee River, shall not exceed those promulgated by the State of Florida Department of Environmental Protection discharge standards.

100.03.02 Drainage Well-point System

If it is necessary to drain the soil and prevent saturated soil from flowing into the excavation, an efficient drain well-point system will be utilized. The well points shall be designed especially for this service. The pumping unit shall be designed for use with the well-points and shall be capable of maintaining a high vacuum and of handling large volumes of air and water at the same time.

100.04 Trench Excavation

Where pipe is to be laid in rock bedding or concrete cradle, the trench may be excavated by machinery to, or to just below, the designated subgrade, provided that the material remaining at the bottom of the trench is not disturbed.

If the trench is excavated below the designated subgrade, the undercut shall be backfilled with compacted bedding rock, uniformly graded from ¼-inch size.

100.05 Depth of Trench

Trenches shall be excavated to such points as will permit the pipe to be laid at the elevations, slopes, or depths of cover indicated and at uniform slopes between indicated elevations.

100.06 Width of Trench

Pipe trenches shall be made as narrow as practicable and shall not be widened by scraping or loosening materials from the sides, Every effort shall be made to keep the sides of the trenches firm and undisturbed until backfilling has been completed and consolidated.

Trenches shall be excavated with approximately vertical sides between the elevation of the center of the pipe and an elevation one (1) foot above the top of the pipe.

100.07 <u>Trench Excavation in Fill</u>

If pipe is to be laid in embankments or other recently filled material, the material shall first be placed to the top of the fill or to go to a height of at least three (3) feet above the top of the pipe, whichever is the lesser, Particular care shall be taken to ensure maximum consolidation of material under the pipe location, The pipe trench shall be excavated as though in undisturbed material.

100.08 Unauthorized Excavation

If bottom of any excavation is taken out or disturbed beyond the limits indicated or prescribed, the resulting void shall be backfilled with embedment material compacted to a minimum of 90% of AASHO T-180 or to the standards of the applicable agency having jurisdiction.

100.09 Elimination of Unsuitable Material

Pipe bedding shall extend a minimum of 4 inches below the pipe. The pipe shall be supported on suitable material ascertained by the Design Engineer following good engineering practices.

100.10 <u>Backfilling</u>

As soon as practicable after the pipes have been laid, or the structures have been built and are structurally adequate to support the loads, including construction loads to which they will be subjected, the backfilling shall be started and thereafter it shall proceed until its completion.

100.10.1 Backfill Materials

The nature of the materials will govern both their acceptability for backfill and the methods best suited for their placement and compaction in the backfill. The materials and the methods shall both be subject to the approval and direction of the Design Engineer. No stone or rock fragment larger than 3 inches in greatest dimension shall be placed in the backfill nor shall large masses of backfill material be dropped into the trench in such a manner as to endanger the pipeline. If necessary, a timber grillage shall be used to break the fall of material dropped from a height of more than 5 feet. Pieces of bituminous pavement shall be excluded from the backfill unless their use is expressly permitted, in which case they shall be broken up as directed.

100.10.2 Embedment Materials

Three broad classes of material shall be used for bedding, haunching, and pipe side support.

CLASS 1 - Angular, ¹/₄-inch to ³/₄-inch graded stone, of which 100% passes a 1-inch sieve such as coral, slag, cinders, crushed stone, crushed shells, or

bedding rock.

CLASS 2 - Coarse sands and gravels with maximum particle size 3/4 inch including variously graded sands and gravels containing small percentages of fines, generally granular and non-cohesive, either wet or dry. Soil Types GW, GP, SW. and SP are included in this class.

CLASS 3 - Fine sand and clayey gravels, including fine sands, sand-clay mixtures, and gravel-clay mixtures. Soil Types GM, GC, SM, and SC are included in this class. Included in Class 3 are existing soil types classified as select backfill.

Class 1, Class 2, or Class 3 material shall be used for bedding material to the top of the pipe. Special care must be taken to insure Class 1. 2, or 3 material is worked under the pipe haunch. Class 2 or 3 material shall be compacted to a minimum of 98% density per AASHO T -180. The District has the option, at any time, to take density tests to confirm the 98% compaction. Precautions shall be taken to prevent movement of the pipe when placing and compacting material under the pipe haunches.

If Class 2 or 3 material is used for bedding and haunching, a dry trench shall be maintained.

Under certain conditions, the Engineer may be faced with an unusual amount of water running in the trench which he may find necessary to remove in order to properly install and compact the embedment material. The Engineer may elect to remove the water with trench side pumps through the use of Class 1 material for bedding. The depth of Class 1 material will depend upon the amount of water but take care to ensure that the trench wall soil material is such that it will not be removed from the area adjacent to the bedding as a result of the running water. The Engineer may also elect to utilize well points or under drain to control excessive ground water. If Class 1 material is used as bedding and under drain, it must be utilized at least up to the top of the pipe.

100.10.3 Zone Around Pipe

The zone around the pipe shall be backfilled with the materials and to the densities and limits indicated on the details.

100.10.4 <u>Compaction</u>

Compaction shall be accomplished by tamping, or under appropriate construction techniques to achieve the required densities.

100.10.5 Maximum Density

Unless specified otherwise, the percent of maximum density referred to in these specifications refers to the maximum density obtained when the material is laboratory tested in accordance with the procedures outlined in Designation AASHTO T-180, Latest Revision or as otherwise required by the governmental agency having jurisdiction over the finished roadway. Field densities shall be determined by a testing laboratory using accepted methods.

100.10.6 <u>Miscellaneous Requirements</u>

Whatever method of compacting backfill is used, care shall be taken that stones and lumps shall not become nested and that all voids between stones shall be completely filled with fine materials. Only approved quantities of stones and rock fragments shall be used in the backfill.

All voids left by the removal of sheeting shall be completely backfilled with suitable material, thoroughly compacted.

END OF SECTION 100

PIPE, FITTINGS AND ACCESSORIES

110.01 General

This section provides standards for all pipe and fittings used in the construction of District wastewater facilities. Approved piping systems include SCH40 and SCH 80 PVC, High Density Polyethylene (HDPE), SDR26 PVC, C900 PVC, C905 PVC and Ductile Iron.

Schedule 40 and 80 PVC Pipe (1/2" - 3")

Small diameter PVC (3" diameter or less) pipe and fittings shall be pressure rated ASTM D1784/D1785 schedule 40 for buried applications and schedule 80 for non-buried applications. Small diameter PVC pipe shall be marked with schedule, diameter, pressure rating at 140 F and applicable ASTM standards for dimensions and materials and be white or gray in color.

Small diameter PVC joints shall be solvent weld socket type.

110.03 AWWA C901 High Density Polyethylene (1/2" - 3")

Small diameter HDPE (3" diameter or less) pipe shall manufactured from PE4710 resin and comply with AWWA C901 and ASTM F714. Small diameter HDPE pipe shall be iron pipe size (IPS) with a standard dimension ratio (SDR) 11. Small diameter HDPE pipe shall be marked with diameter, SDR, AWWA C901, ASTM F714 and PE4710 and shall be black in color with extruded stripes in applicable color; sewer = green, IQ = purple.

Small diameter HDPE pipe shall come in reels sufficient for continuous lay lengths from service latera to service lateral.

Small diameter HDPE pipe shall use brass pack joint style couplings and stainless steel pipe stiffeners.

110.04 AWWA C906 High Density Polyethylene (4" – 63")

Large diameter HDPE (4" - 63") pipe shall manufactured from PE4710 resin and comply with AWWA C906, ASTM F714 and be listed with the Plastic Pipe Institute's (PPI) TR4. Large diameter pipe shall be ductile iron pipe size (DIPS) with a standard dimension ratio (SDR) 11. Large diameter HDPE pipe shall be marked with diameter, SDR, AWWA C906, ASTM F714 and PE4710 and be black in color with extruded stripes in applicable color; sewer = green, IQ = purple, potable = blue.

Single joints of pipe shall be a minimum of 40 feet in length. Damaged pipe may have the damaged area cut out and the remaining portion reused as long as the remaining portion is a minimum of 20 feet in length.

Large diameter HDPE pipe shall utilize HDPE butt fused fittings of the same SDR.

110.05 SDR 26 PVC Gravity Mains

Gravity main installations whose invert is greater than 4'-0" and less than 14'-0" shall be integral bell and spigot gasketed pipe and comply with ASTM D3034 for SDR 26 up to 15" in diameter. SDR 26 gravity main pipe shall meet the following ASTM Standards: D3212 (Joint), F477 (Gasket), D1784 (PVC Compound), D2412 (Stiffness) and D2321 (installation). SDR 26 gravity main pipe shall be green in color and marked with diameter, SDR and applicable ASTM standards.

Joints of SDR 26 gravity main pipe shall be either 14'-0" or 20'-0" in length

110.06 AWWA C900 Force Mains

Force main installations 4" – 48" shall be integral bell and spigot gasketed pipe and comply with AWWA C900 DR18, Pressure Class 235. C900 Force main pipe shall comply with ASTM Standards D1784 (PVC Compound), D3139 (Joint), and F477 (Gasket). C900 force main pipe shall be marked with diameter, DR and AWWA C900. C900 force main pipe shall be green for sewer and purple for IQ.

Joints of C900 force main pipe shall be either 14'-0" or 20'-0" in length.

C900 force main pipe shall use ductile iron fittings with restrained mechanical joints

110.07 <u>Ductile Iron Pipe</u>

All ductile iron pipe shall be manufactured in accordance with ANSI/AWWA C151/A21.51. Ductile iron pipe shall be pressure class 350 up to 20" and pressure class 250 for larger diameters. Ductile iron pipe shall be epoxy coated on the interior with Protecto 401, Permite 9043 Type II or Linerguard. Coatings shall conform to ANSI/AWWA C104/A21.4

Joints shall be conform to ANSI/AWWA C111/A21.11. Restrained push on joints shall use Field Lok 350 Gaskets by US Pipe and Foundry Co., or approved equal.

Ductile Iron Pipe shall be minimum Pressure Class 350 up to 20-inches in diameter and Pressure Class 250 for larger diameters.

Where ductile iron pipe is used, fittings shall be ductile iron and conform to the requirements of ANSI/AWWA C153/A21.53 and shall be of a pressure classification at least equal to that of the pipe with which they are used. Fittings may be flanged or mechanical as applicable.

110.08 SDR 26 PVC Fittings

PVC Gravity main fittings shall conform to the requirements of ASTM D2241 SDR26. Gaskets shall confirm to ASTM F477. Fittings in sizes not available in injection molded form shall be fabricated from SDR26 pipe in accordance with ASTM D2241.

Schedule 40 and 80 PVC Fittings

Fittings used in small diameter PVC piping systems shall match the schedule of the piping system, either Schedule 40 or 80. Fittings shall be socket weld and conform ASTM D1785 for physical dimensions and ASTM D1784 for materials.

110.010 <u>HDPE Butt Fused Fittings</u>

Molded butt fusion fittings and adapters shall conform to ASTM D 3261, utilize HDPE conforming to the pipe to which it will be fused and have the same dimension ratio as the pipe to which it will be fused. All fittings shall be pressure rated to provide a working pressure rating no less than that of the pipe.

110.011 <u>Large Diameter HDPE to PVC/DI Adapters</u>

Transition from HDPE to other piping systems shall require MJ or flanged HDPE adapters. Instances where these adapters are not practical will require pipe stiffeners in conjunction with ductile iron fittings. The pipe stiffeners shall be stainless steel as manufactured by JCM Industries or pre-approved equal. Pipe stiffeners in conjunction with ductile iron fittings shall only be used with the written approval of the District Engineer for HDPE pipe 12" diameter and smaller. When approved, MEGALUG Series 2000PV mechanical joint restraints or approved equal shall be used.

110.012 <u>Small Diameter HDPE Fittings and Adapters</u>

Small diameter HDPE pipe (1/2" - 3") HDPE to HDPE and HDPE to PVC connections shall use pack joint style fittings as manufactured by Ford Meter Box Co. Stainless steel pipe stiffeners shall also be required.

110.013 Ductile Iron Fittings

Ductile iron fittings shall conform to ANSI/AWWA C153/A21.53 (compact fittings) with a minimum pressure rating of 350 psi. Fittings shall be mechanical joint or flanged as required.

Flanged fittings shall comply with ANSI B16.5, Class 150.

All mechanical joints shall be restrained. Restrained mechanical joints shall use 1100 Series Megalug by EBAA Iron Sales, Inc. or approved equal.

Ductile iron fittings shall be epoxy coated on the interior with Protecto 401, Permite 9043 Type II or Linerguard. Coatings shall conform to ANSI/AWWA C104/A21.4

Ductile Iron Pipe and Fittings Linings and Coatings

Ductile iron pipe fittings shall be epoxy coated on the interior with Protecto 401, Permite 9043 Type II or Linerguard. Coatings shall conform to ANSI/AWWA C104/A21.4

Buried ductile iron pipe and fittings shall receive an external bituminous coating in accordance with ANSI 21.10. and be striped with green for sewer and purple for IQ water.

Above grade ductile iron pipe and fittings shall receive a three coat system; Prime Coat: TNEMEC-Aluminum Mastic #135 (3 to 5 mils DFT), Intermediate Coat Series 66 Epoxoline Hi-Build Epoxy (4 to 6 mils DFT) and Finish Coat Series 73 Endura-Shield III Urethane (2 to 3 mils DFT). Coatings shall be green for sewer and purple for reclaimed water.

110.015 Marking Tape

All buried piping shall include marking tape. Marking tape shall be minimum 2" wide, magnetic and detectable. Marking tape shall be green and marked "SEWER".

110.016 <u>Buried Markers</u>

Buried markers shall be installed at all fittings, valves, service connections, change of direction and every 300' of pipe lay length. Buried markers are not required on gravity main piping but are required on service lateral piping and cleanouts. Buried markers shall be EMS Mini-Markers for Wastewater Model 1258 as by 3M.

110.017 Tracer Wire

When specifically required pressure rated piping shall be installed with tracer wire. Tracer wire shall be attached to the pipe using a half-hitch every 10' for direct bury applications and shall be pulled with the pipe (without attaching) in directional drill installations. Tracer wire in directional drill applications shall be minimum 10 gauge, Copperhead Soloshot EHS or approved equal. Tracer wire in direct bury applications shall be minimum 14 gauge, PVC coated, solid copper wire.

110.018 <u>Handling and Cutting Pipe</u>

The pipe manufacturer's recommendation for handling, storing, unloading and cutting pipe shall be followed. Individual pipes shall not be allowed to drop from the truck when unloading. Pipe units shall not be handled with chains or single cables. Pipe shall not be stored more than two units high. Every care shall be taken in handling and laying pipe and fittings to avoid damaging the pipe or scratching or marring machined or finished surfaces.

Any fitting showing a crack shall be marked as rejected and removed at once from the work.

In any pipe showing a distinct crack and in which it is believed there is not incipient fracture beyond the limits of the visible crack, the cracked portions, if so approved by the Design Engineer, may be cut off before the pipe is laid so that the pipe used is perfectly sound. The cut shall be made in the sound barrel at a point at least 12-inches from the visible limits of the crack.

Except as otherwise approved, all cutting shall be done with knives or saws adapted to the purpose. All cut ends shall be examined for possible cracks caused by cutting.

Cut ends to be used with push on joints shall be carefully chamfered and the reference mark located in accordance with the manufacturer's recommendation to prevent cutting the gasket when the pipe is laid or installed.

110.019 <u>Installing Pipe and Fittings</u>

No defective pipe or fittings shall be laid or placed in the piping, and any piece discovered to be defective after having been laid or placed shall be removed and replaced by a sound and satisfactory piece.

Each pipe and fitting shall be cleared of all debris, dirt, etc., before being laid and shall be kept clean until accepted in the complete work. Pipe and fittings shall be laid accurately to the lines and grades indicated on the drawings or required. Care shall be taken to ensure a good alignment both horizontally and vertically.

Each length of pipe shall have a firm bearing along its entire length. Embedment requirements are shown on the Standard Details and in this specification.

The bell of the pipe shall be cleaned of dirt or other obstruction and wiped out before the cleaned and prepared spigot of the next pipe is inserted into it. Only lubricants made by the pipe manufacturer may be used on the spigot. The new pipe shall be shoved firmly into place until properly seated and held securely until the joint has been completed.

110.020 Temporary Plugs

At all times when pipe laying is not actually in progress, the open ends of pipe shall be closed by temporary watertight plugs. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed.

110.021 Preparation of Trench Bottom

The trench bottom shall be constructed to provide a firm, stable and uniform support for the full length of the pipe. Unsuitable foundation material shall be removed as required by the Engineer and refilled with Class 1, 2, or 3 material. Class 2 or 3 material shall be compacted to a minimum of 90% standard proctor density.

110.022 Manhole Connections

Where PVC gravity or force main pipe enters the manhole, approved sealing adapters as manufactured by Harco, Fernco or equal, shall be used. Any coupling used shall be coated with an epoxy coated sand finish approved by the District.

Bell Holes for Elastomeric Seal Joints

When the pipe being installed is provided with elastomeric seal joints, bell holes shall be excavated in the bedding material to allow for unobstructed assembly of the joint. Care should be taken that the bell hole is not larger than necessary to accomplish proper joint assembly. When the joint has been made, the bell hole should be carefully filled with bedding or haunching material to provide for adequate support of the pipe throughout the entire length.

PRECAST MANHOLES AND STRUCTURES

120.01 General

Manholes and structures shall conform in shape, size, dimensions, materials and other respects to the Standard Details or as directed by the District's Engineer.

All manholes and structures shall be precast concrete with monolithic base sections. Invert channels may be formed in the concrete of the base or may be formed of brick and mortar upon the base.

All manholes which will receive direct force main discharges, or are at least 14-feet deep (rim to lowest invert) and the last collection manhole just upstream of any lift station shall receive a minimum 0.5-inch thick calcium aluminate corrosion barrier such as Sewper Coat, Strong Seal, Refratta HAC 100 or approved equal, and installed per the manufacturers recommendations.

The inverts shall conform accurately to the size of the adjoining pipes. Sides inverts shall be curved and main inverts (where direction changes) shall be laid out in smooth curves of the longest possible radius which is tangent to the centerlines of adjoining sewers.

Connections to existing structures shall be made only by mechanically coring a hole through the structure. Jackhammer and other methods of cutting a hole through an existing structure are not acceptable.

Rubber "boots" subject to District approval, will be allowed for making pipe connections to structures provided that a layer of non-shrink grout be applied to seal the annular space on the inside of the manhole for the full wall thickness. The boots shall be cast in the precast structure and shall utilize stainless steel bands and screws.

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121.02 Precast Concrete Sections

Precast concrete sections shall conform to the ASTM Specifications for Precast Reinforced Concrete Manhole Risers and Tops, Designation C-478 or ASTM C858 Standard Specification for Underground Precast Concrete Utility Structures with the following exceptions and additional requirements:

Type II cement shall be used in structures directly exposed to wastewater (i.e. manholes and wetwells

Sections shall be steam cured and shall not be shipped until at least five (5) days after having been

cast.

Acceptance of the sections will be on the basis of material tests, finished quality, and inspection of the completed product.

Cones shall be 30" - concentric type

Joint material in riser sections shall be of the bitumastic type as manufactured by RAM-NEK or equal.

No more than two (2) lift holes may be cast or drilled in each section.

121.03 Shallow Manhole

When the depth from the deepest invert to the top of the cone section is 4'-0" or less, an approved shallow cone section with a 30" opening shall be used. In no case shall a flat slab top section be used.

121.04 <u>Setting Precast Sections</u>

Precast reinforced concrete sections shall be set so as to be vertical with sections in true alignment.

All holes in sections, used for their handling, shall be thoroughly plugged with mortar. The mortar shall be one part cement and 1-1/2 parts sand; mixed slightly damp to the touch (just short of "balling"); hammered into the holes until it is dense and an excess of paste appears on the surface; and then finished smooth and flush with the adjoining surfaces.

Anti-hydro grout shall be used to fill all voids around sanitary sewer pipe and manhole sections.

Mortar for Brick and Concrete Block Work

The mortar shall be composed of Portland cement, hydrated lime, and sand, in which the volume of sand shall not exceed three (3) times the sum of the volumes of cement and lime. The proportions of cement and lime shall be as directed and may vary from 1:1/4 for dense, hard burned brick to 1:3/4 for softer brick. In general, mortar for Grade SA brick shall be mixed in the proportions of 1:1/2:4-1/2.

Cement shall be Type II Portland cement as specified for under Concrete Masonry.

Hydrated lime shall be Type "S" conforming to the ASTM Standard Specification for Hydrated Lime for Masonry Purposes, Designation C207 - Latest Revision.

The sand shall be well graded clean, durable particles all of which shall pass a No. 8 sieve.

121.06 <u>Laying Brick</u>

Only clean, red, fire cured brick shall be used. The brick or block shall be moistened by suitable means, as directed, until they are neither so dry as to absorb water from the mortar, nor so wet as to be slippery when laid.

Each brick or block shall be laid in a full bed and joint of mortar without repairing subsequent grouting, flushing, or filling, and shall be thoroughly bonded as directed.

Brick shall only be used in chimney construction for final adjustment of frame and covers to required grade. Brick chimneys shall not exceed 18 inches in height for manholes 4-6 feet deep and 24 inches for manholes greater than 6 feet deep.

121.07 Plastering and Curing Brick

Outside faces of brick shall be plastered with mortar from 1/4 inch to 3/8 inch thick. If required, the brick shall be properly moistened prior to application of the mortar. The plaster shall be carefully spread and troweled so that all cracks are thoroughly worked out. After hardening, the plaster shall be carefully checked by being tapped for bond and soundness. Unbonded or unsound plaster shall be removed and replaced.

Brick and plaster shall be protected from too rapid drying by the use of burlaps kept moist, or by other approved means and shall be protected from the weather, all as required.

121.08 Frames and Covers

The castings for the frames and covers shall be of good quality, strong, tough, even grained cast iron, smooth, free from scale, lumps, blisters, sandholes and defects of every nature which render them unfit for the service for which they are intended.

All castings shall be thoroughly cleaned and subject to a careful hammer inspection.

Casting shall be at least Class 30 conforming to the ASTM Standard Specification for Gray Iron Castings, Designation A48- Latest Revision, and conform to the standard details.

The contact surface of the frame and cover seat shall be a machine fit and the cover surface shall be "knobbed".

Frame and covers shall be US Foundry Model 230 AB-M

121.09 Setting Frames and Covers

Frames shall be set with the tops conforming accurately to the grade of the pavement or finished

roadway surface, in unsurfaced areas the frames and covers shall be set 3 inches higher than the surrounding ground. Frames shall be set concentric with the top of the masonry and in a full bed of mortar so that the space between the top of the manhole masonry and the bottom flange of the frame shall be completely filled and made watertight. A thick ring of mortar extending to the outer edge of the masonry shall be placed around the bottom flange. The mortar shall be smoothly finished to be flush with the top of the flange and have a slight slope to shed water away from the frame.

Cover shall be left in place in the frames on completion of other work at the manholes.

121.10 Adjustment of Existing Manhole Frames

When it is necessary to raise existing manhole frames due to repaving of roads or other reasons, the frames shall be shimmed with masonry, brick and Type II cement mortar to the new finished grade, or in the case of sodded areas, 2" above finished grade. In cases where raising the existing frame and cover result in chimneys greater than 12" in height the District may require the conical section be raised installation of additional barrel section below the conical section.

When new paving operations cause the manhole frame to be adjusted upwards, manholes will be raised using conventional shimming methods under the frame. The use of adapter rings in the existing frame will not be permitted unless specifically authorized by the District.

END OF SECTION 121

PIPELINE INTEGRITY TESTS

140.01 General

The District shall inspect all sewer facilities prior to acceptance and again just prior to the expiration of the 1-year guarantee.

When a section of pipe of a length deemed adequate by the Design Engineer is ready for testing, the pipe shall be flushed and then tested in accordance with the applicable testing method as described herein. Suitable temporary testing plugs or caps shall be installed. All necessary pressure pumps, pipe connections, meters, gauges, water, weirs, bulkheads, and other necessary equipment and all labor required for carrying out these tests shall be furnished. The Design Engineer shall notify the District at least 48 hours prior to any testing so that it may, at its option, have a representative present during the testing.

Gravity sewers shall be tested in accordance with the Hydraulic Infiltration/Exfiltration Test as described herein. Additionally, PVC Gravity sewers shall be tested for deflection as described herein. Force mains shall be tested in accordance with the Pressure and Leakage Test for Force Mains as described herein.

If the District Engineer so desires, the first section of any line between two manholes shall be tested as soon as possible after backfilling has been completed. If such tests appear to be satisfactory and acceptable, progressive testing of completed sections of the lines may be deferred at the option of the District's Engineer, and at the request of the Contractor, until all pipe has been laid and before final acceptance. However, if permitted, this will not constitute a waiver of any of the tests or the leakage requirements.

Sections of pipe tested for infiltration and exfiltration prior to completion of the project shall be subject to a final inspection at completion of the project, and also subject to additional leakage tests, if warranted in the opinion of the District Engineer.

If the section fails to pass the applicable tests, the Contractor shall locate, uncover and repair or replace the defective pipe, fitting or joint, at his own expense. Additional testing will be required after the deficiency is corrected.

140.02 <u>Hydraulic Infiltration/Exfiltration Tests</u>

Upon completion of a section of the sewer, the pipe shall be dewatered and tested to measure the infiltration for at least three (3) consecutive days. Test section shall be from manhole to manhole. Longer test sections may be used with the approval of the District Engineer.

For making the infiltration tests, underdrains, if used, shall be plugged, well points and other groundwater drainage shall be stopped to permit the groundwater to return to its normal level. Infiltration shall be measured by the use of weirs designed specifically for this purpose or other acceptable means approved by the District Engineer.

As required, suitable bulkheads shall be installed to permit the test of the sewer.

Where the crown of the pipe is below the natural groundwater table at the time and place of testing, the pipe shall be tested for infiltration. Suitable watertight plugs shall be installed and section of pipe to be tested shall be pumped dry before start of test. Where the crown of the pipe is above the natural water table, the pipe shall be tested for exfiltration by installing necessary plugs and filling pipes and manholes with water and maintaining a static head of water of a minimum of two feet above the crown of the pipe during the test. Exfiltration tests shall be conducted on main lines and lateral lines, unless waived by the District Engineer. The water level of internal pressure to be used for exfiltration test shall be determined by the Design Engineer.

The sewers shall pass the applicable test before any connections are made to buildings or to active sewers.

The maximum allowed infiltration/exfiltration shall not exceed 25 gallons per inch of diameter per mile per 24 hours for pipe lines and 4 gallons per 24 hours for manholes. Once systems are stabilized a 2 hour test shall be performed and the appropriate fraction of maximum allowed infiltration/exfiltration applied.

140.03 Pressure and Leakage Test for Force Mains (HDPE)

After fusing, prior to placement, the HDPE piping shall be filled with potable water and pressure tested at 100 psi or 1.5 times design operating pressure for 2 hours, whichever is greater. Each joint shall be visibly inspected for leakage at the end of 2 hours. Any sections showing visible leakage shall be cut out and the remaining pipe fused together and retested. After placement the HDPE pipe shall be pressurized to a minimum 1.65 times pipeline design pressure for 4 hours, with make up water added as necessary to maintain 1.65 times pipeline design pressure. At the end of 4 hours, pressure is reduced to 1.5 times design pressure and pressure monitored for 1 hour. Deviation in pressure > 5% during the 1 hour test indicate a failed test. All testing shall be in compliance with ASTM F2164.

140.04 Pressure and Leakage Test for Force Mains (PVC and DI)

Except as otherwise directed by the District, all pipelines shall be given combined pressure and leakage tests in sections of length approved by the District's Engineer. The Contractor shall furnish and install suitable temporary plugs or caps; all necessary pressure pumps, pipe connections, meters, gauges, and other necessary equipment; and all labor required. The Design Engineer shall witness all tests.

Subject to approval of the Design Engineer and provided that the tests are made within a reasonable time considering the progress of the project as a whole, and the need to put the section into service, the Contractor may make the tests when he desires.

The section of pipe to be tested shall be filled with water of approved quality and all air shall be expelled from the pipe.

The section under test shall be maintained full of water for a period of 24 hours prior to the combined pressure and leakage test being applied.

Two pressure and leakage tests shall be conducted for each pipeline segment. The first test shall be conducted at the average working pressure of the pipeline segment. The second test shall be conducted at a test pressure of 100 pounds per square inch or 1.5 times the pipeline design operating pressure, whichever is greater.

The pressure and leakage test shall consist of first raising the water pressure (based on the elevation of the lowest point of the section under test and corrected to the gauge location) to the specified pressure. If the Contractor cannot achieve the specified pressure and maintain it for a period of one hour with no loss of pressure and no additional pumping, the section shall be considered as having failed to pass the pressure test. The District may require that the pressure and leakage test be run in accordance with AWWA C-600 Standards, latest revision (Four Hour Test).

Allowable leakage shall not exceed the following where L = allowable leakage (gallons), N = number of joints, D = nominal diameter of pipe (inches), P = average test pressure (psi).

$$L = \frac{ND\sqrt{P}}{7400}$$

140.05 Pressure and Leakage Test for Low Pressure Force Mains

Low pressure force mains shall be filled with potable water, bled of air and pressurized to 70 psi. Pressure shall be maintained constant for 1 hour without adding water. Any loss of pressure indicates a failed test.

140.06 <u>Deflection Testing</u>

Pipe deflection shall not exceed 5% measured by a go/no-go gauge or mandrel. The District may confirm the pipe deflection at the end of the job prior to acceptance. Additionally, the District may confirm the pipe deflection just prior to end of the one year guarantee period. Pipe sections exceeding 5% long term deflection will be relaid by the Contractor or the Developer at his own cost and expense and retested until the District's *go/no-go* gauge passes through the pipe section.

The District's mandrel will be considered the "official" gauge used for deflection testing. The standard District gauge is manufactured by "HURCO" Technologies, Inc., Harrisburg, S.D. The outside diameter of the District's mandrel is as follows:

| Pipe Diameter | Mandrel Diameter |
|---------------|------------------|
| (Inches) | (Inches) |
| 8 | 7.28 |
| 10 | 9.08 |
| 12 | 10.79 |

END OF SECTION 140

GENERAL REQUIREMENTS

PART 1 – GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. The work shall consist of furnishing and installing all tools, equipment, materials, supplies, manufactured articles, transportation and services, including fuel, power, water and essential communications, for the performance of all labor, work, or other operations required for the fulfillment of the Contract. The work shall be complete, and all work, materials, and services not expressly shown or called for in the Contract which may be necessary for the complete and proper construction of the work shall be performed, furnished and installed by the Contractor.
- B. Except as specifically noted, the Contractor shall provide and pay for:
 - 1. Maintenance of pedestrian and vehicular maintenance of traffic plan necessary to activate the PBC Land Development permit through PBC Traffic.
 - 2. Copies of current valid license(s) issued in accordance with the Florida Statutes and/or appropriate local agencies as required by the Contract documents.
 - 3. Labor, materials, tools, construction equipment and machinery necessary for proper execution and completion of the work.
 - 4. Water and utilities required for construction.
 - 5. Other facilities and services necessary for proper execution and completion of the work.
- C. Contractor shall comply with all codes, ordinances, rules, regulations, orders and other legal requirements of the Loxahatchee River Environmental Control District, Florida Department of Health/FDEP Wastewater Collection/Transmission System Permit and the Town of Juno Beach.
- D. Until acceptance of the work by the District, all work shall be under the charge and custody of the Contractor who shall take every necessary precaution against injury or damage to the work by the action of the elements or from any other cause whatsoever, arising either from the execution or from the non-execution of the work. The Contractor shall protect, rebuild, repair, restore and make good, without additional compensation, all injury or damage to any portion of the work occasioned by any cause before its completion and acceptance.

1.02 EXISTING UTILITIES AND STRUCTURES

- A. The existing utilities and facilities shown on the drawings were located from the Owner's and other records. Guaranty is not made that all existing facilities are shown or that those shown are entirely accurate. The Contractor shall assure himself of any utilities, structures or facilities prior to performing any Work by pot-holing prior to the start of Work, the Contractor shall request each utility agency to advise him of the location of their facilities in the vicinity. The Owner and the Engineer will assume no liability for damages sustained or costs incurred because of the Contractor's operations in the vicinity of existing utilities or structures. The Contractor shall notify the Engineer of any deviation between existing conditions and the drawings.
- B. When structures and utilities have been properly shown or marked and are disturbed or damaged in the execution of the Work, they must be repaired immediately in conformance with best standard

practice and the approval of the Owner of the damaged utility or structure. In the case of structures and utilities which have not been properly shown or located as outlined above and are disturbed or damaged in the prosecution of the Work, take whatever steps are necessary for safety and notify the affected utility Owner and avoid any actions which might cause further damage to the structure or utility. Should the Work require repairs, changes, or modifications of the Owner's utilities as well as other utilities, it is the responsibility of the Contractor to provide for the maintenance of continuous water, sewage, electric, telephone and other utility services to all present customers of such utilities, unless approval in writing is secured from the applicable utility company or Owner for interpretation of such service.

1.03 PROTECTION AND RESTORATION OF SURVEY MONUMENTS

A. The Contractor shall be responsible for protecting and restoring all land and property corners, such as section corners, 1/4 section corners, property corners or block control points, and for maintaining all horizontal and vertical control points. All surveying work shall be the responsibility of the Contractor and shall be performed under the supervision of a Florida Registered Land Surveyor. Survey points that will be destroyed during construction shall be properly referenced and replaced at the Contractor's expense with permanent monuments approved by the Engineer.

1.04 PRESERVATION OF PROPERTY

A. The CONTRACTOR shall preserve from damage all property along the line of the work, or which is in the vicinity of or is in any way affected by the work, the removal or destruction of which is not called for by the plans. Wherever such property is damaged due to the activities of the Contractor it shall be immediately restored to its original condition by the Contractor at no cost to the Owner.

In case of failure on the part of the Contractor to restore such property, or make good such damage for injury, the Owner may, after 48 hours notice to the Contractor, proceed to repair, rebuild or otherwise restore such property as may be deemed necessary and the cost thereof will be deducted from any monies due or which may become due the Contractor under this contract.

1.05 PRESERVING WATER QUALITY

- A. The Contractor shall exercise extreme care to minimize degradation of water quality at the site. All necessary provisions shall be taken to insure compliance with the water quality standards of the State of Florida. Attention is called to Chapter 17-3, Florida Administrative Code, and in particular, the requirements that turbidity shall not exceed background levels, if required. Adequate silt containment procedures and equipment shall be used to control turbidity at all times at no additional expense to the Owner.
- B. During all pigging/flushing activities when discharge waters will flow into canals, lakes or ponds appropriate silt barriers and turbidity curtains shall be in place. Additionally, no water with a chlorine residual may be discharged into canals, lakes or ponds.

1.06 REGULATORY PERMITS AND PERMIT CONDITIONS

- A. Permits for this project have been acquired from the following entities having jurisdiction within the project boundaries by the Owner.
 - 1. Palm Beach County Land Development

- 2. Florida Department of Health/FDEP Wastewater Collection/Transmission System Permit
- B. The Contractor shall be responsible for ensuring that all construction activities are in full compliance with the requirements of the permits.
- C. Contractor shall also be responsible for the following:
 - 1. Permitting and compliance requirements of Section 02150
 - 2. SFWMD Dewatering Permit in compliance with Section 2.5 of the SFWMD Basis of Review for Water Use and Section 02401.

1.07 STORAGE OF MATERIALS

- A. The Contractor shall provide suitable facilities for storage and protection of materials. All equipment and materials intended for use in the work shall be suitably stored by the Contractor to prevent damage.
- B. Materials found unfit for use shall not be incorporated in the work and shall immediately be removed from the construction or storage site. Delivered materials shall be stored in a manner acceptable to the Engineer before any payment for same will be made.
- C. Staging of materials along the right of way or easements shall be limited to materials scheduled to be installed within a one-week period for time of staging.

1.08 STAGING AREA

A. All construction trailers, material and equipment storage and construction staging areas required by the Contractor shall occur only within public road right-of-ways or easements unless the Contractor has made alternate arrangements for staging areas outside right-of-ways or easements. Alternate arrangements for staging areas shall be at no additional cost to the Owner. The Contractor shall submit a staging area plan to the Engineer/Owner for review and concurrence with County/Town requirements for storage of material. All Contractor parking shall be within the staging area. The Contractor shall take note that any improvements to a proposed staging area site will be at the Contractors expense. The staging area site will need to be restored to a like or better condition after the project is completed at the Contractors expense.

1.09 SALVAGED MATERIAL

A. Unless otherwise stated or noted on the drawings, all materials salvaged under this contract shall become the property of the Owner. Salvaged materials may not be reused in the Work except upon written approval of the Engineer. All salvaged materials not reused or desired by the Owner shall be removed from the site of the Work or otherwise disposed of by the Contractor in a manner satisfactory to the Engineer.

1.10 WORKING HOURS

A. All work on this contract shall be conducted during normal working hours (7 A.M. to 4 P.M.) on weekdays. No work will be permitted on weekends and Owner observed holidays, without prior approval from the Owner and Engineer. Requests for approval to work outside normal working hours and weekends must be submitted in writing seven (7) days prior to scheduled construction.

1.11 ASSEMBLIES OR UNITS

A. Where the Contractor is required to furnish and install an assembly or unit, the Contractor shall furnish all component parts as required by the manufacturer of the unit.

1.12 ACCESS TO THE WORK SITE

A. The Contractor may use only the access designated by the Owner for access to the work locations such as easements or public right of ways. The Contractor shall be responsible for maintaining, protecting and restoring the routes to the satisfaction of the Owner and Engineer.

1.13 SECURITY

A. The Contractor shall be fully responsible for the safety and security of the work and site. Any temporary measures required to maintain the security of the area shall be the Contractor's responsibility. This shall include but not be limited to temporary fencing, security guards, etc. The integrity of the site shall be maintained.

1.14 FAMILIARITY WITH LAWS

A. The Contractor is assumed to be in compliance with and familiar with all federal, state and local laws, ordinances, rules, codes and regulations that may in any manner affect the work. Failure to familiarize themselves with applicable laws, etc., shall in no way relieve the Contractor from responsibility.

1.15 SCHEDULE

A. The Contractor shall be required to prepare a monthly update of the project schedule and submit to the Engineer with each pay request. Each schedule shall independently identify the originally approved schedule, actual progress, adjustments and new completion time projections for every item. The schedule shall show the project critical path, duration and float for every item. Pay requests received without the updated schedule will not be processed.

1.16 PROGRESS MEETINGS

A. The Contractor shall be required to attend monthly status meetings to discuss project progress and shall be able to discuss existing and projected problems, and overall job status. The Contractor's project manager, superintendent and appropriate subcontractors shall attend all progress meetings. The Engineer may increase or decrease the frequency of progress meetings as deemed necessary.

1.17 STANDARDS

A. All work performed on this project shall be in accordance with the Loxahatchee River Environmental Control District and other applicable standards. All conditions, as set forth in all the permits shall be satisfied and adhered to by the Contractor.

1.18 SPECIAL CONSIDERATIONS:

A. Noise: The Contractor is advised that the construction site is in close proximity to residential areas. All engines used during construction shall be equipped with critical grade mufflers.

- B. District/County/Town/State Standards: All work on this project shall be in accordance with District/County/Town/State Standards. Where the Standards conflict, the most stringent shall control.
- C. Project Inspection: The Engineer will be inspecting the work on a non-full time basis. The Contractor shall provide appropriate notice of need for inspections and allow time for scheduling. No work shall be covered up, nor test results accepted unless witnessed by the Engineer. Inspections by the Engineer shall not be performed in lieu of other inspections required by County, Town, State or Federal requirements.

1.19 VIDEO TAPING

A. The Contractor shall video all areas of construction, staging, etc in the presence of and to the satisfaction of the Engineer. The video shall be provided to the Engineer in DVD format, prior to any site mobilization. Two (2) copies of this video are required to be submitted one week prior to mobilization.

1.20 DISPOSAL OF UNSUITABLE EXCAVATED MATERIALS AND DEBRIS

A. All unsuitable excavated material and debris not required for backfill (unless otherwise noted), broken pipe, sidewalks, curbs and other concrete items, together with all roots, boards and other debris are to be disposed of by the Contractor at an appropriate legal site.

1.21 DISPOSAL OF EXCESS MATERIAL SUITABLE FOR REUSE

A. All excess material suitable for reuse shall be retained by the District and delivered by the Contractor to the District's WWTF at 2500 Jupiter Park Drive, Jupiter, FL 33458.

1.22 EQUIPMENT

A. All construction equipment necessary and required for the proper construction of this project shall be on the construction site, in first-class working condition, and shall have been approved by the Engineer before construction is permitted to start. The Contractor shall provide such tamping tools and equipment as necessary for the proper compaction of the backfill.

1.23 PROJECT TIMING/SEQUENCE

A. The Contractor is advised that the impact of construction in residential areas and along the roadways shall be minimized to the satisfaction of the Engineer. The Contractor shall perform clean-up of the construction areas on a daily basis. Further, the Engineer reserves the right to direct the Contractor to cease construction in an area of conflict, restore area to original condition and remobilize at another area designated by the Engineer at no additional cost to the Owner. The Engineer and Owner will be available prior to construction to assist in scheduling if requested by the Contractor.

1.24 EXISTING IRRIGATION

A. Existing irrigation has not been shown on the plans. Repair and or replacement of irrigation systems will be at no additional cost to the Owner.

1.25 CLEAN UP

- A. The Contractor shall keep the construction site free of rubbish and other materials and restore to their original conditions those portions of the site not designated for the alteration by the Contract Documents. Clean up and restoration shall be accomplished on a continuing basis throughout the contract period and in such a manner as to maintain a minimum continuing basis throughout the contract period and in such a manner as to maintain a minimum of nuisance and interference to the general public and residents in the vicinity of the work.
- B. The Contractor shall also remove, when no longer needed, all temporary structures and equipment used in his operation, It is the intent of this specification that the construction areas and those other areas not designated for alteration by the Contract Documents shall be immediately restored to original condition as upon completion of the project.

1.26 PUBLIC SAFETY AND CONVENIENCE

A. The Contractor shall at all times so conduct his work as to ensure the least possible obstruction to traffic, or inconvenience to the general public and residences in the vicinity of the work. No road or street shall be closed to the public, except with the permission of the Engineer and other jurisdictional governmental authority, if any. Fire hydrants on or adjacent to the work shall be kept accessible. Provisions shall be made by the Contractor to ensure public access to sidewalks, public telephones, and the proper functioning of all gutters, sewer inlets, drainage ditches, and irrigation ditches. No open excavation shall be left overnight.

1.27 SAFETY AND OSHA COMPLIANCE

- A. The Contractor shall comply in all respects with all Federal, State and Local safety and health regulations. Copies of the Federal regulations may be obtained from the U.S. Department of Labor, Occupation Safety and Health Administration (OSHA), Washington, DC 20210 or their regional offices.
- B. The Contractor shall conform to the State of Florida Trench Safety Act, 1990 House Bill 3181, requirements.
- C. The Contractor shall comply in all respects with the applicable Workman's Compensation Law.
- C. The Contractor shall be responsible for his own safety program.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

- 1.01 GENERAL: Measurement and payment will be based upon Work completed and accepted in accordance with the Contract Documents. No separate payment will be made for excavation, trenching, backfilling, leakage tests, surveying, density tests or other incidental items of Work not shown in the Agreement.
- 1.02 EQUIPMENT AND MATERIALS IN STORAGE: Partial payment for materials and equipment in proper storage at the site of the Work will be made for those items for which the Contractor has submitted the following:
 - A. Invoice for each item in storage. The invoice shall not exceed the value of the item stored as determined by the amount paid to the manufacturer (subcontractor fabrication costs excluded).
 - B. List of items in storage.
 - C. With the following pay estimate, a release of lien for 90% of each item listed as stored materials for the previous pay estimate shall be provided. Any item for which a 90% release of lien is not supplied shall be considered as having been removed from the site.

No payment for any offsite storage of material will be made. Any payment for stored material shall not include labor or profit by the Contractor or any sub-contractor. The Contractor is specifically advised that this procedure may require full payment for some stored materials or shop work significantly ahead of the time when payment is issued by the Owner.

1.03 MEASUREMENT:

- A. Item No. 1, Mobilization: Provide mobilization, demobilization, insurance and bond premiums, and all other work not specifically covered under other bid items but required to complete the project in accordance with the Contract Documents. The Lump Sum price shall not exceed 5% of the Total Base Bid. Payment shall be made proportional to the percentage complete of the overall project as determined by the Engineer.
- B. Item No. 2, Maintenance of Traffic: Provide maintenance of traffic plans, obtain governing jurisdiction approval, provide signage, barricades, flagmen, temporary roadway and vehicular and pedestrian access during construction in accordance with Section 01570
- C. Item No. 3, Record Drawings: Provide record drawings in compliance with Standard Detail SD-29 and progress submittals with each pay application. In addition to the requirements defined in SD-29 record information shall also be provided for all paving, driveway and swale elevations reconstructed as part of this project.
- D. Item No. 4, Pre-Construction Video: Provide a preconstruction video in compliance with Seciton 01019, 1.24.

- E. Item No. 5, NPDES Permit/Erosion Control: Provide labor, systems and materials to provide permitting and complete site erosion control in conformance with section 02150 and all applicable local, state and federal regulations.
- F. Item No. 6, Trench Safety Act: Provide compliance with Chapter 553 of the Florida Administrative Code (Trench Safety act). Payment shall include all equipment, materials and labor necessary for compliance. Payment shall be made proportional to the percentage complete of the overall project as determined by the Engineer.
- G. Item No. 7, 8" SDR-26: 0'-6': Furnish and install all labor, materials and equipment for installation of 8" SDR-26 gravity sewer pipe between the depths of 0 and 6 feet (not including 6 feet) including but not limited to dewatering, excavation, manhole connections, alignment and open trench restoration and driveways, sidewalks, sod, irrigation and miscellaneous restoration items not covered in other pay items.
- H. Item No. 8, 8" SDR-26: 6'-8': Furnish and install all labor, materials and equipment for installation of 8" SDR-26 gravity sewer pipe between the depths of 6 and 8 feet (including 6 feet and not including 8 feet) including but not limited to dewatering, excavation, manhole connections, alignment and open trench restoration and driveways, sidewalks, sod, irrigation and miscellaneous restoration items not covered in other pay items.
- I. Item No. 9, 8" SDR-26: 8'-10': Furnish and install all labor, materials and equipment for installation of 8" SDR-26 gravity sewer pipe between the depths of 8 and 10 feet (including 8 and not including 10 feet) including but not limited to dewatering, excavation, manhole connections, alignment and open trench restoration and driveways, sidewalks, sod, irrigation and miscellaneous restoration items not covered in other pay items.
- J. Item No. 10, 8" SDR-26: 10'-12': Furnish and install all labor, materials and equipment for installation of 8" SDR-26 gravity sewer pipe between the depths of 10 and 12 feet (including 10 and 12 feet) including but not limited to dewatering, excavation, manhole connections, alignment and open trench restoration and driveways, sidewalks, sod, irrigation and miscellaneous restoration items not covered in other pay items.
- K. Item No. 11, 4' Diameter MH: 0'-6': Furnish and install all labor, materials and equipment for installation of 4' diameter manholes between the depths of 0 and 6 feet (including 0 and not including 6 feet) including but not limited to dewatering, excavation, open trench restoration, height adjustment and frame and covers.
- L. Item No. 12, 4' Diameter MH: 6'-8': Furnish and install all labor, materials and equipment for installation of 4' diameter manholes between the depths of 6 and 8 feet (including 6 and not including 8 feet) including but not limited to dewatering, excavation, open trench restoration, height adjustment and frame and covers.
- M. Item No. 13, 4' Diameter MH: 8'-10': Furnish and install all labor, materials and equipment for installation of 4' diameter manholes between the depths of 8 and 10 feet (including 8 and 10 feet) including but not limited to dewatering, excavation, open trench restoration, height adjustment and frame and covers.
- N. Item No. 14, 4" or 6" Single Service Lateral < 45': Furnish and install all labor, materials and equipment for installation of 4" service laterals less than 45' in length including but not limited to the main line wye, pipe and clean-out assembly.

- O. Item No. 15, Connection to Existing MH and install Drop: Furnish and install all labor, materials and equipment for connection 8" SDR 26 gravity main to an existing pre-cast manhole and install a drop per District standards.
- P. Item No. 16, Dewatering: Provide permitting and disposal of all dewatering and furnish and install all labor, materials, equipment to provide a complete dewatering system incompliance with permits and regulatory authorities.
- Q. Item No. 17, 12" Compacted Subgrade: Furnish all labor, materials and equipment for installation of subgrade in conformance with the standard details, plans, specifications and permits.
- R. Item No. 18, 12" Compacted Limerock Base: Furnish all labor, materials and equipment for installation of limerock base in conformance with the standard details, plans, specifications and permits.
- T. Item No. 19, 6" Asphalt Millings: Furnish all labor, materials and equipment for installation of asphalt millings in conformance with the standard details, plans, specifications and permits.
- 1.05 PAYMENT: Payment will be made at the lump sum or unit price for each item shown in the Unit Bid Price Schedule, stored and/or installed and accepted, which price and payment shall constitute full compensation for furnishing all materials and performing all Work in connection therewith and incidental thereto. The following schedule shall be adhered to:
 - A. Last Day of the month Cut-off date, confirm quantities with inspector. (Engineer and
 - B. 5th of the month Pay estimate to the Engineer
 - C. 10th of the month Pay estimate to the Owner.
 - D. 20th of the month Payment by the Owner

When the cut off date occurs on a holiday or weekend, the date shall be the last work day preceding the end of the month.

- 1.06 PAY ESTIMATE FORMS: The Engineer will supply a pay estimate form for the Contractor to use for submittal in addition to the form required by the Village. The Contractor shall make copies to be used for submittal of the pay estimates. Failure of the Contractor to sign the pay estimate or attach appropriate documentation shall be grounds for returning the pay estimate with no action by the Owner or Engineer.
- 1.07 RECORD DRAWINGS: Updated record drawings shall be submitted with each pay application. Failure of the Contractor to submit record drawings with the pay application shall be grounds for returning the pay application with no action by the Owner or Engineer.
- 1.08 SCHEDULE: An updated schedule shall be submitted with each pay application. Failure of the Contractor to submit an updated schedule with the pay application shall be grounds for returning the pay application with no action by the Owner or Engineer.

1.09 QUANTITIES: The Contractor is specifically advised that quantities listed in the Unit Price Bid Sheet are estimates. Actual installed quantities may vary significantly. Further, quantities may be increased or diminished without invalidating the unit price in the Unit Price Bid Sheet

SUBMITTALS

PART 1 - GENERAL

- 1.01 DESCRIPTION OF REQUIREMENTS: The types of submittals controlled by these general requirements include shop drawings, operation and maintenance manuals, instruction manuals, samples, and miscellaneous work-related submittals. The individual submittal requirements are specified herein and in applicable sections for each unit of work. Other submittals as specified in other sections shall follow the requirements of those sections.
- 1.02 GENERAL SUBMITTAL REQUIREMENTS: Coordination and Sequencing: The Contractor shall coordinate preparation and processing of submittals with performance of the work so that the work will not be delayed by submittals. The Contractor shall allow for adequate review time by the Engineer for the submittals. The Contractor shall coordinate and sequence different categories of submittals for the same work, and for interfacing units of work, so that one will not be delayed for coordination with another. No extension of time will be allowed because of failure to properly coordinate and sequence submittals.

Preparation of Submittals: Provide permanent marking on each submittal to identify project, date, Contractor, subcontractor, submittal name and similar information to distinguish it from other submittals. The marking system used shall be as required by the Engineer. Each submittal shall clearly state where the item is to be installed. Package each submittal appropriately for transmittal and handling. Submittals which are received from sources other than through Contractor's office will be returned without action. All results of testing by independent labs or agencies shall be submitted to the Engineer. This shall include both passing and failing tests.

- 1.03 SPECIFIC CATEGORY SUBMITTAL REQUIREMENTS: General: Except as otherwise indicated in individual work sections, comply with general requirements specified herein for each indicated category of submittal.
- GENERAL SHOP DRAWING REQUIREMENTS: As soon as practicable and within forty five (45) days after the Notice to Proceed, the Contractor, in conformance with the conditions of the contract, shall submit to the Engineer for approval, four (4) copies (in addition to those copies necessary for his own requirements) of all required shop drawings. The Contractor shall submit newly prepared information: do not reproduce contract documents or copy standard printed information as basis of shop drawings except for actual pattern or template type drawings. Prepare shop drawings on reproducible sheets, not less than 8-1/2 in. x 11 in. and not Larger than 24 in. x 36 in. Prepare shop drawings to accurate scale, except where other form is indicated as acceptable. Show dimensions and note which are based on field measurements, identify materials and products in the work shown. Indicate name of firm which has prepared each shop drawing, and provide appropriate project identification.

Shop drawings submitted to the Engineer for his approval shall first be checked and approved by the Contractor, as indicated by a stamp marked "Checked and Approved" on each copy of the shop drawing. Shop drawings received without the Contractor's "Checked and Approved" stamp will be returned without further action. The Contractor will receive only one marked up return copy of any drawings stamped "Not Approved" or "Revise and Resubmit".

Shop drawings shall be submitted for the following. This list shall be considered a minimum. Shop drawings shall be submitted for all materials provided for the project:

- 1. Pipe
- 2. Fittings
- 3. Hardware
- 4. Fabrications
- 5. Permit applications
- 6. Manholes
- 7. Drops
- 8. Approved Maintenance of Traffic Plans
- 9. Concrete
- 10. Grout
- 11. Sod
- 12. Rock
- 13. Seed and Mulch
- 14. Crushed Limestone
- 15. Record Drawings
- 16. Schedule
- 17. Staging Plan

Product Data: Collect required data into one submittal for each unit of work or system; and mark each copy to show which choices and options are applicable to the project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements which have been checked, and special coordination requirements. Maintain one set of product data for each submittal at the project site, available for reference by the Engineer. For purposes of this submittal, manufacturer's fabrication drawings shall be synonymous with shop drawings.

The Contractor shall not submit product data or allow its use on the project, until compliance with requirements of the contract documents has been confirmed. Submittal is for information and record, unless otherwise indicated.

- 1.05 DOCUMENTS: Maintain at the job-site one copy of all drawings, specifications; addenda; approved shop drawings; change orders; field orders; other contract modifications; and other approved documents submitted by the Contractor in compliance with various sections of the specifications. Each of these Project Record Documents shall be clearly marked "Project Record Copy" or "Contract Set" and maintained in good condition; available at all times for review by the Engineer and not used for construction purposes.
- 1.06 PROJECT SCHEDULES: The Contractor will be required to provide a complete schedule of the project at the pre-construction meeting. This schedule will be required to be updated monthly with the submittal of each pay request. Failure of the Contractor to provide an updated project schedule with the pay request will be just cause for the Engineer to return the pay request not approved, until such time as the updated project schedule is submitted.

PART 2 AND 3 - PRODUCTS AND EXECUTION (not applicable)

GENERAL QUALITY CONTROL

PART 1 - GENERAL

- 1.01 DESCRIPTION OF REQUIREMENTS: Definitions: Specific quality control requirements for the work are indicated throughout the contract documents and are not repeated herein. The requirements for this section are primarily to performances of the work beyond furnishing of manufactured products. The term "Quality Control" includes, but is not necessarily limited to, inspection and testing and associated requirements. This section does not specify or modify Engineer's duties relating to quality control and contract enforcement.
- 1.02 RESPONSIBILITY FOR INSPECTIONS AND TESTS: Unless otherwise noted, all testing and inspections required by these specifications shall be performed by a properly certified entity as contracted with by the Owner. All costs associated with the testing and inspections shall be paid by the Owner. The Contractor shall be responsible for all tests or inspections required by any entity having jurisdictional control over the work.

No failure of test agencies, whether engaged by Owner or Contractor, to perform adequate inspections or tests or to properly analyze or report results, shall relieve the Contractor of responsibility for fulfillment of the requirements of the contract documents.

- 1.03 QUALITY ASSURANCE: General Workmanship Standards: Except as more definitively specified, the Contractor shall comply with recognized workmanship quality standards within the industry as applicable to each unit of work, including ANSI standards where applicable. It is a requirement that each category of trades person or installer performing the work be prequalified, to the extent of being familiar with applicable and recognized quality standards for that category of work, and of being capable of workmanship complying with those standards. The Engineer shall be the sole judge of what constitutes industry workmanship standards.
- 1.04 PRODUCT DELIVERY-STORAGE-HANDLING: Handle, store and protect materials and products, including fabricated components, by methods and means which will prevent damages, deterioration and losses including theft (and resulting delays), thereby insuring highest quality results as the performance of the work progresses. Control delivery schedules so as to minimize unnecessary long-term storage at the project site prior to installation.

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION

- 3.01 PREPARATION FOR INSTALLATION: Installer's Inspection of Conditions: The Contractor shall require the fabricator and installer of each major unit of work to inspect substrate to receive the work, and conditions under which the work will be performed, and to report (in writing to the Contractor and the Engineer) unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the fabricator and installer.
- 3.02 INSTALLATION QUALITY CONTROL: Manufacturer's Instructions: Where installations include manufactured products, comply with manufacturer's applicable instructions and recommendations for installation, to whatever extent these are more explicit or more stringent than applicable requirements indicated in the contract documents.

The Contractor shall inspect each item of materials or equipment immediately prior to installation, and reject damaged and defective items.

Provide attachment and connection devices and methods for securing work as it is installed; true to line and level, and within recognized industry tolerances if not otherwise indicated.

The Contractor shall recheck measurements and dimensions of the work, as an integral step of starting each installation.

Install work during conditions of temperature, humidity, exposure, forecasted weather, and status of project completion which will ensure best possible results for each unit of work, in coordination with entire work. Isolate each unit of work from non-compatible work, as required to prevent deterioration.

Mounting Heights: Except as otherwise noted, mount individual units of work at industry-recognized standard mounting heights, for applications indicated. Refer questionable mounting height choices to the Engineer for final decision.

Adjust, clean, lubricate, restore marred finishes, and protect newly installed work, to ensure that it will remain without damage or deterioration during the remainder of the construction period.

TRAFFIC REGULATION

PART 1 - GENERAL

- 1.01 DESCRIPTION: The work to be performed under this section shall include furnishing all maintenance of traffic plans, all materials and labor necessary to receive approval and to regulate vehicular/pedestrian traffic in accordance with the requirements set forth herein and those required by FDOT, Palm Beach County, Martin County and the Town of Jupiter.
- 1.02 APPLICABLE CODES, STANDARDS AND SPECIFICATIONS: The work performed under this contract shall be in strict accordance with the following codes and standards:
 - A. Local, county and municipal codes.
 - B. Florida Department of Transportation specifications.
 - C. State and U.S. Government requirements.
- PART 2 PRODUCTS (not applicable)
- PART 3 EXECUTION

3.01 TRAFFIC AND VEHICULAR ACCESS

- A. Emergency Vehicles: The Contractor shall notify, in writing, the Engineer, the police, fire and other emergency departments and agencies when and where work is to be accomplished which will affect their operations. The notification shall be supplied at least two days, but not more than ten days, prior to the start of such work.
- B. Major Roads and Streets: No major roads or streets shall be blocked to traffic, without adequate detour facilities, for a period of more than 30 minutes, or as directed by the governing authority. All named roads impacted by this project are considered to be major roads unless otherwise agreed to by the Engineer.
- C. Commercial Properties: Access to commercial property shall not be blocked for a period of more than 30 minutes during the time such properties are open for business.
- D. Residential Property: Access to residential property shall not be blocked for a period of more than 12 hours.
- E. Arterial Streets/Parking Areas: The Contractor shall make every attempt to maintain streets and parking areas within the project area accessible to the residents. Notification shall be given to the Engineer and affected residences a minimum of three (3) days prior to the start of work.
- 3.02 CONSTRUCTION IN OTHER THAN STATE HIGHWAY RIGHT-OF-WAY: Construction within other than state highway right-of-way shall be made in full compliance with all requirements of the Florida Department of Transportation and to the satisfaction of the local governing bodies. All necessary barricades, detours, lights and other protective measures shall be provided for the protection of both pedestrian and vehicular traffic.

3.03 SUBMITTALS AND COORDINATION: The Contractor shall prepare plans/sketches and background information required to obtain approval for all maintenance of traffic regulation. The Contractor shall coordinate all traffic regulation with the appropriate governmental/regulatory agencies.

CLEARING AND GRUBBING

PART 1 – GENERAL

1.01 DESCRIPTION: Work under this section of the specifications consists of clearing and grubbing, and, the disposal of materials and debris resulting from the clearing and grubbing operations. The construction site shall be cleared and grubbed as required to accommodate this construction and as further indicated, excluding any trees indicated to remain.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

- 3.01 CLEARING, GRUBBING AND STRIPPING: On areas required to be cleared, grubbed, and stripped all trees, stumps, down timber, brush, vegetation and other objects standing on or protruding from the ground shall be removed. All roots shall be grubbed and removed a minimum of 18 inches below the surface of the ground. Holes caused by grubbing operations shall be filled to the level of adjacent ground. Stripping of all vegetation and topsoil shall be completed by the Contractor. The Contractor shall visit the site prior to submitting a bid to confirm the required amount of clearing/grubbing. The Contractor shall carefully investigate the amount of clearing and/or grubbing necessary to satisfy the specification and prepare the site for construction, if any.
- 3.02 DISPOSAL: All material and debris resulting from clearing, or clearing and grubbing, operations shall be hauled off the construction site and disposed of by the Contractor.
- 3.03 SELECTIVE CLEARING AND/OR GRUBBING: Special attention shall be given by the Contractor to heavily landscaped/wooded areas within the pipeline corridor. Work within these areas shall be reviewed with the Contractor prior to the work occurring
- 3.04 CLEANUP: In accordance with the GENERAL CONDITIONS.

EROSION & SEDIMENT CONTROL

PART 1 – GENERAL

1.01 DESCRIPTION

A. This section includes all Contractor provided labor, systems, materials, etc. to provide permitting and complete site erosion control in conformance with these specifications as well as all applicable local, State and Federal regulations in sufficient detail to control the spread of wind and water borne materials that would be detrimental to adjoining public or private property, the site, and improvements on the project. These measures shall include the Contractor's construction and maintenance of temporary erosion control features as shown in the plans or as may be directed by the Engineer.

B. The "Operator" as referred to herein or in any regulatory documents or permits shall mean the Contractor.

1.02 REFERENCE STANDARDS

- A. FDOT Standard Specifications, Latest Edition.
- B. Rule 62-621.300 (4), F.A.C. and the "Generic Permit for Stormwater Discharge from Large and Small Construction Activities", FDEP Document 62-621.300(4) (a).

1.03 SUBMITTALS

- A. Prior to the pre-construction meeting, the Contractor shall obtain, prepare and submit the FDEP Form 62-621.300 (4) (b), "Notice of Intent (NOI) to use a Generic Permit for Stormwater Discharge from Large and Small Construction Activities". The type of project or activity that qualifies for use of the Generic Permit, the conditions of the permit, and additional requirements to request coverage are specified in the Generic Permit document (FDEP Documents 62-621.300 (4) (a). The appropriate Generic Permit fee, as specified in Rule 62-4.050 (4) (d), F.A.C., shall be submitted with the NOI in order to obtain permit coverage. Submit a copy of the NOI and confirmation of receipt of the NOI and fee from the NPDES Stormwater Notices Center prior to the pre-construction meeting.
- B. The Contractor shall develop and submit to the Engineer a detailed "Erosion and Sediment Control Plan" and "Stormwater Pollution Prevention Plan" (SWPPP) for review. Included shall be plan(s) of the site locating all siltation skirts, hay bales, turbidity curtains, and other features required to control erosion, sediment, water and air pollution, on and off the site. The plan shall be sequenced to show changes during the life of the project; shall be coordinated with on-site stockpiling of fill and top soil; and shall be directly coordinated with the construction sequence for stormwater improvements. The SWPPP shall comply with Generic Permit for Stormwater Discharge from Large and Small Construction Activities, FDEP Document 62-621.300(4)(a).
- C. The plan(s) shall include catalog cuts of all materials provided in support of the plan. The "Erosion and Sediment Control Plan" and SWPPP shall be submitted at or before the preconstruction conferences.

D. At the conclusion of construction and prior to final acceptance by the Engineer, the Contractor shall complete and submit the FDEP Form 62-621.300(6), "Notice of Termination (NOT) of Generic Permit Coverage" in accordance with the instructions contained therein. Submit a copy of the NOT and confirmation of receipt of the NOT from the NPDES Stormwater Notices Center prior to final acceptance by the Engineer.

1.04 PERMANENT EROSION CONTROL

A. This section is not intended to address the permanent Contractor installed erosion control features such as grassing, sodding, grading, and the installation of drainage structures. It applies only to the temporary efforts required of the Contractor during the full construction process. The Contractor shall incorporate the permanent erosion control features into the project as soon as possible.

PART 2 – PRODUCTS

2.01 SILTATION FENCES

A. The siltation fences shall be geotechnical woven or non-woven fabric conforming to the applicable application requirements of Section 985 of the Florida Department of Transportation "Standard Specifications for Road and Bridge Construction". The type and size of posts and wire mesh reinforcement will be at the option of the Contractor and applicable to the installation conditions.

2.02 EROSION CONTROL MATTING

A. Erosion control matting shall be woven, biodegradable geotechnical fabric. It shall be used to temporarily stabilize channels or steep slopes until vegetation is established. This type selected shall be comparable to the grass cover applied for the particular installation. The material shall be stapled in place at 18 inches on center with a minimum matting lap of 4 inches.

2.03 HAY OR STRAW BALES

A. Hay and straw bales shall be individual bales each entrenched 4" into the soil. The bales shall be clean, fresh hay or straw. Bales shall be replaced when they become clogged with silt, deteriorate, or after a period of 3 weeks, whichever occurs first. The particular application may require that bales be staked into the ground with rebars.

2.04 TURBIDITY CURTAINS

A. Turbidity curtains shall be floating of sufficient depth to reach within 1.0 feet of the bottom of the receiving water. They shall be similar to the types manufactured by the American Boom and Barrier Corp. They shall be yellow or international orange in color. The material shall be 45 mils thick (18 to 22 oz/sq. yd) and fully sewn or vulcanized seamed to provide flexible and buoyant units. The top floatation shall maintain a 3" freeboard above the water surface.

PART 3 - EXECUTION

3.01 GENERAL

A. The Contractor shall install and maintain, for the full period of the constructions, all necessary temporary erosion control features. These features shall be coordinated with all applicable

construction features to assure the continuous and effective control of erosion and degradation of surface water quality on and adjoining the site. In the event of unforeseen conditions, the Owner's Representative may require the use of control features of methods other than those indicated or proposed by the Contractor.

B. The Contractor shall perform all clearing and grubbing operations such that the area of unprotected erodible earth exposed at any one time is not larger than the minimum area necessary for efficient construction operations, and the duration of exposed, uncompleted construction shall be kept as short as practicable.

3.02 EARTHWORK PROCESS

- A. The Owner's Representative may limit the area of unprotected erodible earth exposed by clearing, grubbing, excavation, backfilling, or stockpiling operations and may direct the Contractor to provide immediate temporary erosion or pollution control measures to prevent erosion, degradation or receiving water, or wind blown transfer of materials. As a result, the Contractor's efforts shall be in keeping with his capability to grade, grass, and install the permanent erosion control measures.
- B. If unforeseen erosion problems arise as a result of the design, weather conditions, or the Contractor's operations, the Contractor shall be required to implement acceptable temporary erosion control features during construction when the Owner's Representative so directs.

3.03 TEMPORARY EROSION CONTROL

- A. General: Temporary erosion and water pollution control features shall consist of, but not be limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, sediment checks, berms, baled hay or straw, floating turbidity curtain, and silt staked fence. The Contractor may find design details for some of these items in the Water Quality Section of the applicable edition of the Florida Department of Transportation "Department's Roadway and Traffic Design Standards." The Owner's Representative may direct use of temporary erosion control features or methods other than those indicated herein. Any such advice given the Contractor by the Owner's Representative shall not relieve the Contractor from fully preventing erosion.
- B. Temporary Grassing: The Contractor may provide temporary sod or seeding and mulching to provide temporary erosion control in areas where applicable or where site conditions warrant. The Contractor shall obtain the approval of the Owner's Representative for the use of all forms of temporary grassing. Where temporary grassing is provided, the final condition of the grass may warrant its removal and degrassing at no additional cost the Owner.
- C. Temporary Mulch: This work shall consist of furnishing and applying a 2" to 4" thick blanket of straw or hay mulch into the top 2" of the soil in order to temporarily control erosion. Only undecayed straw or hay, which can readily be cut into the soil, shall be used. Other measures for temporary erosion control such as hydro mulching, chemical adhesive soil stabilizers, etc. may be substituted for mulching with straw of hay if approved by the Owner's Representative. When permanent grassing operations begin, temporary mulch materials shall be plowed under in conjunction with preparation of the ground.
- D. Sandbagging: This work shall consist of furnishing and placing sandbags in configurations so as to control erosion and siltation.

- E. Slope Drains: This work shall consist of constructing slope drains, utilizing pipe, fiber mats, rubble, cement concrete, asphaltic concrete plastic sheeting, or other acceptable materials, or as may be approved as suitable to adequately perform the intended function.
- F. Temporary Sediment Basins: Temporary sediment basins, if necessary, shall be constructed to adequately perform the intended function. Sediment basins shall be cleaned out as necessary to maintain flow function or as directed.

FINISH GRADING

PART 1 - GENERAL

1.01 DESCRIPTION: To bring to finished elevations all earth materials as called for on the drawings or required to restore to existing conditions. This general work includes the completion of finish grading so that surfaces of compacted material are correctly oriented with the requirements of the existing grades within the surrounding project areas and to allow for proper drainage.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. All fill shall be clean sand, free from debris, vegetable matter and other deleterious substances.

PART 3 - EXECUTION

3.01 GRADING: Fill, backfill and rough grade as necessary to bring entire site level with elevations of undersides of concrete walks, paved areas and surrounding grades. This grading shall result in finished grades that allow for water to flow from paved areas to unpaved areas unobstructed after the sod has been placed.

3.02 FINISH GRADING:

- A. Where elevations are indicated on plans, obtain such finish elevations, and establish uniform slopes of finish grades between indicated elevations.
- B. Where elevations are not indicated, establish and obtain uniform slope from existing grade.
- C. Areas to be grassed shall be box bladed for leveling prior to grassing.

DEWATERING

PART 1 - GENERAL

- 1.01 DESCRIPTION: The Work to be performed under this section shall include furnishing all equipment and labor necessary to remove storm or subsurface waters from excavation areas in accordance with the requirements set forth and as shown on the drawings.
- 1.02 APPLICABLE CODES, STANDARDS AND SPECIFICATIONS: The dewatering of any excavation area and the disposal of the water shall be in strict accordance with the latest revision of all local and state government rules and regulations and Section 02150.

PART 2 - PRODUCTS (Not Applicable)

2.01 SUBMITTALS

A. The Contractor shall obtain a Dewatering Permit in compliance with Section 2.5 of the SFWMD Basis of Review for Water Use. The Contractor is specifically advised that portions of the project are within wetland areas or in close proximity to wetland areas. Wetlands can be viewed at the following web address. http://www.fws.gov/wetlands/Wetlands-Mapper.html

PART 3 - EXECUTION

3.01 DEWATERING: The Contractor shall provide adequate equipment for the removal of storm or subsurface waters which may accumulate in the excavation. If subsurface water is encountered, the Contractor shall utilize suitable equipment to adequately dewater the excavation so that it will be dry for work and pipe laying. A wellpoint system or other Engineer approved dewatering method shall be utilized if necessary to maintain the excavation in a dry condition for preparation of the trench bottom and for pipe laying. Dewatering by trench pumping will not be permitted if migration of fine grained natural material from bottom, side walls or bedding material will occur. No facilities shall be constructed under wet conditions. Dewatering shall cease in a manner to allow the subsurface water to slowly return to normal levels. Any voids left after the removal of the dewatering system shall be fully grouted.

The Contractor is specifically advised that groundwater elevations within the project areas are known to be variable to a significant degree. The Contractor needs to consider this in preparing their bid and anticipate the need for dewatering accordingly. Note that the use of rock in the trench bottom to assist in stabilization will not be considered as an adequate substitute for dewatering.

3.02 DISPOSAL: Water pumped from the trench or other excavation shall be disposed of in storm sewers having adequate capacity, canals or other suitable disposal pits. The Contractor is responsible for obtaining and complying with all permits to de-water the construction area and discharge the de-watered waters offsite if necessary. The Contractor shall protect waterways, storm sewers or other disposal facilities from turbidity, silt, debris or other material that may impair the quality or function of the facility during the dewatering operation. The Contractor's plan shall include temporary culverts, barricades and other protective measures to prevent damage to property or injury to any person or persons. No flooding of streets, roadways, driveways or private property will be permitted. Engines driving dewatering pumps shall be equipped with critical grade mufflers.

GRASSING AND LANDSCAPING

PART 1 - GENERAL

- 1.01 DESCRIPTION: The Contractor shall furnish all materials and labor necessary for construction. It is the intent of this specification that all damaged areas be replaced in kind. The Engineer will determine where sod or seed/mulch is to be used in questionable areas. The Contractor shall physically inspect all areas with the Engineer prior to the placement of sod or seed/mulch to determine the limits of grassing.
- 1.02 STORAGE OF MATERIALS: The Contractor shall provide space for storage of sod prior to placement in a manner that will not endanger or restrict pedestrian or vehicular traffic.

PART 2 - PRODUCTS

2.01 SOD, SEED and MULCHING:

- A. Sodding shall be in accordance with section 575-1 through 575-2 of the Florida Department of Transportation (FDOT) Specifications. Sod in all areas shall be Bahia, Floratam or Bermuda as directed by the Engineer.
- B. Seeding shall be in accordance with Section 570-1 thru 570-3 of the FDOT specification.

PART 3 - EXECUTION

3.01 SOD, SEED, MULCH:

- A. All areas to be grassed shall be box bladed for leveling to the satisfaction of the Engineer before the grassing operation commences. Hand tool leveling shall be performed in areas adjacent to structures. Final grades shall slope away from structures.
- B. Sodding shall be in accordance with Section 575-3 of the FDOT specifications. In addition, all sod placed on slopes 1:3 or greater shall be pegged.
- C. Seeding shall be in accordance with Section 570-4 thru 570-5 of the FDOT specification.
- D. Mulching shall be in accordance with Section 575-3 of the FDOT specification.
- E. Sod shall be placed on finished grades such that water will flow from paved areas to unpaved areas unobstructed.
- 3.02 AREAS: Prior to sod or seed and mulch placement the Contractor and Engineer shall meet in the field and verify areas to be sodded or seeded and mulched.
- 3.03 MAINTENANCE: Seeding/mulching/sod maintenance shall be in accordance with the FDOT specifications.
- 3.04 IRRIGATION: It shall be the Contractor's responsibility to supply sufficient irrigation water to develop a growing "stand of grass".

- 3.05 COMPLETION: The grassing operation shall not be considered complete until a good stand of grass has been developed and the first mowing completed. The initial mowing shall be performed by the Contractor. All debris which may damage a mower shall be removed.
- 3.06 DAMAGED TREES/SHRUBBERY: All trees and/or shrubbery (landscaping) damaged or disturbed during construction shall be replaced with like size and type by the Contractor at his expense as directed by the Engineer.

The indiscriminate cutting of trees or disfiguring of any feature of scenic value shall not be permitted. This includes other methods such as the use of herbicides. All debris shall be removed by the Contractor at his expense.

APPENDIX A

FDEP/FDOH Permit To Construct

Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Vision: To be the Healthiest State in the Nation

NOTIFICATION OF ACCEPTANCE OF USE OF A GENERAL PERMIT/PERMIT ISSUANCE

PERMITTEE:

D. Albrey Arrington, Ph.D., Executive Director Loxahatchee River District 2500 Jupiter Park Drive Jupiter, FL 33458
Albrey.arrington@lrecd.org

PERMIT NUMBER: 138774-374-DWC

ISSUE DATE: 01/25/2019

EXPIRATION DATE: 01/24/2024

COUNTY: Palm Beach

PROJECT NAME: 181st Neighborhood Gravity

Sewer Improvements

WASTEWATER TREATMENT: LRECD

FACILITY ID: FL0034649

Dear Mr. Arrington:

This letter acknowledges receipt of your Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System for the subject project and issuance of a permit under the provisions of Palm Beach County Ordinance No. 97-58. Our Office received the Notice on January 18, 2019.

This is to advise you that the Florida Department of Health Palm Beach County (Department), as the delegated agent of the Florida Department of Environmental Protection, does not object to your use of such general permit and that you are hereby authorized to perform the work shown on the approved plan(s) attached hereto and made a part hereof.

Please note the attached requirements apply to your use of this general permit for constructing the proposed domestic wastewater collection/transmission system.

You are further advised that the construction activity must conform to the description contained in your Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System and that any deviation will subject the permittee to enforcement action and possible penalties.

Since rely,

For the Division Director

Jorge R. Patino, P.E.

Environmental Administrator

Division of Environmental Public Health

JH/JP

c: engineer-of-record: Kris Dean, P.E.

utility: Same

Florida Department of Health

Palm Beach County, Division of Environmental Public Health P.O. Box 29, 800 Clematis Street, West Palm Beach, FL 33402

PHONE: 561-837-5900 • FAX: 561-837-5294
FioridaHealth.gov, Fihealthpalmbeach.org



PERMITTEE: Loxahatchee River District Permit/Certification No.: 138774-374-DWC

D. Albrey Arrington, Ph.D., Executive Director

FDEP General Permit Requirements

1. This general permit is subject to the general permit conditions of Rule 62-4.540, F.A.C., as applicable. This rule is available at the FDEP Internet site at: http://www.dep.state.fl.us/water/rulesprog.htm#ww [62-4.540]

- 2. This general permit does not relieve the permittee of the responsibility for obtaining a dredge and fill permit where it is required. [62-604.600(6)(b)1]
- 3. This general permit cannot be revised, except to transfer the permit. [62-604.600(6)(b)2]
- 4. This general permit will expire five years from the date of issuance. If the project has been started and not completed by that time, a new permit must be obtained before the expiration date in order to continue work on the project. [62-4.030]
- 5. Upon completion of construction of the collection/transmission system project, and before placing the facilities into operation for any purpose other than testing for leaks or testing equipment operation, the permittee shall submit to the Department FDEP Form 62-604.300(8)(b), Request for Approval to Place a Domestic Wastewater Collection/Transmission System into Operation. This form is available at the Department's Internet site at: http://www.dep.state.fl.us/water/wastewater/forms.htm [62-604.700(2)]
- 6. The new or modified collection/transmission facilities shall not be placed into service until the Department clears the project for use. [62-604.700(3)]
- 7. Abnormal events shall be reported to the Department's in accordance with Rule 62-604.550, F.A.C. For unauthorized spills of wastewater in excess of 1000 gallons per incident, or where information indicates that public health or the environment may be endangered, oral reports shall be provided to the STATE WATCH OFFICE TOLL FREE NUMBER (800) 320-0519 as soon as practical, but no later than 24 hours from the time the permittee or other designee becomes aware of the circumstances. Unauthorized releases or spills less than 1000 gallons per incident are to be reported orally to the Department within 24 hours from the time the permittee, or other designee becomes aware of the circumstances. [62-604.550]

Palm Beach County Ordinance No. 97-58 Requirements

- PBC 1.It shall be the responsibility of the permittee to retain a professional engineer, registered in Florida, to observe that the construction is in accordance with the submitted plans.
- PBC 2. This permit does not include construction of any conflict manholes. The construction shall be strictly in accordance with the "Standard Water and Sewer Separation Statement" and other design specifications noted on the engineering plans. If field conditions require deviations from the proposed design, the project engineer shall consult with the Department prior to construction.
- PBC 3.Prior to construction, all required permits or approvals must be obtained for all aspects of the project from the appropriate agencies.
- PBC 4.Applications for abandonment of all septic systems serving this property must be submitted prior to final approval for use.



Florida Department of Environmental Protection

Bob Martinez Center, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

NOTIFICATION/APPLICATION FOR CONSTRUCTING A DOMESTIC WASTEWATER COLLECTION/TRANSMISSION SYSTEM

PART I - GENERAL

Subpart A: Permit Application Type

| Permit Application Type (mark one only) | EDUs Served | Application Fee* | "X" |
|---|--------------------|------------------|-------------|
| Are you applying for an individual permit for a domestic wastewater collection/transmission system? Note: an EDU is equal to 3.5 persons. Criteria for an individual permit are contained in | ≥ 10 | \$500 | |
| Rule 62-604.600(7), F.A.C. | < 10 | \$300 | |
| Is this a Notice of Intent to use the general permit for wastewater collection/transmission systems? Criteria for qualifying for a general permit are contained in Rule 62-604.600(6), F.A.C. Projects not meeting the criteria in Rule 62-604.600(6), F.A.C., must apply for an individual permit. | N/A | \$250 | \boxtimes |

*Note: Each non-contiguous project (i.e., projects that are not interconnected or are not located on adjacent streets or in the same neighborhood) requires a separate application and fee.

Subpart B: Instructions

- (1) This form shall be completed for all domestic wastewater collection/transmission system construction projects as follows:
 - If this is a Notice of Intent to use the general permit, this notification shall be submitted to the Department at least 30 days prior to initiating construction.
 - If this is an application for an individual permit, the permit must be obtained prior to initiating construction.
- One copy of the completed form shall be submitted to the appropriate DEP district office or delegated local program along with the appropriate (2)fee, and one copy of the following supporting documents. Checks should be made payable to the Florida Department of Environmental Protection, or the name of the appropriate delegated local program.
 - If this is a Notice of Intent to use the general permit, attach a site plan or sketch showing the size and approximate location of new or altered gravity sewers, pump stations and force mains; showing the approximate location of manholes and isolation valves; and showing how the proposed project ties into the existing or proposed wastewater facilities. The site plan or sketch shall be signed and sealed by a professional engineer registered in Florida.
 - If this is an application for an individual permit, one set of plans and specifications shall be submitted with this application, or alternatively, an engineering report shall be submitted. Plans and specifications and engineering reports shall be prepared in accordance with the applicable provisions of Chapters 10 and 20 of Recommended Standards for Wastewater Facilities. The plans and specifications or engineering report shall be signed and sealed by a Professional Engineer registered in Florida.
- All information shall be typed or printed in ink. Where attached sheets (or other technical documentation) are utilized in lieu of the blank (3) spaces provided, indicate appropriate cross-references on the form. For Items (1) through (4) of Part II of this application form, if an item is not applicable to your project, indicate "NA" in the appropriate space provided,



JAN 18 2019

Florida Department of Health - PBC Plan Review

DEP Form 62-604.300(8)(a) Effective November 6, 2003 Northwest District

160 Government Street
Suite 308
Pensacola, Florida 32502-5740

850-595-8300

PART II - PROJECT DOCUMENTATION

| (1) Collection/Trans | smission System Pe | rmittee | | | | |
|---|--------------------------|----------------------------|--------------------------------------|-------------------------|---|--|
| Name: D. Albrey Arr | ington, Ph.D. | | Title: Executive D | Director | | |
| Company Name: Lo | oxahatchee River Dis | trict | | | | |
| Address: 2500 Jupit | er Park Drive | | | | | |
| City: Jupiter | | | State: FL | | Zip: | 33458 |
| Telephone: 561-747 | 7-5700 | Fax: 561-747-99 | Email: | albrey.arrington@ | loxahatcheeriver.org | |
| (2) General Project | Information | | | | | |
| Project Name: 181S | st Street Neighborhoo | d Gravity Sewer Sy | stem | | | |
| Location: County: | Palm Beach | City: Jupiter | Section | : 34 Town | nship: 40 | Range: 42 |
| Project Description ar | nd Purpose (including | pipe length, range | of pipe diameter, total | l number of manho | oles, and total number | r of pump stations): |
| This project is to insta family homes. | all 1,200 feet of 8 inch | n SDR-26 Gravity M | lain from an existing s | sewer system with | 11(Eleven) sewer co | nnections to single |
| Estimated date for: Connections to exist | | | | etion of construct | tion: September 201 | 9 |
| (3) Project Capacity | | | | | | |
| A = Type of Unit | B = Number of Units | C = Population per Unit | D = Total Population (Columns B x C) | E = Per Capital Flow | F = Total Avera Daily Flow (Columns D x l | hour flow |
| Single-Family Home: Mobile Home: | 11 | 2.5 | 27.5 | 100 | 2,750 Gals | 481.25 GPH |
| Apartment: Commercial, Institution or Industrial Facility*: | , | | | | | |
| Total: | | | 27.5 | | 2,750 Gals | 481.25 GPH |
| * Description of comn 4) Pump Station Da | | | | f method used to e | stimate per capita flo | w for these facilities: |
| | | Estimate | d Flow to the Statio | n (GPD) | | |
| Location | Туре | Maximu | ım Ave | erage | | Operating Conditions [GPM @ FT (TDH)] |
| | | | | | | |
| | | | | | | |
| (5) Collection/Trans | mission System De | sign Information | | | | |

A. This information must be completed for all projects by the applicant's professional engineer, and if applicable, those professional engineers in other disciplines who assisted with the design of the project.

If this project has been designed to comply with the standards and criteria listed below, the engineer shall initial in ink before the standards or criteria. If any of the standards or criteria do not apply to this project or if this project has not been designed to comply with the standards or criteria, mark "X" before the appropriate standard or criteria and provide an explanation, including any applicable rule references, in (5)B. below.

Note, if the project has not been designed in accordance with the standards and criteria set forth in Rules 62-604.400(1) and (2), F.A.C., an application for an individual permit shall be submitted. However, if Rules 62-604.400(1) and (2), F.A.C., specifically allow for another alternative that will result in an equivalent level of reliability and public health protection, the project can be constructed using the general permit.

General Requirements



1. The project is designed based on an average daily flow of 100 gallons per capita plus wastewater flow from industrial plants and major institutional and commercial facilities unless water use data or other justification is used to better estimate the flow. The design includes an appropriate peaking factor, which covers I/I contributions and non-wastewater connections to those service lines. [RSWF 11.243]



Procedures are specified for operation of the collection/transmission system during construction. [RSWF 20.15]



The project is designed to be located on public right-of-ways, land owned by the permittee, or easements and to be located no closer than 100 feet from a public drinking water supply well and no closer than 75 feet from a private drinking water supply well; or documentation is provided in Part II.(5)B., showing that another alternative will result in an equivalent level of reliability and public health protection. [62-604.400(1)(b) and (c), F.A.C.]



The project is designed with no physical connections between a public or private potable water supply system and a sewer or force main and with no water pipes passing through or coming into contact with any part of a sewer manhole. [RSFW 38.1 and 48.5]



5. The project is designed to preclude the deliberate introduction of storm water, surface water, groundwater, roof runoff, subsurface drainage, swimming pool drainage, air conditioning system condensate water, non-contact cooling water except as provided by Rule 62-610.668(1), F.A.C., and sources of uncontaminated wastewater, except to augment the supply of reclaimed water in accordance with Rule 62-610.472(3)(c), F.A.C. [62-604.400(1)(d), F.A.C.]



The project is designed so that all new or relocated, buried sewers and force mains, are located in accordance with the separation requirements from water mains and reclaimed water lines of Rules 62-604.400(2)(g)(h) and (i) and (3), F.A.C. Note, if the criteria of Rules 62-604.400(2)(g) 4. or (2)(i) 3., F.A.C., are used, describe in Part II.C. alternative construction features that will be provided to afford a similar level of reliability and public health protection. [62-604.400(2)(g), (h), and (i) and (3), F.A.C.]

Gravity Sewers



7. The project is designed with no public gravity sewer conveying raw wastewater less than 8 inches in diameter. [RSWF 33.17



The design considers buoyancy of sewers, and appropriate construction techniques are specified to prevent flotation of the pipe where high groundwater conditions are anticipated. [RSWF 33.3]



All sewers are designed with slopes to give mean velocities, when flowing full, of not less than 2.0 feet per second, based on Manning's formula using an "n" value of 0.013; or if it is not practicable to maintain these minimum slopes and the depth of flow will be 0.3 of the diameter or greater for design average flow, the owner of the system has been notified that additional sewer maintenance will be required. The pipe diameter and slope are selected to obtain the greatest practical velocities to minimize solids deposition problems. Oversized sewers are not specified to justify flatter slopes. [RSWF 33.41, 33.42, and 33.43]



10. Sewers are designed with uniform slope between manholes. [RWSF 33.44]



11. Where velocities greater than 15 fps are designed, provisions to protect against displacement by erosion and impact are specified. [RSWF 33.45]



12. Sewers on 20% slopes or greater are designed to be anchored securely with concrete, or equal, anchors spaced as follows: not over 36 feet center to center on grades 20% and up to 35%; not over 24 feet center to center on grades 35% and up to 50%; and not over 16 feet center to center on grades 50% and over. [RSWF 33.46]

13. Sewers 24 inches or less are designed with straight alignment between manholes. Where curvilinear sewers are proposed for sewers greater than 24 inches, the design specifies compression joints; ASTM or specific pipe manufacturer's maximum allowable pipe joint deflection limits are not exceeded; and curvilinear sewers are limited to simple curves which start and end at manholes. [RSWF 33.5] 14. Suitable couplings complying with ASTM specifications are required for joining dissimilar materials. [RSWF 33.7] 15. Sewers are designed to prevent damage from superimposed loads. [RSWF 33.7] 16. Appropriate specifications for the pipe and methods of bedding and backfilling are provided so as not to damage the pipe or its joints, impede cleaning operations and future tapping, nor create excessive side fill pressures and ovalation of the pipe, nor seriously impair flow capacity. [RSWF 33.81] 17. Appropriate deflection tests are specified for all flexible pipe. Testing is required after the final backfill has been in place at least 30 days to permit stabilization of the soil-pipe system. Testing requirements specify: 1) no pipe shall exceed a deflection of 5%; 2) using a rigid ball or mandrel for the deflection test with a diameter not less than 95% of the base inside diameter or average inside diameter of the pipe, depending on which is specified in the ASTM specification, including the appendix, to which the pipe is manufactured; and 3) performing the test without mechanical pulling devices. **[RSWF 33.85]** 18. Leakage tests are specified requiring that: 1) the leakage exfiltration or infiltration does not exceed 200 gallons per inch of pipe diameter per mile per day for any section of the system; 2) exfiltration or infiltration tests be performed with a minimum positive head of 2 feet; and 3) air tests, as a minimum, conform to the test procedure described in ASTM C-828 for clay pipe, ASTM C 924 for concrete pipe, ASTM F-1417 for plastic pipe, and for other materials appropriate test procedures. [RSWF 33.93, 33.94, and 33.95] 19. If an inverted siphon is proposed, documentation of its need is provided in Part II.C. Inverted siphons are designed with: 1) at least two barrels; 2) a minimum pipe size of 6 inches; 3) necessary appurtenances for maintenance, convenient flushing, and cleaning equipment; and 4) inlet and discharge structures having adequate clearances for cleaning equipment, inspection, and flushing. Design provides sufficient head and appropriate pipe sizes to secure velocities of at least 3.0 fps for design average flows. The inlet and outlet are designed so that the design average flow may be diverted

Manholes

to one barrel, and that either barrel may be cut out of service for cleaning. [RSWF 35]

- 20. The project is designed with manholes at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 400 feet for sewers 15 inches or less and 500 feet for sewers 18 inches to 30 inches, except in the case where adequate modern cleaning equipment is available at distances not greater than 600 feet. [RSWF 34.1]
- 21. Design requires drop pipes to be provided for sewers entering manholes at elevations of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches, the invert is designed with a fillet to prevent solids deposition. Inside drop connections (when necessary) are designed to be secured to the interior wall of the manhole and provide access for cleaning. Design requires the entire outside drop connection be encased in concrete. [RSWF 34.2]
- 22. Manholes are designed with a minimum diameter of 48 inches and a minimum access diameter of 22 inches. [RSWF 34.3]
 - 23. Design requires that a bench be provided on each side of any manhole channel when the pipe diameter(s) are less than the manhole diameter and that no lateral sewer, service connection, or drop manhole pipe discharges onto the surface of the bench. [RSWF 34.5]
- 24. Design requires: 1) manhole lift holes and grade adjustment rings be sealed with non-shrinking mortar or other appropriate material; 2) inlet and outlet pipes be joined to the manhole with a gasketed flexible watertight connection or another watertight connection arrangement that allows differential settlement of the pipe and manhole wall; and 3) watertight manhole covers be used wherever the manhole tops may be flooded by street runoff or high water. [RSWF 34.6]
- 25. Manhole inspection and testing for watertightness or damage prior to placing into service are specified. Air testing, if specified for concrete sewer manholes, conforms to the test procedures described in ASTM C-1244. [RSWF 34.7]

| K | > 26. | . Electrical equipment specified for use in manholes is consistent with Item 46 of this checklist. [RSWF 34.9] | | | |
|----------|-----------------|--|--|--|--|
| | | Stream Crossings | | | |
| X | 27. | Sewers and force mains entering or crossing streams are designed to be constructed of ductile iron pipe with mechanical joints or so they will remain watertight and free from changes in alignment or grade. Appropriate materials which will not readily erode, cause siltation, damage pipe during placement, or corrode the pipe are specified to backfill the trench. [RSWF 36.21 and 48.5] | | | |
| X | 28. | Stream crossings are designed to incorporate valves or other flow regulating devices (which may include pump station on the shoreline or at such distances form the shoreline to prevent discharge in the event the line is damaged. [62-604.400(2)(k)5., F.A.C.] | | | |
| X | 29. | Sewers and force mains entering or crossing streams are designed at a sufficient depth below the natural bottom of the stream bed to protect the line. At a minimum, the project is designed with subaqueous lines to be buried at least three feet below the design or actual bottom, whichever is deeper, of a canal and other dredged waterway or the natural bottom of streams, rivers, estuaries, bays, and other natural water bodies; or if it is not practicable to design the project with less than three-foot minimum cover, alternative construction features (e.g. a concrete cap, sleeve, or some other properly engineered device to insure adequate protection of the line) are described in Part II.C. [62-604.400(2)(k)1., F.A.C., and RSWF 36.11] | | | |
| X | 30. | Specifications require permanent warning signs be placed on the banks of canals, streams, and rivers clearly identifying the nature and location (including depths below design or natural bottom) of subaqueous crossings and suitably fixed signs be placed at the shore, for subaqueous crossings of lakes, bays, and other large bodies of water, and in any area where anchoring is normally expected. [62-604.400(2)(k)2., F.A.C.] | | | |
| X | 31. | Provisions for testing the integrity of subaqueous lines are specified. [62-604.400(2)(k)4., F.A.C.] | | | |
| X | 32. | Supports are designed for all joints in pipes utilized for aerial crossings and to prevent overturning and settlement. Expansion jointing is specified between above ground and below ground sewers and force mains. The design considers the impact of floodwaters and debris. [RSWF 37 and 48.5] | | | |
| X | 33. | Aerial crossings are designed to maintain existing or required navigational capabilities within the waterway and to riparian rights of adjacent property owners. [62-604.400(2)(k)3., F.A.C.] | | | |
| | | Pump Stations | | | |
| X | 34. | In areas with high water tables, pump stations are designed to withstand flotation forces when empty. When siting the pump station, the design considers the potential for damage or interruption of operation because of flooding. Pump station structures and electrical and mechanical equipment are designed to be protected from physical damage by the 100-year flood. Pump stations are designed to remain fully operational and accessible during the 25-year flood unless lesser flood levels are appropriate based on local considerations, but not less than the 10-year flood. [62-604.400(2)(e), F.A.C.] | | | |
| X | 35. | Pump stations are designed to be readily accessible by maintenance vehicles during all weather conditions. [RSWF 41.2] | | | |
| X | | Wet well and pump station piping is designed to avoid operational problems from the accumulation of grit. [RSWF 41.3] | | | |
| <u>x</u> | | Dry wells, including their superstructure, are designed to be completely separated from the wet well. Common walls are designed to be gas tight. [RSWF 42.21] | | | |
| X | 38. | The design includes provisions to facilitate removing pumps, motors, and other mechanical and electrical equipment. [RSWF 42.22] | | | |

* * = = 4 - 1

39. The design includes provisions for: 1) suitable and safe means of access for persons wearing self-contained breathing apparatus are provided to dry wells, and to wet wells; 2) stairway access to wet wells more than 4 feet deep containing either bar screens or mechanical equipment requiring inspection or maintenance; 3) for built-in-place pump stations, a stairway to the dry well with rest landings at vertical intervals not to exceed 12 feet; 4) for factory-built pump stations over 15 feet deep, a rigidly fixed landing at vertical intervals not to exceed 10 feet unless a manlift or elevator is provided; and 5) where a landing is used, a suitable and rigidly fixed barrier to prevent an individual from falling past the intermediate landing to a lower level. If a manlift or elevator is provided, emergency access is included in the design. [RSWF 42.23] 40. Specified construction materials are appropriate under conditions of exposure to hydrogen sulfide and other corrosive gases, greases, oils, and other constituents frequently present in wastewater. [RSWF 42.25] 41. Except for low-pressure grinder or STEP systems, multiple pumps are specified, and each pump has an individual intake. Where only two units are specified, they are of the same size. Specified units have capacity such that, with any unit out of service, the remaining units will have capacity to handle the design peak hourly flow. [RSWF 42.31 and 42.36] 42. Bar racks are specified for pumps handling wastewater from 30 inch or larger diameter sewers. Where a bar rack is specified, a mechanical hoist is also provided. The design includes provisions for appropriate protection from clogging for small pump stations. [RSWF 42.322] 43. Pumps handling raw wastewater are designed to pass spheres of at least 3 inches in diameter. Pump suction and discharge openings are designed to be at least 4 inches in diameter. [RSWF 42.33] (Note, this provision is not applicable to grinder pumps.) 44. The design requires pumps be placed such that under normal operating conditions they will operate under a positive suction head, unless pumps are suction-lift pumps. [RSWF 42.34] 45. The design requires: 1) pump stations be protected from lightning and transient voltage surges; and 2) pump stations be equipped with lighting arrestors, surge capacitors, or other similar protection devices and phase protection. Note, pump stations serving a single building are not required to provide surge protection devices if not necessary to protect the pump station. [62-604.400(2)(b), F.A.C.] 46. The design requires 1) electrical systems and components (e.g., motors, lights, cables, conduits, switch boxes, control circuits, etc.) in raw wastewater wet wells, or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors may be present, comply with the National Electrical Code requirements for Class I Group D, Division 1 locations; 2) electrical equipment located in wet wells be suitable for use under corrosive conditions; 3) each flexible cable be provided with a watertight seal and separate strain relief; 4) a fused disconnect switch located above ground be provided for the main power feed for all pump stations; 5) electrical equipment exposed to weather to meet the requirements of weatherproof equipment NEMA 3R or 4; 6) a 110 volt power receptacle to facilitate maintenance be provided inside the control panel for pump stations that have control panels outdoors; and 7) ground fault interruption protection be provided for all outdoor outlets. [RSWF 42.35] 47. The design requires a sump pump equipped with dual check valves be provided in dry wells to remove leakage or drainage with discharge above the maximum high water level of the wet well. [RSWF 42.37] 48. Pump station design capacities are based on the peak hourly flow and are adequate to maintain a minimum velocity of 2 feet per second in the force main. [RSWF 42.38] 49. The design includes provisions to automatically alternate the pumps in use. [RSWF 42.4] 50. The design requires: 1) suitable shutoff valves be placed on the suction line of dry pit pumps; 2) suitable shutoff and check valves be placed on the discharge line of each pump (except on screw pumps); 3) a check valve be located between the shutoff valve and the pump; 4) check valves be suitable for the material being handled; 5) check valves be placed on the horizontal portion of discharge piping (except for ball checks, which may be placed in the vertical run); 6) all valves be capable of withstanding normal pressure and water hammer; and 7) all shutoff and check valves be operable from the floor level and accessible for maintenance. [RSWF 42.5] 51. The effective volume of wet wells is based on design average flows and a filling time not to exceed 30 minutes unless the facility is designed to provide flow equalization. The pump manufacturer's duty cycle recommendations were utilized in selecting the minimum cycle time. [RSWF 42.62] 52. The design requires wet well floors have a minimum slope of 1 to 1 to the hopper bottom and the horizontal area of hopper bottoms be no greater than necessary for proper installation and function of the inlet. [RSWF 42.63]

| X | _ 53. | . For covered wet wells, the design provides for air displacement to the atmosphere, such as an inverted "j" tube or other means. [RSWF 42.64] | | | | |
|---|-------|--|--|--|--|--|
| X | _ 54. | The design provides for adequate ventilation all pump stations; mechanical ventilation where the dry well is below the ground surface; permanently installed ventilation if screens or mechanical equipment requiring maintenance or inspection are located in the wet well. Pump stations are designed with no interconnection between the wet well and dry well ventilation systems. [RSWF 42.71] | | | | |
| X | _ 55. | The design requires all intermittently operated ventilation equipment to be interconnected with the respective pit lighting system and the manual lighting/ventilation switch to override the automatic controls. [RSWF 42.73] | | | | |
| X | _ 56. | . The design requires the fan wheels of ventilation systems be fabricated from non-sparking material and automatic hea and dehumidification equipment be provided in all dry wells. [RSWF 42.74] | | | | |
| X | _ 57. | If wet well ventilation is continuous, design provides for at least 12 complete 100% fresh air changes per hour; if wet well ventilation is intermittent, design provides for at least 30 complete 100% fresh air changes per hour; and design requires air to be forced into wet wells by mechanical means rather than solely exhausted from the wet well. [RSWF 42.75] | | | | |
| X | _ 58. | 3. If dry well ventilation is continuous, design provides at least 6 complete 100% fresh air changes per hour; and dry w ventilation is intermittent, design provides for at least 30 complete 100% fresh air changes per hour, unless a system two speed ventilation with an initial ventilation rate of 30 changes per hour for 10 minutes and automatic switch over changes per hour is used to conserve heat. [RSWF 42.76] | | | | |
| X | 59. | Pump stations are designed and located on the site to minimize adverse effects from odors, noise, and lighting. [62-604.400(2)(c), F.A.C.] | | | | |
| X | 60. | The design requires pump stations be enclosed with a fence or otherwise designed with appropriate features to discourage the entry of animals and unauthorized persons. Posting of an unobstructed sign made of durable weather resistant material at a location visible to the public with a telephone number for a point of contact in case of emergency is specified. [62-604.400(2)(d), F.A.C.] | | | | |
| X | 61. | The design requires suitable devices for measuring wastewater flow at all pump stations. Indicating, totalizing, and recording flow measurement are specified for pump stations with a 1200 gpm or greater design peak flow. [RSWF 42.8] | | | | |
| X | 62. | The project is designed with no physical connections between any potable water supplies and pump stations. If a potable water supply is brought to a station, reduced-pressure principle backflow-prevention assemblies are specified. [RSWF 42.9 and 62-555.30(4), F.A.C.] | | | | |
| V | | Additional Items to be Completed for Suction-Lift Pump Stations | | | | |
| X | 63. | 3. The design requires all suction-lift pumps to be either self-priming or vacuum-priming and the combined total of dynam suction-lift at the "pump off" elevation and required net positive suction head at design operating conditions not to exceed 22 feet. For self-priming pumps, the design requires: 1) pumps be capable of rapid priming and repriming at the "lead pump on" elevation with self-priming and repriming accomplished automatically under design operating condition 2) suction piping not to exceed the size of the pump suction or 25 feet in total length; and 3) priming lift at the "lead pump on" elevation to include a safety factor of at least 4 feet from the maximum allowable priming lift for the specific equipment at design operating conditions. For vacuum-priming pump stations, the design requires dual vacuum pumps capable of automatically and completely removing air from the suction-lift pumps and the vacuum pumps be adequately protected from damage due to wastewater. [RSWF 43.1] | | | | |
| X | 64. | The design requires: 1) suction-lift pump equipment compartments to be above grade or offset and to be effectively isolated from the wet well to prevent a hazardous and corrosive sewer atmosphere from entering the equipment compartment; 2) wet well access not to be through the equipment compartment and to be at least 24 inches in diameter; 3) gasketed replacement plates be provided to cover the opening to the wet well for pump units to be remove for service; and 4) no valving be located in the wet well. [RSWF 43.2] | | | | |

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65. Submersible pumps and motors are designed specifically for raw wastewater use, including totally submerged operation during a portion of each pump cycle and to meet the requirements of the National Electrical Code for such units. Provisions for detecting shaft seal failure or potential seal failure are included in the design. [RSWF 44.1] 66. The design requires submersible pumps be readily removable and replaceable without dewatering the wet well or disconnecting any piping in the wet well. [RSWF 44.2] 67. In submersible pump stations, electrical supply, control, and alarm circuits are designed to provide strain relief; to allow disconnection from outside the wet well; and to protect terminals and connectors from corrosion by location outside the wet well or through use of watertight seals. [RSWF 44.31] 68. In submersible pump stations, the design requires the motor control center to be located outside the wet well, readily accessible, and protected by a conduit seal or other appropriate measures meeting the requirements of the National Electrical Code, to prevent the atmosphere of the wet well from gaining access to the control center. If a seal is specified, the motor can be removed and electrically disconnected without disturbing the seal. The design requires control equipment exposed to weather to meet the requirements of weatherproof equipment NEMA 3R or 4. [RSWF 44.32] 69. In submersible pump stations, the design requires: 1) pump motor power cords be flexible and serviceable under conditions of extra hard usage and to meet the requirements of the National Electrical Code standards for flexible cords in wastewater pump stations; 2) ground fault interruption protection be used to de-energize the circuit in the event of any failure in the electrical integrity of the cable; and 3) power cord terminal fittings be corrosion-resistant and constructed in a manner to prevent the entry of moisture into the cable, provided with strain relief appurtenances, and designed to facilitate field connecting. [RSWF 44,33] 70. In submersible pump stations, the design requires all shut-off and check valves be located in a separate valve pit. Provisions to remove or drain accumulated water from the valve pit are included in the design. [RSWF 44.4] **Emergency Operations for Pump Stations** 71. Pump stations are designed with an alarm system which activates in cases of power failure, sump pump failure, pump failure, unauthorized entry, or any cause of pump station malfunction. Pump station alarms are designed to be telemetered to a facility that is manned 24 hours a day. If such a facility is not available and a 24-hour holding capacity is not provided, the alarm is designed to be telemetered to utility offices during normal working hours and to the home of the responsible person(s) in charge of the lift station during off-duty hours. Note, if an audio-visual alarm system with a self-contained power supply is provided in lieu of a telemetered system, documentation is provided in Part II.C. showing an equivalent level of reliability and public health protection. [RSWF 45] 72. The design requires emergency pumping capability be provided for all pump stations. For pump stations that receive flow from one or more pump stations through a force main or pump stations discharging through pipes 12 inches or larger, the design requires uninterrupted pumping capability be provided, including an in-place emergency generator. Where portable pumping and/or generating equipment or manual transfer is used, the design includes sufficient storage capacity with an alarm system to allow time for detection of pump station failure and transportation and connection of emergency equipment. [62-604.400(2)(a)1. and 2., F.A.C., and RSWF 46.423 and 46.433] 73. The design requires: 1) emergency standby systems to have sufficient capacity to start up and maintain the total rated running capacity of the station, including lighting, ventilation, and other auxiliary equipment necessary for safety and proper operation; 2) special sequencing controls be provided to start pump motors unless the generating equipment has capacity to start all pumps simultaneously with auxiliary equipment operating; 3) a riser from the force main with rapid connection capabilities and appropriate valving be provided for all pump stations to hook up portable pumps; and 4) all pump station reliability design features be compatible with the available temporary service power generating and pumping equipment of the authority responsible for operation and maintenance of the collection/transmission system. [62-604.400(2)(a)3., F.A.C., and RSWF 46.431] 74. The design provides for emergency equipment to be protected from operation conditions that would result in damage to

Additional Items to be Completed for Submersible Pump Stations

the equipment and from damage at the restoration of regular electrical power. [RSWF 46.411, 46.417, and 46.432]

| X | _ 75. | For permanently-installed internal combustion engines, underground fuel storage and piping facilities are designed in accordance with applicable state and federal regulations; and the design requires engines to be located above grade with adequate ventilation of fuel vapors and exhaust gases. [RSWF 46.414 and 46.415] |
|---|--|--|
| X | _ 76. | For permanently-installed or portable engine-driven pumps are used, the design includes provisions for manual start-up. [RSWF 46.422] |
| X | ₋ 77. | Where independent substations are used for emergency power, each separate substation and its associated transmission lines is designed to be capable of starting and operating the pump station at its rated capacity. [RSWF 46.44] |
| | | Force Mains |
| X | 78. | Force mains are designed to maintain, at design pumping rates, a cleansing velocity of at least 2 feet per second. The minimum force main diameter specified for raw wastewater is not less than 4 inches. [RSWF 48.1] |
| X | ₋ 79. | The design requires: 1) branches of intersecting force mains be provided with appropriate valves such that one branch may be shut down for maintenance and repair without interrupting the flow of other branches; and 2) stubouts on force mains, placed in anticipation of future connections, be equipped with a valve to allow such connection without interruption of service. [62-604.400(2)(f), F.A.C.] |
| X | 80. | The design requires air relief valves be placed at high points in the force main to prevent air locking. [RSWF 48.2] |
| X | 81. | Specified force main pipe and joints are equal to water main strength materials suitable for design conditions. The force main, reaction blocking, and station piping are designed to withstand water hammer pressures and stresses associated with the cycling of wastewater pump stations. [RSWF 48.4] |
| X | 82. | When the Hazen and Williams formula is used to calculate friction losses through force mains, the value for "C" is 100 for unlined iron or steel pipe for design. For other smooth pipe materials, such as PVC, polyethylene, lined ductile iron, the value for C does not exceed 120 for design. [RSWF 48.61] |
| x | 83. | Where force mains are constructed of material, which might cause the force main to be confused with potable water mains, specifications require the force main to be clearly identified. [RSWF 48.7] |
| X | 84. | Leakage tests for force mains are specified including testing methods and leakage limits. [RSWF 48.8] |
| *RSWF | = Rec | ommended Standards for Wastewater Facilities (1997) as adopted by rule 62-604.300(5)(c), F.A.C. |
| | | n for Requirements or Standards Marked "X" in II(5)A. Above (Attach additional sheets if necessary): ked "X" are not applicable to this project. |
| (1) Co | llectio | PART III - CERTIFICATIONS on/Transmission System Permittee |
| am beli prej ope Flor into | fully a ef. I a pare a ration rida to service med: | ersigned owner or authorized representative* of Loxahatchee River District aware that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and agree to retain the design engineer or another professional engineer registered in Florida, to conduct on-site observation of construction, to certification of completion of construction, and to review record drawings for adequacy. Further, I agree to provide an appropriate and maintenance manual for the facilities pursuant to Rule 62-604.500(4), F.A.C., and to retain a professional engineer registered in examine (or to prepare if desired) the manual. I am fully aware that Department approval must be obtained before this project is placed the for any purpose other than testing for leaks and testing equipment operation. Date: Date: Title: Executive Director |
| Na | me: | D. Albrey Arrington, PM.D. Title: Executive Director |

*Attach a letter of authorization.

| (2) | Owner of Collection/Transmission System |
|-----|--|
| | I, the undersigned owner or authorized representative* of Loxahatchee River District certify that we will be the Owner of this project after it is placed into service. I agree that we will operate and maintain this project in a manner that will comply with applicable Department rules. Also I agree that we will promptly notify the Department if we sell or legally transfer ownership of this project. |
| | Signed Name D. Afbrey Arrington, Ph.D. Title Executive Director Company Name Loxahatchee River District |
| | Address 2500 Jupiter Park Drive |
| | City Jupiter State FI Zip 33458 |
| | Telephone 561 747-5700 Fax 561 747-9929 Email albrey.arrington@loxahatcheeriver.org |
| | * Attach a letter of authorization. |
| (3) | Wastewater Facility Serving Collection/Transmission System** |
| | If this is a Notice of Intent to use a general permit, check here: |
| | The undersigned owner or authorized representative* of the hereby certifies that the above referenced facility has the capacity to receive the wastewater generated by the proposed collection system; is in compliance with the capacity analysis report requirements of Rule 62-600.405, F.A.C.; is not under a Department order associated with effluent violations or the ability to treat wastewater adequately; and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules. |
| | If this is an application for an individual permit, check one: |
| | The undersigned owner or authorized representative* of the hereby certifies that the above referenced facility has and will have adequate reserve capacity to accept the flow from this project and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules. |
| | The undersigned owner or authorized representative* of the hereby certifies that the above referenced facility currently does not have, but will have prior to placing the proposed project into operation, adequate reserve capacity to accept the flow from this project and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules. |
| | Name of Treatment Plant Serving Project Loxahatchee River District WWTF |
| | County Palm Beach City Jupiter |
| | DEP permit number FL 0034649 Expiration Date December 12, 2018 |
| | Maximum monthly average daily flow over the last 12 month period 7.14 MGD Month(s) used 11/2017 |
| | Maximum three-month average daily flow over the last 12 month period 7.05 MGD Month(s) used 1-3/18 |
| | Current permitted capacity 11.00 MGD XAADF MADF TMADF Current outstanding flow commitments (including this project) against treatment plant capacity: |
| | O.239 Signed Date 12319 Name WAlbrey Arrington, Ph.D. Title Executive Director |
| | Address 2500 Jupiter Park Prive |
| | City Jupiter State FI Zip 33458 |
| | Telephone 561 747-5700 Fax 561 747-9929 Email albrey.arrington@loxahatcheeriver.org |
| | * Attach a letter of authorization. |
| l. | ** If there is an intermediate collection system, a letter shall be attached certifying that the intermediate downstream collection system has adequate reserve capacity to accept the flow from this project. |



Florida Department of Health - PBC Plan Review

(4) Professional Engineer Registered in Florida

I, the undersigned professional engineer registered in Florida, certify that I am in responsible charge of the preparation and production of engineering documents for this project; that plans and specifications for this project have been completed; that I have expertise in the design of wastewater collection/transmission systems; and that, to the best of my knowledge and belief, the engineering design for this project complies with the requirements of Chapter 62-604, F.A.C.

| Name: Kris Dean, P.E. Company Name: Loxahat Address: 2500 Jupiter Par | | Florida Registration | No 72334 Signed: Date: STATE OF STORAGE No: 72534 No: 72534 |
|---|-------------------|----------------------|---|
| City: Jupiter | | State: FL | Zip: 33458 |
| Telephone: 561-747-5700 | Fax: 561-747-9929 | | |
| | | | (Afffix Seall) Signed: Date: |
| Name: | | Florida Registration | No: |
| Company Name: | | | |
| Address: | | | |
| City: | | State: | Zip: |
| Telephone: | Fax: | Email: | |
| roruon of Project for Wh | ucn Kesponsible: | | (Afflix Seal) Signed: Date: |
| Name: | | Florida Registration | No: |
| Company Name: | | | |
| Address: | | ~ · · | |
| City: | | State: | Zin: |
| Telephone: | Fax: | Email: | |
| Portion of Project for Wh | ich Responsible: | | |

APPENDIX B

Palm Beach County Land Development Permit

PALM BEACH COUNTY LAND DEVELOPMENT DIVISION RIGHT-OF-WAY CONSTRUCTION - UTILITY PERMIT

PROJECT NAME: 181st Street Neighborhood Gravity Sewer Sys

PERMIT NUMBER: UT51509-1219

PERMITEE NAME: Loxahatchee River Environmental Control Dist

EXPIRATION DATE: 06/23/2020

1 . Improvements approved with this permit may be subject to removal due to Roadway Production's pending projects in the 5 year Road program.

2 . AFTER THE PERMIT CONDITIONS HAVE BEEN ACCEPTED BY THE PERMITTEE/DULY AUTHORIZED AGENT, HE/SHE SHALL CONTACT GRACIELA MCAUSLAND FOR PROJECTS NORTH OF STATE ROAD 80 AND SEAN REILLY FOR PROJECTS SOUTH OF STATE ROAD 80 AT THE PBC TRAFFIC DIVISION (561) 684-4030. THEY WILL DETERMINE IF MAINTENANCE OF TRAFFIC PLAN (FOR VEHICLES AND/OR PEDESTRIANS) IS REQUIRED. IF REQUIRED, THE PLAN SHALL BE SUBMITTED VIA EPERMITTING UNDER THE MAINTENANCE OF TRAFFIC APPLICATION. A MINIMUM OF 2 WEEKS PRIOR TO START OF CONSTRUCTION. THE PERMITTEE/DULY AUTHORIZED AGENT SHALL BE RESPONSIBLE TO HAVE THE PLAN APPROVED PRIOR TO CONSTRUCTION.

WHEN THE PLAN HAS BEEN APPROVED, OR DETERMINED NOT TO BE REQUIRED, THE PERMIT CONTACT SHALL CONTACT CONSTRUCTION COORDINATION DIVISION AT (561) 684-4180, 48 HOURS BEFORE COMMENCEMENT OF WORK FOR A START DATE. (SEE CONDITION NUMBER 1 ON THE BACK OF THIS PERMIT)

- 3 . This condition applies to Advanced Wireless Infrastructure Pole installation permits that exclude the associated underground electric, fiber optics, cables and other types of service conduits required to operate the pole mounted communication system (s). These supporting service lines are required to be permitted by a separate permit (if not included in this approval). "Pole installation only permits" shall not be connected without the supporting underground infrastructure being permitted. Operation without the proper permits will result in the removal of illegally installed components by the permittee and suspension of the Antenna use until properly permitted.
- 4 . The Permittee is required to coordinate with the property's applicable Drainage District for all work proposed or drainage discharge into that District's rights of way or easements.
- 5 . This permit does not include approval of Maintenance of Traffic (MOT). Contact Sean Reilly, Construction Coordinator-Palm Beach County Traffic Division at 561-684-4092.
- 6 . The Permittee has executed an Interlocal Agreement with the County to guarantee proper restoration of the pavement cut(s). Two satisfactory reviews from the PBC Construction Coordination Division shall be obtained by the permittee; one for the initial final field review, the second six months after the initial final field review. Should the Permittee fail to restore the cut within 30 days of written notification, the County may do so and receive reimbursement per Interlocal Agreement No. R 2010-1369
- 7 . Pothole locations must be approved in advance by Construction Coordination. Excessive potholing or potholing in common wheel paths may result in a requirement to mill and resurface of the pavement.

8 . The Permittee shall provide evidence of insurance to the Construction Coordination Division prior to receiving a construction start date, as required by Ordinance No. 2008-006, and as may be amended.

The Certificate Holder shall be:

Palm Beach County Land Development C/O Land Development Division 2300 N. Jog Road West Palm Beach, FL 33411

Under: DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES (Acord 101, additional Remarks Schedule):

The following must be added as Additional Insured for General Liability insurance:

Palm Beach County Board of County Commissioners, Its Employees, Agents and Contractors.

The limits of coverage of insurance required shall be not less than the following:

(a) Worker's Compensation and Employer's Liability Insurance

Worker's Compensation-Florida Statutory Requirements

Employer's Liability - \$100,000 each accident

- \$500,000 disease--policy limit
- \$100,000 disease--each employee
- (b) Comprehensive General Liability

Bodily injury and property damage-

\$1,000,000 each occurrence

\$3,000,000 general aggregate

(c) Automobile Liability

(c) Automobile Elability

Bodily injury and property damage-

\$1,000,000 combined single limit each accident

- 9 . Please note that future roadway construction may require relocation of these facilities at no expense to Palm Beach County.
- 10. Prior to scheduling a final field review with Construction Coordination, the permittee shall submit to the Land Development Division a signed and sealed certification of completion from the Engineer-of-Record for the above work, referencing the permit number and indicating the work was completed in substantial accordance with the approved plans.

If the Permittee is one of the utilities or telecommunication providers that are exempt from requirements associated with Professional Engineers, then a certification of completion letter is still required. The letter is not required to be signed and sealed by a Professional Engineer except in the case where a Professional Engineer is on staff and EOR for the usually exempt project.

- 11. WORK SHALL NOT COMMENCE UNTIL THE PERMITTEE HAS REQUESTED AND RECEIVED APPROVAL FOR A START DATE FROM THE CONSTRUCTION COORDINATION DIVISION AT 561-684-4180.
 - FAILURE TO BEGIN CONSTRUCTION ON THE START DATE WITHOUT 24 HOUR NOTIFICATION WILL RESULT IN A CANCELED PERMIT.
 - IF WORK COMMENCES WITHOUT AN APPROVED START DATE OR ON AN ALTERNATIVE DATE WITHOUT PROPER NOTICE, THIS PERMIT SHALL BE CANCELED.
- 12. All utility structures installed below grade, of any type, in the Palm Beach County right- of- way are required to have traffic bearing tops. This includes all valve boxes, meter boxes, hand holes, splice boxes, storm grates, manhole tops, traffic boxes etc. This requirement applies to structures within the sidewalks, grassed areas and/or pavement.
 - All pull boxes, hand holes, etc., in Palm Beach County Right-of-Way are to be a minimum of Tier 15, (15K design load/ 22.5K Test load) traffic bearing in locations that are subject to occasional traffic. Pull boxes, hand holes, etc., in the roadway (deliberate vehicular traffic applications) are to be a minimum of AASHTO H 20.
- 13. Permittee shall coordinate the proposed installation with the existing utilities in the permitted work area.
- 14. The Permittee is responsible to contact Palm Beach County Department of Environmental Resources Management (561) 233-2400 to obtain any approvals that office may require due to the work proposed by this permit.

CONDITIONS FOR RIGHT-OF-WAY CONSTRUCTION (UTILITIES)

- 1. The Construction Coordination Division shall be contacted 48 hours before commencement of work to establish the start date and establish a timeline when field review(s) of the work are required. Construction shall be done Monday through Friday. Weekend work shall be approved by Construction Coordination 48 hours before Saturday. Plans bearing the approval stamp of the County Engineer and the approved permit shall be at the work site. Work may proceed beyond the permit expiration date if a start date was established and work started prior to the permit expiration date. When work is complete and the engineer's certification of completion has been submitted to the Land Development Division, the permittee/representative/engineer (as applicable) shall schedule a final review with Construction Coordination Division. If a permitted project has been completed but does not require an engineer's certification, the permittee/representative (as applicable) shall submit a letter to the Land Development Division indicating the work is complete and ready for final field review. Land Development will notify the permittee/representative to schedule final field reviews with Construction Coordination.
- 2. The permittee understands and agrees that the rights and privileges herein set out are granted only to the extent of the County's right, title and interest in the land to be entered upon and used by the permittee. THE PERMITTEE WILL AT ALL TIMES ASSUME ALL RISK AND FURTHER WILL INDEMNIFY, DEFEND, AND SAVE HARMLESS PALM BEACH COUNTY FROM AND AGAINST ALL LOSS, DAMAGE, COST OR EXPENSE ARISING IN ANY MANNER (INCLUDING ALL LITIGATION COSTS AND ATTORNEY FEES), ON ACCOUNT OF THE EXERCISE OR ATTEMPTED EXERCISE BY SAID PERMITTEE OF THE AFORESAID RIGHTS AND PRIVILEGES REGARDLESS OF THE APPORTIONMENT OF NEGLIGENCE OF THE PARTIES INVOLVED. THE PERMIT HOLDER, THEREFORE, AGREES TO INDEMNIFY THE COUNTY FOR THE COUNTY'S OWN NEGLIGENCE. It is specifically understood that the limits of this indemnification are the COUNTY'S statutory liability limits under Section 768.28, Florida Statute, or any successor legislation in effect at the issuance of said permit. The existing statutory limits under 768.28, Florida Statute are hereby recognized as the Statue ("Construction Contracts") should that statute be deemed to apply.
- 2a. The following condition is applicable when the permittee is a governmental agency: That Agency shall indemnify, defend and hold County harmless against any actions, claims or damages arising out of Agency's negligence and Agency's exercise of the rights granted by this Agreement to the extent permitted by law. The foregoing indemnification shall not constitute a waiver of sovereign immunity beyond the limits set forth in Section 768.28, Florida Statutes, nor shall the same be construed to constitute an agreement by Agency to indemnify County of County's negligence.
- 3. Permittee assumes full responsibility to maintain all areas under construction safe for the public and to properly route and direct traffic through the construction area. All traffic control operations shall be done in accordance with the current Manual on Uniform Traffic Control Devices (Part VI). Supplements to this manual are the Florida Department of Transportation's Roadway and Traffic Design Standards (Index 600) and Standard Specifications for Road and Bridge Construction (latest edition). No obstruction of the travel lanes between 7 a.m. to 9 a.m. and 3 p.m. to 6 p.m. Monday thru Friday, unless approved by the Palm Beach County Traffic Engineering Division. No time restrictions for local and subdivision roads, or for construction done Saturday or Sunday.
- 4. Florida Statute 336.048 Temporary closing traveling lane of road: Whenever any road on the county road or city street system is repaired, reconstructed, or otherwise altered in a manner that necessitates the closing of one or more traveling lanes of the road for a period of time exceeding 2 hours, the party performing such work shall give notice to the appropriate local law enforcement agency within whose jurisdiction such road is located prior to commencing work on the project. However, when the closing of one or more lanes is required because of emergency conditions, such notice shall be waived.
- 5. Permittee hereby acknowledges the COUNTY'S right to inspect the area governed by this permit at any time prior to final acceptance by the COUNTY to assure compliance with all plans and specifications. All reviews, however, shall be performed at the COUNTY'S discretion and are strictly to assure compliance with project plans and specifications. PERMITTEE HEREBY ACKNOWLEDGES THAT THE COUNTY VIA SAID REVIEWS IS NOT THE EMPLOYER, SUPERVISOR, PRINCIPAL OR AGENT OF PERMITTEE. Permittee is at all times an independent contractor with full responsibility for all obligations and responsibilities imposed under this permit and imposed by law.
- 6. If a County maintained Thoroughfare Plan Road is open cut, the procedures in Land Development Division PPM EL-O-3605, including Form 3605.1 (Open Cut Restoration for Thoroughfare Plan Roads) shall be adhered to. If a Non-Thoroughfare Plan Road is open cut, Land Development Division PPM EL-O-3606, including Form 3606.1 (Open Cut Restoration for Non-Thoroughfare Plan Roads) shall be adhered to.
- 6a. If an asphalt driveway is cut and patched, the entire driveway shall be overlaid with a minimum one inch of asphalt, or entirely replaced. If a concrete driveway is cut, it shall be entirely replaced. Replacement area is from the intersecting road to the property line.
- 7. All areas in the right-of-way shall be left in a condition equal to or better than existed prior to construction. Shoulders disturbed within 8 feet of the edge of pavement shall be stabilized a minimum 50 PSI Florida Bearing Value, 6 inches in depth. Existing drainage shall not be impeded. Sidewalk areas disturbed during construction shall be maintained until repaved. Prior to or concurrent with final review, the permittee shall submit to the Construction Coordination Division copies of density reports done by an independent testing laboratory. If the construction should fail within one year from the date of final review by the

Construction Coordination Division, the permittee is responsible for restoration.

- 8. The permittee certifies notification has or will be given at least 48 hours (excluding Saturday, Sundays and legal holidays) prior to starting excavation, to anyone having the right to bury gas pipe line within the public or private street, alley, right-of-way or gas utility easement for purposes of obtaining information concerning the possible location of gas pipe lines in the area of proposed excavation.
- 9. The permitted work shall be coordinated with any Utility or Cable TV facilities in the area of construction.
- 10. The permittee/developer shall provide and install pavement markings (thermoplastic, unless approved otherwise by the Palm Beach County Traffic Engineer), and reflective pavement markers in accordance with Palm Beach County Traffic Division's latest Typicals for Pavement Markings, Signing and Geometrics.
- 11. If traffic signalization equipment is in the area of construction, notify Palm Beach County Traffic Operations at (561) 233-3900. Do not disturb any material within six feet of a traffic signal pole or a guy wire and anchor. If damage to the equipment occurs during construction, it shall be repaired by Traffic Operations at the permittee's expense.
- 12. Provide a minimum cover of 36 inches in the right-of-way of <u>Thoroughfare Plan Roads</u> and a minimum of 30 inches for all others.

 Maintain a minimum clearance of 12 inches over or under drainage facilities.
- 13. When plastic pipe is permitted for boring, it shall meet the standards as set forth in the latest Florida Department of Transportation Design Standards.
- 14. If previously approved construction is underway in the same location as indicated on this permit, the permittee shall obtain permission to work from the contractor doing the underway construction. If not granted, the construction under this permit shall not be done until the underway construction is finaled by the Palm Beach County Construction Coordination Division.