

**INVITATION FOR BID  
(IFB) #12-1310-OV  
SWWRF LAKE FILTRATION SYSTEM AND NORTH POND  
IMPROVEMENTS, BRADENTON, FL  
MANATEE COUNTY PROJECT NO.: 6079180**

Manatee County, a political subdivision of the State of Florida, (hereinafter the "County") will receive sealed bids from individuals, corporations, partnerships, and other legal entities organized under the laws of the State of Florida or authorized to conduct business in the State of Florida.

**NON-MANDATORY INFORMATION CONFERENCE**

In order to insure that all prospective bidders have sufficient information and understanding of the County's needs, an **Information Conference** will be held **April 30, 2012 @10:30 AM. Location: Manatee County Southwest Water Reclamation Facility, 5101 65<sup>th</sup> Street West, Bradenton, FL 34210.** Attendance is not mandatory, but is highly encouraged.

**An inspection of the project site will immediately follow the Information Conference. (Reference B.04, Site Visitation).**

**DEADLINE FOR CLARIFICATION REQUESTS: May 11, 2012**  
(Reference Bid Article A.06)

**TIME AND DATE DUE: May 23, 2012 @ 2:00 PM**  
Manatee County Purchasing, 1112 Manatee Avenue West, Bradenton, FL 34205

**Funding for this project provided by:**

- **Recovery Zone Economic Development Bonds Act**  
(RZEDBs) are subject to the Prevailing Minimum Wage, Davis-Bacon Act. For this Contract, payment of predetermined minimum wages applies. The U.S. Department of Labor Wage Rates applicable to this Contract is listed in **Wage Decision Number (s) FL 120165 (04/06/2012 – FL 165) Construction Type: Heavy Construction, Manatee County, Florida,** as modified up through ten (10) days prior to the opening of bids. A copy of the Wage Decision Number (s) FL120165 is made a part of this bidding document; and

- **Utility Rates and Reserves**

**FOR INFORMATION CONTACT: Olga Valcich (941) 749-3055  
email: [olga.valcich@mymanatee.org](mailto:olga.valcich@mymanatee.org)**

AUTHORIZED FOR RELEASE 



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Technical Specifications, dated February 2012 including Geotechnical Report for Perico Preserve and Manatee County Site .....	803 Total Pages Attached

**Important Note:** Lobbying is prohibited (reference Bid Article A.08)

**FOR INFORMATION CONTACT**  
**Olga Valcich (941) 749-3055**  
**Email: [olga.valcich@mymanatee.org](mailto:olga.valcich@mymanatee.org)**



SECTION 00010  
**INFORMATION TO BIDDERS**

**A.01 OPENING LOCATION**

These bids will be **publicly opened** at **Manatee County Purchasing, 1112 Manatee Avenue West, Suite 803, Bradenton, Florida 34205** in the presence of County officials at the time and date stated, or soon thereafter. All bidders or their representatives are invited to be present.

Any bids received after the stated time and date will not be considered. It shall be the sole responsibility of the bidder to have their bid **delivered to the Manatee County Purchasing Division** for receipt on or before the stated time and date. If a bid is sent by **U.S. Mail**, the bidder shall be responsible for its timely delivery to the Purchasing Division. Bids delayed by mail shall not be considered, shall not be opened at the public opening, and arrangements shall be made for their return at the respondent's request and expense.

**A.02 SEALED & MARKED**

**One original and two copies** of your **signed bid** shall be submitted in one **sealed package**, clearly marked on the outside **"Sealed Bid #12-1310-OV / SWWRF Lake Filtration System and North Pond Improvements, Bradenton, FL"** with your company name.

Address package to:       Manatee County Purchasing Division  
                                  1112 Manatee Avenue West, Suite 803  
                                  Bradenton, Florida 34205

**A.03 SECURING OF DOCUMENTS**

Complete individual copies of the bidding documents for the project and/or products can be obtained, free of charge, at the Manatee County Public Works Department located at: 1022 26<sup>th</sup> Avenue East, Bradenton, FL 34208: 941-708-7450, Extension 7327 or 7334 between the hours of 8:00 AM to 4:00 PM, Monday through Friday, exception of holidays. Complete set of the bidding document must be used in preparing bids. The County assumes no responsibility for errors and misinterpretations resulting from the use of incomplete sets of bidding documents.

**A.04 BID DOCUMENTS**

**Bids** on <http://www.mymanatee.org>. Bid documents and the Notices of Source Selection related to those Bids are available for download in a portable document format (.PDF) file on the Manatee County web page on the Purchasing tab under "Bids." You may view and print these files using Adobe Acrobat software. You may download a free copy of this software (Adobe) from the County's web page if you do not have it. **Manatee County collaborates with the Manatee Chamber of Commerce** on distributing solicitations using the RFP Tool web page on the Chambers website: <http://www.Manateechamber.com> to post Bid documents in a portable document

**A.04 BID DOCUMENTS (Continued)**

format (.PDF) file. This step is in addition to the posting on Manatee County Government web pages.

Manatee County may also use an internet service provider to distribute Bids. A link to that service, <http://www.DemandStar.com>, is provided on this website under the Tab "DemandStar". Participation in the DemandStar system is not a requirement for doing business with Manatee County.

Note: The County posts the Notice of Source Selection seven calendar days prior to the effective date of the award.

IT IS THE RESPONSIBILITY OF EACH VENDOR, PRIOR TO SUBMITTING THEIR BID, TO CONTACT THE MANATEE COUNTY PURCHASING OFFICE (see contact information on page one of this document) TO DETERMINE IF ADDENDA WERE ISSUED AND TO MAKE SUCH ADDENDA A PART OF THEIR BID .

**A.05 MODIFICATION OF BID SPECIFICATIONS**

If a bidder wishes to recommend changes to the bid specifications, the bidder shall furnish in writing, data and information necessary to aid the County in evaluating the request to modify the specifications. The County is not obligated to make any changes to the bid specifications. Unless an addendum is issued, the bid specifications shall remain unaltered. **Bidders must fully comply with the bid specifications, terms, and conditions.**

**A.06 DEADLINE FOR CLARIFICATION REQUESTS**

**May 11, 2012 at 5:00 PM** shall be the deadline to submit all inquiries, suggestions, or requests concerning interpretation, clarification or additional information pertaining to the Invitation for Bids to the Manatee County Purchasing Office.

This deadline has been established to maintain fair treatment for all potential bidders, while maintaining the expedited nature of the Economic Stimulus that the contracting of this work may achieve.

**A.07 CLARIFICATION & ADDENDA**

Each bidder shall examine all Invitation for Bids documents and shall judge all matters relating to the adequacy and accuracy of such documents. Any inquiries, suggestions or requests concerning interpretation, clarification or additional information pertaining to the Invitation for Bids shall be made through the Manatee County Purchasing Office. The County shall not be responsible for oral interpretations given by any County employee, representative, or others. The issuance of a written addendum is the only official method whereby interpretation, clarification or additional information can be given. If any addenda are issued to this Invitation for Bid, the County will Broadcast the addenda on the Demand Star distribution system to "Planholders" on this web service, and post the documents on the Purchasing Division's web page at <http://www.mymanatee.org> which may be accessed by clicking on the Purchasing button and then clicking on the "Bids" button. **It shall be the responsibility of each bidder**

**A.07 CLARIFICATION & ADDENDA (Continued)**

prior to submitting their bid, to contact Manatee County Purchasing (see contact on page 1) to determine if addenda were issued and to make such addenda a part of their bid.

**A.08 LOBBYING**

After the issuance of any Invitation For Bid, prospective bidders, or any agent, representative or person acting at the request of such bidder shall not contact, communicate with or discuss any matter relating in any way to the Invitation For Bid with any officer, agent or employee of Manatee County other than the Purchasing Official or as directed in the Invitation For Bid. This prohibition begins with the issuance of any Invitation For Bid, and ends upon execution of the final contract or when the invitation has been canceled. Violators of this prohibition shall be subject to sanctions as provided in the Manatee County Purchasing Code.

The County reserves the right to amend or to add to the names listed as persons to contact. All amendments or additions to the names listed as persons to contact shall be issued by the Purchasing Division, in writing.

**A.09 UNBALANCED BIDDING PROHIBITED**

Manatee County recognizes that large and/or complex projects will often result in a variety of methods, sources and prices; however, where in the opinion of the County such variation does not appear to be justified, given bid specifications and industry and market conditions, the bid will be presumed to be unbalanced. Examples of unbalanced bids will include:

1. Bids showing omissions, alterations of form, additions not specified or required conditional or unauthorized alternate bids.
2. Bids quoting prices that substantially deviate, either higher or lower, from those included in the bids of competitive bidders for the same line item unit costs.
3. Bids where the unit costs offered are in excess of or below reasonable cost analysis values.

In the event the County determines that a bid is presumed unbalanced, it will request the opportunity to, and reserves the right to, review all sources quotes, bids, price lists, letters of intent, etc., which the bidder obtained and upon which the bidder relied upon to develop the bid. The County reserves the right to reject as non-responsive any presumptive unbalanced bids where the bidder is unable to demonstrate the validity and /or necessity of the unbalanced unit costs(s).

**A.10 FRONT END LOADING OF BID PRICING PROHIBITED**

Prices offered for performance and/or acquisition activities to occur early in the project schedule, such as: mobilization, clearing and grubbing; or maintenance of traffic, that are substantially higher than pricing of competitive bidders within the same portion of the project schedule, will be presumed to be front end loaded. Front end loaded bids could reasonably appear to be an attempt to obtain unjustified early payments creating a risk of insufficient incentive for the Contractor to complete the work or otherwise creating an appearance of an under-capitalized bidder.

In the event the County determines that a bid is presumed to be front end loaded, it will request the opportunity to, and reserves the right to, review all source quotes, bids, price lists, letters of intent, etc., which the bidder obtained and upon which the bidder relied upon to develop the pricing or acquisition timing for these bid items. The County reserves the right to reject as non-responsive any presumptive front end loaded bids where the bidder is unable to demonstrate the validity and/or necessity of the front end loaded costs.

**A.11 WITHDRAWAL OF OFFERS**

Vendors may withdraw offers as follows: a) Mistakes discovered before the opening of a solicitation may be withdrawn by written notice from the bidder submitting the offer. This request must be received in the office designated for receipt of offers in the solicitation document prior to the time set for delivery and opening of the offers. A copy of the request shall be retained and the unopened offer returned to that vendor. b) After the responses to a solicitation are opened or a selection has been determined, but before a contract is signed, a vendor alleging a material mistake of fact may be permitted to withdraw their offer if: (1) the mistake is clearly evident on the solicitation document; or (2) the bidder submits evidence which clearly and convincingly demonstrates that a mistake was made. Request to withdraw an offer must be in writing and approved by the Purchasing Official.

**A.12 IRREVOCABLE OFFER**

Any bid may be withdrawn up until the date and time set for opening of the bid. Any bid not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of 90 days to sell to Manatee County the goods or services set forth in the attached specifications until one or more of the bids have been duly accepted by the County.

**A.13 BID EXPENSES**

All expenses for making bids to the County are to be borne by the bidder.

**A.14 BE GREEN**

All Bidders are encouraged to use as many environmentally preferable "green" products, materials, supplies, etc. as possible in order to promote a safe and healthy environment. Environmentally preferable are products or services that have a reduced adverse effect on the environment. Provide detail of your organization's initiative and its ability to meet the goal of environmental sustainability.

**A.15 RESERVED RIGHTS**

The County reserves the right to accept or reject any and/or all bids, to waive irregularities and technicalities, and to request resubmission. Also, the County reserves the right to accept all or any part of the bid and to increase or decrease quantities to meet additional or reduced requirements of the County. Any sole response received by the first submission date may or may not be rejected by the County depending on available competition and current needs of the County. For all items combined, the bid of the lowest responsive, responsible bidder will be accepted, unless all bids are rejected. The lowest responsible bidder shall mean **that bidder who makes the lowest bid to sell goods and/or services of a quality which** conforms closest to or most exceeds the quality of goods and/or services set forth in the attached specifications or otherwise required by the County, and who is fit and capable to perform the bid as made.

To be responsive, a bidder shall submit a bid which conforms in all material respects to the requirements set forth in the Invitation For Bid. To be a responsible bidder, the bidder shall have the capability in all respects to perform fully the contract requirements, and the tenacity, perseverance, experience, integrity, reliability, capacity, facilities, equipment, and credit which will assure good faith performance. Also, the County reserves the right to make such investigation as it deems necessary to determine the ability of any bidder to furnish the service requested. Information the County deems necessary to make this determination shall be provided by the bidder. Such information may include, but shall not be limited to: current financial statements, verification of availability of equipment and personnel, and past performance records.

**A.16 APPLICABLE LAWS**

Bidder must be authorized to transact business in the State of Florida. All applicable laws and regulations of the State of Florida and ordinances and regulations of Manatee County will apply to any resulting agreement. Any involvement with any Manatee County procurement shall be in accordance with Manatee County Purchasing Code of Laws as amended. Any actual or prospective bidder who is aggrieved in connection with the solicitation or award of a contract may protest to the Board of County Commissioners of Manatee County as required in Section 2-26/61 of the Purchasing Code.

A protest with respect to this Invitation For Bid shall be submitted in writing prior to the scheduled opening date of this bid, unless the aggrieved person did not know and could not have been reasonably expected to have knowledge of the facts giving rise to such protest prior to the scheduled opening date of this bid. The protest shall be submitted within seven calendar days after such aggrieved person knows or could have reasonably been expected to know of the facts giving rise thereto.

**A.17 COLLUSION**

By offering a submission to this Invitation for Bid, the bidder certifies that he has not divulged, discussed or compared their bid with any other bidder, and has not colluded with any other bidder or parties to this bid whatsoever. Also, bidder certifies and in this case

A.17 COLLUSION (Continued)

of a joint bid each party thereto certifies as to their own organization, that in connection with this bid:

- a. any prices and/or cost data submitted have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices and/or cost data, with any other bidder or with any competitor;
- b. any prices and/or cost data quoted for this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder, prior to the scheduled opening, directly or indirectly to any other bidder or to any competitor;
- c. no attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition;
- d. the only person or persons interested in this bid, principal or principals is/are named therein and that no person other than therein mentioned has any interest in this bid or in the contract to be entered into; and
- e. no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding or a commission, percentage, brokerage, or contingent fee excepting bona fide employees or established commercial agencies maintained by bidder for purpose of doing business.

A.18 CODE OF ETHICS

With respect to this bid, if any bidder violates, directly or indirectly, the ethics provisions of the Manatee County Purchasing Code and/or Florida criminal or civil laws related to public procurement, including but not limited to Florida Statutes Chapter 112, Part II, Code of Ethics for Public Officers and Employees, such bidder will be disqualified from eligibility to perform the work described in this Information for Bid, and may also be disqualified from furnishing future goods or services to, and from submitting any future bids or proposals to supply goods or services to, Manatee County.

By submitting a bid, the bidder represents to the County that all statements made and materials submitted are truthful, with no relevant facts withheld. If a bidder is determined to have been untruthful in its proposal or any related presentation, such bidder will be disqualified from eligibility to perform the work described in this Invitation for Bid, and may also be disqualified from furnishing future goods or services to, and from submitting any future bids or proposals to supply goods or services to, Manatee

A.19 BID FORMS

Bids must be submitted on attached County forms, although additional pages may be attached. **Bidders must fully comply with all bid specifications, terms and conditions.** Failure to comply shall result in contract default, whereupon, the defaulting



vendor shall be required to pay for any and all re-procurement costs, damages, and attorney fees as incurred by the County.

**A.20** **LEGAL NAME**

Bids shall clearly indicate the legal name, address and telephone number of the bidder. Bids shall be signed above the typed or printed name and title of the signer. The signer must have the authority to bind the bidder to the submitted bid.

**A.21** **PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES**

A person or affiliate who has been placed on the State's convicted vendor list following a conviction for a public entity crime, as that term is defined in Florida Statute § 287.133, may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies 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 Florida Statute § 287.017 for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted list.

In addition, the Manatee County Code prohibits the award of any contract to any person or entity who/which has, within the past 5 years, been convicted of, or admitted to in court or sworn to under oath, a public entity crime or of any environmental law that, in the reasonable opinion of the purchasing official, establishes reasonable grounds to believe the person or business entity will not conduct business in a responsible matter. To insure compliance with the foregoing, the Code requires all persons or entities desiring to contract with the County to execute and file with the purchasing official an affidavit, executed under the pain and penalties of perjury, confirming that person, entity and any person(s) affiliated with the entity, does not have such a record and is therefore eligible to seek and be awarded business with the County. In the case of a business entity other than a partnership or a corporation, such affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, such affidavit shall be executed by the general partner(s). A Public Contracting and Environmental Crimes Certification is attached for this purpose.

**A.22** **DISCOUNTS**

Any and all discounts must be incorporated in the prices contained in the bid and not shown separately. The prices as shown on the bid form shall be the price used in determining award.

**A.23 TAXES**

Manatee County is exempt from Federal Excise and State Sales Taxes. (F.E.T. Exempt Cert. No. 59-78-0089K; FL Sales Tax Exempt Cert. NO 85-8012622206C-6); therefore, the vendor is prohibited from delineating a separate line item in his bid for any sales or service taxes. Nothing herein shall affect the vendor's normal tax liability.

Environmental Crimes Certification is attached for this purpose.

**A.24 DESCRIPTIVE INFORMATION**

Unless otherwise specifically provided in the specifications, all equipment, materials and articles incorporated in the work covered by this contract shall be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in the specifications, reference to any equipment, material, article or patented process, by trade name, brand name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

**A.25 AMERICANS WITH DISABILITIES ACT**

The Board of County Commissioners of Manatee County, Florida, does not discriminate upon the basis of any individual's disability status. This non-discrimination policy involves every aspect of the County's functions including one's access to, participation, employment, or treatment in its programs or activities. Anyone requiring reasonable accommodation for an **Information Conference** or **Bid Opening** should contact the person named on the first page of this bid document at least twenty-four (24) hours in advance of either activity.

**A.26 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE**

In accordance with the provisions of Title VI of the Civil Rights Act of 1964 and Title 15, Part 8 of the Code of Federal Regulations, Manatee County hereby notifies all prospective offerors that they will affirmatively ensure minority business enterprises will be afforded full opportunity to participate in response to this advertisement and will not be discriminated against on the grounds of race, color or national origin in consideration for an award of contract.

**A.27 MBE/WBE**

The State of Florida, **Office of Supplier Diversity** provides the certification process and the database for identifying certified MBE/WBE firms. This service may be directly accessed at: <http://www.osd.dms.state.fl.us/iframe.htm>

If you have any questions regarding this State service, please contact their office at (850) 487-0915.

**A.28 MATHEMATICAL ERRORS**

In the event of multiplication/extension error(s), the unit price shall prevail. In the event of addition error(s) the extension totals will prevail. All bids shall be reviewed mathematically and corrected, if necessary, using these standards, prior to additional evaluation.

**A.29 DISCLOSURE**

Upon receipt, all inquiries and responses to inquiries related to this Invitation for Bid become "Public Records" and are subject to public disclosure consistent with Chapter 119, Florida Statutes.

Bids become subject to disclosure 30 days after the Opening or if a notice of intended award decision is made earlier than this time as provided by Florida Statute 119.071 (1)(b). If the County rejects all offers and concurrently notices its intent to reissue the solicitation, initial offers are exempt until the County provides notice of its intended decision, or 30 days after the opening of the new offers.

Based on the above, Manatee County will receive bids at the date and time stated, and will make public at the opening the names of the business entities of all that submitted an offer and any amount presented as a total offer without any verification of the mathematics or the completeness of the offer. Upon the expiration of the statutory term for exemption the actual documents may be inspected or copied. When County staff have completed a mathematic validation and inspected the completeness of the offers, tabulation shall be posted on [www.mymanatee.org](http://www.mymanatee.org).

**A.30 DAVIS-BACON ACT – PREVAILING MINIMUM WAGE**

This project is funded through the Recovery Zone Economic Development Bonds Act (RZEDBs) and subject to the Prevailing Minimum Wage – Davis-Bacon Act. For this Contract, payment of predetermined minimum wages apply. The U.S. Department of Labor Wage Rates applicable to this Contract is listed in **Wage Decision Number (s) FL120165 (04/06/2012) FL165 Construction Type: Heavy; Manatee County Florida,** as modified up through ten (10) days prior to the opening of bids. A copy of the Wage Decision Number (s) FL120165 is made a part of this bidding document.

**A.31 E-VERIFICATION**

Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system, in accordance with the terms governing use of the system, to confirm the employment eligibility of;

1. all persons employed by the Contractor during the term of the Contract to perform employment duties within Florida; and
2. all persons, including subcontractors, assigned by the Contractor to perform work pursuant to the contract with the State Agency.

**NOTE: ANY OR ALL STATEMENTS CONTAINED IN THE FOLLOWING SECTIONS: BASIS OF AWARD, TERMS AND CONDITIONS OF THE CONTRACT, OR SPECIFICATIONS, WHICH VARY FROM THE INFORMATION TO BIDDERS, SHALL HAVE PRECEDENCE.**

**END OF SECTION**

SECTION 00020  
**BASIS OF AWARD**

**B.01 BASIS OF AWARD**

Award shall be to the most responsive, responsible bidder meeting specifications and having the lowest **Total Base Bid Price for Bid "A"**, or the lowest **Total Base Bid Price for Bid "B"**, for the requirements listed on the Bid Form for the Work as set forth in this Invitation For Bid. Bid Prices shall include costs for furnishing all labor, equipment and/or materials for the completion of the Work in accordance with and in the manner set forth and described in the Contract Documents to the County's satisfaction within the prescribed time.

**Two schedules for Completion of the Work shall be considered. Each bid for completion by the specified stated time shall be offered as a separate "Total Bid Price". The County has the sole authority to select the bid based on the Completion Time which is in the best interest of the County. Only one award shall be made.**

In evaluating bids, the County shall consider the qualifications of the bidders; and if required, may also consider the qualifications of the subcontractors, suppliers, and other persons and organizations proposed. County may also consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work.

Whenever two or more bids are equal with respect to price, quality and service, the bid received from a local business shall be given preference in award. Whenever two or more bids which are equal with respect to price, quality and service are received, and both bids and neither of these bids are received from a local business, the award shall be determined by a chance drawing conducted by the Purchasing Office and open to the public.

Local business is defined as a business duly licensed and authorized to engage in the sale of goods and/or services to be procured, which has a place of business in Manatee County with full time employees at that location.

**B.02 SUBCONTRACTORS**

Subcontractors shall be bound by the terms and conditions of this contract insofar as it applies to their Work, but this shall not relieve the prime contractor from the full responsibility of the County for the proper completion of all Work to be executed under this contract.

The employment of unauthorized aliens by any vendor is considered a violation of Section 274 (e) of the Immigration and Employment Act. If the vendor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of this agreement.

**B.03 QUALIFICATIONS OF BIDDERS**

Each bidder must secure all licenses required (in accordance with Chapter 489 Florida Statutes) for the Work which is the subject of this bid; and, upon request, shall submit a true copy of all applicable licenses. The minimum license(s) requirement for this project is a **General Contractor License. A minimum of five (5) years experience in this type of work is required for this project.**

To demonstrate qualifications to perform the Work, each bidder must be prepared to submit within five days of County's request; written evidence such as financial data, previous experience, present commitments and other such data as may be requested. Bidder must be able to provide evidence of Bidder's qualification to do business in the state of Florida. Each bidder shall submit as a portion of their bid, a completed Contractor's Questionnaire included as Section 00430. **A copy of the Contractor's License(s) shall be made a part of the Bid submittal.**

A complete list of all subcontractors proposed for any portion of the Work may be requested of any Bidder deemed necessary by the Owner. Subcontracts shall be awarded only to those subcontractors considered satisfactory by the Owner.

**B.04 INSPECTION OF SITE**

Prior to the submission of a bid, each bidder shall visit the site to become familiar with all conditions that may affect services that are required to completely execute the full intent of these specifications.

A site inspection is scheduled to immediately follow the Information Conference. Bidders who are unable to inspect the Project Site following the Information Conference shall contact Mr. Tom Birk, Water/Wastewater Chief Operator at 941-792-8811, Extension 5179 to make alternate arrangements. **Site Inspection is by appointment only.** All Bidders shall be required to Sign In at the Southwest Water Reclamation Facility.

**Location of Information Conference and Site Visit: Manatee County Southwest Water Reclamation Facility, 5101 65<sup>th</sup> Street West, Bradenton, FL 34210.**

Site visit shall be acknowledged in Section 00300, Bid Form, page 00300-1.

**B.05 PREPARATION OF CONTRACT**

A written notice confirming award or recommendation thereof will be forwarded to the Successful Bidder accompanied by the required number of unsigned counterparts of the Agreement. Within 10 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement with any other required documents to County. (Note: Contract must be approved in accordance with the Manatee County Code of Laws, Chapter 2-26, Manatee County Purchasing Ordinance and the Standard and Procedures approved by the County Administrator).

**END OF SECTION**

SECTION 00030  
**GENERAL TERMS AND CONDITIONS OF THE CONTRACT**

**C.01 CONTRACT FORMS**

The agreement resulting from the acceptance of a bid shall be in the form of the agreement stated in this bid.

**C.02 ASSIGNMENT OF CONTRACT**

Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this Contract or of his right, title, or interest therein, or his power to execute such Contract, or to assign any monies due or to become due there under to any other person, firm or corporation unless first obtaining the written consent of the County. The giving of such consent to a particular subcontractor assignment shall not dispense with the necessity of such consent to any further or other assignment.

**C.03 COMPLETION OF WORK**

The Work will be completed and ready for final inspection within the specified calendar days from the date the Contract Time commences to run. Two bids shall be considered based on **Bid "A" 730 calendar days** and **Bid "B" based on 640 calendar days**. The County has the sole authority to select the bid based on the Completion Time which is in the best interest of the County. Only one award shall be made.

**C.04 LIQUIDATED DAMAGES**

If the Contractor refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as will hinder its completion within the time specified, the County may seek damages. The actual damages for delay will be impossible to determine and in lieu thereof, the Contractor shall pay to the Owner the sum of **\$3,782.00** as fixed, agreed, and liquidated damages for each calendar day of the delay until the Work is finally accepted by the County and the Contractor and his Surety shall be liable for the amount thereof.

**C.05 PAYMENT**

Contractor may apply for partial payment on monthly estimates, based on the amount of Work done or completed in compliance with the provisions of the Contract. Contractor shall submit an application, on a form provided or approved by the County, of an approximate estimate of the proportionate value of the Work done, items and locations of the Work performed up to and including the last day of the period then ending. The County will then review said estimate and make any necessary revisions so that the estimate can receive approval for payment. If the Contractor and the County do not agree on the approximate estimate of the proportionate value of the Work done for any pay period, the determination of the County will be binding. The amount of said estimate after deducting any required retainage and all previous payments shall be due and payable to the Contractor within 20 days after the pay estimate has been approved by the County. **If Outside Agent approval is required, payment shall be due 25 business days after the pay estimate has been approved by the Agent for the County.** It is the Contractor's responsibility for the care of the materials.



**C.05 PAYMENT (Continued)**

Any damage to or loss of said materials is the full responsibility of the Contractor. Any Periodical Pay Estimate signed by the Contractor shall be final as to the Contractor for any or all work covered by the Periodical Pay Estimate. Any requests for payment of materials stored on site must be accompanied with a paid receipt. The Contractor warrants and guarantees that title to all work, materials and equipment covered by any application for payment, whether incorporated in the project or not, will pass to the County at the time of payment free and clear of all liens, claims, security interests and encumbrances (hereafter referred to as "Liens").

The Contractor agrees to furnish an affidavit stating that all laborers, material men, and subcontractors have been paid on the project for Work covered by the application for payment and that a partial or complete release of lien, as may be necessary, be properly executed by the material men, laborers, subcontractors on the project for Work covered by the application for payment, sufficient to secure the County from any claim whatsoever arising out of the aforesaid Work.

When the Contractor has completed the Work in compliance with the terms of the Contract Documents, he shall notify the County in writing that the project is ready for final inspection. The County will then advise the Contractor as to the arrangements for final inspection and what Work, if any, is required to prepare the project or a portion thereof for final inspection. When the County determines the project or portion thereof is ready for final inspection, the County shall perform same. Upon completion of final inspection, the County will notify Contractor of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies. When all such errors have been corrected, a final re-inspection will be made. The process will be repeated until, in the opinion of the County, the project has been completed in compliance with the terms of the Contract Documents.

When final acceptance has been made by the County, the County will make final payment of the Contract amount, plus all approved additions, less approved deductions and previous payments made. The Contract will be considered complete when all work has been finished, the final inspection made, approved as-builts received, and the project finally accepted in writing by the County. The Contractor's responsibility shall then terminate except as otherwise stated.

**C.06 RETAINAGE**

A **retainage** of 10% of the total work in place shall be withheld until 50% complete. After 50% completion, the retainage shall be reduced to 5% of the total work in place until final completion and acceptance of the Work by the County. Upon final acceptance, the remaining retainage shall be included in the final payment.

**C.07 WARRANTY AND GUARANTEE PROVISIONS**

All work, materials, and equipment furnished as defined herein shall be guaranteed and warranted by the contractor for a minimum period of three (3) years, unless otherwise specified, from final acceptance by the Owner to be free from defects due either to faulty materials or equipment or faulty workmanship.

All materials, equipment, and workmanship furnished and installed by the contractor is warranted and guaranteed by the contractor to meet the required standards and to accomplish the purposes and functions required standards and to accomplish the purposes and functions of the project as defined, detailed, and specified herein.

The Owner shall, following discovery thereof, promptly give written notice to the contractor of faulty materials, equipment, or workmanship within the period of the guarantee and the contractor shall promptly replace any part of the faulty equipment, material, or workmanship at his own cost. These warranty and guarantee provisions create no limitations on the Owner as to any claims or actions for breach of guaranty or breach of warranty that the Owner might have against parties other than the contractor, and do not constitute exclusive remedies of the Owner against the contractor.

**C.08 ROYALTIES AND PATENTS**

The contractor shall pay all royalties and license fees for equipment or processes in conjunction with the equipment and/or services being furnished. Contractor shall defend all suits or claims for infringement of any patent, trademark or copyright, and shall save the County harmless from loss on account thereof, including costs and attorney's fees.

**C.09 AUTHORIZED PRODUCT REPRESENTATION**

The contractor, by virtue of submitting the name and specifications of a manufacturer's product, will be required to furnish the named manufacturer's product. Failure to perform accordingly may, in the County's sole discretion, be deemed a breach of contract, and shall constitute grounds for the County's immediate termination of the contract.

**C.10 REGULATIONS**

It shall be the responsibility of the bidder to assure compliance with any OSHA, EPA and/or other federal or state of Florida rules, regulations or other requirements, as each may apply.

**C.11 CANCELLATION**

Any failure of the contractor to furnish or perform the Work (including, but not limited to, commencement of the Work, failure to supply sufficient skilled workers or suitable materials or equipment) in accordance with the contract, the County may order the stop of the Work, or any portion thereof, until the cause for such order has been eliminated. If the contractor persistently fails to perform the Work in accordance with the contract, the County reserves the right to terminate the contract and select the next qualified bidder or re-advertise this procurement in part or in whole. The County reserves the right to cancel all or any undelivered or unexecuted portion of this contract with or without cause.

**C.12 INDEMNIFICATION**

The contractor covenants and agrees to indemnify and save harmless the County, its agents and employees, from and against all claims, suits, actions, damages, causes of action, or judgments arising out of the terms of the resulting agreement for any personal injury, loss of life, or damage to the property sustained as a result of the performance or non-performance of services or delivery of goods; from and against any orders, judgments, or decrees, which may be entered against the County, its agents or employees; and from and against all costs, attorney's fees, expenses and other liabilities incurred in the defense of any such claim, suit or action, and the investigation thereof. Nothing in the award, resulting agreement, contract or Purchase Order shall be deemed to affect the rights, privileges and immunities of the County as set forth in Florida Statute Section 768.28.

**C.13 MANUALS, SCHEMATICS, HANDBOOKS**

All manuals, schematics and handbooks shall be provided which are applicable to the equipment delivered. An operators manual, parts manual and technician manual must also be provided. Parts lists (manuals) must include OEM part numbers for items not manufactured by the bidder. Vendor shall furnish two (2) copies of each.

**C.14 INSURANCE**

The contractor will not commence work under a contract until all insurance under this section and such insurance coverage as might be required by the County has been obtained. The contractor shall obtain, and submit to Purchasing within 10 calendar days of request, at his expense, the following minimum amounts of insurance (inclusive of any amounts provided by an umbrella or excess policy):

a. Workers' Compensation/Employers' Liability

Part One - There shall be no maximum limit (other than as limited by the applicable statute) for liability imposed by Florida Workers' Compensation Act or any other coverage required by the contract documents which are customarily insured under Part One of the standard Workers' Compensation Policy.

**C.14 INSURANCE (Continued)**

Part Two - The minimum amount of coverage required by the contract documents which are customarily insured under Part Two of the standard Workers' Compensation Policy shall be:

<u>\$100,000</u>	(Each Accident)
<u>\$500,000</u>	(Disease-Policy Limit)
<u>\$100,000</u>	(Disease-Each Employee)

b. Commercial General Liability

The limits are to be applicable only to work performed under this contract and shall be those that would be provided with the attachment of the Amendment of Limits of Insurance (Designated Project or Premises) endorsement (ISO Form CG 25 03) a Commercial General Liability Policy with the following minimum limits.

General Aggregate:

Products/Completed Operations Aggregate	<u>\$5,000,000</u>
Personal and Advertising Injury	<u>\$300,000</u>
Each Occurrence	<u>\$2,000,000</u>
Fire Damage (Any One Fire)	<u>\$Nil</u>
Medical Expense (Any One Person)	<u>\$Nil</u>

c. Business Auto Policy

Each Occurrence Bodily Injury and	
Property Damage Liability Combined	<u>\$300,000</u>
Annual Aggregate (if applicable):	<u>\$5,000,000</u>

d. Owners Protective Liability Coverage

The minimum OPC Policy limits per occurrence and, if subject to an aggregate, annual aggregate to be provided by the contractor shall be the same as the amounts shown above as the minimum per occurrence and general policy aggregate limits respectively required for the Commercial General Liability coverage. The limits afforded by the OPC Policy and any excess policies shall apply only to the Owner and the Owner's officials, officers, agents and employees and only to claims arising out of or in connection with the work under this contract.

e. Property Insurance

**If this contract includes** construction of or additions to above ground buildings or structures, contractor shall provide "**Builder's Risk**" insurance with the minimum amount of insurance to be 100% of the value of such addition(s), building(s), or structure(s).

**C.14 INSURANCE (Continued)****f. Installation Floater**

**If this contract does not include** construction of or additions to above ground building or structures, **but does involve** the installation of machinery or equipment, contractor shall provide an "**Installation Floater**" with the minimum amount of insurance to be 100% of the value of such addition(s), building(s), or structure(s).

**g. Certificates of Insurance and Copies of Policies**

Certificates of Insurance in triplicate evidencing the insurance coverage specified in the six above paragraphs a., b., c., d., e., and f., shall be filed with the Purchasing Director before operations are begun. The required certificates of insurance shall name the types of policy, policy number, date of expiration, amount of coverage, companies affording coverage, and also shall refer specifically to the bid number, project title and location of project. Insurance shall remain in force at least one year after completion and acceptance of the project by the County, in the amounts and types as stated herein, with coverage for all products and services completed under this contract.

**ADDITIONAL INSURED: Manatee County, a political subdivision of the State of Florida shall be specifically named as additional insured on all policies.**

If the initial insurance expires prior to the completion of operations and/or services by the contractor, renewal certificates of insurance and required copies of policies shall be furnished by the contractor and delivered to the Purchasing Director thirty (30) days prior to the date of their expiration.

Nothing herein shall in any manner create any liability of the County in connection with any claim against the contractor for labor, services, or materials, or of subcontractors; and nothing herein shall limit the liability of the contractor or contractor's sureties to the County or to any workers, suppliers, material men or employees in relation to this contract.

**C.15 BID BOND/CERTIFIED CHECK**

By offering a submission to this Invitation For Bid, the bidder agrees should the bidder's bid be accepted, to execute the form of contract and present the same to Manatee County for approval within 10 days after being notified of the awarding of the contract. The bidder further agrees that failure to execute and deliver said form of contract **within 10 days** will result in damages to Manatee County and as guarantee of payment of same a bid bond/certified check shall be enclosed within the submitted sealed bid in the amount of five (5%) percent of the total amount of the bid.

**C.15 BID BOND/CERTIFIED CHECK (Continued)**

The bidder further agrees that in case the bidder fails to enter into a contract, as prescribed by Manatee County, the bid bond/certified check accompanying the bid shall be forfeited to Manatee County as agreed liquidated damages. If the County enters into a contract with a bidder, or if the County rejects any and/or all bids, accompanying bond will be promptly returned.

**C.16 PERFORMANCE AND PAYMENT BONDS**

The successful bidder shall furnish surety bonds as security for faithful performance of the contract awarded as a result of this bid, and for the payment of all persons performing labor and/or furnishing material in connection therewith. Surety of such bonds shall be in an amount equal to the bid award (100% each) and from a duly authorized and nationally recognized surety company, authorized to do business in Florida, satisfactory to this County. The attorney-in-fact who signs the bonds must file with the bonds a certificate and effective dated copy of power-of-attorney. (Reference Florida Statute 255.05)

Furnishing the performance and payment bonds shall be requisite to execution of a contract with the County. Said performance and payment bonds will remain in force for the duration of the contract with the premiums paid by the contractor. Failure of successful bidder to execute such contract and to supply the required bonds shall be just cause for annulment of the award.

The County may then contract with another acceptable bidder or re-advertise this Invitation For Bid. If another bidder is accepted, and notice given within 90 days after the opening of bids, this acceptance shall bind the bidder as though they were originally the successful bidder.

Failure of the County at any time, to require performance by the contractor of any provisions set out in the contract will in no way affect the right of the County, thereafter, to enforce the provisions. Bonds to remain in effect for one year after final payment becomes due.

**C.17 NO DAMAGES FOR DELAY**

No claim for damages or any claim other than for an extension of time shall be made or asserted against the County by reason of any delays. The Contractor shall not be entitled to an increase in the Total Contract Price or payment or compensation of any kind from the County or direct, indirect, consequential impact or other costs, expenses for damages, including but not limited to costs of acceleration or inefficiency arising because of delay, disruption, interference or hindrance from any



**C.17 NO DAMAGES FOR DELAY (Continued)**

cause whatsoever; provided, however, that this provision shall not preclude recovery or damages by the Contractor for hindrance or delays due solely to fraud, bad faith, or active interference on part of the County or its agents. Otherwise, the Contractor shall only be entitled to extensions of the Contract Time as the sole and exclusive remedy for such resulting delay, in accordance with and to the extent specifically provided above.

**C.18 NO INTEREST**

Any monies not paid by the County when claimed to be due to the Contractor under this Contract shall not be subject to interest including prejudgment interest. Any monies not paid by the County when claimed to be due to the Contractor for damages awarded in the case of construction delays shall not be subject to prejudgment interest.

**C.19 CONSTRUCTION OF CONTRACT**

This Contract and the rights and responsibilities hereunder shall not be construed more strongly against either party, regardless of the extent to which such party may have participated in the preparation hereof.

**END OF SECTION**

**SECTION 00100**  
**BID SUMMARY**

**D.01 THE WORK**

The Work consists of the conversion of the Existing Unlined North Effluent Storage Pond to a Lined Reject Holding Pond and a Lined Effluent Holding Pond to store Part III Reclaimed Water. The resulting Lined Storage Ponds will be separated by a Lined Interior Berm with Emergency Overflows. Construction will include earth work, pond liner, pipes, valves, precast wet wells, pumps, cast-in-place concrete, miscellaneous renovations, pipe grouting, pipe removal, and automation necessary to monitor Effluent quality, divert reject water to the Reject Pond and return reject flow to the Headwork for retreatment, and return flow from the Part III Storage Pond to the Lake Filtration System.

Renovation of the Lake Filtration System including demolition of the Existing Lake Filtration System, a new Lake Gravity Filter System and associated piping, valves, chemical feed and automation modifications to increase the Lake Filtration System capacity to 15 million gallons per day and improve water quality and system reliability.

Coordination with Contractors on separate County projects under construction at the SWWRF shall be required.

The Contractor shall furnish all shop drawings, working drawings, labor, materials, Equipment, tools, services and incidentals necessary to complete all work required by these Specifications as shown on the Contract Drawings.

The Contractor shall perform the work complete, in place and ready for continuous service and shall include any repairs, replacements, and / or restoration required as a result of damages caused prior to acceptance by the Owner.

The Contractor shall furnish and install all materials equipment and labor which is reasonably and properly inferable and necessary for the proper completion of the work, whether specifically indicated in the Contract Documents or not.

**D.02 SUBCONTRACTORS, SUPPLIERS AND OTHERS**

The identity of subcontractors, suppliers, and other persons and organizations (including those who are to furnish the principal items of material and equipment) may be requested by the County for each bid item from any of the Bidders; and the Bidder shall respond within five days after the date of such request. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such subcontractor, supplier, persons or organization if requested by County.

**D.02 SUBCONTRACTORS, SUPPLIERS AND OTHERS (Continued)**

If County, after due investigation, has reasonable objection to any proposed subcontractor, supplier, other person or organization, County may, before the Notice of Award is given, request the apparent successful Bidder to submit an acceptable substitute without an increase in Contract Price or Contract Time.

If apparent successful Bidder declines to make any such substitution, County may award the contract to the next lowest qualified Bidder that proposes to use acceptable subcontractors, suppliers, and other persons who County does not make written objection to Contractor shall not be required to employ any subcontractor, supplier, other person or organization who Contractor has reasonable objection to.

Subcontractors shall be bound by the terms and conditions of this contract insofar as it applies to their Work, but this shall not relieve the prime contractor from the full responsibility to the County for the proper completion of all Work to be executed under this contract.

**D.03 BIDS**

Bids are to be submitted in triplicate, one original and two copies, upon the County supplied forms. All blank spaces must be filled in as noted with amounts extended and totaled and no changes shall be made in the wording of the forms or in the items mentioned therein. In the event a change is made in your submittal, the Bidder shall write its initials by the change. Any bid may be rejected which contains any omissions, alterations, irregularities of any kind, or which shall in any manner fail to conform to bid requirements.

A bid made by an individual, either in his/her own or proper person or under a trade or firm name, shall be executed under the individual's signature. If made by a partnership, the bid shall be executed by two or more of the general partners. If made by a corporation, the bid shall be executed by its President or other legally authorized corporate officer or agent.

**D.04 EXAMINATION OF CONTRACT DOCUMENTS AND SITE**

It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Bid Documents thoroughly; (b) visit the site to become familiar with local conditions that may affect cost, progress, performance, or furnishing of the Work; (c) consider federal, state, and local codes, laws, and regulations that may affect costs, progress, performance, or furnishing of the Work; (d) study and carefully correlate Bidder's observations with the Bid Documents; and (e) notify County of all conflicts, errors, or discrepancies in the Bid Document.

The accuracy of the existing utility locations shown on the plans is approximate and without express or implied warranty. Each Bidder may, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies, and obtain any additional information and data which pertain to the physical conditions at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work and which Bidder deems necessary to

**D.04 EXAMINATION OF CONTRACT DOCUMENTS AND SITE (Continued)**

determining his Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

County will provide each Bidder access to the site to conduct such explorations and tests. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by County unless otherwise provided in the Contract Documents.

**D.05 MATERIALS AND WORKMANSHIP**

All materials and apparatus required for this Work, except as specifically specified otherwise, shall be new, of first class quality, and shall be furnished, delivered, connected and finished in every detail. Construction shall be prescribed by good industry practice and in accordance with manufacturer's recommendations for the type being installed.

Use skilled workman trained and experienced in the necessary trades and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this section.

**D.06 REGULATIONS AND MATERIAL DISPOSAL**

It shall be the responsibility of the contractor to assure compliance with any OSHA, EPA, federal, state, and/or local rules, regulations or other requirements as each may apply.

**D.07 PROJECT CLOSE-OUT**

Clean construction site and remove any and all excess materials. Correct any damages to property that may have occurred as a result of installation and/or delivery. Repair and patch all surfaces cut for installation. The Contractor shall remedy any deficiencies promptly should the County determine any work is incomplete or defective.

When the County determines the Work is acceptable in accordance with this Invitation for Bid, the Contractor shall provide the close out submittals, including but not necessarily limited to the following:

- 1 set – Certificate of warranties
- 1 set - Manufacturer's product literature
- 1 set - Project Record Drawings

**D.09 DISCRETIONARY WORK**

This Bid Item entails minor increases (that may be directed by staff) to existing bid item quantities or minor modification items not bid which were unforeseen and necessary during the construction to provide a safe, complete project in accordance with Bid Documents. (This will not affect the requirement for change orders involving major modifications to the project.) Payment for all Work under this item shall be made only at the County's discretion in order to satisfactorily complete the project. In general, this item is for unanticipated conflicts and/or design changes required during construction which are necessary to complete the project without changing the initial scope of Work and without costly delays.

**END OF SECTION**

## SECTION 00150

**MANATEE COUNTY LOCAL PREFERENCE LAW AND VENDOR REGISTRATION****E.01 Vendor Registration**

All vendors are encouraged to register with Manatee County using the on-line "Vendor Registration" web page on [www.mymanatee.org](http://www.mymanatee.org).

Enclosed are a copy of the current Manatee County law that details the County's Local Preference and the County's definition of a Local Business.

If you assert that your firm meets the stated definition of a Local Business, we ask that in addition to registering on the County's Web page, you fill out the attached "**Affidavit As To Local Business Form**" that is included in this section, have the completed document notarized, and mail the original to the following address: Manatee County Administration Center, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205.

Your cooperation in registering your business with Manatee County will enhance our opportunities to identify sources for goods and services, plus identify Local Businesses. This information is used for soliciting quotations up to \$250,000.00 and for competitive solicitations of larger purchases.

You will note that Manatee County collaborates with the Manatee Chamber of Commerce, posting bids on [www.manatee-chamber.com](http://www.manatee-chamber.com) as well as using the same vendor categories for registration.

Our staff can assist you with your registration as needed. Our office hours are 8:00 A.M. to 5:00 P.M., Monday through Friday on regular business days. Please call (941) 749-3014 if you wish to have a purchasing staff member assist you.

**Quick steps to registration:**                      **[www.mymanatee.org](http://www.mymanatee.org)**

A link to "Purchasing" is listed under "Quick Links" on page one of the County Web Site.

On the left hand side of the Purchasing Web page, click on "Vendor Registration".

This will bring up the Vendor Registration form for on-line input. Please note that the definition of a "Local Business" changed on March 17, 2009. The Web page will be updated to include the current Law which has been provided in this section of the bid.

Thank you for reviewing this information and considering registering your business with Manatee County. Registration is not mandatory; however, by taking the time to register, you are helping the County to provide timely notifications of quotation, bid and proposal opportunities to your business.



**E.02 Section 2-26-6. Local preference, tie bids, local business defined.**

(a) Whenever a responsible local business bidder and a responsible non-local business bidder are found, upon the opening of bids, to have both submitted the lowest responsive bid, the bid of the local bidder shall be awarded the contract. Should more than one responsible local business bidder match the responsible non-local business bidder's lowest responsive bid, or should no responsible local business bidder match the lowest responsive bid but two or more responsible non-local business bidders submit lowest responsive bids for equal amounts, then the award of the contract shall be determined by a chance drawing, coin toss, or similar tie-breaking method conducted by the purchasing office and open to the public. Any bidders seeking to be recognized as local businesses for purposes of this local business preference provision may be required by the terms of the bid announcement to certify they meet the definition of local business set forth in this section, and to register as a local business with the county in the manner prescribed by the county to facilitate the county's ability to track the award of contracts to local businesses and to allow the county to provide future notifications to its local businesses concerning other bidding opportunities.

(b) Nothing herein shall be deemed to prohibit the inclusion of requirements with respect to operating and maintaining a local place of business in any invitation for bids when the bidder's location materially affects the provisions of the services or supplies that are required by the invitation.

**(c) Local business is defined as a business legally authorized to engage in the sale of the goods and/or services to be procured, and which certifies within its bid that for at least six (6) months prior to the announcement of the solicitation of bids it has maintained a physical place of business in Manatee, Desoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one full-time employee at that location.**

(d) **Each solicitation for bids made by the county shall contain terms expressly describing the local business preference policies of the county, and shall provide that by electing to submit a bid pursuant to a request for bids, all bidders are deemed to understand and agree to those policies.**

(e) For all contracts for architecture, professional engineering, or other professional services governed by Florida Statute § 287.055, the Consultants' Competitive Negotiation Act, the county shall include the local business status of a firm among the factors considered when selecting which firms are "most highly qualified." In determining which firm is the "most qualified" for purposes of negotiating a satisfactory contract, preference shall be given to a local business where all other relevant factors are equal.

(f) Local preference shall not apply to the following categories of contracts:

1. Goods or services provided under a cooperative purchasing agreement or similar "piggyback" contract;
2. Contracts for professional services subject to Florida Statute § 287.055, the Consultants' Competitive Negotiation Act, except as provided for in subsection (e) above;

**E.02 Section 2-26-6. Local preference, tie bids, local business defined. (Continued)**

3. Purchases or contracts which are funded, in whole or in part, by a governmental or other funding entity, where the terms and conditions of receipt of the funds prohibit the preference;
4. Purchases or contracts made pursuant to a non-competitive award process, unless otherwise provided by this section;
5. Any bid announcement which specifically provides that the general local preference policies set forth in this section are suspended due to the unique nature of the goods or services sought, the existence of an emergency as found by either the county commission or county administrator, or where such suspension is, in the opinion of the county attorney, required by law.

(g) To qualify for local preference under this section, **a local business must certify to the County that it:**

1. Has not within the five years prior to the bid announcement admitted guilt or been found guilty by any court or state or federal regulatory enforcement agency of violation of any criminal law, or a law or administrative regulation regarding fraud;
2. Is not currently subject to an unresolved citation or notice of violation of any Manatee County Code provision, except citations or notices which are the subject of a current legal appeal, as of the date of the bid announcement;
3. Is not delinquent in the payment of any fines, liens, assessments, fees or taxes to any governmental unit or taxing authority within Manatee County, except any such sums which are the subject of a current legal appeal.

Ref: Ordinance 09-21 and 09-23 **PASSED AND DULY ADOPTED** in open session, with a quorum present and voting, on the 17<sup>th</sup> day of March, 2009.

**END OF SECTION**

**MANATEE COUNTY GOVERNMENT**  
**AFFIDAVIT AS TO LOCAL BUSINESS (Complete and Initial Items B-F)**

**A. Authorized Representative**

I, [name] \_\_\_\_\_, am the [title] \_\_\_\_\_

and the duly authorized representative of: [name of business] \_\_\_\_\_  
 \_\_\_\_\_, and that I possess direct personal knowledge to make informed responses to these certifications and the legal authority to make this Affidavit on behalf of myself and the business for which I am acting; and by electing to submit a bid pursuant to this Invitation for Bids, shall be deemed to understand and agree to the local business preference policies of Manatee County; and that I have the direct knowledge to state that this firm complies with all of the following conditions to be considered to be a Local Business as required by the Manatee County Code of Law, Section 2-26-6.

**B. Place of Business:** I certify that the above business is legally authorized to engage in the sale of goods and/or services and has a physical place of business in Manatee, DeSoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one (1) fulltime employee at that location. The physical address of the location which meets the above criteria is: \_\_\_\_\_ [Initial] \_\_\_\_\_

Phone No.: \_\_\_\_\_

email address: \_\_\_\_\_

**C. Business History:** I certify that business operations began at the above physical address with at least one fulltime employee on [date] \_\_\_\_\_ [Initial] \_\_\_\_\_

**D. Criminal Violations:** I certify that within the past five years of the date of this Bid announcement, this business has not admitted guilt nor been found guilty by any court or local, state or federal regulatory enforcement agency of violation of any criminal law or administrative regulation regarding fraud. [Initial] \_\_\_\_\_

**E. Citations or Code Violations:** I certify that this business is not currently subject to any unresolved citation or notice of violation of any Manatee County Code provision, with the exception of citations or notices which are the subject of a legal current appeal within the date of this bid announcement. [Initial] \_\_\_\_\_

**F. Fees and Taxes:** I certify that within this business is not delinquent in the payment of fines, liens, assessments, fees or taxes to any governmental unit or taxing authority within Manatee County, with the exception of those which are the subject of a legal current appeal. [Initial] \_\_\_\_\_

*Each of the above certifications is required to meet the qualification of "Local Business" under Manatee County Code of Law, 2-26-6.*

Signature of Affiant \_\_\_\_\_

STATE OF FLORIDA

COUNTY OF \_\_\_\_\_

Sworn to (or affirmed) and subscribed before me this \_\_\_\_ day of \_\_\_\_, 20\_\_, by (name of person making statement).

(Notary Seal) Signature of Notary: \_\_\_\_\_

Name of Notary (Typed or Printed) \_\_\_\_\_

Personally Known \_\_\_\_ OR Produced Identification \_\_\_\_ Type of Identification Produced \_\_\_\_\_

**Submit executed copy to Manatee County Purchasing, Suite 803, 1112 Manatee Avenue W., Bradenton, FL 34205.**

**BID FORM**  
**SECTION 00300 – IFB #12-1310-OV**

**For: SWWRF Lake Filtration System and North Pond Improvements, Bradenton, FL**  
**Manatee County Project No.: 6079180**

<b>TOTAL BID PRICE “A”: \$ _____</b>
Based on a Completion Time of <b><u>730</u></b> calendar days
<b>TOTAL BID PRICE “B”: \$ _____</b>
Based on a Completion Time of <b><u>640</u></b> calendar days

**Two schedules for Completion of the Work shall be considered. Each bid for completion by the specified stated time shall be offered as a separate “Total Bid Price”. The County has the sole authority to select the bid based on the Completion Time which is the best interest of the County. Only one award shall be made.**

We, the undersigned, hereby declare that we have carefully reviewed the bid documents, and with full knowledge and understanding of the aforementioned herewith submit this bid, meeting each and every specification, term, and condition contained in the Invitation for Bids.

We understand that the bid technical specifications, terms, and conditions in their entirety shall be made a part of any agreement or contract between Manatee County and the successful bidder. Failure to comply shall result in contract default, whereupon, the defaulting contractor shall be required to pay for any and all re-procurement costs, damages, and attorney fees as incurred by the County.

Communications concerning this Bid shall be addressed as follows:

Person's Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Date: \_\_\_\_\_ FLContractorLicense# \_\_\_\_\_

Bidder is a WBE/MBE Vendor? \_\_\_\_\_ Certification \_\_\_\_\_

COMPANY'S NAME: \_\_\_\_\_

AUTHORIZED SIGNATURE(S): \_\_\_\_\_

Name and Title of Above Signer(s) \_\_\_\_\_

CO. MAILING ADDRESS: \_\_\_\_\_

STATE OF INCORPORATION \_\_\_\_\_ (if applicable)

TELEPHONE: (\_\_\_\_) \_\_\_\_\_ FAX: (\_\_\_\_) \_\_\_\_\_

Email address : \_\_\_\_\_

Acknowledge Addendum No. \_\_\_\_\_ Dated: \_\_\_\_\_ Acknowledge Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_

**SIGN AND CONFIRM DATE OF PROJECT VISIT: \_\_\_\_\_ DATE: \_\_\_\_\_**

**BID FORM A****MANATEE COUNTY / IFB #12-1310-OV****SWWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS, BRADENTON****MANATEE COUNTY, FL PROJECT NO.: 6079180****BASED ON A COMPLETION TIME OF BID "A" 730 CALENDAR DAYS**

Bid Item		Estimated			
No.	Description	Quantity	Unit	Unit Price	Total
1	SWWRF Mobilization/Demobilization	1	LS	\$	\$
2	Demolition	1	LS	\$	\$
3	Reject Storage Pond & North Reclaimed Water Storage Pond Improvements	1	LS	\$	\$
4	Disk Filters	1	LS	\$	\$
5	Reclaimed Water Return Pump Station	1	LS	\$	\$
6	Waste Backwash Pump Station	1	LS	\$	\$
7	North Pond Outlet Structure Improvements	1	LS	\$	\$
8	Effluent Pump Station Flowmeter Assembly	1	LS	\$	\$
9	Chlorination Facilities	1	LS	\$	\$
10	Site Piping	1	LS	\$	\$
11	Replace Intake Structure Screens in Middle & South Ponds & Refurbish Middle Pond Outfall	1	LS	\$	\$
12	Unfiltered Pump Station	1	LS	\$	\$
13	Electrical Work & Instrumentation	1	LS	\$	\$
14	Discretionary Work	1	LS		\$500,000.00
	<b>TOTAL BASE BID PRICE FOR BID ITEMS 1 THROUGH 14 (BASED ON BID "A" 730 CALENDAR DAYS COMPLETION)</b>				<b>\$</b>

BIDDER: \_\_\_\_\_

AUTHORIZED SIGNATURE: \_\_\_\_\_

00300-2  
BID "A"

**BID FORM A****MANATEE COUNTY / IFB #12-1310-OV****SWWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS, BRADENTON****MANATEE COUNTY, FL PROJECT NO.: 6079180****BASED ON A COMPLETION TIME OF BID "A" 730 CALENDAR DAYS**

<b>BID ALTERNATE ITEMS 15 AND 16</b>					
15	Hauling of Fill from Perico Preserve Excavation Site	150,000	CY	\$	\$
16	Fill Quantity Deduction from Perico Preserve Excavation Site	150,000	CY	\$	\$

The BIDDER must submit a bid for bid items 1 through 14 and the sum of these bid items will be considered the Total Amount of Base Bid. The BIDDER must also submit unit prices for Bid Alternate Items 15 and 16. The BIDDER must submit a bid on all items or the bid shall be considered irregular. The OWNER reserves the right to accept or reject the bid. The OWNER, or his representative, further reserves the unqualified right to determine whether any particular item or items or materials, equipment, or whatsoever is an approved equal, and reserves the unqualified right to a final decision regarding the approval or rejection of the same. The bid selection shall be based on the apparent low bidder for the **"TOTAL AMOUNT OF BASE BID "**.

BIDDER:\_\_\_\_\_

AUTHORIZED SIGNATURE:\_\_\_\_\_

00300-3  
BID "A"

**BID FORM B****MANATEE COUNTY / IFB #12-1310-OV****SWWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS, BRADENTON****MANATEE COUNTY, FL PROJECT NO.: 6079180****BASED ON A COMPLETION TIME OF BID "B" 640 CALENDAR DAYS**

Bid Item		Estimated			
No.	Description	Quantity	Unit	Unit Price	Total
1	SWWRF Mobilization/Demobilization	1	LS	\$	\$
2	Demolition	1	LS	\$	\$
3	Reject Storage Pond & North Reclaimed Water Storage Pond Improvements	1	LS	\$	\$
4	Disk Filters	1	LS	\$	\$
5	Reclaimed Water Return Pump Station	1	LS	\$	\$
6	Waste Backwash Pump Station	1	LS	\$	\$
7	North Pond Outlet Structure Improvements	1	LS	\$	\$
8	Effluent Pump Station Flowmeter Assembly	1	LS	\$	\$
9	Chlorination Facilities	1	LS	\$	\$
10	Site Piping	1	LS	\$	\$
11	Replace Intake Structure Screens in Middle & South Ponds & Refurbish Middle Pond Outfall	1	LS	\$	\$
12	Unfiltered Pump Station	1	LS	\$	\$
13	Electrical Work & Instrumentation	1	LS	\$	\$
14	Discretionary Work	1	LS		\$500,000.00
	<b>TOTAL BASE BID PRICE FOR BID ITEMS 1 THROUGH 14 (BASED ON BID "B" 640 CALENDAR DAYS COMPLETION)</b>				<b>\$</b>

BIDDER:\_\_\_\_\_

AUTHORIZED SIGNATURE:\_\_\_\_\_

00300-4  
BID "B"

**BID FORM B****MANATEE COUNTY / IFB #12-1310-OV****SWWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS, BRADENTON****MANATEE COUNTY, FL PROJECT NO.: 6079180****BASED ON A COMPLETION TIME OF BID "B" 640 CALENDAR DAYS**

<b>BID ALTERNATE ITEMS 15 AND 16</b>					
15	Hauling of Fill from Perico Preserve Excavation Site	150,000	CY	\$	\$
16	Fill Quantity Deduction from Perico Preserve Excavation Site	150,000	CY	\$	\$

The BIDDER must submit a bid for bid items 1 through 14 and the sum of these bid items will be considered the Total Amount of Base Bid. The BIDDER must also submit unit prices for Bid Alternate Items 15 and 16. The BIDDER must submit a bid on all items or the bid shall be considered irregular. The OWNER reserves the right to accept or reject the bid. The OWNER, or his representative, further reserves the unqualified right to determine whether any particular item or items or materials, equipment, or whatsoever is an approved equal, and reserves the unqualified right to a final decision regarding the approval or rejection of the same. The bid selection shall be based on the apparent low bidder for the **"TOTAL AMOUNT OF BASE BID "**.

BIDDER:\_\_\_\_\_

AUTHORIZED SIGNATURE:\_\_\_\_\_

00300-5  
BID "B"



**SWORN STATEMENT  
THE FLORIDA TRENCH SAFETY ACT**

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR BY AN OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This Sworn Statement is submitted with IFB No. #12-1310-OV
2. This Sworn Statement is submitted by \_\_\_\_\_  
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. Name of individual signing this Sworn Statement is: \_\_\_\_\_,  
Whose relationship to the above entity is: \_\_\_\_\_.
4. The Trench Safety Standards that will be in effect during the construction of this project shall  
include, but are not limited to: Laws of Florida, Chapters 90-96, TRENCH SAFETY ACT, and  
OSHA RULES AND REGULATIONS 29 CFR 1926.650 Subpart P, effective October 1, 1990.
5. The undersigned assures that the entity will comply with the applicable Trench Safety Standards  
and agrees to indemnify and hold harmless the Owner and Engineer, and any of their agents or  
employees from any claims arising from the failure to comply with said standard.
6. The undersigned has appropriated the following costs for compliance with the applicable  
standards:

Trench Safety Measure (Description)	Units of Measure (LF, SY)	Unit Quantity	Unit Cost	Extended Cost
a. _____	_____	_____	\$ _____	_____
b. _____	_____	_____	\$ _____	_____
c. _____	_____	_____	\$ _____	_____
d. _____	_____	_____	\$ _____	_____

7. The undersigned intends to comply with these standards by instituting the following procedures:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

THE UNDERSIGNED, in submitting this Bid, represents that they have reviewed and considered all available geotechnical information and made such other investigations and tests as they may deem necessary to adequately design the trench safety system(s) to be utilized on this project.

\_\_\_\_\_  
(AUTHORIZED SIGNATURE / TITLE)

SWORN to and subscribed before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.  
(impress official seal)

\_\_\_\_\_  
Notary Public, State of Florida  
My commission expires: \_\_\_\_\_

SECTION 00430  
**CONTRACTOR'S QUESTIONNAIRE**

(Submit in Triplicate)

The Bidder warrants the truth and accuracy of all statements and answers herein contained.  
**(Include additional sheets if necessary.)**

THIS QUESTIONNAIRE MUST BE COMPLETED AND SUBMITTED WITH YOUR BID.

**A General Contractor's License is a requirement for this bid with a minimum of five (5) years experience in this type of work.**

1. LICENSE(S) # and COMPANY'S NAME: \_\_\_\_\_  
 CO. PHYSICAL ADDRESS: \_\_\_\_\_  
 TELEPHONE NUMBER: (\_\_\_\_) \_\_\_\_\_ FAX (\_\_\_\_) \_\_\_\_\_
  
2. Bidding as an; individual; a partnership; a corporation; a joint venture; \_\_\_\_
  
3. If a partnership: list names and addresses of partners; if a corporation: list names of officers, directors, shareholders, and state of incorporation; if joint venture: list names and address of ventures' and the same if any venture are a corporation for each such corporation, partnership, or joint venture:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  
4. Your organization has been in business (under this firm's name) as a \_\_\_\_\_  
 For how many years? \_\_\_\_\_
  
5. Describe and give the date and owner of the last three government projects you've completed which are similar in cost, type, size, and nature as the one proposed (for a public entity). Include contact name and phone number:  
 \_\_\_\_\_  
 \_\_\_\_\_
  
6. Have you ever been assessed liquidated damages under a contract during the past five (5) years? If so, state when, where (contact name, address, and phone number) and why.  
 \_\_\_\_\_  
 \_\_\_\_\_
  
7. Have you ever failed to complete work awarded to you? If so, state when, where (Contact name, address, phone number) and why?  
 \_\_\_\_\_  
 \_\_\_\_\_

8. Have you ever been debarred or prohibited from bidding on a governmental entity's construction project? If yes, name the entity and describe the circumstances:
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
9. What specific steps have you taken to examine the physical conditions at or contiguous to the site, including but not limited to, the location of existing underground facilities?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
10. What specific physical conditions, including, but not limited to, the location of existing underground facilities have you found which will, in any manner, affect cost, progress, performance, or finishing of the work?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
11. Will you subcontract any part of this Work? If so, describe which major portion(s):
- \_\_\_\_\_
- \_\_\_\_\_
12. If any, list (with contract amount) WBE/MBE to be utilized:
- \_\_\_\_\_
- \_\_\_\_\_
13. What equipment do you own to accomplish this Work?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
14. What equipment will you purchase/rent for the Work? (Specify which)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

15. Provide and describe the largest, most complex project of this nature that you have completed.

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16. Provide your present commitments, including owner, scope and location of the project, cost of the project and estimated completion date.

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17. Describe and give the date and owner of the **last three (3) government projects** you have completed which are similar in cost, type, size and nature as the one proposed (for a public entity). Include contact name, and phone number: Also include: Project Title, location and work summary, Contractor's Project Manager.

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18. Describe and give the date and owner of the **last three (3) private contracts** you have completed which are similar in cost, type, size and nature. Include contact name and phone number. Also include: Project Title, location and work summary, Contractor's Project Manager.

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19. List the following in connection with the Surety which is providing the Bond(s):

Surety's Name: \_\_\_\_\_

Surety's Address: \_\_\_\_\_

Name, address and phone number of Surety's resident agent for service of process in Florida:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_

**PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION****SWORN STATEMENT PURSUANT TO ARTICLE 5,  
MANATEE COUNTY PURCHASING CODE**

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

This sworn statement is submitted to the Manatee County Board of County Commissioners by

\_\_\_\_\_  
[print individual's name and title]

\_\_\_\_\_ for \_\_\_\_\_  
[print name of entity submitting sworn statement]

Whose business 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: \_\_\_\_\_

I understand that no person or entity shall be awarded or receive a county contract for public improvements, procurement of goods or services (including professional services) or a county lease, franchise, concession or management agreement, or shall receive a grant of county monies unless such person or entity has submitted a written certification to the County that it has not:

- (1) been convicted of bribery or attempting to bribe a public officer or employee of Manatee County, the State of Florida, or any other public entity, including, but not limited to the Government of the United States, any state, or any local government authority in the United States, in that officer's or employee's official capacity; or
- (2) been convicted of an agreement or collusion among bidders or prospective bidders in restraint of freedom of competition, by agreement to bid a fixed price, or otherwise; or
- (3) been convicted of a violation of an environmental law that, in the sole opinion of the County's Purchasing Director, reflects negatively upon the ability of the person or entity to conduct business in a responsible manner; or
- (4) made an admission of guilt of such conduct described in items (1), (2) or (3) above, which is a matter of record, but has not been prosecuted for such conduct, or has made an admission of guilt of such conduct, which is a matter of record, pursuant to formal prosecution. An admission of guilt shall be construed to include a plea of nolo contendere; or
- (5) where an officer, official, agent or employee of a business entity has been convicted of or has admitted guilt to any of the crimes set forth above on behalf of such and entity and pursuant to the direction or authorization of an official thereof (including the person committing the offense, if he is an official of the

business entity), the business shall be chargeable with the conduct herein above set forth. A business entity shall be chargeable with the conduct of an affiliated entity, whether wholly owned, partially owned, or one which has common ownership or a common Board of Directors. For purposes of this Form, business entities are affiliated if, directly or indirectly, one business entity controls or has the power to control another business entity, or if an individual or group of individuals controls or has the power to control both entities. Indicia of control shall include, without limitation, interlocking management or ownership, identity of interests among family members, shared organization of a business entity following the ineligibility of a business entity under this Article, or using substantially the same management, ownership or principles as the ineligible entity.

Any person or entity, who claims that this Article is inapplicable to him/her's/it because a conviction or judgement has been reversed by a court of competent jurisdiction, shall prove the same with documentation satisfactory to the County's Purchasing Director. Upon presentation of such satisfactory proof, the person or entity shall be allowed to contract with the County.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR MANATEE COUNTY IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT ANY CONTRACT OR BUSINESS TRANSACTION SHALL PROVIDE FOR SUSPENSION OF PAYMENTS, OR TERMINATION, OR BOTH, IF THE CONTRACTING OFFICER OR THE COUNTY ADMINISTRATOR DETERMINES THAT **SUCH PERSON OR ENTITY HAS MADE FALSE CERTIFICATION.**

\_\_\_\_\_  
[Signature]

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2009 by  
\_\_\_\_\_.

Personally known \_\_\_\_\_ OR produced \_\_\_\_\_  
[Type of identification]

\_\_\_\_\_  
My commission expires \_\_\_\_\_  
Notary Public Signature

\_\_\_\_\_  
[Print, type or stamp Commissioned name of Notary Public]

**Signatory Requirement** - In the case of a business entity other than a partnership or a corporation, this affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, this affidavit shall be executed by the general partner(s). In the case of a corporation, this affidavit shall be executed by the corporate president.

SECTION 00500  
**FORM OF AGREEMENT**  
**BETWEEN THE**  
**COUNTY OF MANATEE, FLORIDA**  
**AND THE CONTRACTOR AS IDENTIFIED BELOW**  
**ON THE BASIS OF A STIPULATED UNIT COST CONTRACT PRICE**

THIS AGREEMENT is made and entered into by and between the COUNTY OF MANATEE, a political subdivision of the state of Florida, hereinafter referred to as the "COUNTY" and \_\_\_\_\_, hereinafter referred to as the "CONTRACTOR," duly authorized to transact business in the state of Florida, with offices located at \_\_\_\_\_.

**Article 1. WORK**

CONTRACTOR shall furnish all labor, materials, supplies, and other items required to complete the Work for IFB No. **IFB#12-1310-OV SWWRF LAKE FILTRATION SYSTEM AND NORTH POND IMPROVEMENTS, BRADENTON, FL MANATEE COUNTY PROJECT NO.: 6079180** in strict accordance with Contract Documents and any duly authorized subsequent addenda thereto, all of which are made a part hereof.

**Article 2. ENGINEER**

The County of Manatee, Project Management Department, is responsible as the COUNTY and **McKim & Creed, Clearwater, FL** hereinafter referred to as "ENGINEER," designed this project and is responsible for technical/engineering reviews and decisions. The ENGINEER is a member of the COUNTY'S project management team which is collectively responsible in ensuring the Work is completed in accordance with the Contract Documents.



All communications involving this project will be addressed to Mr. Anthony Benitez, Engineer II and Ms. Rebecca Avalos, Project Engineer, URS Corporation. **All invoices will be addressed to Mr. Anthony Benitez with copies of invoices to Mr. Matthew S. Love, McKim & Creed Corporation, 1365 Hamlet Avenue, Clearwater, FL 33756.**

County of Manatee  
Public Works Department  
Project Management Division  
Attn: Mr. Anthony Benitez, Engineer II  
IFB#12-1310-OV  
1022 26<sup>th</sup> Avenue East  
Bradenton, FL 34208  
Phone (941) 708-7450, Ext. 7333

McKim & Creed Corporation  
Engineer of Record  
1365 Hamlet Avenue  
  
Clearwater, FL 33756  
Phone (727) 442-7196

Where the terms ENGINEER and/or COUNTY are used in the Contract Documents, it shall mean the COUNTY'S project management team.

### **Article 3. CONTRACTOR'S REPRESENTATIONS**

In order to induce COUNTY to enter into this Agreement, CONTRACTOR makes the following representations:

- 3.1 CONTRACTOR has familiarized itself with the nature and extent of the Bid Documents, Work, site, locality and all local conditions and laws and regulations that in any manner may affect cost, progress, performance or furnishing of the Work.
- 3.2 CONTRACTOR has studied carefully all drawings of the physical conditions upon which CONTRACTOR is entitled to rely.
- 3.3 CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies which pertain to the physical conditions at or contiguous to the site or which otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Bid Documents; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by CONTRACTOR for such purposes.

- 3.4 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Bid Documents with respect to existing underground facilities at or contiguous to the site and assumes responsibility for the accurate location of said underground facilities. Any additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said underground facilities conducted by the CONTRACTOR will be done at the CONTRACTOR'S expense.
- 3.5 CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Bid.
- 3.6 CONTRACTOR has given COUNTY written notice of all conflicts, errors or discrepancies that have been discovered in the Bid Documents and the written resolution thereof by OWNER is acceptable to CONTRACTOR.
- 3.7 CONTRACTOR shall schedule and perform the Work subject to COUNTY'S approval and shall hold COUNTY harmless from all liabilities incurred due to CONTRACTOR'S failure to coordinate with the COUNTY.

#### **Article 4. CONTRACT DOCUMENTS**

The Contract Documents which comprise entire Agreement between COUNTY and CONTRACTOR concerning the Work consist of the following:

- 4.1 This Agreement and Bid Document **IFB#12-1310-OV**
- 4.2 Performance and/or other Bonds and Insurance Certificate(s)
- 4.3 Drawings (not attached)
- 4.4 Addenda numbers \_\_\_\_\_ to \_\_\_\_\_, inclusive.
- 4.5 CONTRACTOR'S Bid Form and any other information submitted by Contractor prior to Notice of Award.

- 4.6 The following which may be delivered or issued after the effective date of the Agreement and are not attached hereto: all written Change Orders and other documents amending, modifying, or supplementing the Contract Documents.
- 4.7 The documents listed in paragraphs above are attached to this Agreement (except as noted otherwise above). There are no Contract Documents other than those listed above in this Article 4.

#### **Article 5. MISCELLANEOUS**

- 5.1 Terms used in this Agreement are defined in Article 1 of the General Conditions.
- 5.2 No assignment by a party hereto of any rights under or interest in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law); and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignee from any duty or responsibility under the Contract Documents.
- 5.3 COUNTY 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 of all covenants, agreements and obligations contained in the Contract Documents.

The OWNER will pay, and the CONTRACTOR will accept in full consideration for the performance of the Work **IFB No. #12-1310-OV SWWRF Lake Filtration System and North Pond Improvements, Bradenton, FL Manatee County Project No.: 6079180** subject to additions and deductions as provided therein, the sum of **and Zero Cents** for **Bid "X"** based on Completion Time of **XXX calendar days** and the sum of **\$3,782.00** as liquidated damages for each calendar day of delay.

\_\_\_\_\_  
CONTRACTOR

BY: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Name and Title of Signer (printed)

Date: \_\_\_\_\_

MANATEE COUNTY GOVERNMENT

BY: \_\_\_\_\_ For the County  
Signature

Melissa M. Wendel, CPPO, Purchasing Official  
Name and Title of Signer

Date: \_\_\_\_\_

SECTION 00700  
GENERAL CONDITIONS

ARTICLE I - DEFINITIONS

Whenever used in the Bid Documents, the following terms have the meaning indicated which are applicable to both the singular and plural thereof:

Addendum - Written or graphic instruments issued prior to the opening of bids which clarify or change the bidding documents or the contract documents.

Agreement - The written Agreement between County and Contractor covering the Work to be performed; other contract documents are attached to the Agreement and made a part thereof as provided therein.

Written Amendment - A written amendment of the contract documents, signed by County and Contractor on or after the effective date of the Agreement and normally dealing with the non-engineering or non-technical rather than strictly work related aspects of the contract documents.

Application for Payment - The form accepted by Project Representative which is to be used by Contractor in requesting progress or final payments and which is to include such supporting documentation as is required by the contract documents.

Award - Acceptance of the bid from the person, firm, or corporation which in the County's sole and absolute judgment will under all circumstances best serve the public interest. Award shall be made by a majority vote of a quorum of Manatee County Board of County Commissioners in open session; or by the Purchasing Official in accordance with Ordinance 11-43, Manatee County Purchasing Ordinance.

Bid - The offer of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

Bidder - One who submits a bid directly to the County, as distinct from a sub-bidder, who submits a bid to a Bidder.

Bidding Documents - Consists of the Invitation For Bid, which includes but is not limited to: the bid form, drawings, Contract Documents, terms and conditions, and the proposed contract documents (including all Addenda issued prior to receipt of bids); and becomes a part of the Agreement.

Bonds - Performance and payment bonds and other instruments of security.

Change Order - A document recommended by Project Representative which is signed by Contractor and County and authorizes an addition, deletion, or revision in the Work or an adjustment in the contract price or the contract time, issued on or after the effective date of the Agreement.

Compensable Delay - Any delay beyond the control and without the fault or negligence of the Contractor resulting from County-caused changes in the Work, differing site conditions, suspensions of the Work, or termination for convenience by County.

Contract Documents - The Agreement, Addenda (which pertain to the contract documents), Contractor's bid (including documentation accompanying the bid and any post-bid documentation submitted prior to the Notice of Award), the bonds, the specifications and the drawings, together with all amendments, modifications and supplements issued on or after the effective date of the Agreement.

Contract Price - The monies payable by County to Contractor under the contract documents as stated in the Agreement.

Contract Time - The number of days or the date stated in the Notice to Proceed for the completion of the Work.

Contractor - The person, firm or corporation with whom County has entered into an Agreement.

Days - All references to days are to be considered calendar days except as specified differently.

Defective - An adjective which when modifying the work refers to work that is unsatisfactory, faulty or deficient, or does not conform to the contract documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the contract documents, or has been damaged prior to Project Representative's recommendation of final payment (unless responsibility for the protection thereof has been assumed by County).

Discretionary - Payment for all work that shall be made only at the County's discretion in order to satisfactorily complete the project in accordance with the Plans and Specifications.

Drawings - The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by Engineer and are referred to in the bidding and contract documents.

Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective (date of execution).

Excusable Delay - Any delay beyond the control and without the negligence of the Contractor, the County, or any other contractor caused by events or circumstances such as, but not limited to, acts of God or of the public enemy, fires, floods, freight embargoes, acts of government other than County, or epidemics. Labor disputes and above average rainfall shall give rise only to excusable delays.

Float or Slack Time - The time available in the progress schedule during which an unexpected activity can be completed without delaying substantial completion of the Work.

Inexcusable Delay - Any delay caused by events or circumstances within the control of the Contractor, such as inadequate crewing, slow submittals, etc., which might have been avoided by the exercise of care, prudence, foresight, or diligence on the part of the Contractor.

Non-prejudicial Delay - Any delay impacting a portion of the Work within the available total float or slack time and not necessarily preventing completion of the Work within the contract time.

Notice of Award - The written notice to the successful bidder stating Award has been approved by the Board of County Commissioners; or by the Purchasing Official in accordance with Ordinance 11-43, Manatee County Purchasing Code.

Notice of Intent to Award - The written notice to the apparent low bidder stating Award has been recommended with final Award to be authorized by the Board of County Commissioners.

Notice to Proceed - Written notice by County (after execution of contract) to Contractor fixing the date on which the contract time will commence to run and on which Contractor shall start to perform (ten (10) days from date of such notice) Contractor's obligations under the contract documents.

County - Manatee County, Florida, Board of County Commissioners.

Preconstruction Conference - Prior to starting the Work, a meeting scheduled by County with Contractor to review the Work schedules, to establish procedures for handling shop drawings and other submissions, for processing periodical pay estimates, and such other matters as may be pertinent to the project.

Prejudicial Delay - Any excusable or compensable delay impacting the Work and exceeding the total float available in the progress schedule, thus preventing completion of the Work within the contract time unless the Work is accelerated.

Pre-operation Testing - All field inspections, installation checks, water tests, performance tests and necessary corrections required of Contractor to demonstrate that individual components of the work have been properly constructed and do operate in accordance with the contract documents for their intended purposes.

Project - The total construction of which the Work to be provided under the contract documents may be the whole or a part as indicated elsewhere in the contract documents.

Project Representative - The authorized representative of County who is assigned to the project or any part thereof.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a supplier and submitted by Contractor to illustrate material or equipment for some portion of the Work.

Specifications - Those portions of the contract documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor - An individual or corporation having a direct contact with Contractor or with any other subcontractor for the performance of a part of the Work at the site. Such person or firm has contractual relations with the Contractor, not with the County.

Substantial Completion - The Work (or a specified part thereof) has progressed to the point when, in the opinion of the Engineer as evidenced by Engineer's definitive certificate of Substantial Completion, it is sufficiently complete in accordance with contract documents so that the work can be utilized for the purposes for which it is intended; or if there be no such certificate issued, when final payment is due.

Successful Bidder - The lowest qualified, responsible and responsive bidder to whom an award is made.

Supplier - A manufacturer, fabricator, supplier, distributor, materialman or vendor.

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

Unit Price Work - Work to be paid for on the basis of unit prices.

Work - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the contract documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the contract documents.

Work Directive Change - A written directive to contractor, issued on or after the effective date of the Agreement and signed by County and recommended by Project Representative ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed or to emergencies. A work directive change may not change the contract price or the contract time; but is evidence that the parties expect that the change directed or documented by a work directive change will be incorporated in a subsequently issued change order following negotiations by the parties as to its effect, if any, on the contract price or contract time.



## ARTICLE 2 - PRELIMINARY MATTERS

Computation of Time: When time is referred to in the contract documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or legal holiday, such day will be omitted from the computation.

- 2.1 The Contractor must submit a proposed schedule of the Work at the preconstruction conference. The purpose of this schedule is to enable the County to govern the Work, to protect the functions of the local government and its citizens and to aid in providing appropriate surveillance. The County shall have the right to reschedule work provided such rescheduling is in accord with the remainder of terms of the contract. The schedule shall show, as a minimum, the approximate dates on which each segment of the work is expected to be started and finished, the proposed traffic flows during each month, the anticipated earnings by the Contractor for each month and the approximate number of crews and equipment to be used. The County, after necessary rescheduling and obtaining additional information for specific purposes, shall review and approve the schedule. The Contractor shall also forward to the County, as soon as practicable after the first day of each month, a summary report of the progress of the various parts of the work under the contract, in fabrication and in the field, stating the existing status, estimated time of completion and cause of delay, if any. Together with the summary report, the Contractor shall submit any necessary revisions to the original schedule for the County's review and approval. In addition, more detailed schedules may be required by the County for daily traffic control.
- 2.2 A Notice to Proceed may be given at any time within thirty (30) days after the effective date of the Agreement. The contract time will commence at the time specified in such notice. Contractor shall start to perform the Work on the date specified in the notice to proceed, but no work shall be done at the site prior to the date on which the contract time commences to run.
- 2.3 If at any time the materials and appliances to be used appear to the County as insufficient or improper for securing the quality of work required or the required rate of progress, the County may order the Contractor to increase his efficiency or to improve the character of his work and the Contractor shall conform to such an order. The failure of the County to demand any increase of such efficiency of any improvement shall not release the County from his obligation to secure the quality of work or the rate of progress necessary to complete the Work within the limits imposed by the contract. The County may require the Contractor to remove from the Work such employees as the County deems incompetent, careless, insubordinate or otherwise objectionable, or whose continued employment on the Work is deemed to be contrary to the County's interest.
- 2.4 The County reserves the right to let other Contracts in connection with this Work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and execution of their Work, and promptly connect and coordinate the Work with theirs.

**ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, RE-USE**

- 3.1 The contract documents comprise the entire Agreement between County and Contractor concerning the work. The contract documents are complementary; what is called for by one is as binding as if called for by all. The contract documents will be construed in accordance with the laws and ordinances of the State of Florida and the County of Manatee.

Should a conflict exist within the contract documents, the precedence in ascending order of authority are as follows: 1) Standard Printed Contract Documents, 2) Special Conditions, 3) General Conditions and 4) Drawings. Note: Computed dimensions shall govern over scaled dimensions.

- 3.2 It is the intent of the contract documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the contract documents. Any work, materials or equipment that may reasonably be inferred from the contract documents as being required to produce the intended result will be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of opening of bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the contract documents) shall be effective to change the duties and responsibilities of County, Contractor or Engineer, or any of their agents or employees from those set forth in the Contract Documents.

- 3.3 The contract documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

3.3.1 A Formal Written Amendment

3.3.2 A Change Order

3.3.3 Administrative Contract Adjustment (ACA)

- 3.4 In addition, the requirements of the contract documents may be supplemented and minor variations and deviations in the Work may be authorized in one or more of the following ways:

3.4.1 Discretionary Work – Field Directive

3.4.2 Engineer's approval of a Shop Drawing or sample.

## ARTICLE 4 - CONTRACTOR'S RESPONSIBILITIES

- 4.1 Contractor shall keep on the Work at all times during its progress a competent resident superintendent; who shall be the Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the superintendent shall be as binding as if given to Contractor.
- 4.2 Contractor shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the contract documents. Contractor shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto and except as otherwise indicated in the contract documents, all Work at the site shall be performed during regular working hours and Contractor will not permit overtime work or the performance of work on Saturday, Sunday or legal holiday without County's written consent given after prior notice to Engineer (at least 72 hours in advance).
- 4.2.1 Contractor shall pay for all additional engineering charges to the County for any overtime work which may be authorized. Such additional engineering charges shall be a subsidiary obligation of Contractor and no extra payment shall be made by County on account of such overtime work. At County's option, overtime costs may be deducted from Contractor's monthly payment request or Contractor's retainage prior to release of final payment.
- 4.3 Unless otherwise specified, Contractor shall furnish and assume full responsibility for all bonds, insurance, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.
- 4.4 All materials and equipment shall be of good quality and new, except as otherwise provided in the contract documents. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instruction of the applicable supplier except as otherwise provided in the contract documents.
- 4.5 Contractor shall be fully responsible to County for all acts and omissions of the subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with Contractor just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between County or Engineer and any such subcontractor, supplier or other person or organization, nor shall it create any obligation on the part of County to pay or to see to the payment of any monies due any such subcontractor, supplier or other person or organization.

- 4.6 Permits: Unless otherwise provided, Contractor shall obtain and pay for all construction permits and licenses. County shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work.
- 4.7 During the progress of the Work, Contractor shall keep the premises free from accumulation of waste materials rubbish and other debris resulting from the Work. At the completion of the Work, Contractor shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery and surplus materials and shall leave the site clean and ready for occupancy by County. Contractor shall restore to original conditions all property not designated for alteration by the Contract Documents.
- 4.8 Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.
- 4.9 Safety and Protection: Contractor shall comply with the Florida Department of Commerce Safety Regulations and any local safety regulations. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to:
- 4.9.1 all employees on the work and other persons and organizations who may be affected thereby;
  - 4.9.2 all the work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
  - 4.9.3 other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.

Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall provide and maintain all passageways, guard fences, lights and other facilities for the protection required by public authority or local conditions. Contractor shall provide reasonable maintenance of traffic way for the public and preservation of the County's business, taking into full consideration all local conditions. Contractor's duties and responsibilities for the safety and protection of the work shall continue until such time as all the work is completed.

- 4.10 Emergencies: In emergencies affecting the safety or protection of persons or the work or property at the site or adjacent thereto, Contractor, without special instruction or authorization from Engineer or County, is obligated to act to prevent threatened damage, injury or loss. Contractor shall give County prompt written notice if Contractor believes that any significant changes in the work or variations from the contract documents have been caused thereby. If Owner determines that a change in the contract documents is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variation.
- 4.11 For substitutes not included with the bid, but submitted after the effective date of the Agreement, Contractor shall make written application to Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will also contain an itemized estimate of all costs and delays or schedule impacts that will result directly or indirectly from review, acceptance and provisions of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by the Engineer in evaluating the proposed substitute. Engineer may require Contractor to furnish at Contractor's expense, additional data about the proposed substitute. In rendering a decision, County/Engineer and Contractor shall have access to any available float time in the construction schedule. In the event that substitute materials or equipment not included as part of the bid, but proposed after the effective date of the agreement, are accepted and are less costly than the originally specified materials or equipment, then the net difference in cost shall be credited to the County and an appropriate change order executed.
- 4.11.1 If a specific means, method, technique, sequence of procedure of construction is indicated in or required by the contract documents, Contractor may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to Engineer if Contractor submits sufficient information to allow Engineer to determine that the substitute proposed is equivalent to that indicated or required by the contract documents.
- 4.11.2 Engineer will be allowed a reasonable time within which to evaluate each proposed substitute. Engineer will be the sole judge of acceptability and no substitute will be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a change order or an approved shop drawing. County may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- 4.11.3 Contractor shall reimburse County for the charges of Engineer and Engineer's Consultants for evaluating each proposed substitute submitted after the effective date of the Agreement and all costs resulting from any delays in the work while the substitute was undergoing review.

- 4.12 The Contractor shall furnish, free of charge, all labor, stakes, surveys, batter boards for structures, grade lines and other materials and supplies and shall set construction stakes and batter boards for establishing lines, position of structures, slopes and other controlling points necessary for the proper prosecution of the construction work. Where rights-of-way, easements, property lines or any other conditions which make the lay-out of the project or parts of the project critical are involved, the Contractor will employ a competent surveyor who is registered in the State of Florida for lay-out and staking. These stakes and marks shall constitute the field control by and in accord with which the Contractor shall govern and execute the work. The Contractor will be held responsible for the preservation of all stakes, marks and if for any reason any of the stakes or marks or batter boards become destroyed or disturbed, they will be immediately and accurately replaced by the Contractor.
- 4.13 The Contractor has, by careful examination, satisfied himself as to the nature and location of the work and all other matters which can in any way affect the work under this contract, including, but not limited to details pertaining to boring, as shown on the drawings, are not guaranteed to be more than a general indication of the materials likely to be found adjacent to holes bored at the site of the work, approximately at the locations indicated. The Contractor shall examine boring data, where available, and make his own interpretation of the subsoil investigations and other preliminary data, and shall base his bid on his own opinion of the conditions likely to be encountered. In no event shall an extension of time be considered for any conditions that existed at the time of bidding, nor shall the Contractor receive extra compensation for completion of the project as intended by the drawings and in keeping with the contract documents. No verbal agreement or conversation with any officer, agent or employee of the County, before or after the execution of this contract, shall affect or modify any of the terms or obligations herein contained.
- 4.14 If the Contractor, in the course of the work, finds that the drawings and/or Contract Documents cannot be followed, he shall immediately inform the County in writing, and the County shall promptly check the accuracy of the information. Any work done after such discovery, until any necessary changes are authorized, will be done at the Contractor's risk.

## ARTICLE 5 - OWNER'S RESPONSIBILITIES

- 5.1 County shall furnish the data required of County under the contract documents promptly and shall make payments to the Contractor within a reasonable time (no more than 45 days) after the Work has been accepted by the County. The form of all submittals, notices, change orders and other documents permitted or required to be used or transmitted under the contract documents shall be determined by the County/Engineer. Standard County forms shall be utilized.
- 5.2 The County shall provide the lands upon which the Work under this contract is to be done, except that the Contractor shall provide all necessary additional land required for the erection of temporary construction facilities and storage of his materials, together with right of access to same.

- 5.3 The County shall have the right to take possession of and use any completed portions of the work, although the time for completing the entire work or such portions may not have expired, but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents.

#### ARTICLE 6 - CHANGES IN THE WORK

- 6.1 Without invalidating the Agreement and without notice to any surety, County may, at any time, order additions, deletions or revisions in the Work. These will be authorized by a written amendment, a change order, or a work directive change. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the contract documents (except as otherwise specifically provided).
- 6.2 Contractor shall not be entitled to an increase in the contract price or an extension of the contract time with respect to any Work performed that is not required by the contract documents as amended, modified and supplemented.
- 6.3 County and Contractor shall execute appropriate change orders (or written amendments) covering changes in the Work which are ordered by County, or which may be required because of acceptance of defective Work.
- 6.4 At any time Engineer may request a quotation from Contractor for a proposed change in the Work and within twenty-one (21) calendar days after receipt, Contractor shall submit a written and detailed proposal for an increase or decrease in the contract price or contract time for the proposed change. Engineer shall have 21 calendar days after receipt of the detailed proposal to respond in writing. The proposal shall include an itemized estimate of all costs and time for performance that will result directly or indirectly from the proposed change. Unless otherwise directed, itemized estimates shall be in sufficient detail to reasonably permit an analysis by Engineer of all material, labor, equipment, subcontracts, overhead costs and fees, and shall cover all Work involved in the change, whether such Work was deleted, added, changed or impacted. Notwithstanding the request for quotation, Contractor shall carry on the Work and maintain the progress schedule. Delays in the submittal of the written and detailed proposal will be considered non-prejudicial.

#### ARTICLE 7 - CHANGE OF CONTRACT PRICE

- 7.1 The contract price constitutes the total compensation (subject to authorized adjustments) payable to Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at his expense without change in the contract price.
- 7.2 The contract price may only be changed by change order or by a written amendment. Any claim for an increase or decrease in the contract price shall be based on written notice delivered by the party making the claim to the other party. Notice of the amount of the claim with supporting data shall be delivered within ten (10) days from the beginning of such occurrence and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event.

- 7.3 The value of any Work covered by a change order or of any claim for an increase or decrease in the contract price shall be determined in one of the following ways (at County's discretion):
- 7.3.1 Where the Work involved is covered by unit prices contained in the contract documents, cost will be determined by application of such unit prices to the quantities of the items involved.
  - 7.3.2 By mutual acceptance of lump sum.
  - 7.3.3 On the basis of the cost of the Work, plus a 15% Contractor's fee for overhead and profit. (Contractor shall submit an itemized cost breakdown together with supporting data.)
- 7.4 Either County or Contractor may make a claim for an adjustment in the contract price. The unit price of an item of unit price Work shall be subject to re-evaluation and adjustment under the following conditions:
- 7.4.1 If the total cost of a particular item of unit price Work amounts to 5% or more of the contract price and the variation in the quantity of the particular item of unit price Work performed by Contractor differs by more than 15% from the estimated quantity of such item indicated in the Agreement; and
  - 7.4.2 If there is no corresponding adjustment with respect to any other item of Work; and
  - 7.4.3 If a Contractor believes that it has incurred additional expense as a result thereof; or
  - 7.4.4 If County believes that the quantity variation entitles it to an adjustment in the unit price; or
  - 7.4.5 If the parties are unable to agree as to the effect of any such variations in the quantity of unit price Work performed.

## ARTICLE 8 - CHANGE OF CONTRACT TIME

- 8.1 Contract time may only be changed by a change order or a written amendment. Any claim for an extension or shortening of the contract time shall be based on written notice delivered by the party making the claim to the other party. Notice of the extent of the claim with supporting data shall be delivered within fifteen (15) days from detection or beginning of such occurrence and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event.



- 8.2 The contract time will be extended in an amount equal to time lost due to delays beyond the control of Contractor. Such delays shall include, but not be limited to, acts or neglect by County or others performing additional work; or to fires, floods, epidemics, abnormal weather conditions or acts of God.
- 8.3 All time limits stated in the contract documents are of the essence.

#### ARTICLE 9 - WARRANTY, TEST/INSPECTION, CORRECTION

- 9.1 Contractor warrants (for a minimum period of three years or as otherwise stated herein) and guarantees to County that all work will be in accordance with the contract documents and will not be defective; that County, representatives of County, governmental agencies with jurisdictional interests will have access to the work at reasonable time for their observation, inspecting and testing (Contractor shall give Engineer timely notice of readiness of the work for all required approvals and shall assume full responsibility, including costs, in obtaining required tests, inspections, and approval certifications and/or acceptance, unless otherwise stated by County).
- 9.2 If any work (including work of others) that is to be inspected, tested, or approved is covered without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice. Neither observations by Engineer nor inspections, tests, or approvals by others shall relieve Contractor from Contractor's obligations to perform the work in accordance with the contract documents.
- 9.3 If the work is defective, or Contractor fails to supply sufficient skilled workers, or suitable materials or equipment, or fails to furnish or perform the work in such a way that the completed work will conform to the contract documents, County may order Contractor to stop the work, or any portion thereof and terminate payments to the Contractor until the cause for such order has been eliminated. Contractor shall bear all direct, indirect and consequential costs for satisfactory reconstruction or removal and replacement with non-defective work, including, but not limited to fees and charges of engineers, architects, attorneys and other professionals and any additional expenses experienced by County due to delays to other Contractors performing additional work and an appropriate deductive change order shall be issued. Contractor shall further bear the responsibility for maintaining schedule and shall not be entitled to an extension of the contract time and the recovery of delay damages due to correcting or removing defective work.
- 9.3.1 If Contractor fails within seven (7) days after written notice to correct defective work, or fails to perform the work in accordance with the contract documents, or fails to comply with any other provision of the contract documents, County may correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, County may exclude Contractor from all or part of the site, take possession of all or part of the work, Contractor's tools, construction equipment and machinery at the site or for which County has paid

Contractor but which are stored elsewhere. All direct, indirect and consequential costs of County in exercising such rights and remedies will be charged against Contractor in an amount approved as to reasonableness by Engineer and a change order will be issued incorporating the necessary revisions.

- 9.3.2 If within three years after the date of **substantial completion** or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the contract documents, any work is found to be defective, Contractor shall promptly, without cost to County and in accordance with County's written instructions, either correct such defective work or if it has been rejected by County, remove it from the site and replace it with non-defective work. If Contractor does not promptly comply with the terms of such instruction, County may have the defective work corrected/removed and all direct, indirect and consequential costs of such removal and replacement will be paid by Contractor.

#### ARTICLE 10 - SUSPENSION/TERMINATION OF WORK

- 10.1 County may, at any time and without cause, suspend the work or any portion thereof for a period of not more than ninety (90) days by written notice to Contractor, which will fix the date on which work will be resumed. Contractor shall be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to any suspension if Contractor makes an approved claim therefore.
- 10.2 County may terminate the contract if Contractor commences a voluntary case under any chapter of the Bankruptcy Code or any similar action by filing a petition under any other federal or state law relating to the bankruptcy or insolvency; if a petition is filed against the Contractor under any chapter of the Bankruptcy Code or similar relief under any other federal or state law; if Contractor persistently fails to perform the work in accordance with the contract documents; if Contractor disregards laws or regulations of any public body having jurisdiction or the Engineer; or otherwise violates in any substantial way any provisions of the contract.
- 10.2.1 County may, after giving Contractor (and the surety, if there is one) seven (7) days written notice and to the extent permitted by laws and regulations, terminate the services of Contractor; exclude Contractor from the site and take possession of the work and of all Contractor's tools, construction equipment and machinery at the site and use the same to the full extent they could be used (without liability to Contractor for trespass or conversion); incorporate in the work all materials and equipment stored at the site or for which county has paid Contractor but which are stored elsewhere, and finish the work as County may deem expedient. In such case, Contractor shall not be entitled to receive any further payment beyond an amount equal to the value of material and equipment not incorporated in the work, but delivered and suitably stored, less the aggregate of payments previously made. If the direct and indirect costs of completing the work exceed the unpaid balance of the contract price, Contractor shall pay the difference to County. Such costs incurred by County shall be verified by County and incorporated in

a change order; but in finishing the work, County shall not be required to obtain the lowest figure for the work performed. Contractor's obligations to pay the difference between such costs and such unpaid balance shall survive termination of the Agreement.

- 10.3 If, through no act or fault of Contractor, the work is suspended for a period of more than ninety (90) days by County or under an order of court or other public authority, or Engineer fails to act on any application or fails to pay Contractor any sum finally determined to be due; then Contractor may, upon seven (7) days written notice to County terminate the Agreement and recover from County payment for all work executed, any expense sustained plus reasonable termination expenses. In lieu of terminating the Agreement, if Engineer has failed to act on any application of payment or County has failed to make any payment as aforesaid, Contractor may upon seven (7) days written notice to County stop the work until payment of all amounts then due.

#### ARTICLE 11 - CONTRACT CLAIMS

- 11.1 The rendering of a decision by Engineer with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment) will be a condition precedent to any exercise by County or Contractor of such right or remedies as either may otherwise have under the contract documents or by laws or regulations in respect of any such claim, dispute or other matter. No action, either at law or at equity, shall be brought in connection with any such claim, dispute or other matter later than thirty (30) days after the date on which County/Engineer has rendered such written decision in respect thereof. Failure to bring an action within said thirty (30) day period shall result in Engineer's decision being final and binding on the Contractor. In no event may any such action be brought after the time at which instituting such proceedings would be otherwise barred by the applicable statute of limitations.
- 11.2 Before bringing any action in court pertaining to any claim, dispute or other matter in question(s) arising out of or relating to the contract documents or the breach thereof, or Engineer's final decision, except for claims which have been waived by the making and acceptance of final payment, the Contractor shall first submit written notice(s) of contract claims to the Purchasing Official for a decision; the Contractor may request a conference with the Purchasing Official. Claims include, without limitation, disputes arising under the contract and those based upon breach of contract, mistake, misrepresentation, or other cause for modification or revision. Contract claims shall use the process detailed in The Manatee County Purchasing Code.

#### ARTICLE 12 - RESIDENT PROJECT REPRESENTATIVE - DUTIES, RESPONSIBILITIES

- 12.1 Resident Project Representative is Engineer/County's Agent, who will act as directed by and under the supervision of the Engineer, and who will confer with County/Engineer regarding his actions. Resident Project Representative's dealing in matters pertaining to the on-site work shall, in general, be only with the

County/Engineer and Contractor and dealings with subcontractors shall only be through or with the full knowledge of Contractor.

12.2 Resident Project Representative will:

- 12.2.1 Review the progress schedule, schedule of shop drawing submissions and schedule of values prepared by Contractor and consult with County/Engineer concerning their acceptability.
- 12.2.2 Attend preconstruction conferences. Arrange a schedule of progress meetings and other job conferences as required in consultation with County/Engineer and notify those expected to attend in advance. Attend meetings and maintain and circulate copies of minutes thereof.
- 12.2.3 Serve as County/Engineer's liaison with Contractor, working principally through Contractor's superintendent and assist him in understanding the intent of the contract documents. As requested by County/Engineer, assist in obtaining additional details or information when required at the job site for proper execution of the Work.
- 12.2.4 Receive and record date of receipt of shop drawings and samples, receive samples which are furnished at the site by Contractor and notify County/Engineer of their availability for examination.
- 12.2.5 Advise County/Engineer and Contractor or his superintendent immediately of the commencement of any work requiring a shop drawing or sample submission if the submission has not been approved by the County/Engineer.
- 12.2.6 Conduct on-site observations of the work in progress to assist County/Engineer in determining if the work is proceeding in accordance with the contract documents and that completed work will conform to the contract documents.
- 12.2.7 Report to County/Engineer whenever he believes that any work is unsatisfactory, faulty or defective or does not conform to the contract documents, or does not meet the requirements of any inspections, tests or approvals required or if work has been damaged prior to final payment; and advise County/Engineer when he believes work should be corrected or rejected or should be uncovered of observation or requires special testing, inspection or approval.
- 12.2.8 Verify that tests, equipment and system start-ups and operating and maintenance instructions are conducted as required by the contract documents and in the presence of the required personnel, and that Contractor maintains adequate records thereof; observe, record and report to Engineer appropriate details relative to the test procedures and start-ups.

- 12.2.9 Accompany visiting inspectors representing public or other agencies having jurisdiction over the project; record the outcome of these inspections and report to County/Engineer.
- 12.2.10 Transmit to Contractor, County/Engineer's clarifications and interpretations of the contract documents.
- 12.2.11 Consider and evaluate Contractor's suggestions or modifications in drawings or Contract Documents and report them with recommendations to County/Engineer.
- 12.2.12 Maintain at the job site orderly files for correspondence, reports of job conferences, shop drawings and sample submissions, reproductions of original contract documents including all addenda, change orders, field orders, additional drawings issued subsequent to the execution of the contract, County/Engineer's clarifications and interpretations of the contract documents, progress reports and other project related documents.
- 12.2.13 Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions; list of visiting officials and representatives or manufacturers, fabricators, suppliers and distributors; daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures. Send copies to County/Engineer.
- 12.2.14 Record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.
- 12.2.15 Furnish County/Engineer periodic reports as required of progress of the work and Contractor's compliance with the approved progress schedule and schedule of shop drawing submissions.
- 12.2.16 Consult with County/Engineer in advance of scheduling major tests, inspections or start of important phases of the work.
- 12.2.17 Report immediately the occurrence of any accident.
- 12.2.18 Review applications for payment with Contractor for compliance with the established procedure for their submission and forward them with recommendations to County/Engineer, noting particularly their relation to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the work.
- 12.2.19 During the course of the work, verify that certificates, maintenance and operations manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed, and deliver this material to County/Engineer for his review prior to final acceptance of the work.

- 12.2.20 Before County/Engineer issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.
- 12.2.21 Conduct final inspection in the company of County/Engineer and Contractor and prepare a final list of items to be completed or corrected.
- 12.2.22 Verify that all items on final list have been completed or corrected and make recommendations to County/Engineer concerning acceptance.
- 12.3 Except upon written instructions of County/Engineer, Resident Project Representative.
  - 12.3.1 Shall not authorize any deviation from the contract documents or approve any substitute materials or equipment;
  - 12.3.2 Shall not exceed limitations on County/Engineer's authority as set forth in the contract documents;
  - 12.3.3 Shall not undertake any of the responsibilities of Contractor, Subcontractors or Contractor's Superintendent, or expedite the work;
  - 12.3.4 Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the contract documents;
  - 12.3.5 Shall not advise on or issue directions as to safety precautions and programs in connection with the work;
  - 12.3.6 Shall not authorize County to occupy the project in whole or in part; and
  - 12.3.7 Shall not participate in specialized field or laboratory tests.

#### ARTICLE 13 - APPRENTICES

- 13.1 In accordance with the requirement of Section 446.011, Florida Statutes, the following requirements to safeguard the welfare of apprentices and trainees shall be a part of this contract, if applicable.
  - 13.1.1 Contractor agrees to hire for the performance of the contract, a number of apprentices or trainees in each occupation which bears to the average number of the journeymen in that occupation to be employed in the performance of the contract, the ratio of at least one apprentice or trainee to every five journeymen.
  - 13.1.2 Contractor agrees, when feasible to assure that 25% of such apprentices or trainees are in their first year of training, except when the number of apprentices or trainees to be hired is fewer than four.

- 13.1.3 Contractor agrees to submit, at three month intervals, to the Bureau of Apprenticeship of the Division of Labor, records of employment by trade of the number of apprentices or trainees employed; race of all apprentices; the number of apprentices or trainees in their first year of training; and total hours of work of all apprentices, trainees, and journeymen.
- 13.1.4 Contractor agrees to submit to the Bureau of Apprenticeship of the Division of Labor, at three month intervals, a statement describing steps taken toward making a diligent effort in the hiring of apprentices and trainees and containing a breakdown by craft of hours worked and wages paid for first year apprentices or trainees, other apprentices or trainees and journeymen.

NOTE: The form of all submittals, notices, change orders and other documents permitted or required to be used or transmitted under the Contract shall be determined by the County. Standard County forms shall be utilized.

**END OF SECTION**

General Decision Number: FL120165 04/06/2012 FL165

Superseded General Decision Number: FL20100264

State: Florida

Construction Type: Heavy

County: Manatee County in Florida.

HEAVY CONSTRUCTION PROJECTS (Including Sewer and Water Lines)

Modification Number	Publication Date
0	01/06/2012
1	03/09/2012
2	03/30/2012
3	04/06/2012

ELEC0915-003 12/01/2011

	Rates	Fringes
ELECTRICIAN.....	\$ 24.64	34%+\$0.25

\* ENGI0925-008 01/01/2012

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Crawler Cranes; Truck		
Cranes; Pile Driver		
Cranes; Rough Terrain		
Cranes; and Any Crane not		
otherwise described below...\$ 28.91		10.74
Hydraulic Cranes Rated 100		
Tons or Above but Less		
Than 250 Tons; and Lattice		
Boom Cranes Less Than 150		
Tons if not described below.\$ 29.91		10.74
Lattice Boom Cranes Rated		
at 150 Tons or Above;		
Friction Cranes of Any		
Size; Mobile Tower Cranes		
or Luffing Boom Cranes of		
Any Size; Electric Tower		
Cranes; Hydraulic Cranes		
Rated at 250 Tons or		
Above; and Any Crane		
Equipped with 300 Foot or		
More of Any Boom		
Combination.....\$ 30.91		10.74
Oiler.....\$ 22.38		10.74

IRON0397-006 01/01/2012

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 26.67	12.06

LABO0517-002 05/01/2008



	Rates	Fringes
LABORER: Grade Checker.....	\$ 17.20	5.47

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PAIN0088-008 07/01/2008

	Rates	Fringes
PAINTER: Brush, Roller and Spray.....	\$ 16.00	6.85

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SUFL2009-161 06/24/2009

	Rates	Fringes
CARPENTER.....	\$ 14.95	2.92
CEMENT MASON/CONCRETE FINISHER...	\$ 14.77	3.50
LABORER: Common or General.....	\$ 10.90	0.38
LABORER: Landscape.....	\$ 7.25	0.00
LABORER: Pipelayer.....	\$ 13.75	2.06
LABORER: Power Tool Operator (Hand Held Drills/Saws, Jackhammer and Power Saws Only).....	\$ 10.63	2.20
OPERATOR: Asphalt Paver.....	\$ 11.59	0.00
OPERATOR: Backhoe Loader Combo.....	\$ 16.10	2.44
OPERATOR: Backhoe/Excavator.....	\$ 15.00	0.52
OPERATOR: Bulldozer.....	\$ 17.00	0.00
OPERATOR: Grader/Blade.....	\$ 16.00	2.84
OPERATOR: Loader.....	\$ 14.75	0.00
OPERATOR: Mechanic.....	\$ 14.32	0.00
OPERATOR: Roller.....	\$ 10.76	0.00
OPERATOR: Scraper.....	\$ 11.00	1.74
OPERATOR: Trackhoe.....	\$ 20.92	5.50
OPERATOR: Tractor.....	\$ 10.54	0.00
TRUCK DRIVER, Includes Dump Truck.....	\$ 11.00	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 12.73	0.00
TRUCK DRIVER: Off the Road		

Truck.....\$ 12.21 1.97

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

#### Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

#### Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION



# Florida Department of Environmental Protection

Southwest District Office  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Herschel T. Vinyard Jr.  
Secretary

APR - 9 2012

Manatee County  
c/o Mr. Daniel T. Gray, Director  
Manatee County Utilities Department  
4410 66<sup>th</sup> Street  
Bradenton, FL 34210

File No.: 41-0221256-003

Dear Mr. Gray:

Enclosed is the Environmental Resource Permit, DEP Project No. 41-0221256-003, issued pursuant to Part IV of Chapter 373, Florida Statutes, and Title 62, Florida Administrative Code.

Appeal rights for you and for any affected third party are described in the text of the permit along with conditions that must be met when authorized activities are undertaken.

You, as the applicant, are responsible for all aspects of permit compliance. You should therefore review this permit document carefully to ensure compliance with the general and specific conditions contained herein. Please be aware of permit specific condition numbers 2 and 3, which respectively state that:

- The erosion control methods depicted in the attached permit drawings shall be in place prior to construction.
- A dewatering plan must be approved prior to beginning the work authorized by the permit.

If you have any questions about this document, please contact me at (813) 632-7600, ext. 470.

Thank you for your participation in the permit process and in managing the natural resources of the State of Florida.

Sincerely yours,

Dennis Pierson,  
Engineering Specialist,  
Submerged Lands and Environmental  
Resource Management

Enc: Environmental Resource Permit with attachments (46 pages).



# Florida Department of Environmental Protection

Southwest District Office  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

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Governor

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Lt. Governor

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Secretary

## **Permittee/Authorized Entity:**

Manatee County  
c/o Mr. Daniel T. Gray, Director  
Manatee County Utilities Department  
4410 66<sup>th</sup> Street  
Bradenton, FL 34210

**Manatee County South West Water Reclamation Facility  
Lake Filtration System & North Pond Improvements  
Manatee County**

## **Environmental Resource Permit**

**U.S. Army Corps of Engineers Authorization –  
Separate Corps Authorization Required**

**Permit No.: 41-0221256-003**

**Permit Issuance Date:** APR - 9, 2012

**Permit Construction Phase Expiration Date:** APR - 9, 2017



# Florida Department of Environmental Protection

Southwest District Office  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Herschel T. Vinyard Jr.  
Secretary

## Environmental Resource Permit

**Permittee: Manatee County Utilities Department**

**Permit No: 41-0221256-003**

**Permit Issuance Date: APR - 9, 2012**

**Permit Construction Phase Expiration Date: APR - 9, 2017**

### AUTHORIZATIONS

#### Project Description

The permittee is authorized to construct a surface water management system (SWMS) with a dry retention pond to provide ½-inch of water quality treatment and discharge rate attenuation for the stormwater runoff from 1.17-acre drainage basin with 0.08 acres of new impervious surface. The 1.17-acre drainage basin is shown on Figure 6 of the attached permit drawings. The project is located at the existing 329-acre Manatee County Southwest Water Reclamation Facility (SWWRF). Construction within the 1.17-acre drainage basin will also include the installation of a stormwater culvert under a pervious stone access road. The SWMS will discharge north through a skimmer-equipped control structure to an existing roadside ditch along an SWWRF access road and conveyed off-site to the Cedar Hammock Drainage Canal.

Other facility modifications will be made outside of the 1.17-acre drainage basin for the retention pond, and within a 50.95-acre over-all project area at the SWWRF that is shown on Figure 1 of the attached permit drawings. The other modifications include new access roads and entry ramps, the removal and replacement of existing paved surfaces, and a new 1,110 square foot paved maintenance access area from which stormwater runoff will sheet flow to a drainage swale with a check dam. This swale will retain ½-inch of water quality treatment volume and discharge north to the SWWRF access road ditch. Flood plain compensation is not required. Authorized activities are depicted on the attached exhibits.

The project described above may only be conducted accordance with the terms, conditions and attachments contained in this permit. The issuance of this permit does not infer, nor guarantee, nor imply that future permits or modifications will be granted by the Department.

### State-owned Submerged Lands Authorization

As staff to the Board of Trustees, the Department has reviewed the activity described above and has determined that the activity is not located on submerged lands owned by the State of Florida. Therefore, your project is not subject to the requirements of Chapter 253, Florida Statutes (F.S.).

### Federal Authorization

A copy of this permit has been sent to the U.S. Army Corps of Engineers (USACE). The USACE may require a separate permit. Failure to obtain any required federal permits prior to construction could subject you to enforcement action by that agency.

### Coastal Zone Management

This permit also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Management Act.

### Water Quality Certification

This permit constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

### Other Authorizations

You are advised that authorizations or permits for this project may be required by other federal, state or local entities, including the municipality/county in which the project is located. Please be sure to contact the local county building and environmental department to obtain these required authorizations. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

## **PROJECT LOCATION**

The activities authorized by this permit are located at the Manatee County Southwest Water Reclamation Facility, 5101 65<sup>th</sup> Street West, Bradenton, FL 34210, Section 8, Township 35 South, Range 17 East, Manatee County.

## **PERMIT CONDITIONS**

The activities described herein must be conducted in accordance with:

- **The Specific Conditions**
- **The General Conditions**
- **The limits, conditions, and locations of work shown in the attached drawings**
- **The term limits of this authorization**



You are advised to read and understand these conditions and drawings prior to commencing the authorized activities, and to ensure that the work is conducted in conformance with all the terms, conditions, and drawings. If you are utilizing a contractor, the contractor should also read and understand these conditions and drawings prior to commencing the authorized activities. Failure to comply with these conditions shall constitute grounds for revocation of the permit and appropriate enforcement action by the Department.

Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit/certification/authorization as specifically described herein.

### **SPECIFIC CONDITIONS**

1. Submittals required herein (e.g., progress reports, as-built drawings, etc.) shall include the permittee's name and permit number 41-0221256-003 and shall be directed by e-mail to **SW\_ERP@dep.state.fl.us** with a subject line of compliance permit number 41-0221256-003, or by mail to:

Department of Environmental Protection  
Southwest District  
Submerged Lands and Environmental Resource Program  
13051 North Telecom Parkway  
Temple Terrace, FL 33637-0926

**PRIOR TO CONSTRUCTION CONDITIONS** (The permittee shall comply with the following conditions prior to commencement of any construction activities.)

2. Best management practices for erosion control shall be implemented prior to construction commencement and shall be maintained at all times during construction to prevent siltation and turbid discharges in excess of State water quality standards (>29 NTU's above background, pursuant to Rule 62-302, F.A.C.). Erosion control methods shall be implemented as depicted in Sheets C-0.2 and C-0.8 of the attached permit drawings.
3. The permittee shall submit a dewatering plan for Department approval prior to beginning the work authorized by this permit and in accordance with the dewatering notes provided on Drawing C-0.2 of the attached permit drawings. Proposed dewatering activities may require modification of the environmental resource permit.

## **CONSTRUCTION CONDITIONS**

4. Wetland areas or water bodies that are outside the specific limits of construction authorized by this permit must be protected from erosion, sedimentation, siltation, scouring, excess turbidity, and/or dewatering. There shall be no discharge in violation of the water quality standards in Chapter 62-302, F.A.C. Turbidity/erosion controls shall be installed prior to clearing, excavation or placement of fill material shall be maintained until construction is completed, disturbed areas are stabilized, and turbidity levels have fallen to less than 29 NTU's above background. The turbidity and erosion control devices shall be removed within 14 days once these conditions are met.
5. Areas of exposed soils shall be isolated from wetlands or other surface waters to prevent erosion and deposition of these soils into wetlands or other surface waters during construction and operation of permitted activities.
6. Side slopes, exposed and/or disturbed land surfaces shall be stabilized with sod, seed or mulch within 48 hours following completion of final grades at the project site to prevent erosion, sedimentation, and siltation or scouring.
7. The authorized surface water management system shall be completed prior to or simultaneously with associated upland development. Occupation of the site shall be in accordance with General Condition 12.

**CONSTRUCTION COMPLETION CONDITIONS** (The permittee shall comply with the following conditions prior to the transfer to operation phase of the facility. All documentation required below shall be included with the permittee's request to transfer the project to the operation phase [Form No. 62-343.900(7), F.A.C.] )

8. The permittee shall submit two copies of signed, dated and sealed as-built drawings to the Department for review and approval within 30 days of completion of construction. The as-built drawings shall be based on the Department permitted construction drawings, which should be revised to reflect changes made during construction. Both the original design and constructed elevation must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. Surveyed dimensions and elevations required shall be verified and signed, dated and sealed by a Florida registered surveyor or engineer. *As-builts shall be submitted to the Department regardless of whether or not deviations are present. In addition to the "As-built Certification" form; the permittee shall submit the "Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase" form as required in General Condition #13.*

The following information shall be verified on the as-built drawings from the engineering drawings signed and sealed by Mr. Travis Terpstra, P.E., #71412:

Manatee County Utilities Department – SWWRF Improvements

File No.: 41-0221256-003

Page 4 of 13

<u>Plan View/Cross-Section</u>	<u>Drawing Number</u>	<u>Date</u>
Yard Piping No. 3	C-0.16	November 03, 2011
Yard Piping No. 5	C-0.18	November 03, 2011
Grading Plans Nos. 1 - 7	C-1.1 – C-1.7 (7 pages)	November 03, 2011
Grading Plan Nos. 8 – 10	C-1.8 – C-1.10 (3 pages)	February 1, 2012
Typical Pond Sections No. 2	C-1.12	November 03, 2011
Pond Sections Nos. 1 - 7	C-1.13 – C-1.19 (7 pages)	November 03, 2011

**MONITORING/REPORTING REQUIREMENTS/ OPERATING CONDITIONS** (The permittee shall comply with the following operation conditions for the life of the facility.)

9. The retention pond and retention swale are intended to become dry within 72 hours after a rainfall event. A system that is regularly wet shall not be considered in compliance with this permit and possible modifications to the system may be required.
10. The maintenance of the SWMS shall be in accordance with the attached "Operation & Maintenance Plan". It is the responsibility of the permittee to ensure that that the surface water management system is functioning as designed.
11. Beginning 24 months after operation is authorized and every 24 months thereafter, the Operation and Maintenance Entity shall inspect the SWMS and submit inspection reports in the form required by the Department (see attached FDEP Inspection Certification Form, 62-343.900(6), F.A.C.)

**GENERAL CONDITIONS**

1. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.
2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by Department staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
3. Activities approved by this permit shall be conducted in a manner that does not cause violations of state water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of state water quality standards. Temporary erosion control shall be implemented prior to and during construction and permanent control measures shall be completed within seven

days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

4. Water quality data for the water discharged from the permittee's property or into the surface waters of the state shall be submitted to the Department as required by the permit. Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency. If water quality data are required, the permittee shall provide data as required on volumes of water discharged, including total volume discharged during the days of sampling and total monthly volume discharged from the property or into surface waters of the state.
5. Department staff must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters, a written dewatering plan must either have been submitted and approved with the permit application or submitted to the Department as a permit modification prior to the dewatering event. The permittee is advised that the rules of the Southwest Florida Water Management District state that a water use permit may be required prior to any use exceeding the thresholds in Chapter 40D-2, F.A.C.
6. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has temporarily or permanently ceased.
7. Off site discharges during construction and development shall be made only through the facilities authorized by this permit. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operation schedules satisfactory to the Department.
8. The permittee shall complete construction of all aspects of the SWMS, including wetland compensation (grading mulching, planting), water quality treatment features, and discharge control facilities prior to beneficial occupancy or use of the development being served by this system.

9. The following shall be properly abandoned and/or removed in accordance with the applicable regulations:
  - a. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed well contractor.
  - b. Any existing septic tanks on site shall be abandoned at the beginning of construction.
  - c. Any existing fuel storage tanks and fuel pumps shall be removed at the beginning of construction.
10. All surface water management systems shall be operated to conserve water in order to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property and to minimize dewatering of offsite property.
11. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the Department a written notification of commencement using an "Environmental Resource Permit Construction Commencement" notice (Form No. 62-343.900(3), F.A.C.) indicating the actual start date and the expected completion date.
12. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the occupation of the site or operation of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to a local government or other responsible entity.
13. Within 30 days after completion of construction of the permitted activity, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required "Environmental Resource Permit As-Built Certification by a Registered Professional" (Form No. 62-343.900(5), F.A.C.), and "Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase" (Form 62-343-900(7), F.A.C.). Additionally, if deviations from the approved drawings are discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted.

14. This permit is valid only for the specific processes, operations and designs indicated on the approved drawings or exhibits submitted in support of the permit application. Any substantial deviation from the approved drawings, exhibits, specifications or permit conditions, including construction within the total land area but outside the approved project area(s), may constitute grounds for revocation or enforcement action by the Department, unless a modification has been applied for and approved. Examples of substantial deviations include excavation of ponds, ditches or sump areas deeper than shown on the approved plans.
15. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the conditions herein, the Department determines the system to be in compliance with the permitted plans, and the entity approved by the Department accepts responsibility for operation and maintenance of the system. The permit may not be transferred to the operation and maintenance entity approved by the Department until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the Department, the permittee shall request transfer of the permit to the responsible operation and maintenance entity approved by the Department, if different from the permittee. Until a transfer is approved by the Department pursuant to Section 62-343.110(1)(d), F.A.C., the permittee shall be liable for compliance with the terms of the permit.
16. Should any other regulatory agency require changes to the permitted system, the Department shall be notified of the changes prior to implementation so that a determination can be made whether a permit modification is required.
17. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations including a determination of the proposed activities' compliance with the applicable comprehensive plan prior to the start of any activity approved by this permit.
18. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40D-4 or Chapter 40D-40, F.A.C.
19. The permittee is hereby advised that Section 253.77, F.S., states that a person may not commence any excavation, construction, other activity involving the use of sovereign or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the

permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

20. The permittee shall hold and save the Department harmless from any and all damages, claims, or liabilities which may arise by reason of the activities authorized by the permit or any use of the permitted system.
21. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.
22. The permittee shall notify the Department in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of section 62-343.130, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.
23. Upon reasonable notice to the permittee, Department authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with Department rules, regulations and conditions of the permits.
24. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the Department and the Florida Department of State, Division of Historical Resources.
25. The permittee shall immediately notify the Department in writing of any previously submitted information that is later discovered to be inaccurate.

### **NOTICE OF RIGHTS**

This permit is hereby final unless a sufficient petition for an administrative hearing is timely filed under Sections 120.569 and 120.57 of the Florida Statutes as provided below. The procedures for petitioning for a hearing are set forth below.

Mediation is not available.

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received by the clerk) in the

Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Because the administrative hearing process is designed to re-determine final agency action on the application, the filing of a petition for an administrative hearing may result in a modification of the permit or even a denial of the application. If a sufficient petition for an administrative hearing or request for an extension of time to file a petition is timely filed, this permit automatically becomes only proposed agency action on the application, subject to the result of the administrative review process. Accordingly, the applicant is advised not to commence construction or other activities under this permit until the deadlines noted below for filing a petition for an administrative hearing, or request for an extension of time has expired.

Under rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon. If a request is filed late, the Department may still grant it upon a motion by the requesting party showing that the failure to file a request for an extension of time before the deadline was the result of excusable neglect.

In the event that a timely and sufficient petition for an administrative hearing is filed, other persons whose substantial interests will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Any intervention will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

In accordance with Rule 62-110.106(3) F.A.C., petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first.

Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition for an administrative hearing



within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Under Sections 120.569(2)(c) and (d), F.S., a petition for administrative hearing must be dismissed by the agency if the petition does not substantially comply with the above requirements or is untimely filed.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

This permit constitutes an order of the Department. The applicant has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed

within 30 days from the date when the final order is filed with the Clerk of the Department. The applicant, or any party within the meaning of Section 373.114(1)(a), F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1), F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when the final order is filed with the Clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



William L. Vorstadt  
Program Administrator  
Submerged Lands and Environmental  
Resource Program  
Southwest District

WLV/drp

**Attachments:**

Commencement notice /62-343.900(3) (1 page)  
As-built certification/62-343.900(5) (1 page)  
Inspection certification/62-343.900(6) (1 page)  
Transfer construction to operation phase/62-343.900(7) (1 page)  
Application for transfer of an ERP /62-343.900(8) (1 page)  
Project Location Map (1 page)  
Permit Drawings (25 pages)  
Operation and Maintenance Instructions (2 pages)

**Copies furnished to:**

Manatee County, c/o Mr. Daniel T. Gray, Director, Manatee County Utilities Department, 4410  
66<sup>th</sup> Street, Bradenton, FL 34210  
McKim & Creed, P.A., c/o Mr. Travis Terpstra, P.E., Project Engineer, 160 Cypress Point  
Parkway, Suite C214, Palm Coast, FL 32164  
Florida Department of Environmental Protection, Southwest District, c/o Mr. Jeff Hilton, P.E.,  
Manager, Domestic Wastewater Program, 13051 North Telecom Parkway, Temple Terrace, FL  
33637-0926  
U.S. Army Corps of Engineers  
File

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that this permit, including all copies, was mailed before the close of business on 4/9/12, to the above listed persons.

**FILING AND ACKNOWLEDGMENT**

FILED, on this date, under 120.52(7) of the Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

ERobinson 4/9/12  
Clerk                      Date

## ENVIRONMENTAL RESOURCE PERMIT Construction Commencement Notice

Project:

Phase:

I hereby notify the Department of Environmental Protection that the construction of the surface water management system authorized by Environmental Resource Permit Number \_\_\_\_\_ has commenced / is expected to commence on \_\_\_\_\_ and will require a duration of approximately \_\_\_\_\_ months \_\_\_\_\_ weeks \_\_\_\_\_ days to complete. It is understood that should the construction term extend beyond one year, I am obligated to submit the Annual Status Report for surface Water Management System Construction.

**PLEASE NOTE:** If the actual construction commencement date is not known, Department staff should be so notified in writing in order to satisfy permit conditions.

\_\_\_\_\_  
Permittee or Authorized Agent

Title and Company

Date

Phone

Address

ENVIRONMENTAL RESOURCE PERMIT  
AS-BUILT CERTIFICATION BY A REGISTERED PROFESSIONAL

Permit Number:

Project Name:

I hereby certify that all components of this surface water management system have been built substantially in accordance with the approved plans and specifications and are ready for inspection. Any substantial deviations (noted below) from the approved plans and specifications will not prevent the system from functioning as designed when properly maintained and operated. These determinations are based upon on-site observation of the system conducted by me or by my designee under my direct supervision and/or my review of as-built plans certified by a registered professional or Land Surveyor licensed in the State of Florida.

Name (please print)

\_\_\_\_\_  
Signature of Professional

Company Name

Florida Registration Number

Company Address

Date

City, State, Zip Code

Telephone Number

(Affix Seal)

Substantial deviations from the approved plans and specifications:

(Note: attach two copies of as-built plans when there are substantial deviations)

Within 30 days of completion of the system, submit two copies of the form to:

## ENVIRONMENTAL RESOURCE PERMIT INSPECTION CERTIFICATION

Permit Number:

Project Number:

Inspection Date(s):

Inspection results: (check one)

☐ I hereby certify that I or my designee under my direct supervision have inspected the system at the above referenced project and that the system appears to be functioning in accordance with the requirements of the permit and Chapter 373 F.S. (as applicable).

☐ The following necessary maintenance was conducted:

☐ I hereby certify that I or my designee under my direct supervision has inspected the system at the above referenced project and that the system does not appear to be functioning in accordance with the requirements of the permit and Chapter 373 F.S. (as applicable). I have informed the operation and maintenance entity of the following: (a) that the system does not appear to be functioning properly, (b) that maintenance is required to bring the system into compliance, and (c) if maintenance measures are not adequate to bring the system into compliance, the system may have to be replaced or an alternative design constructed subsequent to Department approval.

Name

\_\_\_\_\_  
Signature of Professional Engineer

Company Name

Florida Registration Number

Company Address

Date

City, State, Zip Code

Telephone Number

(affix seal)

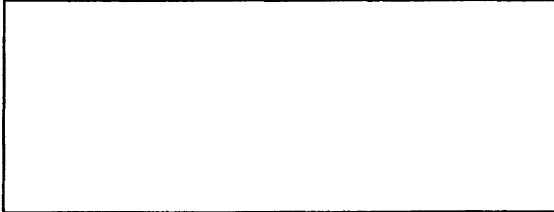
Within 30 days of completion of the inspection, submit two copies of the form to the following Department Office:

Department of Environmental Protection

## Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase

(To be completed and submitted by the operating entity)

Florida Department of Environmental Protection



It is requested that Department Permit Number \_\_\_\_\_ authorizing the construction and operation of a surface water management system for the below mention project be transferred from the construction phase permittee to the operation phase operating entity.

Project:

From: Name:  
Address:  
City: State: Zip:

To: Name:  
Address:  
City: State: Zip:

The surface water management facilities are hereby accepted for operation and maintenance in accordance with the engineers certification and as outlined in the restrictive covenants and articles of incorporation for the operating entity. Enclosed is a copy of the document transferring title of the operating entity for the common areas on which the surface water management system is located. Note that if the operating entity has not been previously approved, the applicant should contact the Department staff prior to filing for a permit transfer.

The undersigned hereby agrees that all terms and conditions of the permit and subsequent modifications, if any, have been reviewed, are understood and are hereby accepted. Any proposed modifications shall be applied for and obtained prior to such modification.

Operating Entity:

\_\_\_\_\_  
Name Title:

Telephone:

Enclosure

- ☐ copy of recorded transfer of title surface water management system  
☐ Coy of plat(s)  
☐ Copy of recorded restrictive covenants, articles of incorporation, and certificate of incorporation.

[REDACTED]

APPLICATION FOR TRANSFER OF ENVIRONMENTAL RESOURCE PERMIT AND NOTIFICATION  
OF SALE OF A FACILITY OR SURFACE WATER MANAGEMENT SYSTEM

Permit No. \_\_\_\_\_ Date Issued \_\_\_\_\_ Date Expires \_\_\_\_\_

FROM (Name of Current Permit Holder) \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_

Identification or Name of Facility/Surface Water Management System: \_\_\_\_\_

Phase of Facility/Surface Water Management System (if applicable): \_\_\_\_\_

The undersigned hereby notifies the Department of the sale or legal transfer of this facility, or surface water management system, and further agrees to assign all rights and obligations as permittee to the applicant in the event the Department agrees to the transfer of permit.

Signature of the current permittee: \_\_\_\_\_

Title (if any): \_\_\_\_\_ Date: \_\_\_\_\_

---

TO (Name of Proposed Permit Transferee): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_

The undersigned hereby notifies the Department of having acquired the title to this facility, or surface-water management system. The undersigned also states he or she has examined the application and documents submitted by the current permittee, the basis of which the permit was issued by the Department, and states they accurately and completely describe the permitted activity or project. The undersigned further attests to being familiar with the permit, agrees to comply with its terms and with its conditions, and agrees to assume the rights and liabilities contained in the permit. The undersigned also agrees to promptly notify the Department of any future changes in ownership of, or responsibility for, the permitted activity or project.

Signature of the applicant (Transferee): \_\_\_\_\_

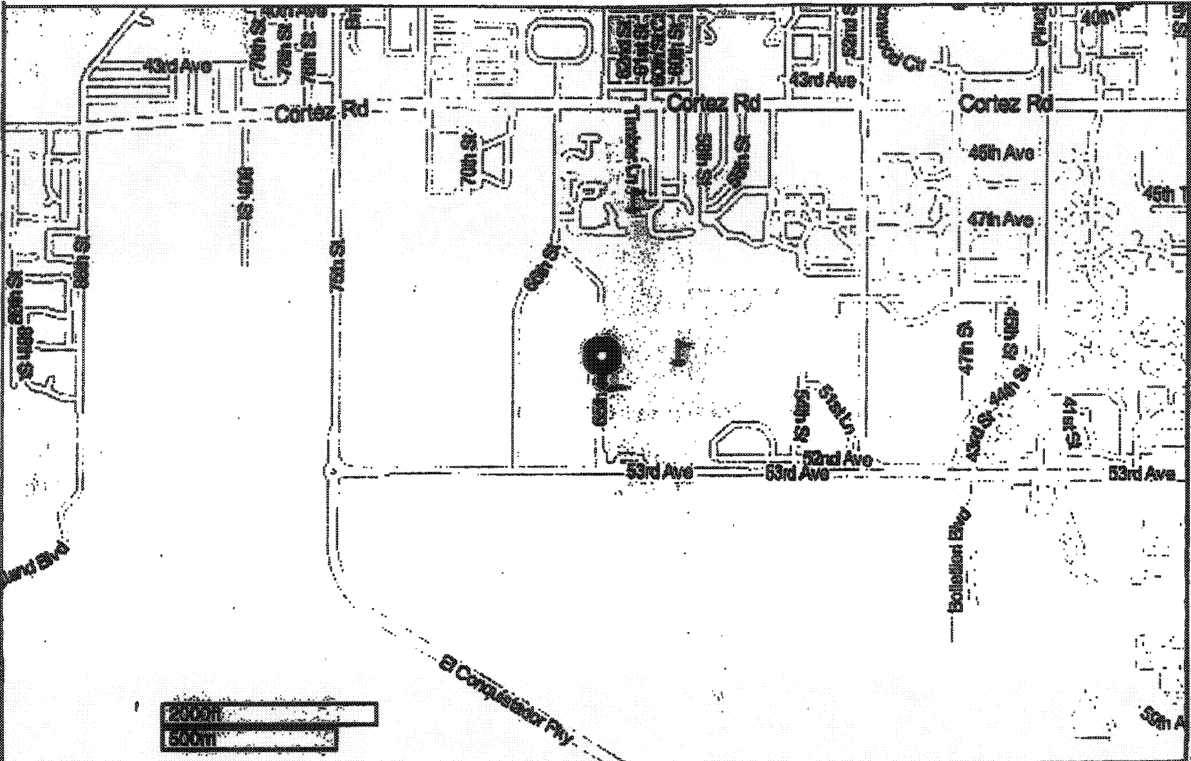
Title (if any): \_\_\_\_\_ Date: \_\_\_\_\_

Project Engineer Name (if applicable) \_\_\_\_\_

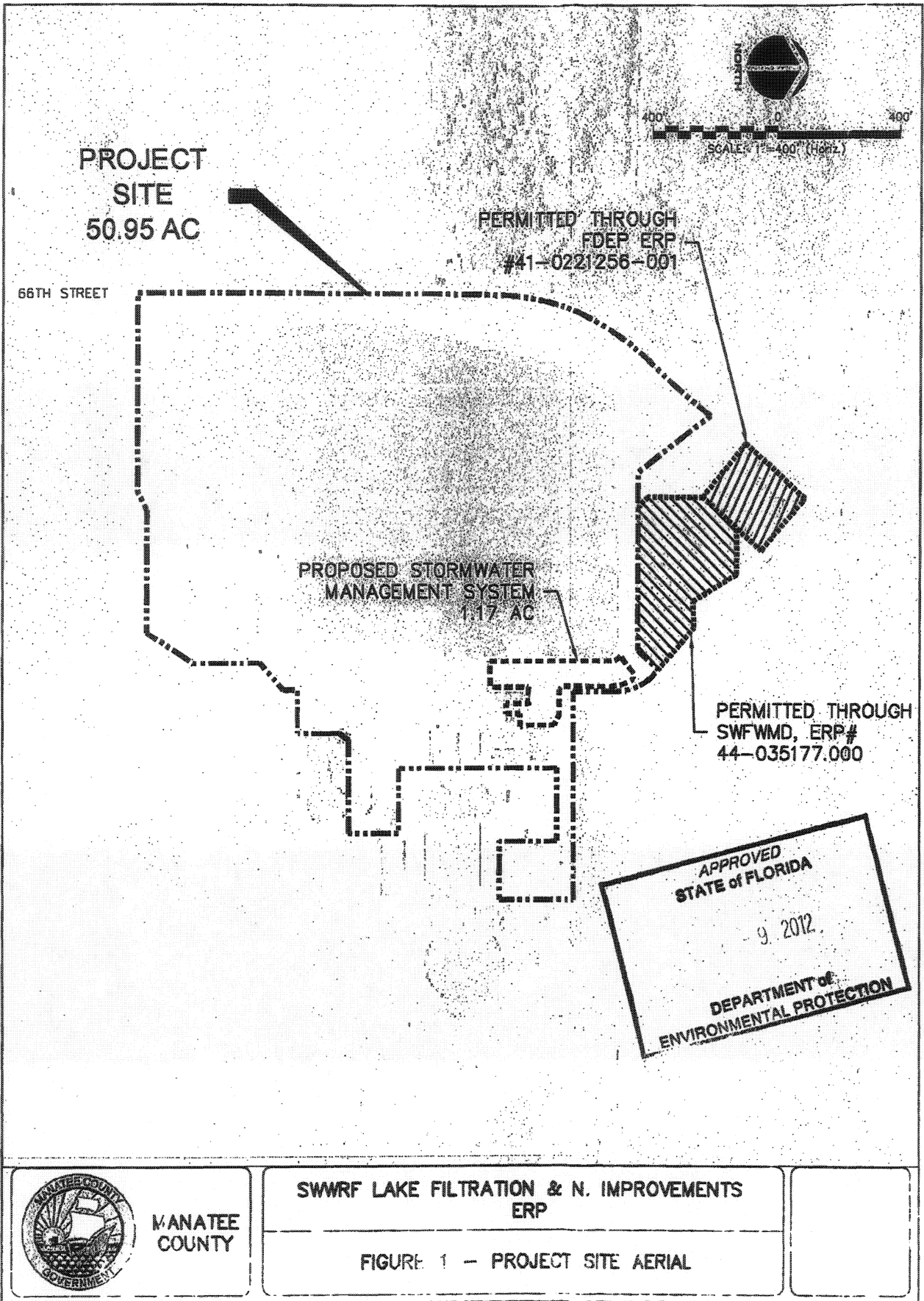
Mailing Address: \_\_\_\_\_

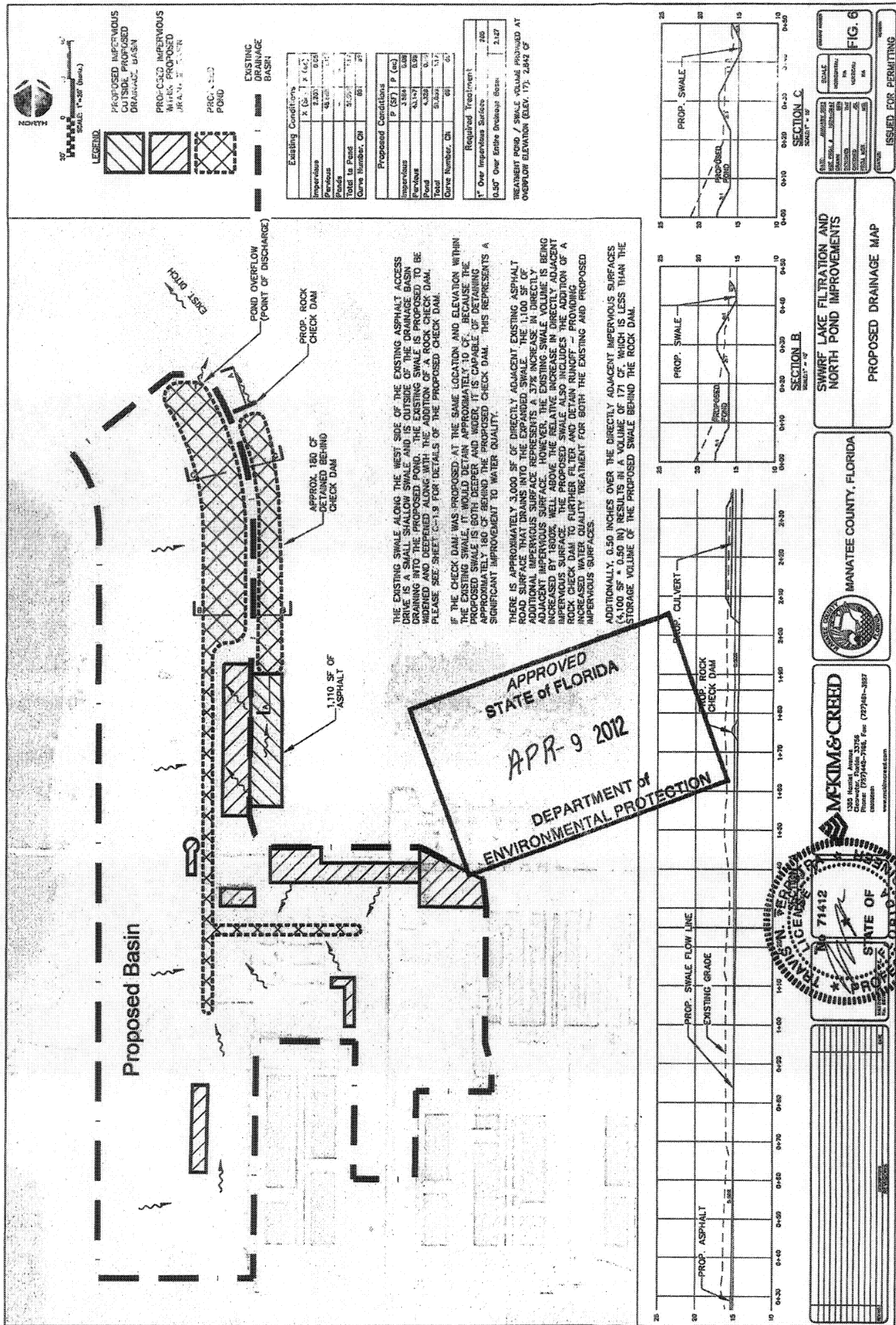
Telephone: (\_\_\_\_) \_\_\_\_\_



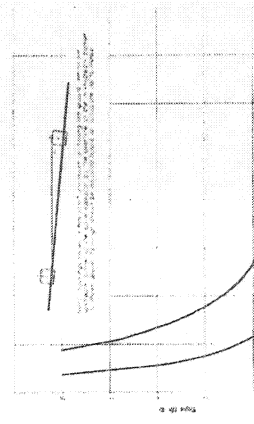


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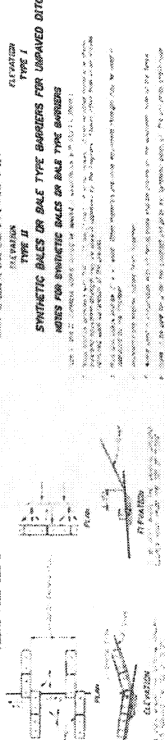




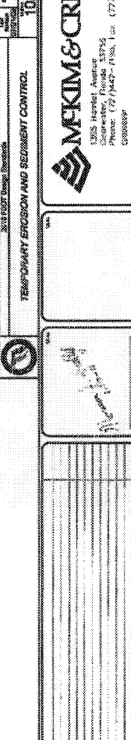




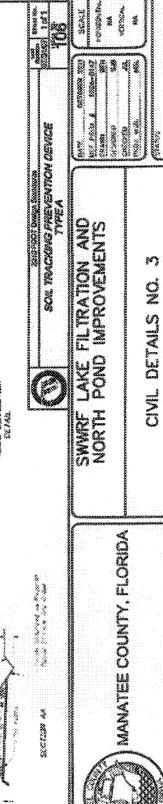
APPROVED  
STATE of FLORIDA  
APR - 9 2011  
DEPARTMENT  
INVESTIGATION




**BARRIERS FOR FULL SLOPES**  
At 48" or Slopes



**McKIM & CREED**  
1505 Harriet Avenue  
Clearwater, Florida 33755  
Phone: (727) 447-1100, Fax: (727) 447-5821  
C000089P  
[www.mckimcreed.com](http://www.mckimcreed.com)

[illegible]



MANATEE COUNTY, FLORIDA

**SWRFL LAKE FILTRATION AND  
NORTH POND IMPROVEMENTS**

SECTION 46  
NORTH POND IMPROVEMENTS

**CIVIL DETAILS NO. 3**

SECTION 46  
NORTH POND IMPROVEMENTS

**CIVIL DETAILS NO. 3**

SECTION 46  
NORTH POND IMPROVEMENTS

**CIVIL DETAILS NO. 3**

CIVIL DETAILS NO. 3

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Seawater, Florida 33786  
Phone: (727) 442-7133, (727) 993-1027  
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1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to understand the current market landscape, identify gaps, and determine the target audience. Once a market need is identified, the next step is to develop a concept that addresses the need. This involves brainstorming ideas, creating a prototype, and testing the concept with a small group of potential customers. If the concept is well-received, the next step is to develop a business plan that outlines the financial and operational aspects of the new product. This includes determining the production costs, setting a price, and identifying distribution channels. Finally, the product is launched into the market, and the company monitors sales and customer feedback to make any necessary adjustments.

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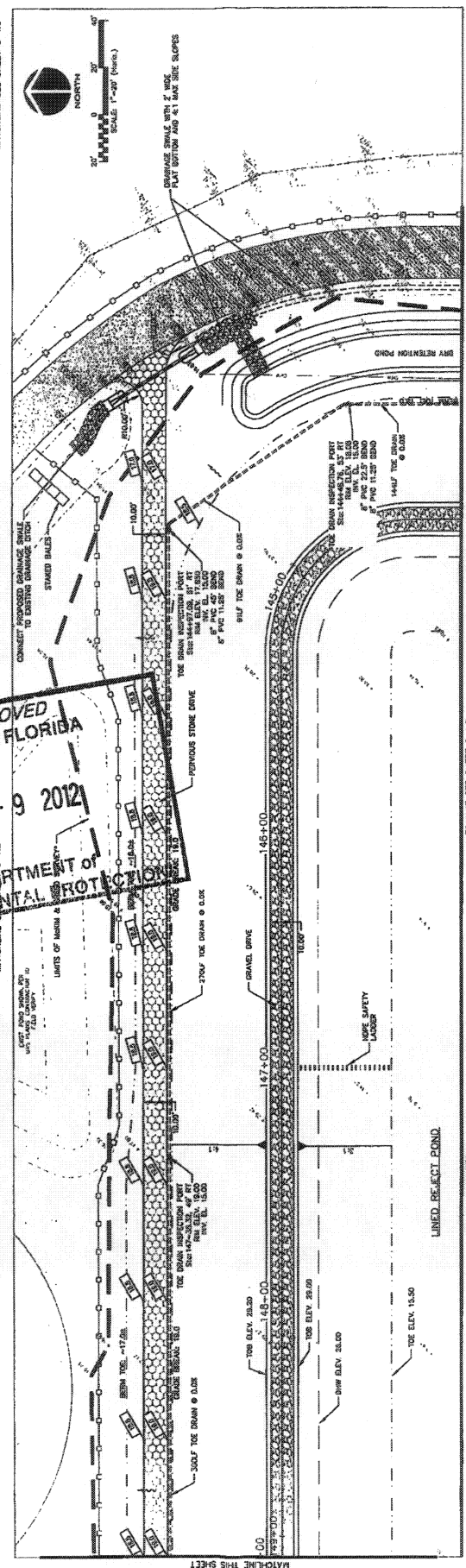
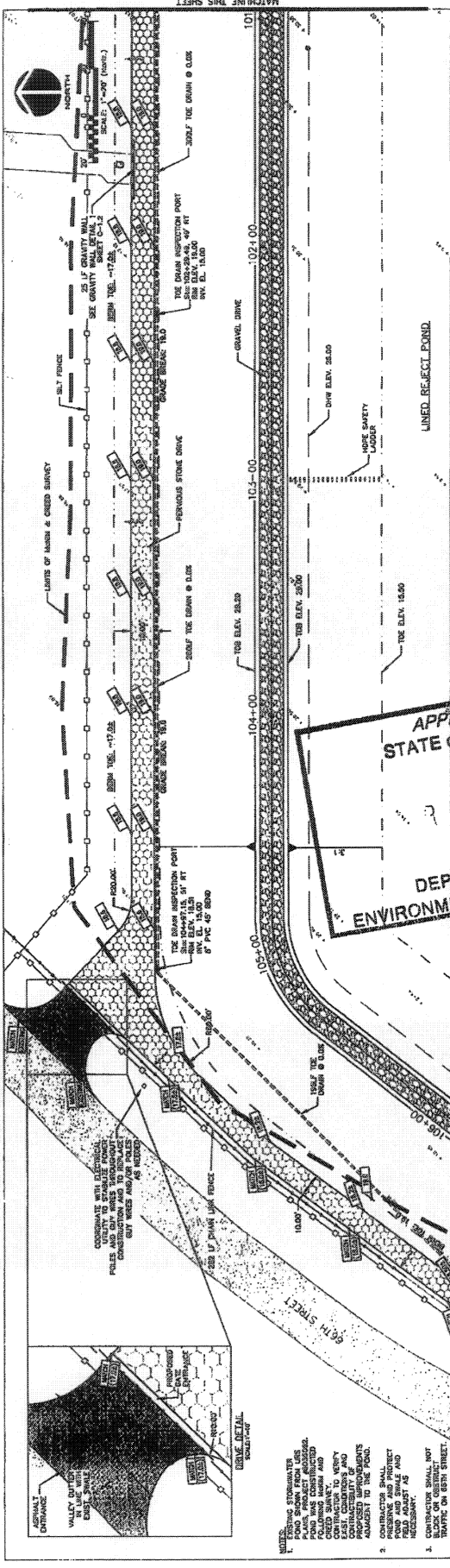












**SWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS**

**GRADING PLAN No. 1**

**MANATEE COUNTY, FLORIDA**

**100% SUBMITTAL**

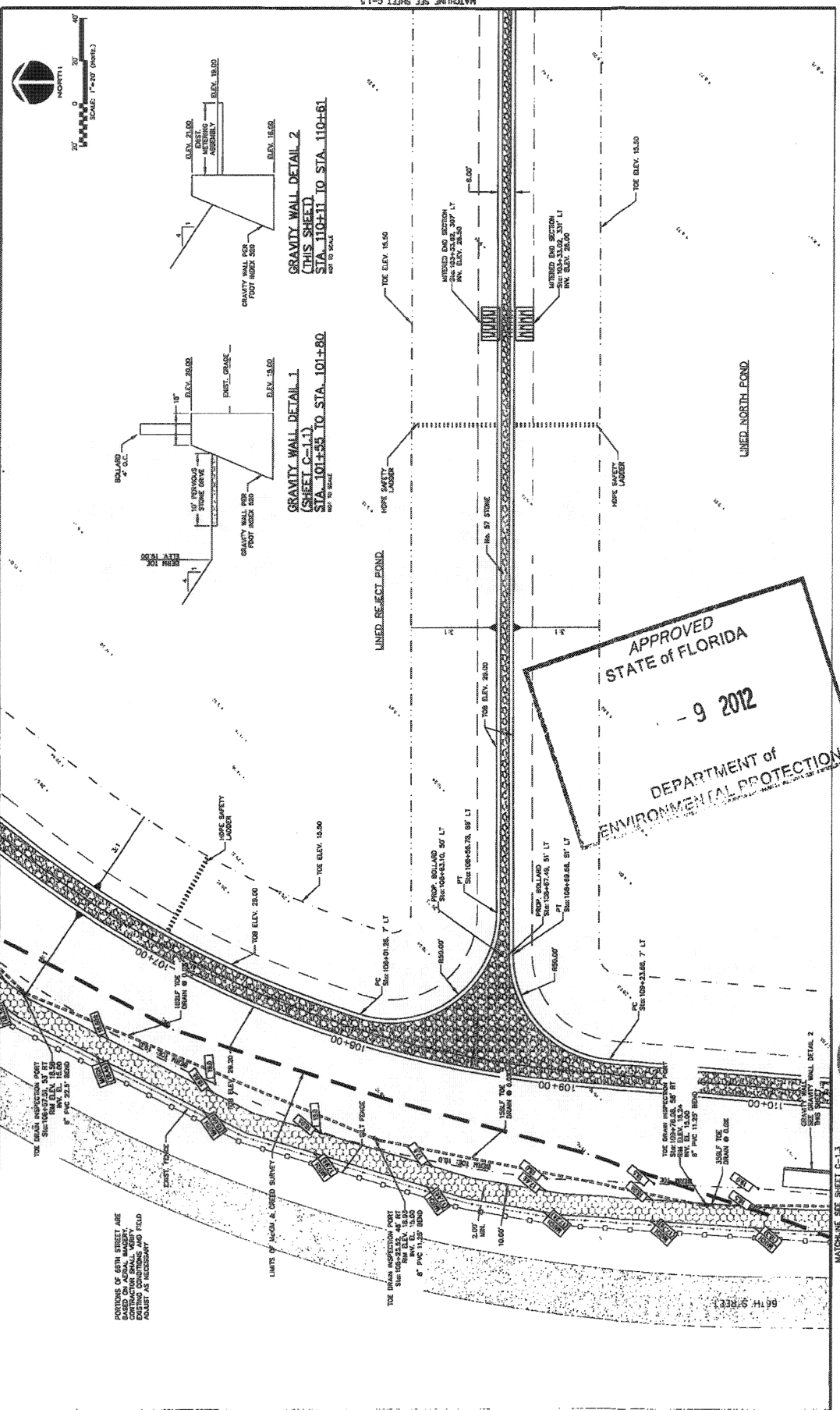
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**SCALE:** 1" = 20'  
**PROJECT:** SWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS  
**DESIGNER:** MCKIM & CREED  
**CHECKED:** [Signature]  
**APPROVED:** [Signature]  
**DATE:** 09/20/2012

**MCKIM & CREED**  
 1305 Highway 44  
 Clearwater, Florida 33765  
 (727) 462-1100  
 www.mckimcreed.com

**MANATEE COUNTY, FLORIDA**

**100% SUBMITTAL**

MATCHLINE SEE SHEET C-1.1



REMARKS OF OPEN SHEET ARE  
BASED ON Aerial Map  
CONTRACTOR SHALL VERIFY  
LOCATIONS AND FIELD  
ADJUST AS NECESSARY

GRAVITY WALL DETAIL 2  
(THIS SHEET)  
STA. 110+11 TO STA. 110+61  
NOT TO SCALE

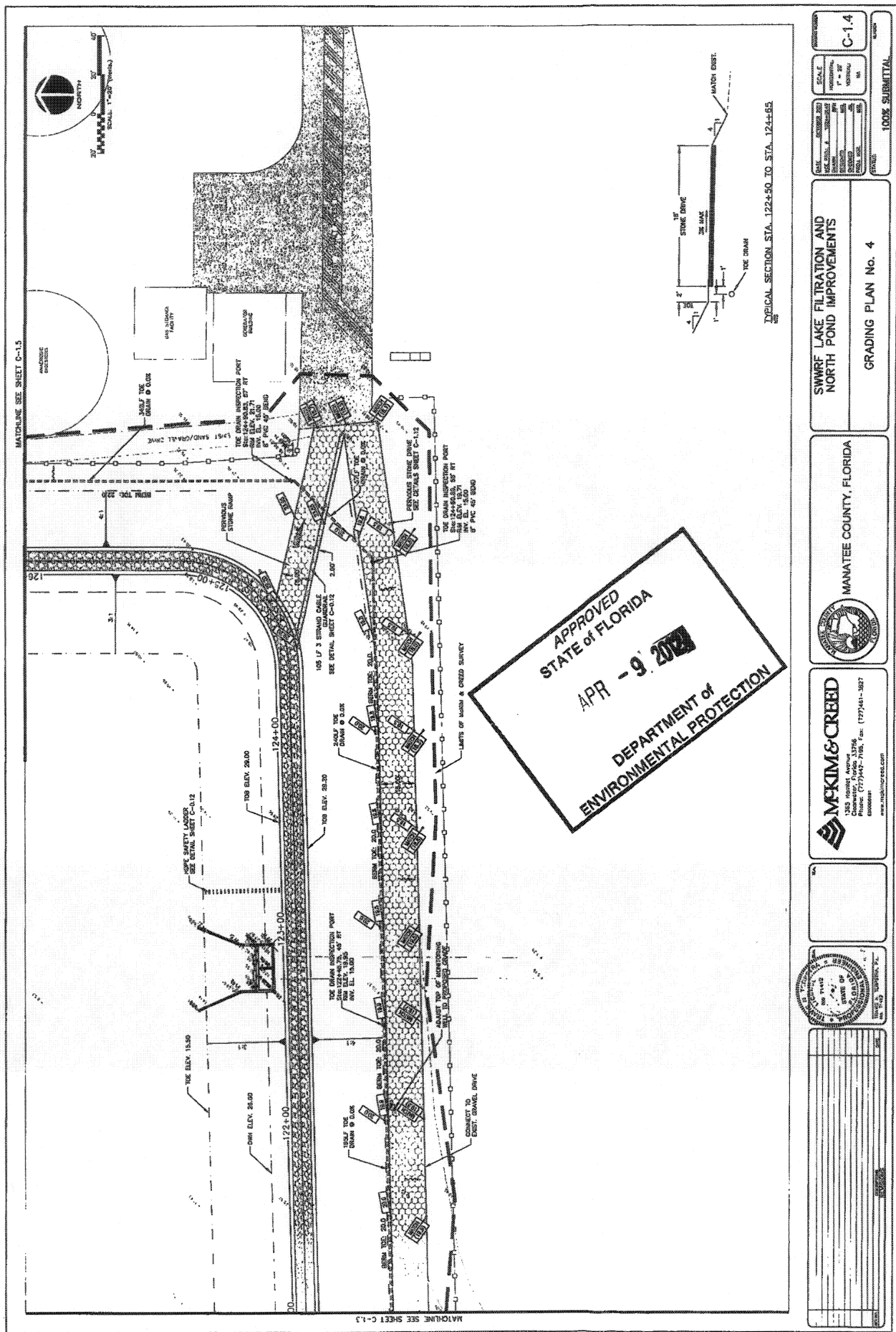
GRAVITY WALL DETAIL 1  
(SHEET C-1.1)  
STA. 101+55 TO STA. 101+80  
NOT TO SCALE

APPROVED  
STATE of FLORIDA  
- 9 2012  
DEPARTMENT of  
ENVIRONMENTAL PROTECTION

MATCHLINE SEE SHEET C-1.3

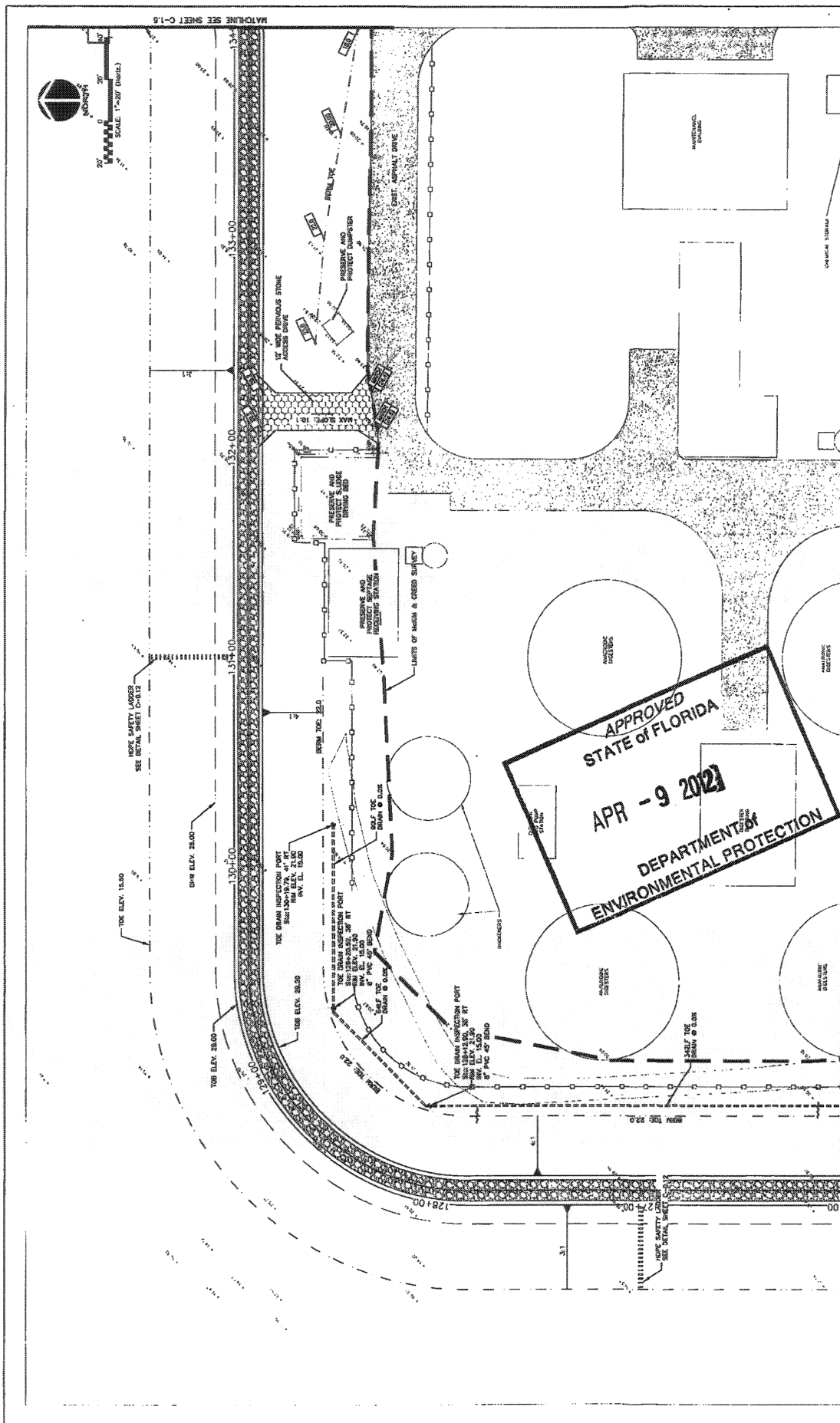
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<b>MCKIM &amp; CREED</b> 1380 Republic Avenue, Suite 204 Tampa, FL 33606-7196, Tel: (727) 461-3827 Fax: (727) 461-3827 www.mckimandcreed.com		<b>PROJECT</b> 100% SUBMITTAL		<b>DATE</b> NOVEMBER 2011 DESIGNED BY CHECKED BY DRAWN BY SCALE PROJECT NO. SHEET NO.	





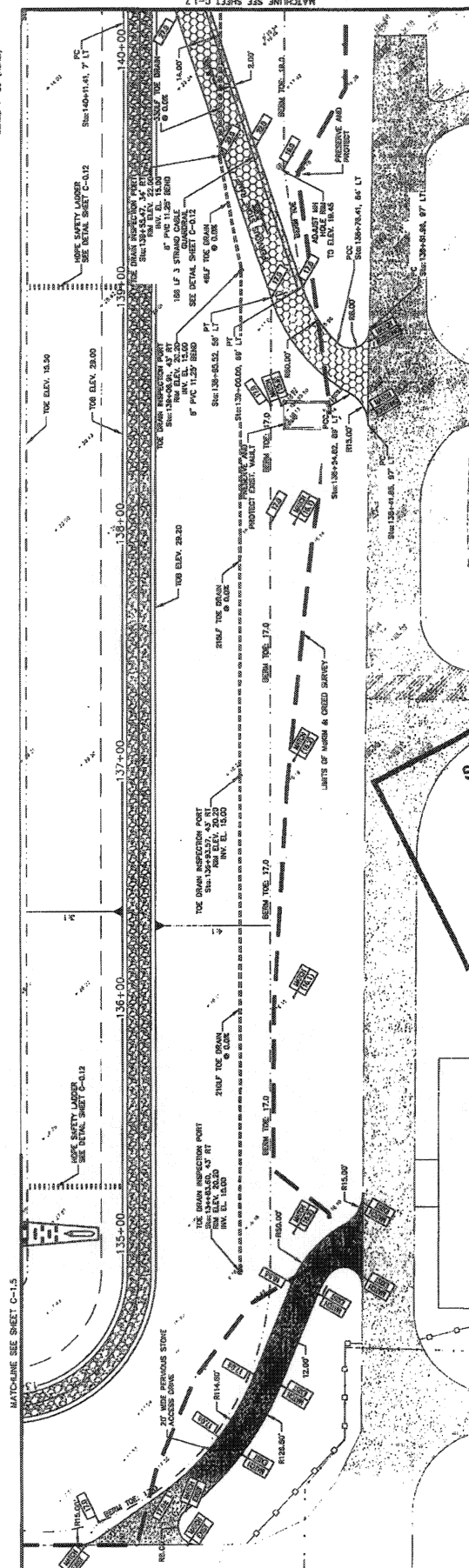
APPROVED  
STATE of FLORIDA  
APR -9 2022  
DEPARTMENT of  
ENVIRONMENTAL PROTECTION

<p>MANATEE COUNTY, FLORIDA</p>		<p>SWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS</p> <p>GRADING PLAN No. 4</p>	<p>100% SUBMITTAL</p>
<p>DATE: 10/20/2021</p> <p>SCALE: 1" = 20'</p> <p>PROJECT: C-1.4</p> <p>DESIGNED: [Signature]</p> <p>CHECKED: [Signature]</p> <p>APPROVED: [Signature]</p>		<p>100% SUBMITTAL</p>	
<p>MANATEE COUNTY, FLORIDA</p>		<p>100% SUBMITTAL</p>	
<p>MANATEE COUNTY, FLORIDA</p>		<p>100% SUBMITTAL</p>	



 <b>MANATEE COUNTY, FLORIDA</b>		<b>SWWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS</b>	
 <b>McKIM &amp; CREED</b>		<b>GRADING PLAN No. 5</b>	
536 North Main Street, Suite 337-06 Dunedin, Florida 33706 Phone: (727) 462-7196, Fax: (727) 461-3427 E-mail: <a href="mailto:info@mcimc.com">info@mcimc.com</a> <a href="http://www.mckimandcreed.com">www.mckimandcreed.com</a>		SCALE: <b>C-1.5</b> HORIZONTAL: 1" = 20' VERTICAL: 1" = 10' DATE: <b>02/01/2007</b> DESIGNED BY: <b>WJH</b> CHECKED BY: <b>WJH</b> IN CHARGE: <b>WJH</b> PROJECT NO.: <b>02000000</b>	
NO. 1015 STATE OF FLORIDA COUNTY OF MANATEE DISTRICT OF 1 1/4"		100% SUBMITTAL	





APPROVED  
STATE of FLORIDA

STATE  
APR -9 2012  
DEPARTMENT of  
ENVIRONMENTAL PROTECTION



1385 Manvel Avenue  
Clearwater, Florida 33756  
Phone: (727) 442-7185. Fax: (727) 461-3827



MANATEE COUNTY, FLORIDA

## SWWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS

GRADING PLAN No. 6

100% SUBMITTAL.

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www.routledge.com

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**Supra, p. 2.**

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No. 2148

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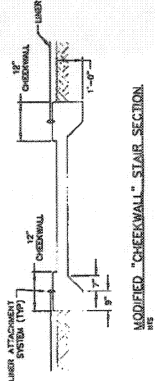
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© 2000 Blackwell Science Ltd, *Journal of Internal Medicine* 247: 391–397

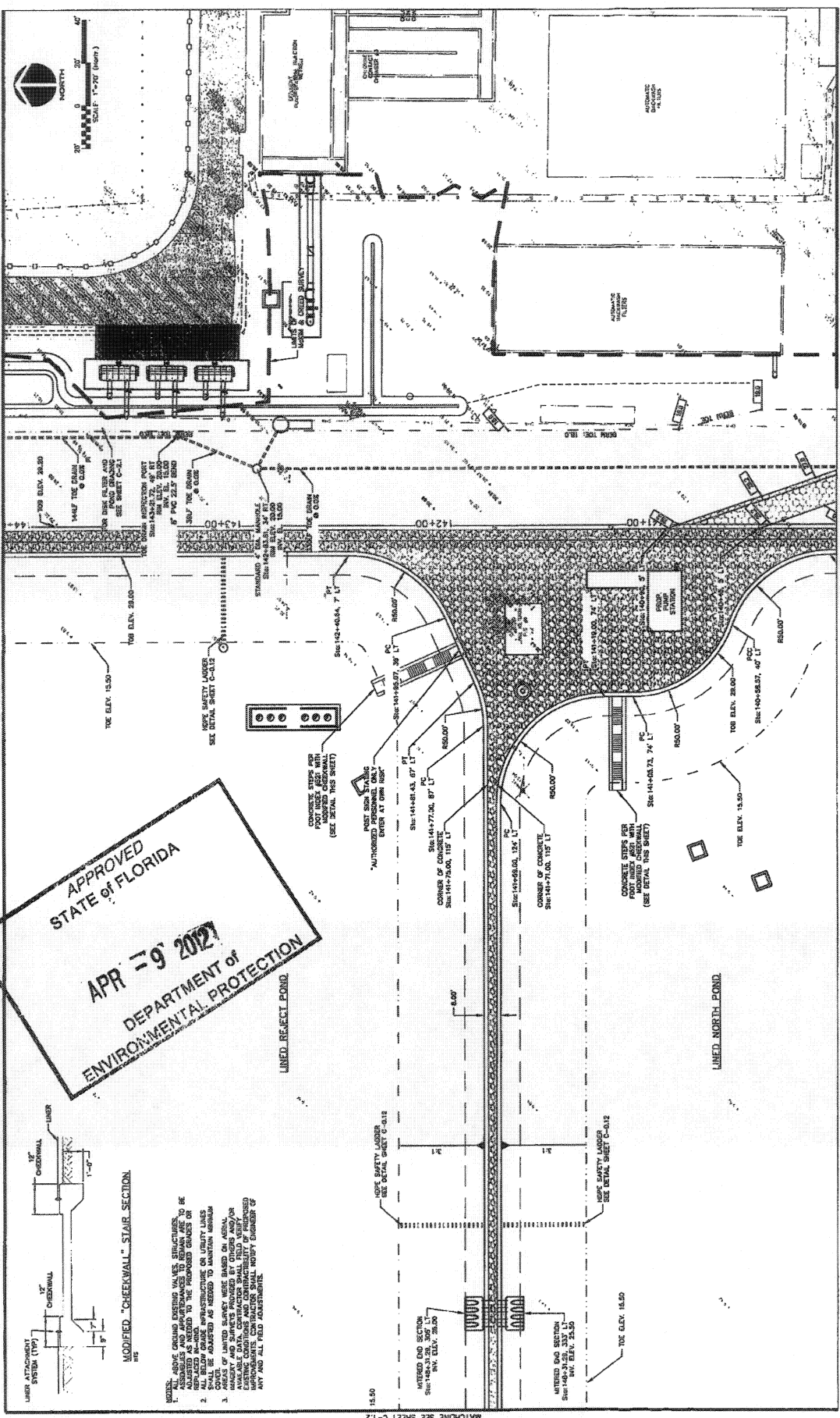
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APPROVED  
STATE of FLORIDA  
APR -9 2012  
DEPARTMENT of  
ENVIRONMENTAL PROTECTION



- NOTES:
1. ALL ABOVE GROUND EXISTING VALVES, STRUCTURES, ASSEMBLIES AND APPURTENANCES TO REMAIN ARE TO BE REPAIRED AND/OR REPLACED AS NECESSARY TO MAINTAIN MINIMUM DESIGN STANDARDS.
  2. ALL EXISTING AND PROPOSED CONSTRUCTION SHALL BE ADAPTED AS NEEDED TO MAINTAIN MINIMUM DESIGN STANDARDS.
  3. ALL DIMENSIONS OF LIMITED SURVEY WERE BASED ON AERIAL PHOTOGRAPHY AND SURVEYS PROVIDED BY OTHERS AND/OR FIELD MEASUREMENTS. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS AND CONFIRMED THE DIMENSIONS OF EXISTING CONDITIONS AND CONSTRUCTION OF PROPOSED CONDITIONS. THE ENGINEER HAS NOT CONDUCTED ANY AND ALL FIELD ADJUSTMENTS.

MATCHLINE SEE SHEET C-1.1



**SWRFF LAKE FILTRATION AND NORTH POND IMPROVEMENTS**

GRADING PLAN No. 7

**MANATEE COUNTY, FLORIDA**

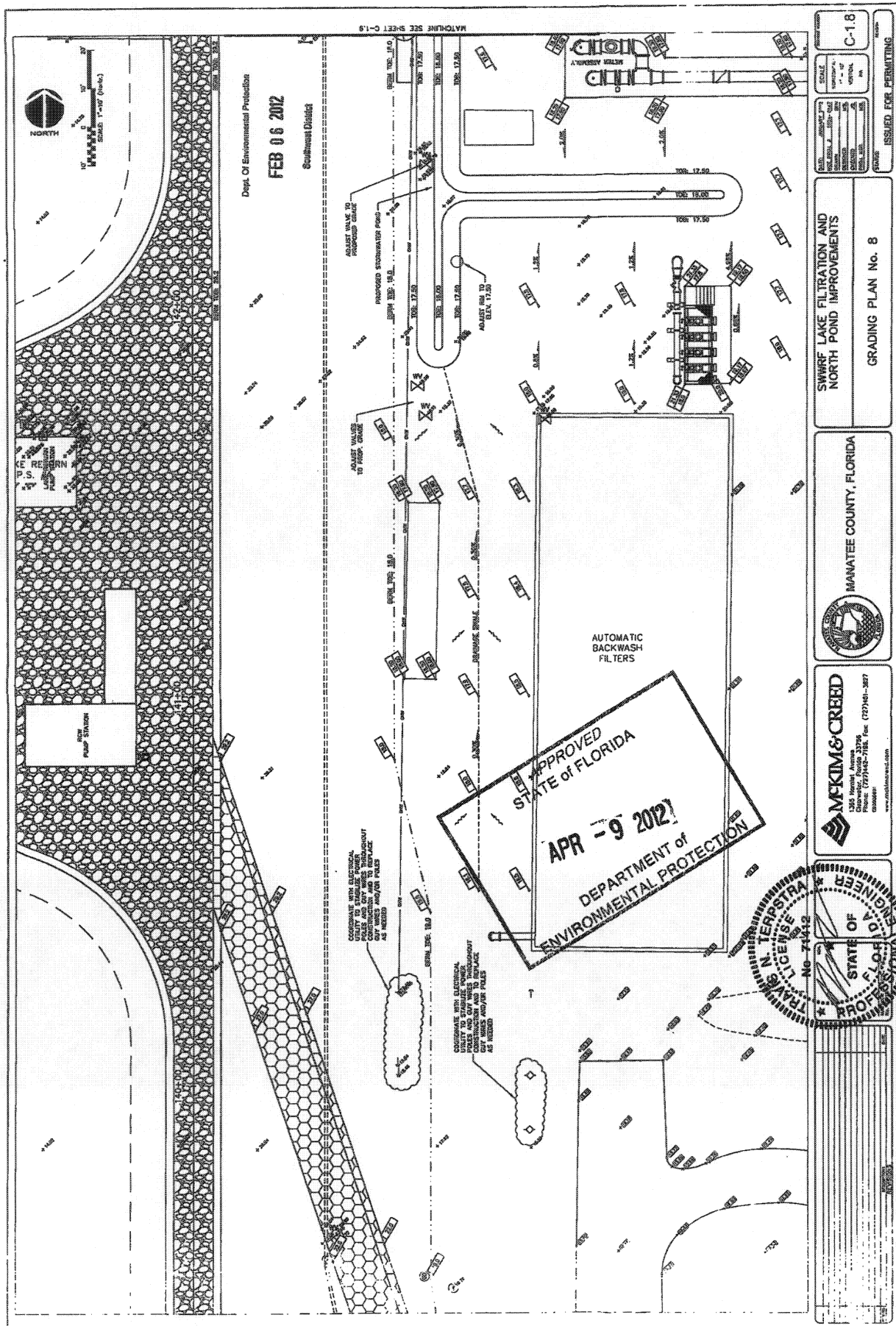
**100% SUBMITTAL**

**MFKIM & CREED**

1800 Highway 337, Suite 337  
Clearwater, Florida 34616  
Phone: (774) 461-3827  
Fax: (774) 461-3827  
www.mfkimandcreed.com

**STATE OF FLORIDA**

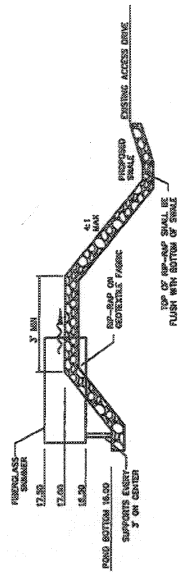
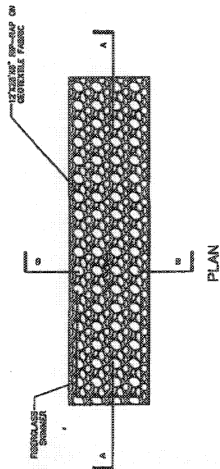
NO. 17110  
DATE OF EXPIRATION: 12/31/2012  
STATE OF FLORIDA



2-1-12







SECTION A-A: OVERFLOW PROFILE



SECTION B-B: OVERFLOW CROSS-SECTION

POND OUTLET DETAIL

NOTES:  
1. POND ACCESS SUMMER SHALL BE CONCRETE.  
2. CONCRETE FLOOR IS FOR 6-8 IN POND ACCESS DRIVE.

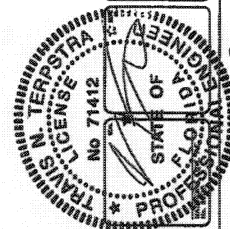
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SWANEE LAKE FILTRATION AND NORTH POND IMPROVEMENTS

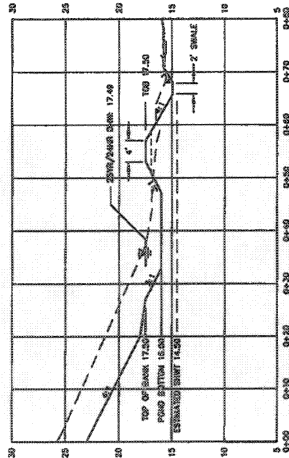
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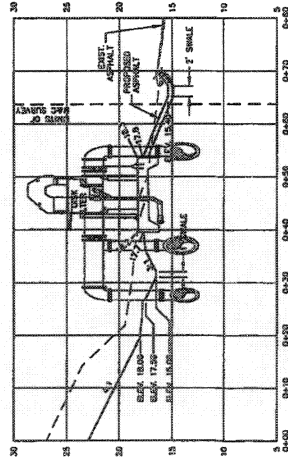
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2-1-12



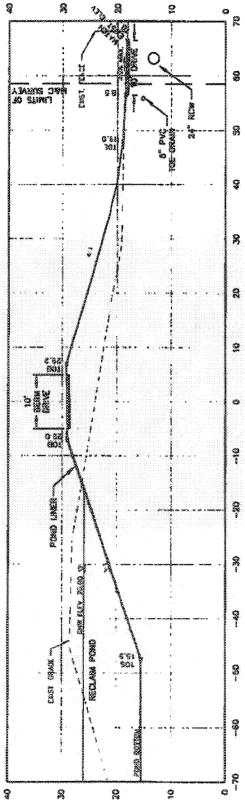
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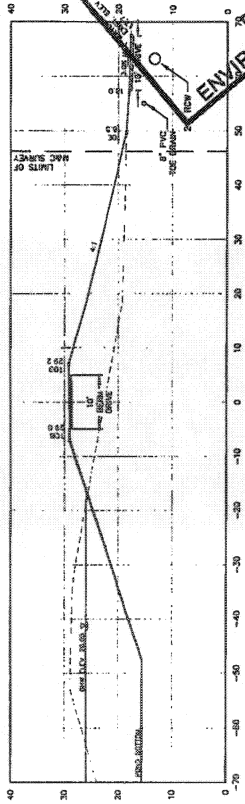
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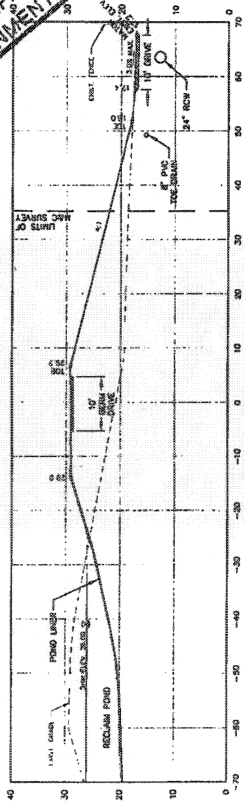




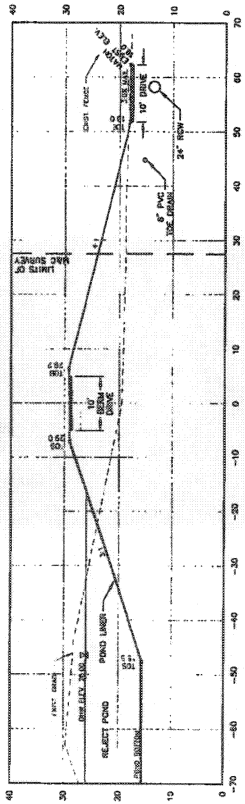
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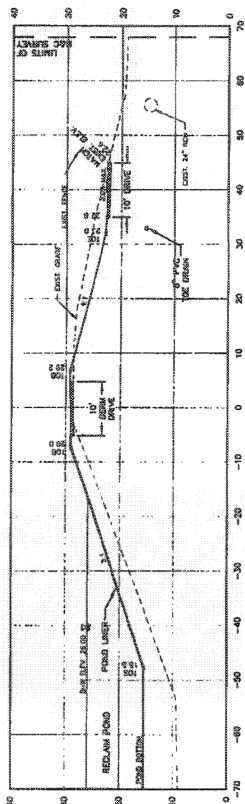
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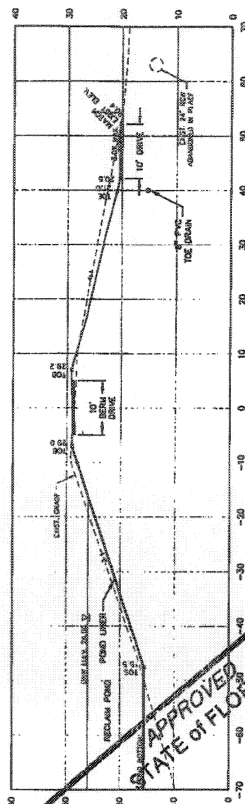
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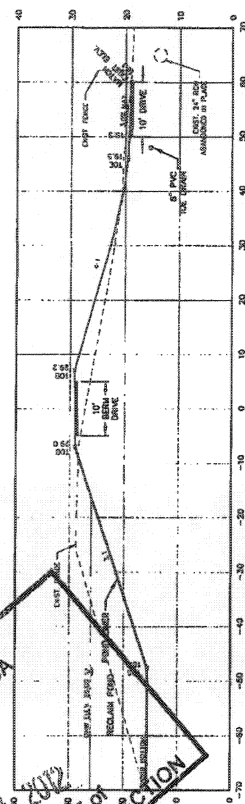
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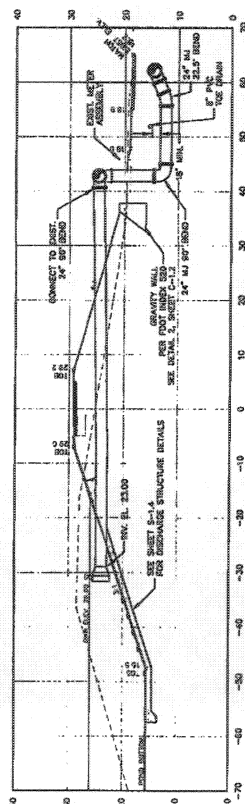
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**MANATEE COUNTY, FLORIDA**

**SWRFL LAKE FILTRATION AND NORTH POND IMPROVEMENTS**

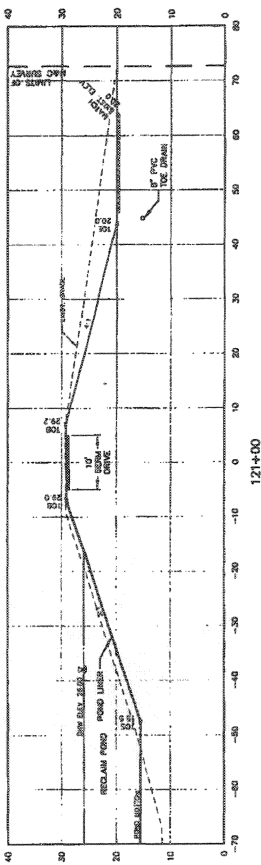
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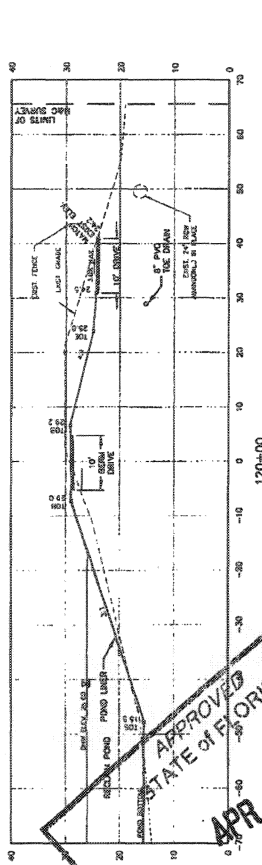
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 SHEET NO. C-1.14

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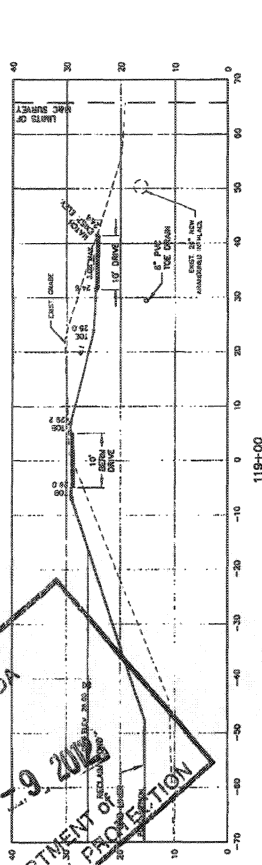
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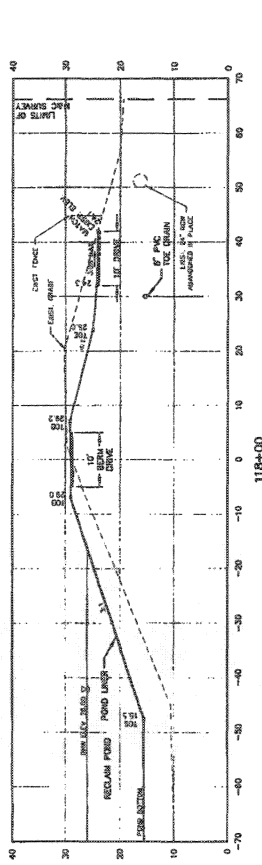
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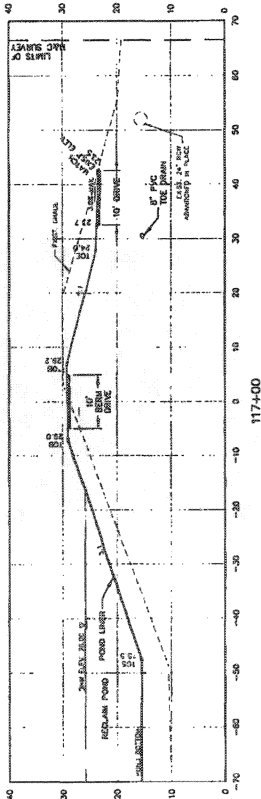
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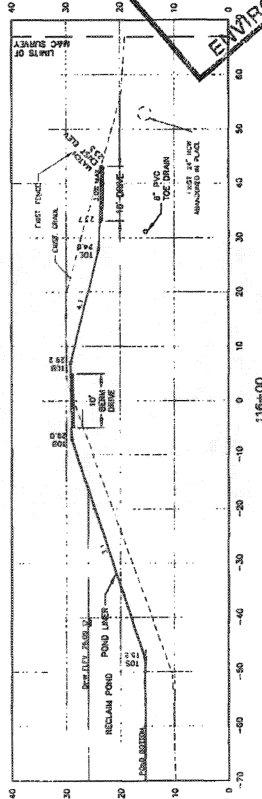
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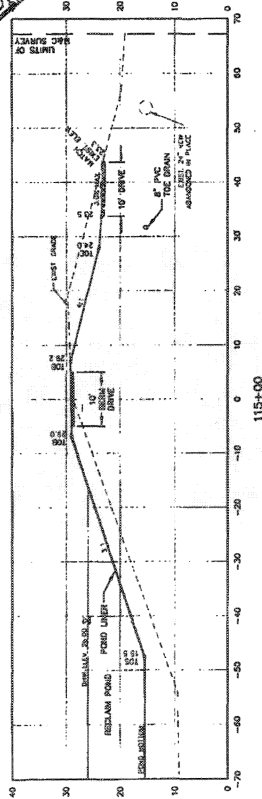
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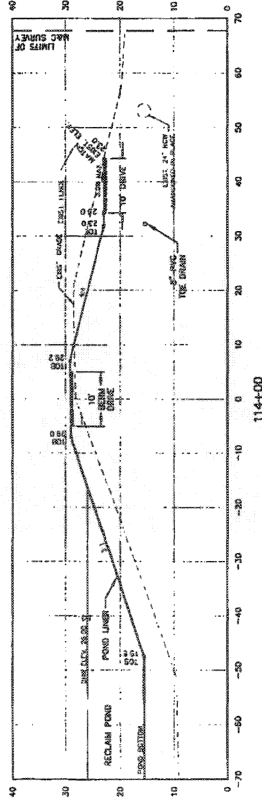
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**SWRFL LAKE FILTRATION AND NORTH POND IMPROVEMENTS**

MANATEE COUNTY, FLORIDA

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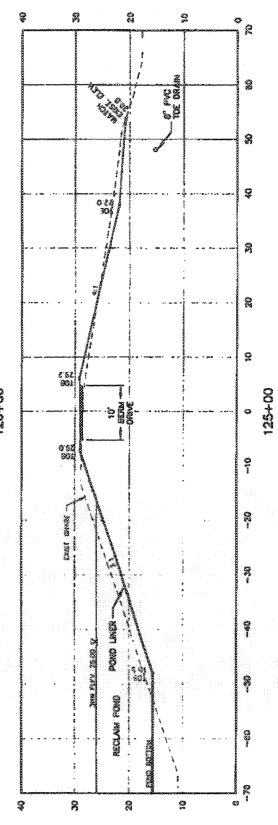
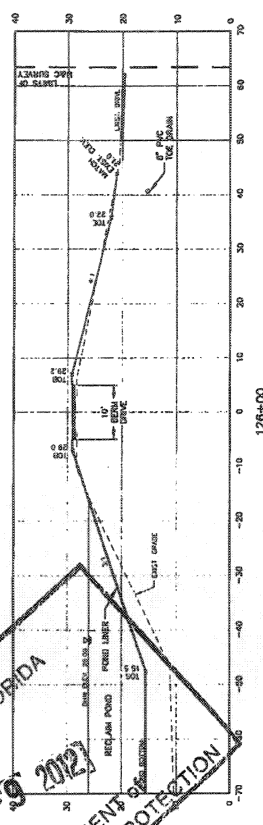
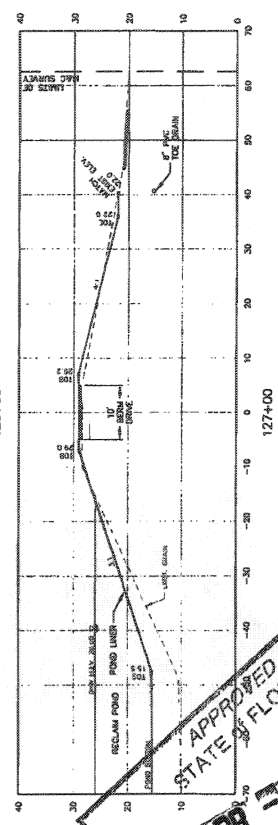
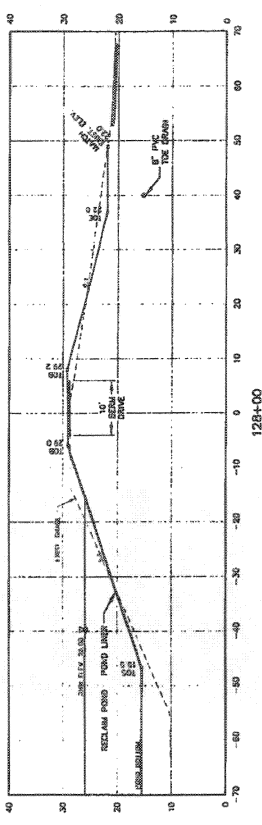
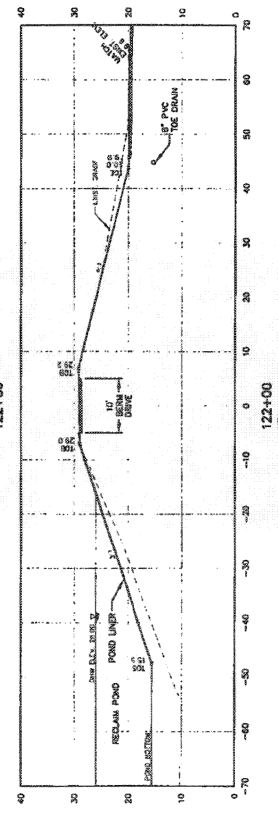
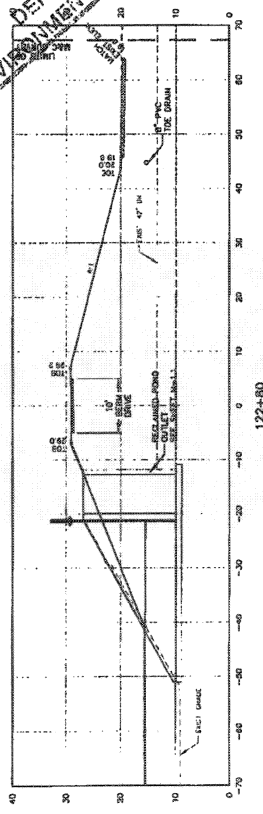
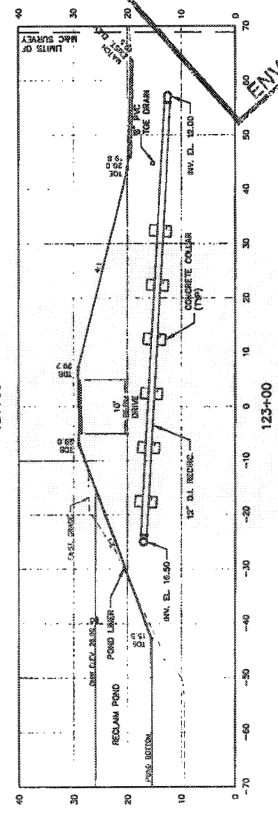
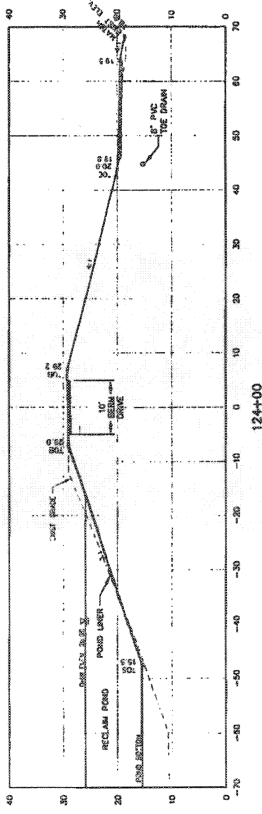
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HORIZONTAL  
VERTICAL  
1" = 10'

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**SWRF LAKE FILTRATION AND  
NORTH POND IMPROVEMENTS**

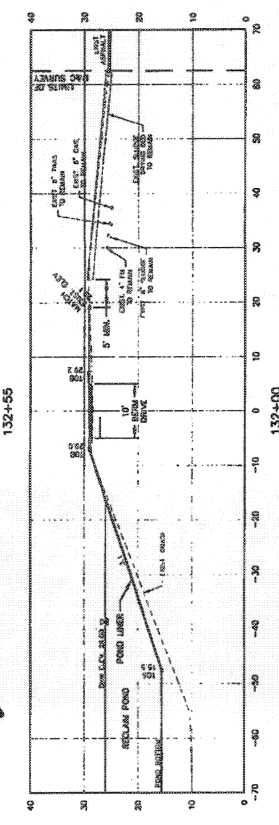
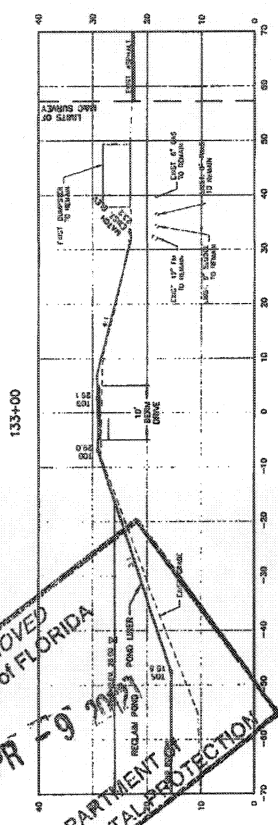
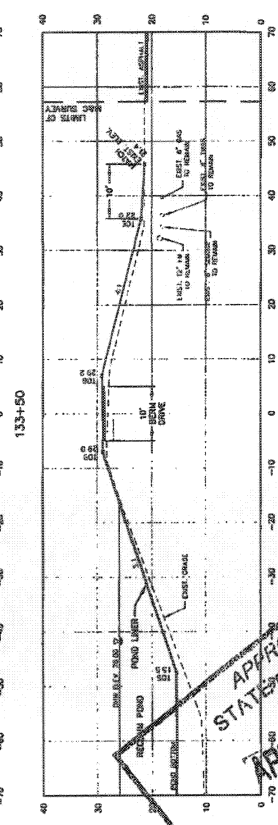
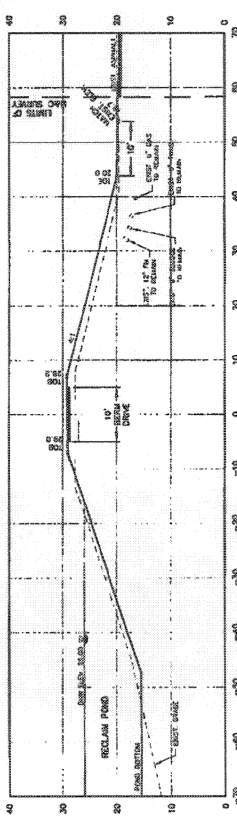
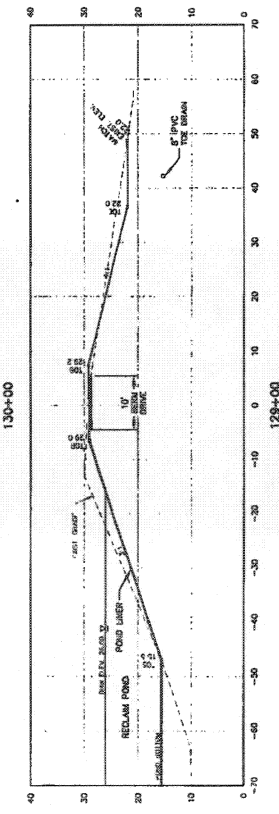
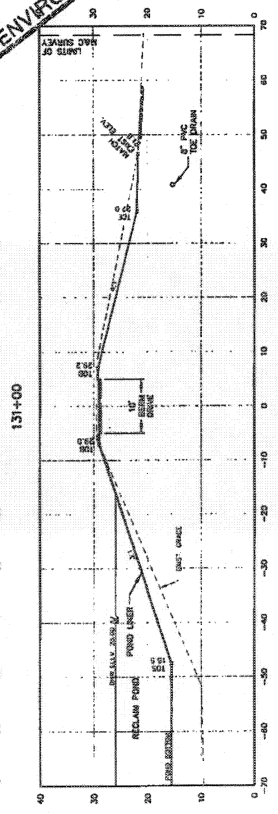
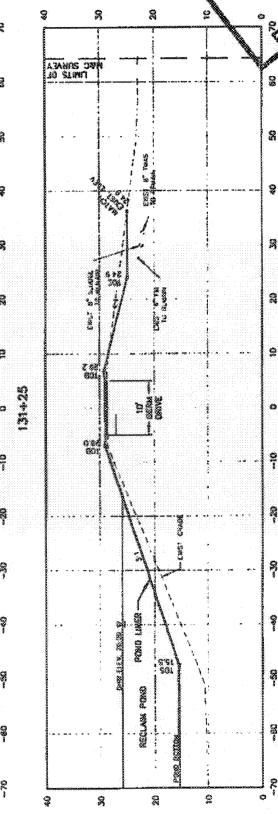
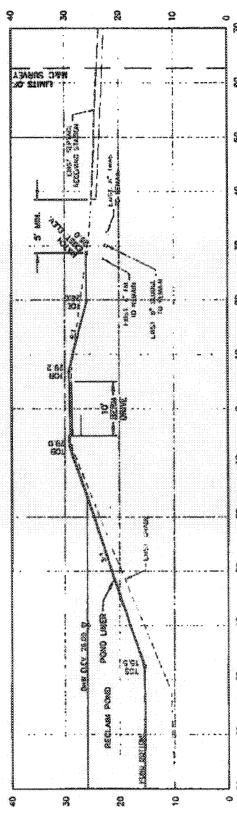
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DATE: 11/11/11

PROJECT: SWRF LAKE FILTRATION AND NORTH POND IMPROVEMENTS

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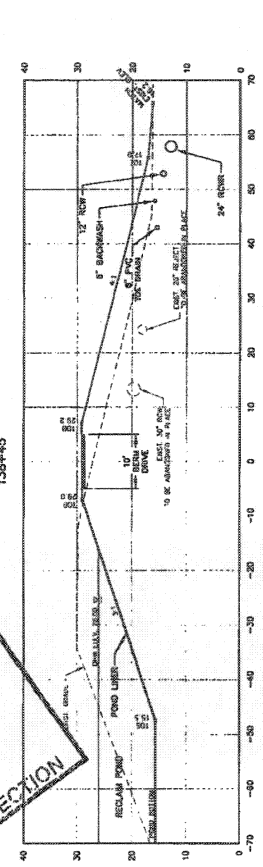
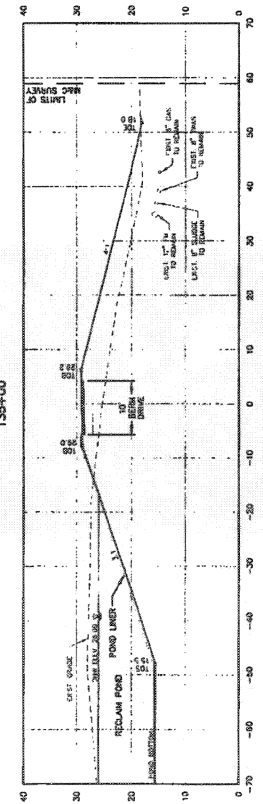
**SWRFLAKE FILTRATION AND  
NORTH POND IMPROVEMENTS**

POND SECTIONS No. 5

100% SUBMITTAL

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MAN. DESIGNED	MAN. DESIGNED	MAN. DESIGNED	MAN. DESIGNED
MAN. CHECKED	MAN. CHECKED	MAN. CHECKED	MAN. CHECKED
MAN. REVIEWED	MAN. REVIEWED	MAN. REVIEWED	MAN. REVIEWED
MAN. APPROVED	MAN. APPROVED	MAN. APPROVED	MAN. APPROVED
C-1.17			





DATE	ENTRIES	2017
WEL. MON. 2	10:00-20:00	
DAY	WED	
ESCHERICH	WEL	
CONTO	50	
WEL	WEL	

SCALE

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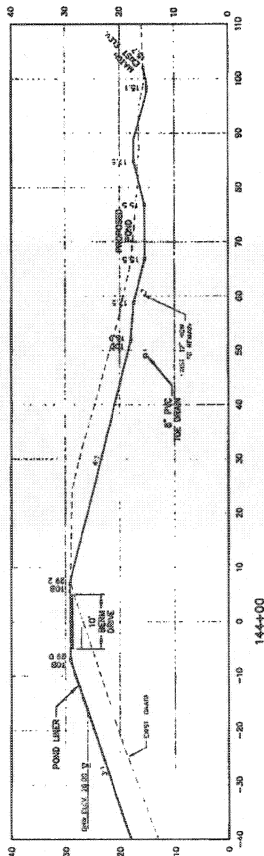
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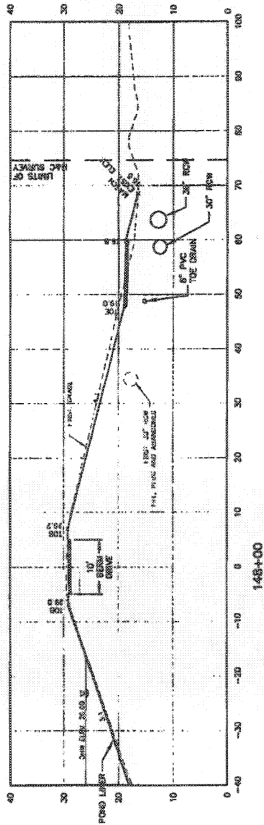
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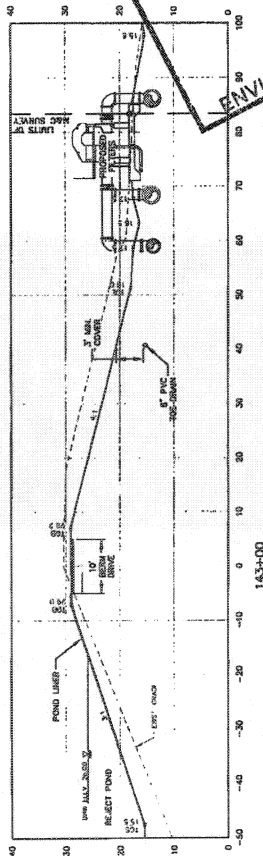
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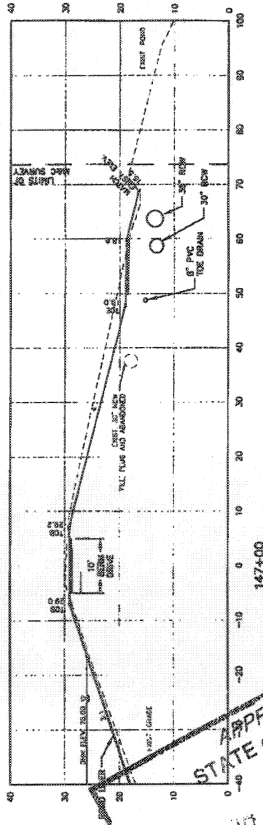
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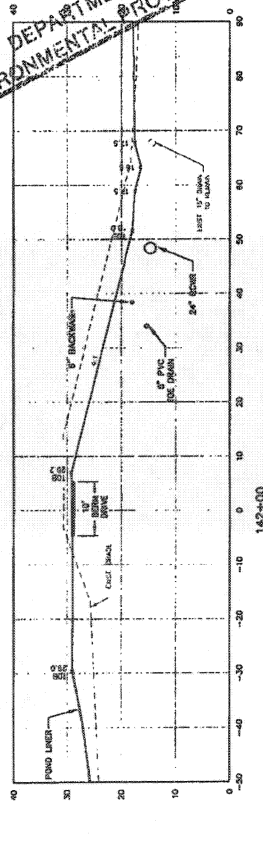
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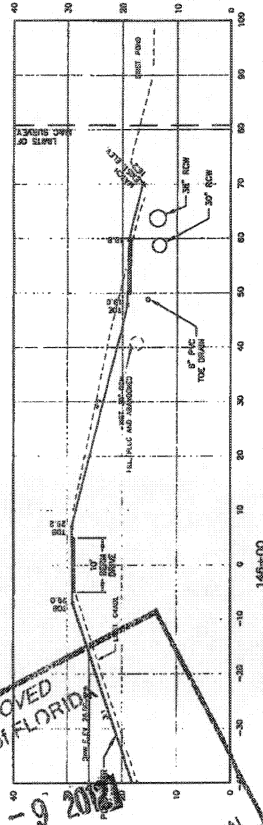
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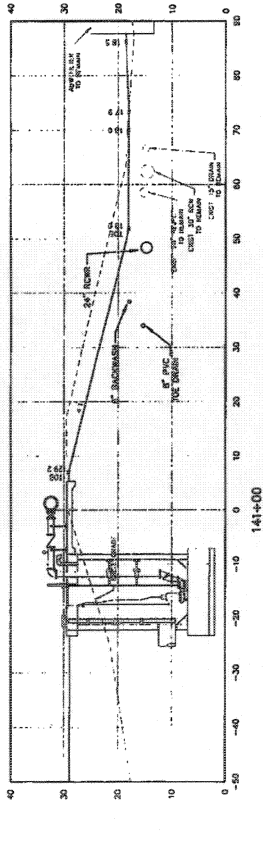
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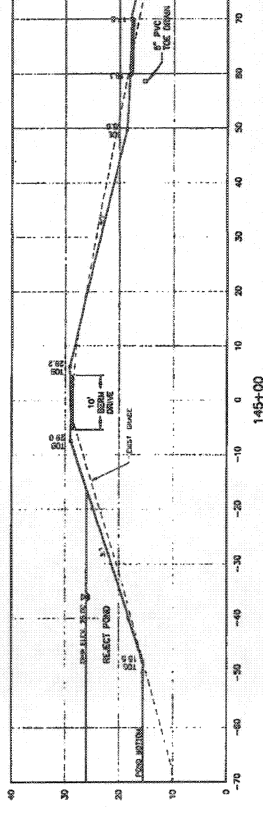
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MANATEE COUNTY, FLORIDA

SWRFL LAKE FILTRATION AND  
NORTH POND IMPROVEMENTS

POND SECTIONS No. 7

DATE: 08/01/2021	SCALE: HORIZONTAL 1" = 10'	VERTICAL 1" = 10'	PROJECT: C-1.19
DRAWN BY: MFKM & CREED	CHECKED BY: MFKM & CREED	DESIGNED BY: MFKM & CREED	APPROVED BY: MFKM & CREED
DATE: 08/01/2021	SCALE: HORIZONTAL 1" = 10'	VERTICAL 1" = 10'	PROJECT: C-1.19

100% SUBMITTAL

**SWWRF LAKE FILTRATION AND NORTH POND IMPROVEMENT PROJECT**  
**Operation and Maintenance Instructions For the**  
**Surface Water Management System (SWMS)**

The following normal maintenance items, including cleaning or replacement of the various elements of the system, will be required for the surface water management system to continue to operate as designed. It is the Owner's responsibility to inspect and maintain the SWMS on a regular basis.

General Maintenance:

1. All surface water management system pipes, inlets, catch basins, manholes, flumes, swales, and ponds as well as inflow and outfall structures (including oil skimmers), and discharge pipes should be inspected on a regular basis (monthly) and following significant storm events. They should be maintained by removing built-up debris and vegetation and repairing deteriorating structures.
2. Chemicals, oils, greases, or similar wastes are NOT to be disposed of in the surface water management system or through storm sewers. Treatment ponds are designed to treat normal road, parking lot, roof, and yard runoff only. Some chemicals may interfere with a treatment pond's functions or kill vegetation and wildlife. Dispose of these potentially dangerous materials properly by taking them to recycling facilities or to collection locations sponsored by many local governments.

Also do not dispose of grass clippings in a surface water management system. Grass clippings pose problems by smothering desirable vegetation, clogging outfall structures and, when they decompose, may cause unsightly algae blooms that can fill fish.

3. Accumulated pond sediments may contain heavy metals such as lead, cadmium and mercury, as well as other potentially hazardous materials. Therefore, sediments removed from surface water management system inlets, pipes, and ponds should be disposed of at an approved facility (check with your County Solid Waste Department or the Florida Department of Environmental Protection for disposal facilities approved to accept treatment pond sediment).
4. During any repair or maintenance activity, use care to avoid causing erosion or siltation to adjacent or off-site areas.
5. Alterations (filling, enlarging, etc.) of any part of the surface water management system are not permitted without prior approval from the Department and all other applicable governing agencies.
6. It is usually more cost effective to monitor and perform routine maintenance on a surface water management system rather than let it fail and have to reconstruct the entire system.

7. Notify the Department within 24 hours of observation of sinkhole development within any of the retention areas of the surface water management system.

Dry Retention Ponds and Swales:

1. On a quarterly basis and following a storm event, the entity responsible for maintenance shall inspect the retention pond and outfall structure to ensure that the system is operating properly. If standing water persists longer than 72 hours after a normal summer rain event, or if wetland vegetation such as cattails grow in the retention areas, the surface water management system may be in need of repair. Repairs may be as simple as scarifying or raking the pond bottom, or may consist of removing the bottom sediment (approximately the top foot of soil) and replacing the soil with clean sand.
2. Annually, inspect the SWMS ponds and swales for the following and repair as needed:
  - (1) Determine the bottom elevation of the ponds and swales. If any pond bottom has accumulated four (4) or more inches of material, the excess material shall be removed and properly disposed of (please refer to Item #3 above). If any swale has accumulated material that will hinder conveyance, the excess material shall be removed and properly disposed of (please refer to Item #3 above.)
3. The retention areas shall be kept grassed and mowed frequently enough to prevent thatch buildup. Clippings and debris will be removed after mowing. Limit fertilizer use around the retention areas and do not fertilize the retention area bottoms.
4. Re-sod any of the retention areas (sides or bottom) where grass or sod has been removed or eroded.
5. Notify the Department within 24 hours of observation of sinkhole development within any of the retention areas of the surface water management system.

Refer to Number: 41-0221256-003,

# **CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS**

## **SWWRF LAKE FILTRATION SYSTEM AND NORTH POND IMPROVEMENTS**

Prepared for  
**BOARD OF COUNTY COMMISSIONERS  
COUNTY OF MANATEE, FLORIDA**

COUNTY PROJECT NO. 6079180



### **ISSUE FOR BID**

**February 2012**

Prepared by



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Clearwater, Florida 33756  
Ph: 727/442-7196  
Fax: 727/461-3827



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#### **APPENDICES**

Geotechnical Report for the Lake Filtration System and North Pond  
Improvements dated March 31, 2011

Geotechnical Report for the Perico Preserve Evaluation dated  
February 17, 2012

**END TOC**



## SECTION 01005

### GENERAL REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 SCOPE AND INTENT

###### A. Description

The work to be done consists of the furnishing of all labor, materials and equipment, and the performance of all work included in this Contract.

###### B. Work Included

The Contractor shall furnish all labor, superintendence, materials, plant, power, light, heat, fuel, water, tools, appliances, equipment, supplies, shop drawings, working drawings and other means of construction necessary or proper for performing and completing the work. He shall obtain and pay for all required permits necessary for the work, other than those permits such as the DEP permit and railroad permit which may have already been obtained. He shall perform and complete the work in the manner best calculated to promote rapid construction consistent with safety of life and property and to the satisfaction of the Engineer, and in strict accordance with the Contract Documents. The Contractor shall clean up the work and maintain it during and after construction, until accepted, and shall do all work and pay all costs incidental thereto. He shall repair or restore all structures and property that may be damaged or disturbed during performance of the work.

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

The Contractor shall provide and maintain such modern plant, tools, and equipment as may be necessary, in the opinion of the Engineer, to perform in a satisfactory and acceptable manner all the work required by this Contract. Only equipment of established reputation and proven efficiency shall be used. The Contractor shall be solely responsible for the adequacy of his workmanship,

materials and equipment, prior approval of the Engineer notwithstanding.

C. Public Utility Installations and Structures

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

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

Public utility installations or structures owned or controlled by the Owner or other governmental body, which are required by this contract to be removed, relocated, replaced or rebuilt by the Contractor not identified in any separate bid item shall be considered as a part of the general cost of doing the work and shall be included in the prices bid for the various contract items. No separate payment shall be made therefore.

Where public utility installations or structures owned or controlled by the Owner or other governmental body are encountered during the course of the work, and are not indicated on the Plans or in the Specifications, and when, in the opinion of the Engineer, removal, relocation, replacement or rebuilding is necessary to complete the work under this Contract, such work shall be accomplished by the utility having jurisdiction, or such work may be ordered, in writing by the Engineer, for the

contractor to accomplish. If such work is accomplished by the utility having jurisdiction, it will be carried out expeditiously and the Contractor shall give full cooperation to permit the utility to complete the removal, relocation, replacement or rebuilding as required. If such work is accomplished by the Contractor, it will be in accordance with the General and Supplemental General Conditions.

The Contractor shall give written notice to Owner and other governmental utility departments and other owners of public utilities of the location of his proposed construction operations, at least forty-eight hours in advance of breaking ground in any area or on any unit of the work. This can be accomplished by making the appropriate contact with the "Sunshine State One-Call of Florida, Inc. Call Center ("Call Sunshine") and per all requirements provided for in the Florida Underground Facilities Damage Prevention and Safety Act (Florida Statutes, Title XXXIII, Chapter 556).

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

## **1.02 PLANS AND SPECIFICATIONS**

### **A. Plans**

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

### **B. Copies Furnished to Contractor**

The Contractor shall furnish each of the subcontractors, manufacturers, and material men such copies of the Contract Documents as may be required for their work. Additional copies of the Plans and Specifications, when requested, may be furnished to the Contractor at cost of reproduction.

### **C. Supplementary Drawings**

When, in the opinion of the Engineer, it becomes necessary to explain more fully the work to be done or to illustrate the work further or to show any changes which may be required, drawings known as Supplementary

Drawings, with specifications pertaining thereto, will be prepared by the Engineer and five paper prints thereof will be given to the Contractor.

D. Contractor to Check Plans and Data

The Contractor shall verify all dimensions, quantities and details shown on the Plans, Supplementary Drawings, Schedules, Specifications or other data received from the Engineer, and shall notify him of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction or improper operation resulting there from nor from rectifying such conditions at his own expense. He will not be allowed to take advantage of any errors or omissions, as full instructions will be furnished by the Engineer, should such errors or omissions be discovered. All schedules are given for the convenience of the Engineer and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quality of materials and equipment included in work to be done under the Contract.

E. Specifications

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

F. Intent

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

The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only

the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

The inclusion of the Related Requirements (or work specified elsewhere) in the General part of the specifications is only for the convenience of the Contractor, and shall not be interpreted as a complete list of related Specification Sections.

### **1.03 MATERIALS AND EQUIPMENT**

#### **A. Manufacturer**

The names of proposed manufacturers, material men, suppliers and dealers who are to furnish materials, fixtures, equipment, appliances or other fittings shall be submitted to the Engineer for approval. Such approval must be obtained before shop drawings will be checked. No manufacturer will be approved for any materials to be furnished under this Contract unless he shall be of good reputation and have a plant of ample capacity. He shall, upon the request of the Engineer, be required to submit evidence that he has manufactured a similar product to the one specified and that it has been previously used for a like purpose for a sufficient length of time to demonstrate its satisfactory performance.

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

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

#### **B. Delivery**

The Contractor shall deliver materials in ample quantities to insure the most speedy and uninterrupted progress of the work so as to complete the work within the allotted time. The Contractor shall also coordinate deliveries in order to avoid delay in, or impediment of, the progress of the work of any related Contractor.

C. Tools and Accessories

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

Spare parts shall be furnished as specified.

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

D. Installation of Equipment.

The Contractor shall have on hand sufficient proper equipment and machinery of ample capacity to facilitate the work and to handle all emergencies normally encountered in work of this character.

Equipment shall be erected in a neat and workmanlike manner on the foundations at the locations and elevations shown on the Plans, unless directed otherwise by the Engineer during installation. All equipment shall be correctly aligned, leveled and adjusted for satisfactory operation and shall be installed so that proper and necessary connections can be made readily between the various units.

The Contractor shall furnish, install and protect all necessary anchor and attachment bolts and all other appurtenances needed for the installation of the devices included in the equipment specified. Anchor bolts shall be as approved by the Engineer and made of ample size and strength for the purpose intended. Substantial templates and working drawings for installation shall be furnished.

The Contractor shall, at his own expense, furnish all materials and labor for, and shall properly bed in non-shrink grout, each piece of equipment on its supporting base that rests on masonry foundations.

Grout shall completely fill the space between the equipment base and the foundation. All metal surfaces coming in contact with concrete or grout shall receive a coat of coal tar epoxy equal to Koppers 300M.



E. Service of Manufacturer's Engineer

The Contract prices for equipment shall include the cost of furnishing (as required by equipment specifications sections) a competent and experienced engineer or superintendent who shall represent the manufacturer and shall assist the Contractor, when required, to install, adjust, test and place in operation the equipment in conformity with the Contract Documents. After the equipment is placed in permanent operation by the Owner, such engineer or superintendent shall make all adjustments and tests required by the Engineer to prove that such equipment is in proper and satisfactory operating condition, and shall instruct such personnel as may be designated by the Owner in the proper operation and maintenance of such equipment.

**1.04 INSPECTION AND TESTING**

A. General

Inspection and testing of materials will be performed by the Owner unless otherwise specified.

For tests specified to be made by the Contractor, the testing personnel shall make the necessary inspections and tests and the reports thereof shall be in such form as will facilitate checking to determine compliance with the Contract Documents. Three (3) copies of the reports shall be submitted and authoritative certification thereof must be furnished to the Engineer as a prerequisite for the acceptance of any material or equipment.

If, in the making of any test of any material or equipment, it is ascertained by the Engineer that the material or equipment does not comply with the Contract, the Contractor will be notified thereof and he will be directed to refrain from delivering said material or equipment, or to remove it promptly from the site or from the work and replace it with acceptable material, without cost to the Owner.

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

The Contractor shall be fully responsible for the proper operation of equipment during tests and instruction

periods and shall neither have nor make any claim for damage which may occur to equipment prior to the time when the Owner formally takes over the operation thereof.

B. Costs

All inspection and testing of materials furnished under this Contract will be performed by the Owner or duly authorized inspection engineers or inspections bureaus without cost to the Contractor, unless otherwise expressly specified.

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

Materials and equipment submitted by the Contractor as the equivalent to those specifically named in the Contract may be tested by the Owner for compliance. The Contractor shall reimburse the Owner for the expenditures incurred in making such tests on materials and equipment which are rejected for non-compliance.

C. Inspections of Materials

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

D. Certificate of Manufacture

When inspection is waived or when the Engineer so requires, the Contractor shall furnish to him

authoritative evidence in the form of Certificates of Manufacture that the materials to be used in the work have been manufactured and tested in conformity with the Contract Documents. These certificates shall be notarized and shall include copies of the results of physical tests and chemical analyses, where necessary, that have been made directly on the product or on similar products of the manufacturer.

E. Shop Tests of Operating Equipment

Each piece of equipment for which pressure, duty, capacity, rating, efficiency, performance, function or special requirements are specified shall be tested in the shop of the maker in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Documents. No such equipment shall be shipped to the work until the Engineer notifies the Contractor, in writing, that the results of such tests are acceptable.

Five copies of the manufacturer's actual test data and interpreted results thereof, accompanied by a certificate of authenticity sworn to by a responsible official of the manufacturing company, shall be forwarded to the Engineer for approval. The cost of shop tests and of furnishing manufacturer's preliminary and shop test data of operating equipment shall be borne by the Contractor.

F. Preliminary Field Tests

As soon as conditions permit, the Contractor shall furnish all labor, materials, and instruments and shall make preliminary field tests of equipment. If the preliminary field tests disclose any equipment furnished under this Contract which does not comply with the requirements of the Contract Documents, the Contractor shall, prior to the acceptance tests, make all changes, adjustments and replacements required. The furnishing Contractor shall assist in the preliminary field tests as applicable.

G. Final Field Tests

Upon completion of the work and prior to final payment, all equipment and piping installed under this Contract shall be subjected to acceptance tests as specified or required to prove compliance with the Contract Documents.

The Contractor shall furnish labor, fuel, energy, water and all other materials, equipment and instruments

necessary for all acceptance tests, at no additional cost to the Owner. The Supplier shall assist in the final field tests as applicable.

#### H. Failure of Tests

Any defects in the materials and equipment or their failure to meet the tests, guarantees or requirements of the Contract Documents shall be promptly corrected by the Contractor. The decision of the Engineer as to whether or not the Contractor has fulfilled his obligations under the Contract shall be final and conclusive. If the Contractor fails to make these corrections or if the improved materials and equipment, when tested, shall again fail to meet the guarantees of specified requirements, the Owner, notwithstanding its partial payment for work, and materials and equipment, may reject the materials and equipment and may order the Contractor to remove them from the site at his own expense.

In case the Owner rejects any materials and equipment, then the Contractor shall replace the rejected materials and equipment within a reasonable time. If he fails to do so, the Owner may, after the expiration of a period of thirty (30) calendar days after giving him notice in writing, proceed to replace such rejected materials and equipment, and the cost thereof shall be deducted from any compensation due or which may become due the Contractor under his Contract.

#### I. Final Inspection

During such final inspections, the work shall be clean and free from water. In no case will the final pay application be prepared until the Contractor has complied with all requirements set forth and the Engineer has made his final inspection of the entire work and is satisfied that the entire work is properly and satisfactorily constructed in accordance with the requirements of the Contract Document.

### 1.05 **TEMPORARY STRUCTURES**

#### A. Temporary Fences

If, during the course of the work, it is necessary to remove or disturb any fence or part thereof, the Contractor shall, at his own expense, if so ordered by the Engineer, provide a suitable temporary fence which shall be maintained until the permanent fence is replaced. The Engineer shall be solely responsible for

the determination of the necessity for providing a temporary fence and the type of temporary fence to be used.

#### **1.06        TEMPORARY SERVICES**

##### **A.     First Aid**

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

#### **1.07        LINES AND GRADES**

##### **A.     Grade**

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

##### **B.     Safeguarding Marks**

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

The Contractor shall safeguard all existing and known property corners, monuments and marks adjacent to but not related to the work and, if required, shall bear the cost of reestablishing them if disturbed or destroyed.

##### **C.     Datum Plane**

All elevations indicated or specified refer to the Mean Sea Level Datum of the NGVD 1929 Datum and/or NAVD 1988.

#### **1.08        ADJACENT STRUCTURES AND LANDSCAPING**

##### **A.     Responsibility**

The Contractor shall also be entirely responsible and liable for all damage or injury as a result of his

operations to all other adjacent public and private property, structures of any kind and appurtenances thereto met with during the progress of the work. The cost of protection, replacement in their original locations and conditions or payment of damages for injuries to such adjacent public and private property and structures affected by the work, whether or not shown on the Plans, and the removal, relocation and reconstruction of such items called for on the Plans or specified shall be included in the various Contract Items and no separate payments will be made therefore. Where such public and private property, structures of any kind and appurtenances thereto are not shown on the Plans and when, in the opinion of the Engineer, additional work is deemed necessary to avoid interference with the work, payment therefore will be made as provided for in the General Conditions.

Contractor is expressly advised that the protection of buildings, structures, tunnels, tanks, pipelines, etc. and related work adjacent and in the vicinity of his operations, wherever they may be, is solely his responsibility. Conditional inspection of buildings or structures in the immediate vicinity of the project which may reasonably be expected to be affected by the Work shall be performed by and be the responsibility of the Contractor.

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

Prior to the beginning of any excavations, the Contractor shall advise the Engineer of all buildings or structures on which he intends to perform work or which performance of the project work will affect.

#### B. Protection of Trees

1. All trees and shrubs shall be adequately protected by the Contractor with boxes and otherwise and in accordance with ordinances governing the protection of trees. No excavated materials shall be placed

so as to injure such trees or shrubs. Trees or shrubs destroyed by negligence of the Contractor or his employees shall be replaced by him with new stock of similar size and age, at the proper season and at the sole expense of the Contractor.

2. Beneath trees or other surface structures, where possible, pipelines may be built in short tunnels, backfilled with excavated materials, except as otherwise specified, or the trees or structures carefully supported and protected from damage.
3. The Owner may order the Contractor, for the convenience of the Owner, to remove trees along the line or trench excavation. If so ordered, the Owner will obtain any permits required for removal of trees. Such tree removal ordered shall be paid for under the appropriate Contract Items.

C. Lawn Areas

Lawn areas shall be left in as good condition as before the starting of the work. Where sod is to be removed, it shall be carefully removed, and later replaced, or the area where sod has been removed shall be restored with new sod in the manner described in the Workmanship and Materials Paragraph in Section 02900, Seeding and Sodding.

D. Restoration of Fences

Any fence, or part thereof, that is damaged or removed during the course of the work shall be replaced or repaired by the Contractor and shall be left in as good a condition as before the starting of the work. The manner in which the fence is repaired or replaced and the materials used in such work shall be subject to the approval of the Engineer. The cost of all labor, materials, equipment, and work for the replacement or repair of any fence shall be deemed included in the appropriate Contract Item or items, or if no specific Item is provided therefore, as part of the overhead cost of the work, and no additional payment will be made therefore.

**1.09 PROTECTION OF WORK AND PUBLIC**

A. Barriers and Lights

During the prosecution of the work, the Contractor shall put up and maintain at all times such barriers and lights as will effectually prevent accidents. The Contractor shall provide suitable barricades, red lights, "danger" or "caution" or "street closed" signs and watchmen at all places where the work causes obstructions to the normal traffic or constitutes in any way a hazard to the public, in accordance with state and local requirements.

B. Smoke Prevention

A strict compliance with ordinances regulating the production and emission of smoke will be required. No open fires will be permitted.

C. Noise

The Contractor shall eliminate noise to as great an extent as practicable at all times. Air compressing plants shall be equipped with silencers and the exhaust of all engines or other power equipment shall be provided with mufflers. In the vicinity of hospitals and schools, special care shall be used to avoid noise or other nuisances. The Contractor shall strictly observe all local regulations and ordinances covering noise control.

Except in the event of an emergency, no work shall be done between the hours of 7:00 P.M. and 7:00 A.M., or on weekends. If the proper and efficient prosecution of the work requires operations during the night or weekends, the written permission of the Owner shall be obtained before starting such items of the work.

D. Access to Public Services

Neither the materials excavated nor the materials or plant used in the construction of the work shall be so placed as to prevent free access to all fire hydrants, valves or manholes.

E. Dust prevention

The Contractor shall prevent dust nuisance from his operations or from traffic by keeping the roads and/or construction areas sprinkled with water at all times.

**1.10 CUTTING AND PATCHING**

The Contractor shall do all cutting, fitting or patching of his portion of the work that may be required to make



the several parts thereof join and coordinate in a manner satisfactory to the Engineer and in accordance with the Plans and Specifications. The work must be done by competent workmen skilled in the trade required by the restoration.

#### **1.11 CLEANING**

##### **A. During Construction**

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

The Contractor shall remove from the site all of his surplus materials and temporary structures when no further need therefore develops.

##### **B. Final Cleaning**

At the conclusion of the work, all equipment, tools, temporary structures and materials belonging to the Contractor shall be promptly taken away, and he shall remove and promptly dispose of all water, dirt, rubbish or any other foreign substances.

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

#### **1.12 MISCELLANEOUS**

##### **A. Protection Against Siltation and Bank Erosion**

1. The Contractor shall arrange his operations to minimize siltation and bank erosion on construction sites and on existing or proposed water courses and drainage ditches.

2. The Contractor, at his own expense, shall remove any siltation deposits and correct any erosion problems as directed by the Engineer which results from his construction operations.

##### **B. Protection of Wetland Areas**

The Contractor shall properly dispose of all surplus material, including soil, in accordance with Local, State and Federal regulations. Under no circumstances shall surplus material be disposed of in wetland areas as defined by the Florida Department of Environmental Protection or Southwest Florida Water Management District.

C. Existing Facilities

The work shall be so conducted to maintain existing facilities in operation insofar as is possible. Requirements and schedules of operations for maintaining existing facilities in service during construction shall be as described in the Special Provisions.

D. Use of Chemicals

All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval of either EPA or USDA.

Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**

**END OF SECTION**

## SECTION 01010

### SUMMARY OF WORK

#### PART 1 GENERAL

##### 1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. The work may consist of, but may not be limited to the following improvements for the SWWRF Lake Filters and Reclaimed Water Storage Ponds:
1. Construct a lined 18 million gallon Reject Storage Pond in the northern portion of the existing North Reclaimed Water storage pond. The construction includes filling in the bottom of the pond to elevation 15.50 and constructing an earth berm to elevation 29.00 to separate the proposed Reject Pond from the existing Reclaimed Water Storage Pond. Construction includes stairways into the pond and emergency spillways.
  2. Construct a lined 64 million gallon Reclaimed Water Storage Pond in the remaining area of the existing North Pond. The construction includes filling in the pond to elevation 15.50 and improving the existing berms so that they have a top elevation of 29.00. The amount of earth fill required for the proposed Reject Pond and North Reclaimed Water Pond is approximately 300,000 cubic yards. Construction includes stairways into the pond.
  3. Install a 60 mil thick High Density Polyethylene Liner in the proposed Reject Pond and proposed North Reclaimed Water Storage Pond. The quantity of liner being approximately 1,100,000 square feet.
  4. Convert the existing Reclaimed Water Return Pump Station in the existing North Pond to the Reject Pump Station. Construct a new intake structure, manhole and 36 inch intake pipe for the Reject Pump Station. Install a new 20 inch 90 degree bend on the Reject discharge header.
  5. Construct a new Reclaimed Water Return Pump Station for the proposed North Reclaimed Water Storage Pond. The pump station will have three (3) 60 HP submersible pumps, each with a Variable Frequency Drive and a maximum capacity of approximately 5 MGD (total pump capacity = 15 MGD). The pump station shall have two (2) intake

strucutres, a 36-inch intake pipe approximately 150 feet in length, a 24-inch discharge pipe with a flowmeter and a 12-foot diameter wetwell.

6. Replace the existing sluice gates on the North Pond Outlet Structure with stainless steel units. Remove the existing slide gates and install new non-adjustable emergency overflow weirs. Install new grating and railings.
7. Provide and install three (3) Gravity Disk Filters with 25 micron screens, each disk filter with a maximum flow capacity of 5 MGD (3 filters total flow capacity = 15 MGD).
8. Construct a 24-inch Reclaimed Water Return pipeline from the North Pond RCWR pump station to its connection with the proposed 24 inch Reclaimed Water Return pipeline from its connection with an existing 20 inch RCWR pipe southeast of the North Pond to the Disk Filters, a length of approximately 1,100 feet.
9. Construct approximately 800 feet of 20-inch Reject pipeline from the Reject Pump Station to the Headworks or ABW Filters, including connecting to existing 20-inch reclaimed water mains to be used for the Reject.
10. Construct approximately 160 feet of a proposed 30-inch Reclaimed Water Return pipeline from the Disk Filters to the existing clearwell for the existing High Service Effluent Pumps.
11. Provide and install a Waste Backwash Pump Station for the Disk Filters. The pump station to have two submersible pumps, each with a capacity of 200 GPM and a 4-inch discharge.
12. Construct a 6-inch Waste Backwash pipeline from the proposed pump station to the existing 8-inch Thickened Waste Activated Sludge pipeline, a length of approximately 800 feet.
13. Construct a 6-inch Waste Backwash pipeline from the proposed 6-inch pipeline to the Waste Backwash Trough for existing Sand Filter Nos. 6 and 7, a length of approximately 50 feet.
14. Construct a 12-inch Reclaimed Water Recirculation pipline from the proposed Reclaimed Water Return Pump Station to its outlet at the existing North Pond Outlet Structure at the south end of the

proposed North Reclaimed Water storage pond, a length of approximately 2,100 feet.

15. Provide and install a proposed 30-inch Reclaimed Water Metering Assembly at the Reclaimed Water High Service Effluent Pumping Station, the assembly to include a 36 inch motorized butterfly valve and a 36 inch globe-type backpressure valve.
16. Construct approximately 900 feet of 36-inch Reclaimed Water mains from the proposed Effluent Pumping Station flowmeter assembly to the 10 MG storage tank fill valve assembly.
17. Construct approximately 750 feet of 24-inch Reclaimed Water mains from the existing 24 inch pipeline west of the existing 10-MG storage tank to the outlet for the North Reclaimed Water Storage Pond on the west berm. Construct a concrete discharge pad in the storage pond.
18. Construct approximately 750 feet of 30-inch Reclaimed Water mains from the Effluent Pumping Station Meter Assembly to its connection with an existing 30 inch southeast of the North Pond.
19. Construction approximately 250 feet of 30 inch Reclaimed Water mains from the Effluent Pump Station Flowmeter Assembly northerly towards the existing 10 MG storage tank.
20. Construct a new Reject Pond Outlet Assembly, including approximately 200 feet of 30 inch ductile iron pipe, concrete collars, six (6) 36 inch outlet pipes, concrete encasement and steel reinforcing.
21. Provide and install a sodium hypochlorite chemical feed sytem, including a 2-pump chemical feed skid in the Chlorine Building, approximately 500 feet of double contained 3" x 1" PVC pipe, approximately 500 feet of ½ inch HDPE sample pipe to the chlorine analyzer, an injector assembly and a valve vault.
22. Convert the Middle and South Storage Ponds to Part III reclaimed water storage ponds. Replace the existing 3 intake structure screens.
23. Refurbish the Middle Pond Outfall to the South Pond including: replacement of existing gates, actuators, restore power from existing TECO meter and rerun power cables from control panel.

24. Provide and install electric power, instrumentation and SCADA equipment, cables, control panels, etc., for the operation, control and monitoring of the proposed pumping stations, disk filters, flowmeters, etc.

25. Demolition

- a. Remove sludge in the bottom, grass, top soil, and unsuitable material from existing North Reclaimed Water Storage Pond after dewatering.
- b. Remove existing lake filter equipment, piping, valves, controls, electrical equipment, concrete pad, etc.
- c. Remove slide gates, sluice gates, grating and railings from the existing North RCW storage pond outlet structure. Cut holes in existing concrete walls for new sluice gates.
- d. Remove north and south 30 inch flowmeter station valve vault structures to 3 feet below finished grade.
- e. Remove screens from the Intake Screen Structures for the Middle and South Ponds.
- f. Remove 130 feet of 42 inch DI pipe from the Effluent Pump Station west to its connection with the existing 30 inch RCW pipe.
- g. Remove existing North Pond pumping station intake structure and 70 feet of 36 inch intake piping.
- h. Remove 500 feet of 24 inch RCW pipe, 250 feet of 12 inch RCW pipe, and 100 feet of 8-inch RCW pipe.
- i. Remove existing 12 inch Reclaimed Water Return Flowmeter Assemblies from the existing North Pond Pumping Station to ABW Filters, 1, 2, 3, 4, 5, 6 and 7 (includes removing flowmeters, valves, pipe fittings and supports).
- j. Abandon and fill with flowable fill approximately 1,900 feet of 30 inch RCW pipe, 1,000 feet of 24-inch RCW pipe, and 700 feet of 20-inch RCW pipe.
- k. Remove existing asphalt drive and approximately 260 feet of chain link fence.
- l. Replace an existing power pole and relocate the guy wires for another power pole.

B. The Contractor shall furnish all labor, equipment, and incidentals, which are necessary for the full completion of the work whether specifically indicated in the Contract Documents or not. This includes, but is not limited to, miscellaneous concrete, dewatering, sheeting, workplace safety, cleanup, etc.

## 1.02 PLANS AND SPECIFICATIONS

- A. The Plans and the Specifications indicate the extent and nature of the work to be performed.
- B. Plans: When obtaining data and information from the Plans, figures shall be used in preference to scaled dimensions, and large scale drawings in preference to small scale drawings.
- C. Copies Furnished to Contractor: The Contractor shall furnish each of the subcontractors, manufacturers, and material men such copies of the Contract Documents as may be required for their work. Additional copies of the Plans and Specifications, when requested, may be furnished to the Contractor at cost of reproduction.
- D. Supplementary Drawings: When, in the opinion of the County or Engineer, it becomes necessary to explain more fully the work to be done or to illustrate the work further or to show any changes which may be required, drawings known as Supplementary Drawings, with specifications pertaining thereto, will be prepared and five paper prints thereof will be given to the Contractor.
- E. Contractor to Check Plans and Data: The Contractor shall verify all dimensions, quantities and details shown on the Plans, Supplementary Drawings, Schedules, Specifications or other data received from the Owner, and shall notify him Owner of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction or improper operation resulting therefrom nor from rectifying such conditions at his own expense. Contractor will not be allowed to take advantage of any errors or omissions, as full instructions will be furnished by the Engineer, should such errors or omissions be discovered. All schedules are given for the convenience of the Owner and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quality of materials and equipment included in work to be done under the Contract.
- F. Specifications: The Technical Specifications consist of three parts: General, Products and Execution. The General Section contains General Requirements which govern the work. Products and Execution modify and

supplement these by detailed requirements for the work and shall always govern whenever there appears to be a conflict.

G. Intent:

1. All work called for in the Specifications applicable to this Contract, but not shown on the Plans in their present form, or vice versa, shall be of like effect as if shown or mentioned in both. Work not specified in either the Plans or in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the work, is required and shall be performed by the Contractor as though it were specifically delineated or described.
2. The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.
3. The inclusion of the Related Requirements (or work specified elsewhere) in the General part of the specifications is only for the convenience of the Contractor, and shall not be interpreted as a complete list of related Specification Sections.

**1.03 MATERIALS AND EQUIPMENT**

A. Manufacturer

1. The names of proposed manufacturers, materials, suppliers and dealers who are to furnish materials, fixtures, equipment, appliances or other fittings shall be submitted to the Engineer and Manatee County Project Management for approval. Such approval must be obtained before shop drawings will be checked. No manufacturer will be approved for any materials to be furnished under this Contract unless he shall be of good reputation and have a plant of ample capacity. He shall, upon the request of the Engineer, be required to submit evidence that he has manufactured a similar product to the one specified and that it has been previously used for a like purpose for a sufficient length of time to demonstrate its satisfactory performance.



2. All transactions with the manufacturers or subcontractors shall be through the Contractor, unless the Contractor shall request, in writing to the Engineer, that the manufacturer or subcontractor deal directly with the Engineer. Any such transactions shall not in any way release the Contractor from his full responsibility under this Contract.
3. Any two or more pieces or material or equipment of the same kind, type or classification, and being used for identical types of services, shall be made by the same manufacturer.
4. Delivery: The Contractor shall deliver materials in ample quantities to insure the most speedy and uninterrupted progress of the work so as to complete the work within the allotted time. The Contractor shall also coordinate deliveries in order to avoid delay in, or impediment of, the progress of the work of any related Contractor.

B. Tools and Accessories:

1. The Contractor shall, unless otherwise stated in the Contract Documents, furnish with each type, kind or size of equipment, one complete set of suitably marked high grade special tools and appliances which may be needed to adjust, operate, maintain or repair the equipment. Such tools and appliances shall be furnished in approved painted steel cases, properly labeled and equipped with good grade cylinder locks and duplicate keys.
2. Spare parts shall be furnished as specified.
3. Each piece of equipment shall be provided with a substantial nameplate, securely fastened in place and clearly inscribed with the manufacturer's name, year of manufacture, serial number, weight and principal rating data.

C. Installation of Equipment.

1. The Contractor shall have on hand sufficient proper equipment and machinery of ample capacity to facilitate the work and to handle all emergencies normally encountered in work of this character.
2. Equipment shall be erected in a neat and workmanlike manner on the foundations at the locations and elevations shown on the Plans,

unless directed otherwise by the Engineer during installation. All equipment shall be correctly aligned, leveled and adjusted for satisfactory operation and shall be installed so that proper and necessary connections can be made readily between the various units.

3. The Contractor shall furnish, install and protect all necessary anchor and attachment bolts and all other appurtenances needed for the installation of the devices included in the equipment specified. Anchor bolts shall be as approved by the Engineer and made of ample size and strength for the purpose intended. Substantial templates and working drawings for installation shall be furnished.
  4. The Contractor shall, at his own expense, furnish all materials and labor for, and shall properly bed in non-shrink grout, each piece of equipment on its supporting base that rests on masonry foundations.
  5. Grout shall completely fill the space between the equipment base and the foundation. All metal surfaces coming in contact with concrete or grout shall receive a coat of coal tar epoxy equal to Koppers 300M.
- D. Service of Manufacturer's Engineer: The Contract prices for equipment shall include the cost of furnishing (as required by equipment specifications sections) a competent and experienced engineer or superintendent who shall represent the manufacturer and shall assist the Contractor, when required, to install, adjust, test and place in operation the equipment in conformity with the Contract Documents. After the equipment is placed in permanent operation by the Owner, such engineer or superintendent shall make all adjustments and tests required by the Engineer to prove that such equipment is in proper and satisfactory operating condition, and shall instruct such personnel as may be designated by the Owner in the proper operation and maintenance of such equipment.

#### **1.04 SUBMITTALS**

- A. The Contractor shall submit to the Engineer, within ten days after receipt of Notice to Proceed, a schedule of Shop Drawing Submittals which shall include:
1. The names of proposed manufacturers, suppliers, and dealers,

2. A list of materials and equipment for shop drawing submittals, and
  3. Proposed shop drawing submittal dates.
- B. The Contractor shall coordinate all submittals with the related Vendor in a manner not to impede construction on the individual project(s).

**1.05 CONTRACTS**

- A. Furnish all the labor and needed materials as ordered on a project basis under the Contract (Agreement).

**1.06 CONSTRUCTION AREAS**

The Contractor shall:

- A. Limit his use of the construction areas for work and for storage, to allow for:
1. Work by other contractors.
  2. Owner Use.
- B. Coordinate use of work site under direction of Owner's Representative.
- C. Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.
- D. Move any stored-products, under Contractor's control, which interfere with operations of the Owner or separate contractor.
- E. Obtain and pay for the use of additional storage of work areas needed for operations.

**1.07 OWNER OCCUPANCY**

- A. It is assumed that portions of the work will be completed prior to completion of the entire work. Upon completion of construction in each individual facility, including testing, if the Owner, at his sole discretion, desires to accept the individual facility, the Contractor will be issued a dated certificate of completion and acceptance for each individual facility. The Owner will assume ownership and begin operation of the individual facility on that date and the one-year guaranty period shall commence on that date. The Owner has the option of not accepting any individual completed facility, but accepting the entire work as a whole when it is completed and tested.

PART 2      PRODUCTS (NOT USED)

PART 3      EXECUTION (NOT USED)

END OF SECTION

## **SECTION 01015**

### **CONTROL OF WORK**

#### **PART 1 GENERAL**

##### **1.01 WORK PROGRESS**

- A. The Contractor shall furnish personnel and equipment which will be efficient, appropriate and adequately sized to secure a satisfactory quality of work and a rate of progress which will insure the completion of the work within the time stipulated in the Contract. If at any time such personnel appears to the Engineer to be inefficient, inappropriate, or insufficient for securing the quality of work required for producing the rate of progress aforesaid, he may order the Contractor to increase the efficiency, change the character, or increase the personnel and equipment and the Contractor shall conform to such order. Failure of the Engineer to give such order shall in no way relieve the Contractor of his obligations to secure the quality of the work and rate of progress required.

##### **1.02 PRIVATE LAND**

- A. The Contractor shall not enter or occupy private land outside of easements, except by permission of the affected property owner.

##### **1.03 WORK LOCATIONS**

- A. Work shall be located substantially as indicated on the drawings, but the Engineer reserves the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons.

##### **1.04 OPEN EXCAVATIONS**

- A. All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons and damage to property. The Contractor shall, at his own expense, provide suitable and safe bridges and other crossings for accommodating travel by pedestrians and workmen. Bridges provided for access to private property during construction shall be removed when no longer required. If the excavation becomes a hazard, or if it excessively restricts traffic at any point, the Engineer may require

special construction procedures such as limiting the length of open trench, prohibiting stacking excavated material in the street and requiring that the trench shall not remain open overnight.

- B. The Contractor shall take precautions to prevent injury to the public due to open trenches. All trenches, excavated material, equipment, or other obstacles which could be dangerous to the public shall be barricaded and well lighted at all times when construction is not in progress.

#### **1.05 DISTRIBUTION SYSTEMS AND SERVICES**

- A. The Contractor shall avoid interruptions to water, telephone, cable TV, sewer, gas, or other related utility services. He shall notify the Engineer and the appropriate agency well in advance of any requirement for dewatering, isolating, or relocating a section of a utility, so that necessary arrangements may be made.
- B. If it appears that utility service will be interrupted for an extended period, the Engineer may order the Contractor to provide temporary service lines at the Contractor's expense. Inconvenience of the users shall be kept to the minimum, consistent with existing conditions. The safety and integrity of the systems are of prime importance in scheduling work.

#### **1.06 PROTECTION AND RELOCATION OF EXISTING STRUCTURES AND UTILITIES**

- A. The Contractor shall assume full responsibility for the protection of all buildings, structures and utilities, public or private, including poles, signs, services to building utilities, gas pipes, water pipes, hydrants, sewers, drains and electric and telephone cables and other similar facilities, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such structures and utilities from injury of any kind. Any damage resulting from the Contractor's operation shall be repaired by the Contractor at his expense.
- B. The Contractor shall bear full responsibility for obtaining locations of all underground structures and utilities (including existing water services, drain lines and sewers). Services to buildings shall be maintained and all costs or charges resulting from damage thereto shall be paid by the Contractor.

- C. Protection and temporary removal and replacement of existing utilities and structures as described in this Section shall be a part of the work under the Contract and all costs in connection therewith shall be included in the unit prices established in the Bid.
- D. If, in the opinion of the Engineer, permanent relocation of a utility owned by the Owner is required, he may direct the Contractor, in writing, to perform the work. Work so ordered will be paid for at the Contract unit prices, if applicable, or as extra work as classified in the General Conditions. If relocation of a privately owned utility is required, the Owner will notify the utility to perform the work as expeditiously as possible. The Contractor shall fully cooperate with the Owner and utility and shall have no claim for delay due to such relocation. The Contractor shall notify public utility companies in writing at least 48 hours (excluding Saturdays, Sundays and legal holidays) before excavating near their utilities.

#### **1.07 TEST PITS**

- A. Test pits for the purpose of locating underground pipeline or structures in advance of the construction shall be excavated and backfilled by the Contractor immediately after the utility location and the surface shall be restored in a manner equal or better than the original condition. No separate payment will be made.

#### **1.08 CARE AND PROTECTION OF PROPERTY**

- A. The Contractor shall be responsible for the preservation of all public and private property and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, such property shall be restored by the Contractor, at his expense, to a condition equal or better to that existing before the damage was done, or he shall make good the damage in another manner acceptable to the Engineer.
- B. All sidewalks which are disturbed by the Contractor's operations shall be restored to their original or better condition by the use of similar or comparable materials. All curbing shall be restored in a condition equal to the original construction and in accordance with the best

modern practice.

- C. Along the location of this work, all fences, walks, bushes, trees, shrubbery and other physical features shall be protected and restored in a thoroughly workmanlike manner unless otherwise shown on the drawings. Fences and other features removed by the Contractor shall be replaced in the location indicated by the Engineer as soon as conditions permit. All grass areas beyond the limits of construction which have been damaged by the Contractor shall be regraded and sodded to equal or exceed original conditions.
- D. Trees close to the work which drawings do not specify to be removed shall be boxed or otherwise protected against injury. The Contractor shall trim all branches that are liable to damage because of his operations, but in no case shall any tree be cut or removed without prior notification to the Engineer. All injuries to bark, trunk, limbs and roots of trees shall be repaired by dressing, cutting and painting according to approved methods, using only approved tools and materials.
- E. The protection, removal and replacement of existing physical features along the line of work shall be a part of the work under the Contract and all costs in connection therewith shall be included in the unit and/or lump sum prices established under the items in the Bid.

#### **1.09 MAINTENANCE OF TRAFFIC**

- A. Open pits, trenches, unpaved streets, debris, or other obstructions due to construction that will prevent the normal flow of traffic during an extended construction stoppage, for any reason, shall be minimized. In the event an extended construction stoppage is found to be necessary, Contractor shall, at his own expense, provide normal traffic flow during extended construction stoppage. Extended stoppage will be defined by the Engineer.
- B. All excavated material shall be placed so that vehicular and pedestrian traffic may be maintained at all times. If the Contractor's operations cause traffic hazards, he shall repair the road surface, provide temporary roadways, erect wheel guards or fences, or take other safety measures which are satisfactory to the Engineer and Owner.
- C. Detours around construction areas will be subject to the approval of the Owner and the Engineer. Where detours



are permitted, the contractor shall provide all necessary barricades and signs as required to divert the flow of traffic. While traffic is detoured, the Contractor shall expedite construction operations and periods when traffic is being detoured, will be strictly controlled by the Owner.

#### **1.10 WATER FOR CONSTRUCTION PURPOSES**

- A. In locations where public water supply is available, the Contractor may purchase water for all construction purposes.
- B. The Contractor shall be responsible for paying for all water tap fees incurred for the purpose of obtaining a potable water service or temporary use meter.

#### **1.11 MAINTENANCE OF FLOW**

- A. The Contractor shall at his own cost, provide for the flow of sewers, drains and water courses interrupted during the progress of the work and shall immediately cart away and remove all offensive matter. The entire procedure of maintaining existing flow shall be fully discussed with the Engineer and Owner well in advance of the interruption of any flow.

#### **1.12 CLEANUP**

- A. During the course of the work, the Contractor shall keep the site of his operations in as clean and neat a condition as is possible. He shall dispose of all residue resulting from the construction work and at the conclusion of the work, he shall remove and haul away any surplus excavation, broken pavement, lumber, equipment, temporary structures and any other refuse remaining from the construction operations and shall leave the entire site of the work in a neat and orderly condition.

#### **1.13 COOPERATION WITHIN THIS CONTRACT**

- A. All firms or person authorized to perform any work under this Contract shall cooperate with the General Contractor and his subcontractors or trades and shall assist in incorporating the work of other trades where necessary or required.
- B. Cutting and patching, drilling and fitting shall be carried out where required by the trade or subcontractor having jurisdiction, unless otherwise indicated herein or

directed by the Engineer.

**1.14 PROTECTION OF CONSTRUCTION AND EQUIPMENT**

- A. All newly constructed work shall be carefully protected from injury in any way. No wheeling or walking or placing of heavy loads on it shall be allowed and all portions injured shall be reconstructed by the Contractor at his own expense.
- B. All structures shall be protected in a manner approved by the Engineer. Should any of the floors or other parts of the structures become heaved, cracked, or otherwise damaged, all such damaged portions of the work shall be completely repaired and made good by the Contractor, at his own expense and to the satisfaction of the Engineer. If, in the final inspection of the work, any defects, faults, or omissions are found, the Contractor shall cause the same to be repaired or removed and replaced by proper materials and workmanship without extra compensation for the materials and labor required. Further, the Contractor shall be fully responsible for the satisfactory maintenance and repair of the construction and other work undertaken herein, for at least the warranty period described in the Contract.
- C. Further, the Contractor shall take all necessary precautions to prevent damage to any structure due to water pressure during and after construction and until such structure is accepted and taken over by the Owner.

**1.15 CONSTRUCTION WITHIN RIGHT-OF-WAY**

- A. Where pipe lines are installed within FDOT right-of-way, all excavation backfill and compaction for the purpose of reconstructing roadways and/or adjacent slopes contiguous thereto shall be in accordance with FDOT or Manatee County Standards and Specifications, whichever is applicable. Contractor shall satisfy the authorized representative of the FDOT with respect to proper safety procedures, construction methods, required permitting, etc., within the FDOT right-of-way.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 01030**

### **SPECIAL PROJECT PROCEDURES**

#### **PART 1 GENERAL**

##### **1.01 PERMITS**

- A. Upon notice of award, the Contractor shall immediately apply for and/or obtain all applicable permits not previously obtained by the Owner to do the work from the appropriate governmental agency or agencies. No work shall commence until all applicable permits have been obtained and copies delivered to the Owner's Representative. The costs for obtaining all permits shall be borne by the Contractor.

##### **1.02 CONNECTIONS TO EXISTING SYSTEM**

- A. The Contractor shall perform all work necessary to locate, excavate and prepare for connections to the terminus of the existing systems all as shown on the Drawings or where directed by the Owner's Representative. The cost for this work and for the actual connection to the existing systems shall be included in the price bid for the project and shall not result in any additional cost to the Owner.

##### **1.03 RELOCATIONS**

- A. The Contractor shall be responsible for the coordination of the relocation of structures, including but not limited to light poles, power poles, signs, sign poles, fences, piping, conduits, drains and irrigation components that interfere with the positioning of the work as set out on the Drawings. No relocation of the items under this Contract shall be done without approval from the Engineer.

##### **1.04 EXISTING UNDERGROUND PIPING, STRUCTURES AND UTILITIES**

- A. The attention of the Contractor is drawn to the fact that during excavation, the possibility exists of the Contractor encountering various water, sewer, telephone, electrical, or other utility lines not shown on the Drawings. The Contractor shall exercise extreme care before and during excavation to locate and flag these lines as to avoid damage to the

existing lines. Cost for relocation of all existing lines shall be included in the price bid for the project. Should damage occur to an existing line, the Contractor shall bear the cost of all repairs to said line.

- B. It is the responsibility of the Contractor to ensure that all utility or other poles, the stability of which may be endangered by the close proximity of excavation, are temporarily stayed in position while work proceeds in the vicinity of the pole and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.
- C. The existing utility locations are shown without express or implied representation, assurance, or guarantee that they are complete or correct or that they represent a true picture of underground piping to be encountered. The Contractor shall be responsible for notifying the various utility companies to locate their respective utilities in advance of construction in conformance with all requirements provided for in the Florida Underground Facilities Damage Prevention and Safety Act (Florida Statutes, Title XXXIII, Chapter 556).
- D. The existing piping and utilities that interfere with new construction shall be rerouted as shown, specified, or required. Before any piping and utilities not shown on the Drawings are disturbed, the Contractor shall notify the Engineer of the location of the pipeline or utility and shall reroute or relocate the pipeline or utility as directed. Cost for relocation of existing pipelines or utilities shall be included in the price bid for the project.
- E. The Contractor shall exercise care in any excavation to locate all existing piping and utilities. All utilities which do not interfere with complete work shall be carefully protected against damage. Any existing utilities damaged in any way by the Contractor shall be restored or replaced by the Contractor at his expense as directed by the Owner's Representative and/or the owner of the utility.
- F. It is intended that wherever existing utilities such as water, sewer, telephone, electrical, or other

service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated in the Drawings. However, when in the opinion of the Owner's Representative this procedure is not feasible, he may direct the use of fittings for a utilities crossing as detailed on the Drawings. No deflections will be allowed in gravity sanitary sewer lines or in existing storm sewer lines.

**1.05       SUSPENSION OF WORK DUE TO WEATHER**

- A. Refer to FDOT Standards and Specifications Book, Section 8.

**1.06       HURRICANE PREPAREDNESS PLAN**

- A. Within 30 days of the date of Notice to Proceed, the Contractor shall submit to the Owner's Representative and Owner a Hurricane Preparedness Plan. The plan should outline the necessary measures which the Contractor proposes to perform at no additional cost to the Owner in case of a hurricane warning.
- B. In the event of inclement weather, or whenever Owner's Representative shall direct, Contractor shall insure that he and his Subcontractors shall carefully protect work and materials against damage or injury from the weather. If, in the opinion of the Owner's Representative, any portion of work or materials is damaged due to the failure on the part of the Contractor or Subcontractors to protect the work, such work and materials shall be removed and replaced at the expense of the Contractor.

**1.07       POWER SUPPLY**

- A. Electricity as may be required for construction and permanent power supply shall be secured and purchased by the Contractor.

**1.08       SALVAGE**

- A. Any existing equipment or material, including, but not limited to, valves, pipes, fittings, couplings, building materials, etc., which is removed or replaced as a result of construction under this project may be designated as salvage by the Owner's

Representative or Owner and, if so, shall be protected for a reasonable time until picked up by the Owner. Any equipment or material not worthy of salvaging, as directed by the Owner's Representative, shall be disposed of by the Contractor at no additional cost.

#### **1.09       DEWATERING**

- A.   The Contractor shall do all groundwater pumping necessary to prevent flotation of any part of the work during construction operations with his own equipment.
- B.   The Contractor shall pump out water and wastewater which may seep or leak into the excavations for the duration of the Contract and with his own equipment. He shall dispose of this water in an appropriate manner.

#### **1.10       ADDITIONAL PROVISIONS**

- A.   Before commencing work on any of the existing pipelines, structures or equipment, the Contractor shall notify the Owner's Representative, in writing, at least 10 calendar days in advance of the date he proposes to commence such work.
- B.   The Contractor shall provide, at his own expense, all necessary temporary facilities for access to and for protection of, all existing facilities. The Owner's personnel must have ready access at all times to the existing facilities. The Contractor is responsible for all damage to existing structures, equipment and facilities caused by his construction operations and must repair all such damage when and as ordered by the Engineer.
- C.   Contractor shall provide protective matting, fuel containment and all other materials, equipment and labor during construction. Any spill of fuel, hydraulic fluid, or oil shall be contained. Any contaminated soil shall be removed and disposed of according to all applicable federal, state and local regulations, entirely at the Contractor's expense. Contractor shall, prior to beginning construction, submit a "Fueling Spill Prevention Plan" that shall clearly indicate how fuel spills will be prevented.

**1.11 CONSTRUCTION CONDITIONS**

- A. The Contractor shall strictly adhere to the specific requirements of the governmental unit(s) and/or agency(ies) having jurisdiction over the work. Wherever there is a difference in the requirements of a jurisdictional body and these Specifications, the more stringent shall apply.

**1.12 PUBLIC NUISANCE**

- A. The Contractor shall not create a public nuisance including but not limited to encroachment on adjacent lands, flooding of adjacent lands, excessive noise or dust.
- B. Sound levels must comply with all applicable state and local codes. Sound levels in excess of those listed in said codes are sufficient cause to have the work halted until equipment can be quieted to these levels. Work stoppage by the Engineer or County for excessive noise shall not relieve the Contractor of the other portions of this specification including, but not limited to contract time and contract price.
- C. No extra charge may be made for time lost due to work stoppage resulting from the creation of a public nuisance.

**1.13 CHANGES TO GENERAL CONDITIONS**

- A. The word "completion" shall be replaced with the words "substantial completion" in Specification Section 00700- General Conditions, Article 9.3.2.

**1.14 FIELD OFFICES**

- A. Office space will be made available at the site for the temporary field offices of the Contractor (and his subcontractors) and for storage of construction materials. The Contractor (and his subcontractors) shall provide all necessary temporary fencing and gates to protect materials from pilferage. The location and type of temporary buildings shall be subject to the approval of the OWNER and the Engineer.
- B. Record documents required by the General Conditions and other sections of the Contract Documents shall be

kept in the office.

**1.15        EXISTING FACILITIES- PLAN OF OPERATION**

- A. The functions of the existing wastewater treatment facility include flow equalization, screening, grit removal, primary clarification, aeration, secondary clarification, sludge recycle, sludge wasting, filtration, chlorine disinfection prior to discharge to the MARS System, sludge digestion and sludge dewatering facilities. These functions must be maintained and shall be maintained by the contractor throughout the construction period unless otherwise specified herein, such that there is no deterioration in the quality of the treated effluent. At no time will an overflow of wastewater of a quality less than that which meets the County's discharge permit and which is not disinfected as required by State regulations, be allowed as a result of the Contractor's operations. Construction operations shall be scheduled and undertaken so that treatment of the wastewater is continuously maintained, as specified above, throughout the life of the project. The existing limitations for the facility must be met during the construction period.
- B. All electrical work shall be scheduled to allow continuous electrical operation of the existing facilities with a minimum of required outages. Any power outage or any work which required interruption of the plant flow shall be scheduled during a normally dry weather period of the year and at those times of the day and/or night when sewage flows are low. In such cases, the Contractor shall submit a written request at least seven days prior to the scheduled work or outage and obtain the written permission of the Owner. Such permission shall give consideration to recent weather conditions and plant flow patterns, as well as projected weather forecasts for the area, and the Contractor's preparedness to perform the work. The Contractor shall coordinate with the electric utility, as required, regarding the scheduling of the power outages.
- C. The Contractor shall prepare a detailed construction sequence to maintain continuous treatment to allow the facility to meet the required effluent limitations.



Continuous treatment shall be defined, at a minimum, as consisting of the following unit processes:

- Flow Equalization
- Screening
- Grit Removal
- Primary Clarification
- Aeration
- Secondary Clarification
- Sludge Recycle
- Sludge Wasting
- Filtration of Secondary Clarifier Effluent
- Disinfection
- Effluent Pumping and Flow Measurement
- Plant Water System
- Anaerobic Digestion
- Sludge Dewatering

This plan shall require approval by the Owner's Representative before any of the existing facilities are modified. In this plan he shall successfully demonstrate to the Owner's Representative that the continuity and degree (quality) of treatment will not be adversely affected.

1. In development of his detailed construction sequence, the contractor shall give particular consideration to the following:
  - a. Connection of the lake gravity disk filter effluent to the effluent pump station wet well and the connection of the new effluent discharge header shall occur during the minimum flow hours and be coordinated with Operational Staff 10-days in advance. During this work, plant flow shall be channeled to the 54-inch gravity line via existing gates in the effluent wet well structure. The Contractor will be required to construct a temporary cofferdam within the overflow channel prior to performing the work. It cannot be guaranteed that the existing gates will not leak. Contractor shall provide all means to dewater his work area as required to perform the work.

- b. Contractor shall coordinate with the Operational Staff, 10 days in advance, in regard to all power interruptions and yard piping interconnections, including the tie-ins to the 20" reject line, the 30" effluent line, the 10 MG storage tank fill valve assembly, the sodium hypochlorite feed system, the 8-inch Thickened Waste Activated Sludge line, the Headworks, the 20-inch RCWR line, the 24 inch RCW line to the North Reclaimed Water Storage Pond fill assembly, and the relocation of the 24" RCW Storage Tank Return Line and the 8"/12" Deep Well Injection Line.
  - c. ABW Filters #7 and #8 may be taken off-line to allow for the connection of the 20" Reject Line and the 6" Backwash Water Line. Coordinate the work 10-days in advance with Operational Staff.
  - d. The North Reclaimed Water Storage Pond shall be taken out of service and dewatered for a lengthy period of time. During that time, the plant operations staff will store Reject and Reclaimed Water in the Middle and South storage ponds.
  - e. All other work including new construction and demolition not mentioned in the above schedule may be performed concurrently with any stage of the work as long as the performance of such work will in no way jeopardize the continuity and quality of treatment of wastewater. The Contractor shall coordinate his work closely with the ongoing functions of the existing treatment facility, chemical and other deliveries and with the work of all subcontractors.
- D. Any process equipment, utility, etc. necessary to maintain treatment must be maintained. The primary goal is to maintain continuous treatment to the required levels.
- E. The Owner's personnel shall be responsible for the day-to-day operations including meter reading, process monitoring, and establishing control system modifications to ensure compliance with the effluent limits. Maintenance of temporary process equipment including routine corrective repairs and maintenance

shall be performed by the Contractor as part of the base bid price. Operational changes (valves, etc.) shall be performed by the Owner or the Owner's representative.

- F. As part of the construction sequence, the Contractor may find that temporary pumping facilities and temporary piping will be required for wastewater or other process streams. These facilities or other means that the Contractor elects shall be subject to the review and approval of the Engineer and shall be provided by the Contractor to maintain continuous process operations.
- G. The Contractor shall make whatever provisions are necessary to protect and maintain the continued operation of the existing facilities. Such provisions shall include, but not be limited to the following.
  - 1. Protection of the structural integrity of the existing structures adjacent to work shall be provided as necessary and required for the successful rehabilitation and modification.
  - 2. Installation of suitable temporary piping to replace those which must be demolished as part of the construction or as otherwise required to maintain continuous treatment.
- H. In addition to the master schedule, prior to commencing alteration work on any existing facility, The Contractor shall submit to the Owner's Representative, a proposed method and schedule of construction in the immediate area, taking into account the precautions and requirements specified herein. Such work shall not commence until approval is obtained with the Owner's Representative and interruptions of normal plant operations reviewed with the Owner. In general, temporary isolation of existing plant components for construction operations shall be carefully coordinated beforehand with the Owner and Engineer so that treatment of wastewater can continue. All work shall be closely coordinated with the Owner's operating personnel so that they can adjust their normal operating procedures to any temporary conditions imposed upon them. No temporary isolation of plant components will be permitted until the Contractor has on hand all materials, labor, tools and equipment

necessary to accomplish the work in that isolated area. Such work shall begin immediately and be expedited to satisfactory completion as soon as particular area or plant component has been isolated.

- I. The Contractor shall assist the Owner in maintaining any process equipment, utility, etc., necessary to maintain continuous treatment. Any such equipment that must be relocated, either temporarily or permanently, or any process equipment, utilities, etc., that must be installed, either temporarily or permanently, to maintain wastewater treatment shall be the responsibility of the General Contractor. The Contractor shall include the cost of all temporary facilities required to maintain treatment, meeting secondary standards, during the construction period in his bid prices. The cost shall include the cost of all labor, tools, equipment and materials necessary.

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 01045**

### **CUTTING AND PATCHING**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. The Contractor shall be responsible for all cutting, fitting and patching, including excavation and backfill, required to complete the work or to:
  - 1. Make its several parts fit together properly.
  - 2. Uncover portions of the work to provide for installation of ill-timed work.
  - 3. Remove and replace defective work.
  - 4. Remove and replace work not conforming to requirements of Contract Documents.
  - 5. Provide penetrations of non-structural surfaces for installation of piping and electrical conduit.

#### **PART 2 PRODUCTS**

##### **2.01 MATERIALS**

- A. Comply with specifications and standards for each specific product involved.

#### **PART 3 EXECUTION**

##### **3.01 INSPECTION**

- A. Inspect existing conditions of project, including elements subject to damage or to movement during cutting and patching.
- B. After uncovering work, inspect conditions affecting installation of products, or performance of work.
- C. Report unsatisfactory or questionable conditions to Engineer. Do not proceed with work until Engineer has provided further instructions.

##### **3.02 PREPARATION**

- A. Provide adequate temporary support as necessary to assure structural value to integrity of affected portion of work.

- B. Provide devices and methods to protect other portions of project from damage.
- C. Provide protection from elements for that portion of the project which may be exposed by cutting and patching work and maintain excavations free from water.

**3.03 PERFORMANCE**

- A. Execute cutting and demolition by methods which will prevent damage to other work and will provide proper surfaces to receive installation of repairs.
- B. Execute excavating and backfilling by methods which will prevent settlement or damage to other work.
- C. Fit and adjust products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- D. Restore work which has been cut or removed; install new products to provide completed work in accordance with the requirements of the Contract Documents.
- E. Replace surfaces airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- F. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes.

**END OF SECTION**

## **SECTION 01050**

### **FIELD ENGINEERING AND SURVEYING**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. The Contractor shall provide and pay for field surveying service required for the project.
- B. The Contractor shall furnish and set all necessary stakes to establish the lines and grades as shown on the Contract Drawings and layout each portion of the Work of the Contract.
  - 1. All survey work required in execution of Project.
  - 2. All costs of construction layout shall be included in the unit and lump sum prices contained in the respective divisions of the Contract Bid Form.
  - 3. Civil, structural or other professional engineering services specified or required to execute Contractor's construction methods.

##### **1.02 QUALIFICATION OF SURVEYOR AND ENGINEER**

- A. All construction staking shall be conducted by or under the supervision of a Florida Registered Professional Surveyor and Mapper approved by the Owner. The Contractor shall be responsible for the layout of all such lines and grades, which will be subject to verification by the Engineer.

##### **1.03 SURVEY REFERENCE POINTS**

- A. Existing horizontal and vertical control points for the Project are designated on the Contract Drawings.
- B. Locate and protect all survey monumentation, property corners and project control points prior to starting work and preserve all permanent reference points during construction. All costs associated with the replacement of all survey monumentation, property corners and project control points shall be borne by the Contractor.
- C. Make no changes or relocations without prior written notice to Engineer.

- D. Report to Engineer when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
- E. Require surveyor to replace project control points which may be lost or destroyed.
- F. Establish replacements based on original survey control.

**1.04 PROJECT SURVEY REQUIREMENTS**

- A. The Contractor shall establish temporary bench marks as needed, referenced to data established by survey control points.

**1.05 RECORD DRAWINGS**

- A. Maintain a complete, accurate log of all control and survey work as it progresses.
- B. The Contractor shall employ a Professional Engineer or Surveyor registered in the State of Florida to verify survey data and properly prepare and certify Record Drawings per Section 01720 - Project Record Documents.

**1.06 SUBMITTALS**

- A. Submit name and address of Professional Surveyor and Mapper to Engineer for Owner's approval.
- B. Submit certificate signed by the Professional Surveyor and Mapper certifying that elevations and locations of improvements are in conformance, or nonconformance, with Contract Documents.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**



## **SECTION 01090**

### **REFERENCE STANDARDS**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS**

Abbreviations and acronyms used in Contract Documents to identify reference standards.

- A. Application: When a standard is specified by reference, comply with requirements and recommendations stated in that standard, except when requirements are modified by the Contract Documents, or applicable codes established stricter standards.
- B. Publication Date: The most recent publication in effect on the date of Contract Documents (including addenda), except when a specific publication date is specified.

##### **1.03 ABBREVIATIONS, NAMES AND ADDRESSES OR ORGANIZATIONS**

- A. Obtain copies of reference standards direct from publication source, when needed for proper performance of work, or when required for submittal by Contract Documents.

AA            Aluminum Association  
              818 Connecticut Avenue, N.W.  
              Washington, DC 20006

AASHTO      American Association of State Highway and  
              Transportation Officials  
              444 North Capital Street, N.W.  
              Washington, DC 20001

ACI           American Concrete Institute  
              Box 19150  
              Reford Station  
              Detroit, MI 48219

AI            Asphalt Institute  
              Asphalt Institute Building  
              College Park, MD 20740

AISC          American Institute of Steel Construction  
              1221 Avenue of the Americas  
              New York, NY 10020

AISI	American Iron and Steel Institute 1000 16th Street NW Washington, DC 20036
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329
ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
AWS	American Welding Society 2501 N.W. 7th Street Miami, FL 33125
CRSI	Concrete Reinforcing Steel Institute 180 North LaSalle Street, Suite 2110 Chicago, IL 60601
FDEP	Florida Department of Environmental Protection 3900 Commonwealth Blvd. Tallahassee, Florida 32399
FDOT	Florida Department of Transportation Standards Specifications for Road and Bridge Construction Maps & Publication Sales - Mail Station 12 605 Suwannee St. Tallahassee, FL 32399-0450
FS	Federal Specification General Services Administration Specifications and Consumer Information Distribution Section (WFSIS) Washington Navy Yard, Bldg. 197 Washington, DC 20407

MCUOD	Manatee County Utility Operations Department 4410 66th St. W. Bradenton, FL 34210
MLSFA	Metal Lath/Steel Framing Association 221 North LaSalle Street Chicago, IL 60601
MMA	Monorail Manufacturer's Association 1326 Freeport Road Pittsburgh, PA 15238
NAAMM	National Association of Architectural Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601
NEMA	National Electrical Manufacturer's Assoc. 2101 L Street N.W. Washington, DC 20037
OHSA	Occupational Safety and Health Assoc. 5807 Breckenridge Pkwy., Suite A Tampa, FL 33610-4249
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 20076
PCI	Prestressed Concrete Institute 20 North Wacker Drive Chicago, IL 60606
SDI	Steel Door Institute 712 Lakewood Center North Cleveland, OH 44107
SMACNA	Sheet Metal and Air Conditioning Contractor's National Association 8224 Old Court House Road Vienna, VA 22180
SSPC	Steel Structures Painting Council 402 24 <sup>th</sup> Street, Suite 600 Pittsburgh, PA 15213
SWFWMD	Southwest Florida Water Management District 2379 Broad Street Brooksville, FL 34604-6899

UL            Underwriter's Laboratories, Inc.  
             333 Pfingston Road  
             Northbrook, IL 60062

**PART 2       PRODUCTS (NOT USED)**

**PART 3       EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 01150**

### **MEASUREMENT AND PAYMENT**

#### **PART 1 GENERAL**

##### **1.01 SCOPE OF WORK**

- A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Proposal section of these specifications. Payment will be made based on the specified items supplied and delivered in the description in this section for each bid item.

##### **1.02 GENERAL**

- A. All contract lump sum prices included in the Bid Proposal section will be full compensation for all labor, equipment and incidentals to construct the Lake Filter Improvements and appurtenances as specified in the Contract Documents under this contract.

##### **1.03 WORK OUTSIDE AUTHORIZED LIMITS**

- A. No payment will be made for work constructed outside the authorized limits of work.

##### **1.04 PAYMENT**

- A. Lump Sum Items: Where payment for items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum item within the limits of work shown or specified.

##### **1.05 COSTS INCLUDED IN PAYMENT ITEMS**

- A. Separate Payment: No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work.
  - 1. Clearing and grubbing.
  - 2. Trench excavation, including necessary pavement and rock removal, except as otherwise specified.
  - 3. Dewatering and disposal of surplus water.
  - 4. Structural fill, backfill, grading, and related transport costs.
  - 5. Replacement of paved and unpaved roadways, grass (sod) and shrubbery plots.
  - 6. Cleanup.
  - 7. Foundation and borrow materials, except as hereinafter specified.

8. Testing and placing system in operation.
  9. Any material and equipment required to be installed and utilized for tests.
  10. Pipe, structures, pavement replacement, restoration and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
  11. Maintaining the existing quality of service during construction, including any required by-pass pumping.
  12. Appurtenant work as required for a complete and operable system.
  13. Repair of damaged irrigation piping and sprinkler heads.
  14. Maintaining access to treatment plant structures with barriers, lights, signage etc.
  15. Erosion Control
  16. Painting
- B. Cleanup: CONTRACTOR's attention is called to the fact that cleanup is considered a part of the work of construction. No payment will be made until cleanup is essentially complete.

#### **1.06 BID ITEMS**

##### Bid Item No. 1 - Mobilization/Demobilization

- A. Mobilization shall be the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, storage buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by the Contract Documents and applicable laws and regulations. The costs of bonds, required insurance, permits and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included in this item. Demobilization shall be the work of removing temporary facilities from the site.
- B. Payment for the mobilization/demobilization shall not exceed 5 percent (5%) of the Bid Price. Partial payments for this item will be made in accordance with the following schedule:

Percent of Original Contract Amount <u>Amount Earned</u>	Allowable Percent of the Lump Sum <u>Price for the Item</u>
After Contract Execution	25
10	35
20	45
30	55
40	65
50	70
60	75
70	80
80	85
90	90
Substantial Completion	95
Final Payment	100

- C. These payments will be subject to the standard retainage provided in the agreement. Payment of the retainage will be made after completion of the work and demobilization.

Bid Item No. 2 - Demolition

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary for the removal, demolition and disposal of structures, equipment, piping, valves and soil materials for installation of new facilities. Demolition shall include removal of the North Reclaimed Water Storage Pond stored water and dewatering of the berm and bottom soils; removal of the top 24" of berm and bottom soils in the North Pond; separation and storage of suitable top soil materials and berm fill materials for reuse; disposal of unsuitable materials; removal of existing lake filters equipment, piping, valves, controls, electrical equipment and concrete pad; removal of slide gates, sluice gates, grating and railings from the existing North Pond outlet structure; cutting holes in the structure; removing the north and south 30-inch reclaimed water flowmeter valve vault structures to 36 inches below finished grade; removal of 42-inch D.I. pipe from the Effluent Pump Station to its connection with the 30-inch RCW pipe; removal of the Reject Pump Station intake structure and its 36-inch intake pipe; removal of 24-inch, 12-inch and 8-inch RCW piping and valves; removal of 12-inch Reclaimed Water Return pipelines, flowmeters, valves, fittings and supports at ABW Filters 1,2,3,4,5,6 and 7; abandoning and filling with flowable fill 30-inch, 24-inch and 20-inch Reclaimed Water Return pipelines; removing short lengths of asphalt drives and chain link fences;

removal of stored water from the Middle and South Ponds; removal of the screens from the intake structures for the Middle and South Ponds; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 3 - Reject Storage Pond and North Reclaimed Water Storage Pond Improvements

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials, including all suitable fill required, hauling, and equipment necessary to fill in the North Pond with 6 to 7 feet of earth, construct a new Reject pond and a new Reclaimed Water Storage Pond out of the existing North Pond by installing a dividing earth berm, construct new exterior earth berms for the Reject and RCW storage ponds using borrow material; construct emergency overflow facilities, provide and install an HDPE liner in the Reject and North RCW storage ponds; install concrete stairs, HDPE safety ladders and gas vents; construct berm access drives; install bollards; install Reject Pond Outlet Assembly, 36-inch D.I. outlet pipe, concrete collars, intake structure, intake manhole, 36-inch intake pipe; install two intake structures in the North Pond, 36-inch intake pipe, 24-inch outlet pipe and concrete discharge pad; install toe drain around exterior perimeter of the berms; including all site preparation, clearing, grading, drainage, paving, grassing, borrow, demolition, excavation, fencing, signage and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 4 - Disk Filters

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary to provide and install disk filter units, including dewatering; excavation grading; crushed stone base; backfill; asphalt paving; sod; concrete pad; concrete supports; 3 disk filters; aluminum walkway stairs and railings; 24 inch inlet header, 30 inch outlet header, 30-inch overflow header; 20 inch inlet, outlet and overflow pipes; 20 inch butterfly valves; pipe supports, 8,4 and 2-inch reclaimed water supply pipes for spray systems; 3,4 and 6-inch drain pipes; control panels; electrical work; instrumentation and SCADA; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.



Bid Item No. 5 - Reclaimed Water Return Pump Station

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary to provide and install a Reclaimed Water Return Pump Station in the North Pond berm, including dewatering; sheeting; excavation; grading; crushed stone base; backfill; sod; precast; concrete wetwell; concrete pad; 3 submersible pumps; pump base elbows, 12-inch stainless steel discharge pipes; 12-inch ductile iron discharge pipes, 12-inch check valves, 12-inch gate valves and 12-inch motorized butterfly valve; aluminum hatches, stilling well, vent; 24-inch ductile iron header, 24-inch motorized butterfly valve; air release and vacuum valve; strap-on flowmeter; pipe supports; pressure gauges; level sensor; control panel; variable frequency drives; electrical work; instrumentation and SCADA; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 6 - Waste Backwash Pump Station

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor materials and equipment necessary to provide and install a Waste Backwash Pump Station, including dewatering; sheeting; excavation; crushed stone base; backfill; grading; sod; precast concrete wetwell, concrete pad, 2 submersible pumps, pump base elbows; PVC discharge pipe; 4 and 6-inch ductile iron discharge pipe; 4-inch check valves and plug valves; aluminum hatches; air vent; air release valve; pipe supports, float switches; control panel; electrical work; instrumentation and SCADA; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 7 - North Pond Outlet Structure Improvements

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary to provide and install improvements to the North Pond Outlet Structure, including 2 new stainless steel sluice gates; 2 fixed overflow weirs; aluminum grating and railings; saw cutting holes in the concrete walls for the sluice gates; filling the existing holes in the

concrete walls with the steel reinforcing and structural concrete; installing the 12-inch ductile iron recirculation pipe in a concrete wingwall; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 8 - Effluent Pump Station Flowmeter Assembly

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary to provide and install the Effluent Pump Station Flowmeter Assembly, including dewatering; excavation; sheeting; crushed stone base; concrete pad; backfill; grading; sod; 30 and 36-inch ductile iron pipe, 30-inch strap-on flowmeter; four 36-inch butterfly valves; one 36-inch motorized butterfly valve; one 36-inch globe-type backpressure valve; one 36-inch plug valve, 2 air release valves; pipe supports; electrical work; instrumentation and SCADA; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 9 - Chlorination Facilities

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary to provide and install chlorination facilities, including 2 sodium hypochlorite chemical feed pumps on a prefabricated skid with PVC piping, ball valves, pulsation dampeners, surge relief valves, backpressure valves, pressure gauges; precast concrete valve vault, aluminum hatch, sump pump, sodium hypochlorite injection assembly, pipe supports; 3"x1" double contained PVC feed piping, ½-inch HDPE sample piping; ½-inch stainless steel tap with ½-inch stainless steel ball valve; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 10 - Site Piping

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary to provide and install site piping, including dewatering; excavation; bedding; haunching, initial backfill; 36,30,24,8,4 and 2-inch Reclaimed Water pipelines; 24-inch Reclaimed Water Return Pipelines; 36 and 20-inch Reject Water pipelines; 12-inch RCW Recirculation pipelines; 6 and 4-inch Waste Backwash pipelines; 3"x1"

PVC double-contained sodium hydrochlorite pipelines; 1/2-inch HDPE sample lines; 8-inch potable water pipelines; gate valves, butterfly valves and plug valves; concrete collars; connection to Filter No. 7 Bypass Channel; connection to Filter No. 7 Waster Backwash Channel; connection to the Headworks; grading; sodding; asphalt paving; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 11 - Replace Intake Structure Screens In Middle And South Ponds and Refurbish Middle Pond Outfall

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary to replace the aluminum intake screens on the 3 intake structures in the Middle and South Reclaimed Water Storage Ponds and Refurbish Middle Pond Outfall, including aluminum screens, frames, fasteners, gates, actuators, dewatering and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 12 - Unfiltered Pump Station

- A. Payment of the applicable lump sum price shall be full compensation for, but is not limited to, all plant, labor, materials and equipment necessary to provide a complete and functioning pump station including; precast wet well; grating; stairs; concrete; 16 inch, 24 inch, and 36 inch piping and appurtenances; excavation; bedding, haunching; backfill; pump installation; grading; and all other appurtenant work related to this lump sum pay item as presented in the Contract Documents.

Bid Item No. 13 - Electrical Work And Instrumentation

- A. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor, materials and equipment necessary to construct a complete power and control system including switches, panels, switchgear, VFD's, MCC, control panels, duct banks, lighting, power circuitry; and install, set-up, calibrate, program, integrate, and coordinate a complete instrumentation package as specified including all instruments, PLC's, software and programming, fiber optic cable, transmitters, interface panels, programming terminal, and all appurtenances as shown on the plans and specifications.

Bid Item No. 14 - Discretionary Work

- A. This payment item is for the Owner's requested changes in the work pertaining to the Lake Filter Improvements Work that requires authorization of the Owner prior to the work being performed. This item is not to cover work outlined in the plans and/or specifications or for work incidental to the completion of the project as outlined herein, and shall only be used when directed by the Owner.
- B. Payment shall be made based on written authorization of the additional work. The authorization shall reflect the actual amounts agreed to by the Contractor and the Owner.
- C. Payment of the applicable lump sum price shall be full compensation for furnishing, but is not limited to, all plant, labor; materials and equipment necessary to perform work not covered under Bid Item No. 1 - 13 and is considered outside of the original scope of work. Proposals for all work performed under Bid Item No. 14 shall be submitted to the Engineer and the Owner for review and approval.

The following bid Alternates are included to obtain unit prices for additions/deductions resulting from the Owner's option to utilize suitable fill dirt that may be available from a County project named "Perico Preserve Seagrass Basin Excavation" (Perico Preserve Excavation Site). The Perico Preserve Excavation Site is currently under design and permitting by the County. If permits are obtained and a contract is executed (separate from the Lake Filtration and North Pond Improvement project) for the excavation and stockpiling of material at this site, then the County will exercise the following bid alternate Additions/Deductions in order to utilize the suitable fill material from this site at the SWWRF N Pond Improvements site. Included in the bid documents for information only is the soils report for the Perico Preserve Excavation site by PSI dated February 17, 2012.

Alternate Bid Item No. 15 - Hauling of Fill from Perico Preserve Excavation Site to SWWRF

- A. The Per Cubic Yard Bid Price Payment shall be full compensation for furnishing all labor, materials and equipment necessary for hauling excavated suitable fill

material from the Perico Preserve Excavation Site to the SWWRF and unloading at the SWWRF. Please see attached figure for locations. Placement and compaction of this fill material is included in Bid Item No. 03.

- B. Payment shall be made based upon written authorization and shall reflect the actual per cubic yard quantity agreed upon by the Contractor and the Owner.
- C. The estimated quantity of suitable fill material to be hauled from the Perico Preserve Excavation Site is approximately 150,000 cubic yards. Actual quantity may vary.

Alternate Bid Item No. 16 - Fill Quantity Deduction from Perico Preserve Excavation Site

- A. The Per Cubic Yard Bid Price Deduction shall be full compensation for furnishing all labor, materials and equipment necessary for purchasing and hauling suitable fill material from any site other than the Perico Preserve Excavation Site to the SWWRF and unloading at the SWWRF.
- B. Deduction from Bid Item No. 3 shall be made based upon written authorization and shall reflect the actual per cubic yard quantity agreed upon by the Contractor and the Owner.
- C. The estimated quantity of suitable fill material to be hauled from the Perico Preserve Excavation Site is approximately 150,000 cubic yards. Actual quantity may vary.

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**

**END OF SECTION**





PERICO PRESERVE  
EXCAVATION SITE

MANATEE AVE W.

75TH ST W.

SWWRF



MANATEE  
COUNTY

SWWRF LAKE FILTRATION & N. IMPROVEMENTS  
ERP

POND FILL EXCAVATION LOCATION

FIGURE 1

## **SECTION 01152**

### **REQUESTS FOR PAYMENT**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Submit Applications for Payment to the Project Manager or as directed at the preconstruction meeting, in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.

##### **1.02 FORMAT AND DATA REQUIRED**

- A. Submit payment requests in the form provided by the Owner with itemized data typed in accordance with the Bid Form.
- B. Provide construction photographs in accordance with Contract Documents.

##### **1.03 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS**

- A. When the Owner or the Engineer requires substantiating data, Contractor shall submit suitable information with a cover letter.
- B. Submit one copy of data and cover letter for each copy of application.

##### **1.04 PREPARATION OF APPLICATION FOR FINAL PAYMENT**

- A. Fill in application form as specified for progress payments.

##### **1.05 SUBMITTAL PROCEDURE**

- A. Submit applications for payment at the times stipulated in the Agreement.
- B. Number: Three (3) copies of each application; all signed and certified by the Contractor.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION (NOT USED)**

**END OF SECTION**





## **SECTION 01153**

### **CHANGE ORDER PROCEDURES**

#### **PART 1 GENERAL**

##### **1.01 DEFINITION**

- A. Change Order: Major change in contract scope or time that must be approved by the Board.
- B. Administrative Change Adjustment: Minor change order under 10% of project cost or 20% time, does not have to be Board approved.
- C. Field Directive Change: Change to contract quantity that does not require a change of scope or time extension.

##### **1.02 REQUIREMENTS INCLUDED**

- A. The Contractor shall promptly implement change order procedures:
  - 1. Provide full written data required to evaluate changes.
  - 2. Maintain detailed records of work done on a time-and-material/force account basis.
  - 3. Provide full documentation to Engineer on request.
- B. The Contractor shall designate a member of the Contractor's organization who:
  - 1. Is authorized to accept changes to the Work.
  - 2. Is responsible for informing others in the Contractor's employ of the authorized changes into the Work.
- C. The Board of County Commissioners executes all Change Orders.

##### **1.03 PRELIMINARY PROCEDURES**

- A. Project Manager may initiate changes by submitting a Request to Contractor. Request will include:
  - 1. Detailed description of the change, products, costs and location of the change in the Project.
  - 2. Supplementary or revised Drawings and Specifications.
  - 3. The projected time extension for making the change.

4. A specified period of time during which the requested price will be considered valid.
  5. Such request is for information only and is not an instruction to execute the changes, nor to stop work in progress.
- B. Contractor may initiate changes by submitting a written notice to the Project Manager, containing:
1. Description of the proposed changes.
  2. Statement of the reason for making the changes.
  3. Statement of the effect on the Contract Sum and the Contract Time.
  4. Statement of the effect on the work of separate contractors.
  5. Documentation supporting any change in Contract Sum or Contract Time, as appropriate.

#### **1.04 FIELD DIRECTIVE CHANGE**

- A. In lieu of a Change Order, the Project Manager may issue a Field Directive change for the Contractor to proceed with additional work within the original intent of the Project.
- B. Field Directive change will describe changes in the work, with attachments of backup information to define details of the change.
- C. Contractor must sign and date the Field Directive change to indicate agreement with the terms therein.

#### **1.05 DOCUMENTATION OF PROPOSALS AND CLAIMS**

- A. Support each quotation for a lump sum proposal and for each unit price which has not previously been established, with sufficient substantiating data to allow the Engineer/Owner to evaluate the quotation.
- B. On request, provide additional data to support time and cost computations:
1. Labor required.
  2. Equipment required.
  3. Products required.
    - a. Recommended source of purchase and unit cost.
    - b. Quantities required.
  4. Taxes, insurance and bonds.
  5. Credit for work deleted from Contract, similarly documented.
  6. Overhead and profit.

7. Justification for any change in Contract Time.
- C. Support each claim for additional costs and for work done on a time-and-material/force account basis, with documentation as required for a lump-sum proposal, plus additional information.
1. Name of the Owner's authorized agent who ordered the work and date of the order.
  2. Date and time work was performed and by whom.
  3. Time record, summary of hours work and hourly rates paid.
  4. Receipts and invoices for:
    - a. Equipment used, listing dates and time of use.
    - b. Products used, listing of quantities.
    - c. Subcontracts.

#### **1.06 PREPARATION OF CHANGE ORDERS**

- A. Project Manager will prepare each Change Order.
- B. Change Order will describe changes in the Work, both additions and deletions, with attachments as necessary to define details of the change.
- C. Change Order will provide an accounting of the adjustment in the Contract Sum and in the Contract Time.

#### **1.07 LUMP SUM/FIXED PRICE CHANGE ORDER**

- A. Project Manager initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by the Contractor, or requests from the Owner, or both.
- B. Once the form has been completed, all copies should be sent to Contractor for approval. After approval by Contractor, all copies should be sent to Owner for approval. The Owner will distribute executed copies after approval by the Board of County Commissioners.

#### **1.08 UNIT PRICE CHANGE ORDER**

- A. Contents of Change Orders will be based on, either:
  1. Owner's definition of the scope of the required changes.
  2. Contractor's Proposal for a change, as approved by the Owner.

3. Survey of completed work.
- B. The amounts of the unit prices to be:
  1. Those stated in the Agreement.
  2. Those mutually agreed upon between Owner and Contractor.

**1.09 TIME AND MATERIAL/FORCE ACCOUNT CHANGE ORDER/CONSTRUCTION  
CHANGE AUTHORIZATION**

- A. At completion of the change, Contractor shall submit itemized accounting and supporting data as provided in the Article "Documentation of Proposals and Claims" of this Section.
- B. Engineer will determine the allowable cost of such work, as provided in General Conditions and Supplementary Conditions.
- C. Engineer will sign and date the Change Order to establish the change in Contract Sum and in Contract Time.
- D. Owner and Contractor will sign and date the Change Order to indicate their agreement therewith.

**1.10 CORRELATION WITH CONTRACTOR'S SUBMITTALS**

- A. Periodically revise Schedule of Values and Application for Payment forms to record each change as a separate item of work, and to record the adjusted Contract Sum.
- B. Periodically revise the Construction Schedule to reflect each change in Contract Time. Revise sub schedules to show changes for other items of work affected by the changes.
- C. Upon completion of work under a Change Order, enter pertinent changes in Record Documents.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 01200**

### **PROJECT MEETINGS**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. The Owner or Engineer shall schedule the pre-construction meeting, periodic progress meetings and special meetings, if required, throughout progress of work.
- B. Representatives of contractors, subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.
- C. The Contractor shall attend meetings to ascertain that work is expedited consistent with Contract Documents and construction schedules.

##### **1.02 PRE-CONSTRUCTION MEETING**

- A. Attendance:
  - 1. Owner's Engineer.
  - 2. Owner's Project Manager
  - 3. Contractor.
  - 4. Resident Project Representative.
  - 5. Related Labor Contractor's Superintendent.
  - 6. Major Subcontractors.
  - 7. Major Suppliers.
  - 8. Others as appropriate.
- B. Suggested Agenda:
  - 1. Distribution and discussion of:
    - a. List of major subcontractors.
    - b. Projected Construction Schedules.
    - c. Coordination of Utilities
  - 2. Critical work sequencing.
  - 3. Project Coordination.
    - a. Designation of responsible personnel.
    - b. Emergency contact persons with phone numbers.
  - 4. Procedures and processing of:
    - a. Field decisions.
    - b. Submittals.
    - c. Change Orders.
    - d. Applications for Payment.
  - 5. Procedures for maintaining Record Documents.

6. Use of premises:
  - a. Office, work and storage areas.
  - b. Owner's REQUIREMENTS.
7. Temporary utilities.
8. Housekeeping procedures.
9. Liquidated damages.
10. Equal Opportunity Requirements.
11. Laboratory testing.
12. Project / Job meetings: Progress meeting, other special topics as needed.

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 01310**

### **CONSTRUCTION SCHEDULE AND PROJECT RESTRAINTS**

#### **PART 1 GENERAL**

##### **1.01 GENERAL**

- A. Construction under this contract must be coordinated with the Owner and accomplished in a logical order to maintain utilization and flow through existing facilities and public properties and rights-of-way and to allow construction to be completed within the time allowed by Contract Documents and in the manner set forth in the Contract.

##### **1.02 CONSTRUCTION SCHEDULING GENERAL PROVISIONS**

- A. No work shall be done between 7:00 p.m. and 7:00 a.m. nor on weekends or legal holidays without written permission of the Owner. However, emergency work may be done without prior permission.
- B. Night work may be established by the Contractor as regular procedure with the written permission of the Owner. Such permission, however, may be revoked at any time by the Owner if the Contractor fails to maintain adequate equipment and supervision for the proper execution and control of the work at night.
- C. Due to potential health hazards and requirements of the State of Florida and the U.S. Environmental Protection Agency, existing facilities must be maintained in operation.
- D. The Contractor shall be fully responsible for providing all temporary piping, plumbing, electrical hook-ups, lighting, temporary structure, or other materials, equipment and systems required to maintain the existing facility's operations. All details of temporary piping and temporary construction are not necessarily shown on the Drawings or covered in the Specifications. However, this does not relieve the Contractor of the responsibility to insure that construction will not interrupt proper facility operations.
- E. The Contractor shall designate an authorized representative of his firm who shall be responsible for development and maintenance of the schedule and of progress and payment reports. This representative of the

Contractor shall have direct project control and complete authority to act on behalf of the Contractor in fulfilling the commitments of the Contractor's schedule.

### **1.03        PROGRESS OF THE WORK**

The work shall be executed with such progress as may be required to prevent any delay to the general completion of the work. The work shall be executed at such times and in or on such parts of the project and with such forces, materials and equipment to assure completion of the work in the time established by the Contract and in the manner set forth in the Contract.

## **PART 2        PRODUCTS**

### **2.01        GENERAL REQUIREMENTS**

- A. The Contractor shall submit a critical path schedule as described herein.
- B. The planning, scheduling, management and execution of the work is the sole responsibility of the Contractor. The progress schedule requirement is established to allow Engineer to review Contractor's planning, scheduling, management and execution of the work; to assist Engineer in evaluating work progress and make progress payments and to allow other contractors to cooperate and coordinate their activities with those of the Contractor.

### **2.02        FORM OF SCHEDULES**

- A. Prepare schedules using the latest version of Microsoft Project, or other Owner approved software, in the form of a horizontal bar chart diagram. The diagram shall be time-scaled and sequenced by work areas. Horizontal time scale shall identify the first work day of each week.
- B. Activities shall be at least as detailed as the Schedule of Values. Activity durations shall be in whole working days. In addition, man-days shall be shown for each activity or tabulated in an accompanying report.
- C. Diagrams shall be neat and legible and submitted on sheets at least 8-1/2 inches by 11 inches suitable for reproduction. Scale and spacing shall allow space for notations and future revisions.



## **2.03           CONTENT OF SCHEDULES**

- A.   Each monthly schedule shall be based on data as of the last day of the current pay period.
- B.   Description for each activity shall be brief, but convey the scope of work described.
- C.   Activities shall identify all items of work that must be accomplished to achieve substantial completion, such as items pertaining to Contractor's installation and testing activities; items pertaining to the approval of regulatory agencies; contractor's time required for submittals, fabrication and deliveries; the time required by Engineer to review all submittals as set forth in the Contract Documents; items of work required of Owner to support pre-operational, startup and final testing; time required for the relocation of utilities. Activities shall also identify interface milestones with the work of other contractors performing work under separate contracts with Owner.
- D.   Schedules shall show the complete sequence of construction by activities. Dates for beginning and completion of each activity shall be indicated as well as projected percentage of completion for each activity as of the first day of each month.
- E.   Submittal schedule for shop drawing review, product data, and samples shall show the date of Contractor submittal and the date approved submittals will be required by the Engineer, consistent with the time frames established in the Specifications.
- F.   For Contract change orders granting time extensions, the impact on the Contract date(s) shall equal the calendar-day total time extension specified for the applicable work in the Contract change orders.
- G.   For actual delays, add activities prior to each delayed activity on the appropriate critical path(s). Data on the added activities of this type shall portray all steps leading to the delay and shall further include the following: separate activity identification, activity description indicating cause of the delay, activity duration consistent with whichever set of dates below applies, the actual start and finish dates of the delay or, if the delay is not finished, the actual start date and estimated completion date.

- H. For potential delays, add an activity prior to each potentially delayed activity on the appropriate critical path(s). Data for added activities of this type shall include alternatives available to mitigate the delay including acceleration alternatives and further show the following: separate activity identification, activity description indicating cause of the potential delay and activity duration equal to zero work days.

## **2.04 SUPPORTING NARRATIVE**

- A. Status and scheduling reports identified below shall contain a narrative to document the project status, to explain the basis of Contractor's determination of durations, describe the Contract conditions and restraints incorporated into the schedule and provide an analysis pertaining to potential problems and practical steps to mitigate them.
- B. The narrative shall specifically include:
  - 1. Actual completion dates for activities completed during the monthly report period and actual start dates for activities commenced during the monthly report period.
  - 2. Anticipated start dates for activities scheduled to commence during the following monthly report period.
  - 3. Changes in the duration of any activity and minor logic changes.
  - 4. The progress along the critical path in terms of days ahead or behind the Contract date.
  - 5. If the Monthly Status Report indicates an avoidable delay to the Contract completion date or interim completion dates as specified in the Agreement, Contractor shall identify the problem, cause and the activities affected and provide an explanation of the proposed corrective action to meet the milestone dates involved or to mitigate further delays.
  - 6. If the delay is thought to be unavoidable, the Contractor shall identify the problem, cause, duration, specific activities affected and restraints of each activity.
  - 7. The narrative shall also discuss all change order activities whether included or not in the revised/current schedule of legal status. Newly introduced change order work activities and the CPM path(s) that they affect, must be specifically identified. All change order work activities added to the schedule shall conform with the sequencing

and Contract Time requirements of the applicable Change Order.

8. Original Contract date(s) shall not be changed except by Contract change order. A revision need not be submitted when the foregoing situations arise unless required by Engineer. Review of a report containing added activities will not be construed to be concurrence with the duration or restraints for such added activities; instead the corresponding data as ultimately incorporated into the applicable Contract change order shall govern.
9. Should Engineer require additional data, this information shall be supplied by Contractor within 10 calendar days.

## **2.05 SUBMITTALS**

- A. Contractor shall submit estimated and preliminary progress schedules (as identified in the Terms and Conditions of the Contract and the General Conditions), monthly status reports, a start-up schedule and an as-built schedule report all as specified herein.
- B. All schedules, including estimated and preliminary schedules, shall be in conformance with the Contract Documents.
- C. The finalized progress schedule discussed in the Contract Documents shall be the first monthly status report and as such shall be in conformance with all applicable specifications contained herein.
- D. Monthly Status Report submittals shall include three copies of a time-scaled (days after notice to proceed) diagram showing all contract activities and supporting narrative. The initial detailed schedule shall use the notice to proceed as the start date. The finalized schedule, if concurred with by Owner, shall be the work plan to be used by the contractor for planning, scheduling, managing and executing the work.
- E. The schedule diagram shall be formatted as above. The diagram shall include (1) all detailed activities included in the preliminary and estimated schedule submittals, (2) calendar days prior to substantial completion, (3) summary activities for the remaining days. The critical path activities shall be identified, including critical paths for interim dates, if possible.
- F. The Contractor shall submit monthly progress schedules with each month's application for payment.

- G. Contractor shall submit three monthly status reports which will be retained by the Owner and Engineer.

## **2.06 MONTHLY STATUS REPORTS**

- A. Contractor shall submit three copies of detailed schedule status reports on a monthly basis with the Application for Payment. The first such status report shall be submitted with the first Application for Payment and include data as of the last day of the pay period. The Monthly Report shall include a "marked-up" copy of the latest detailed schedule of legal status and a supporting narrative including updated information as described above. The Monthly Report will be reviewed by Engineer and Contractor at a monthly schedule meeting and Contractor will address Engineer's comments on the subsequent monthly report. Monthly status reports shall be the basis for evaluating Contractor's progress.
- B. The "marked-up" diagram shall show, for the latest detailed schedule of legal status, percentages of completion for all activities, actual start and finish dates and remaining durations, as appropriate. Activities not previously included in the latest detailed schedule of legal status shall be added, except that contractual dates will not be changed except by change order. Review of a marked-up diagram by Engineer will not be construed to constitute concurrence with the time frames, duration, or sequencing for such added activities; instead the corresponding data as ultimately incorporated into an appropriate change order shall govern.

## **2.07 STARTUP SCHEDULE**

- A. At least 60 calendar days prior to the date of substantial completion, Contractor shall submit a time-scaled (days after notice to proceed) diagram detailing the work to take place in the period between 60 days prior to substantial completion, together with a supporting narrative. Engineer shall have 10 calendar days after receipt of the submittal to respond. Upon receipt of Engineer's comments, Contractor shall make the necessary revisions and submit the revised schedule within 10 calendar days. The resubmittal, if concurred with by Owner, shall be the Work Plan to be used by Contractor for planning, managing, scheduling and executing the remaining work leading to substantial completion.

- B. The time-scaled diagram shall use the latest schedule of legal status for those activities completed ahead of the last 60 calendar days prior to substantial completion and detailed activities for the remaining 60-day period within the time frames outlined in the latest schedule of legal status.
- C. Contractor will be required to continue the requirement for monthly reports, as outlined above. In preparing this report, Contractor must assure that the schedule is consistent with the progress noted in the startup schedule.

## **2.08 REVISIONS**

- A. All revised Schedule Submittals shall be made in the same form and detail as the initial submittal and shall be accompanied by an explanation of the reasons for such revisions, all of which shall be subject to review by Engineer and concurrence by Owner. The revision shall incorporate all previously made changes to reflect current as-built conditions. Minor changes to the approved submittal may be approved at monthly meetings; a minor change is not considered a revision in the context of this paragraph.
- B. A revised schedule submittal shall be submitted for review when required by Engineer.

## **PART 3 EXECUTION (NOT USED)**

**END OF SECTION**



## SECTION 01340

### SHOP DRAWINGS, PROJECT DATA AND SAMPLES

#### PART 1 GENERAL

##### 1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall submit to the Engineer for review and approval: working drawings, shop drawings, test reports and data on materials and equipment (hereinafter in this section called data), and material samples (hereinafter in this section called samples) as are required for the proper control of work, including, but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Contract Drawings.
- B. Within thirty (30) calendar days after the effective date of the Agreement, the Contractor shall submit to the Engineer, a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items and the date on which each Shop Drawing shall be submitted. Review of this list by the Engineer shall in no way relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the Specifications. This procedure is required in order to expedite final review of Shop Drawings.
- C. The Contractor is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting with the Owner and the Engineer. This log should include the following items:
  - 1. Submittal description and number assigned.
  - 2. Date to Engineer.
  - 3. Date returned to Contractor (from Engineer).
  - 4. Status of Submittal (No exceptions taken, returned for confirmation or resubmittal, rejected).
  - 5. Date of Resubmittal and Return (as applicable).
  - 6. Date material released (for fabrication).
  - 7. Projected date of fabrication.
  - 8. Projected date of delivery to site.
  - 9. Projected date and required lead time so that product installation does not delay contact.
  - 10. Status of O&M manuals submitted.

### **1.03 CONTRACTOR'S RESPONSIBILITY**

- A. It is the duty of the Contractor to check all drawings, data and samples prepared by or for him before submitting them to the Engineer for review. Each and every copy of the Drawings and data shall bear Contractor's stamp showing that they have been so checked. Shop drawings submitted to the Engineer without the Contractor's stamp will be returned to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the contract Documents.
- B. Determine and verify:
  - 1. Field measurements.
  - 2. Field construction criteria.
  - 3. Catalog numbers and similar data.
  - 4. Conformance with Specifications and indicate all variances from the Specifications.
- C. The Contractor shall furnish the Engineer a schedule of Shop Drawing submittals fixing the respective dates for the submission of shop and working drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.
- D. The Contractor shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him, by the Engineer, with No Exceptions Taken or Approved As Noted.
- E. The Contractor shall submit to the Engineer all drawings and schedules sufficiently in advance of construction requirements to provide no less than twenty-one (21) calendar days for checking and appropriate action from the time the Engineer receives them.
- F. The Contractor shall submit five (5) copies of descriptive or product data submittals to complement shop drawings for the Engineer plus the additional copies if the Contractor requires more than 1 being returned. The Engineer shall retain four (4) sets.
- G. The Contractor shall be responsible for and bear all cost of damages which may result from the ordering of any material or from proceeding with any part of work prior



to the completion of the review by Engineer of the necessary Shop Drawings.

**1.04 ENGINEER'S REVIEW OF SHOP DRAWINGS AND WORKING DRAWINGS**

- A. The Engineer's review of drawings, data and samples submitted by the Contractor shall cover only general conformity to the Specifications, external connections and dimensions which affect the installation.
- B. The review of drawings and schedules shall be general and shall not be construed:
  - 1. As permitting any departure from the Contract requirements.
  - 2. As relieving the Contractor of responsibility for any errors, including details, dimensions and materials.
  - 3. As approving departures from details furnished by the Engineer, except as otherwise provided herein.
- C. If the drawings or schedules as submitted describe variations and show a departure from the Contract requirements which the Engineer finds to be in the interest of the Owner and to be so minor as not to involve a change in Contract Price or time for performance, the Engineer may return the reviewed drawings without noting any exception.
- D. When reviewed by the Engineer, each of the Shop and Working Drawings shall be identified as having received such review being so stamped and dated. Shop Drawings stamped "REJECTED" and with required corrections shown shall be returned to the Contractor for correction and resubmittal.
- E. Resubmittals will be handled in the same manner as first submittals. On resubmittals, the Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, to revisions other than the corrections requested by the Engineer on previous submissions. The Contractor shall make any corrections required by the Engineer.
- F. If the Contractor considers any correction indicated on the drawings to constitute a change to the Contract Drawings or Specifications, the Contractor shall give written notice thereof to the Engineer.
- G. The Engineer shall review a submittal a maximum of three (3) times after which cost of review shall be borne by

the Contractor. The cost of engineering shall be equal to the Engineer's actual payroll cost.

- H. When the Shop and Working Drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.
- I. No partial submittals shall be reviewed. Incomplete submittals shall be returned to the Contractor and shall be considered not approved until resubmitted.

#### **1.05 SHOP DRAWINGS**

- A. When used in the Contract Documents, the term "Shop Drawings" shall be considered to mean Contractor's plans for material and equipment which become an integral part of the Project. These drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, drawings, setting drawings, schedule drawings, manufacturer's scale drawings and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature and performance and test data, shall be considered only as supportive to required Shop Drawings as defined above.
- B. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor's stamp of approval and original signature as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval and original signature shall be returned to the Contractor for resubmission.
- C. Each Shop Drawing shall have a blank area 3-1/2 inches by 3-1/2 inches, located adjacent to the title block. The title block shall display the following:
  - 1. Number and title of the drawing.
  - 2. Date of Drawing or revision.
  - 3. Name of project building or facility.
  - 4. Name of contractor and subcontractor submitting drawing.
  - 5. Clear identification of contents and location of the work.
  - 6. Specification title and number.
- D. If drawings show variations from Contract requirements because of standard shop practice or for other reasons,

the Contractor shall describe such variations in his letter of transmittal. If acceptable, proper adjustment in the contract shall be implemented where appropriate. If the Contractor fails to describe such variations, he shall not be relieved of the responsibility of executing the work in accordance with the Contract, even though such drawings have been reviewed.

- E. Data on materials and equipment shall include, without limitation, materials and equipment lists, catalog sheets, cuts, performance curves, diagrams, materials of construction and similar descriptive material. Materials and equipment lists shall give, for each item thereon, the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish and all other pertinent data.
- F. For all mechanical and electrical equipment furnished, the Contractor shall provide a list including the equipment name and address and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.
- G. All manufacturers or equipment suppliers who proposed to furnish equipment or products shall submit an installation list to the Engineer along with the required shop drawings. The installation list shall include at least five installations where identical equipment has been installed and have been in operation for a period of at least one (1) year.
- H. Only the Engineer will utilize the color "red" in marking shop drawing submittals.

#### **1.06 WORKING DRAWINGS**

- A. When used in the Contract Documents, the term "working drawings" shall be considered to mean the Contractor's fabrication and erection drawings for structures such as roof trusses, steelwork, precast concrete elements, bulkheads, support of open cut excavation, support of utilities, groundwater control systems, forming and false work; underpinning; and for such other work as may be required for construction of the project.
- B. Copies of working drawings as noted above, shall be submitted to the Engineer where required by the Contract Documents or requested by the Engineer and shall be submitted at least thirty (30) days (unless otherwise specified by the Engineer) in advance of their being required for work.

- C. Working drawings shall be signed by a registered Professional Engineer, currently licensed to practice in the State of Florida and shall convey, or be accompanied by, calculation or other sufficient information to completely explain the structure, machine, or system described and its intended manner of use. Prior to commencing such work, working drawings must have been reviewed without specific exceptions by the Engineer, which review will be for general conformance and will not relieve the Contractor in any way from his responsibility with regard to the fulfillment of the terms of the Contract. All risks of error are assumed by the Contractor; the Owner and Engineer shall not have responsibility therefore.

#### **1.07 SAMPLES**

- A. The Contractor shall furnish, for the review of the Engineer, samples required by the Contract Documents or requested by the Engineer. Samples shall be delivered to the Engineer as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until reviewed by the Engineer.
- B. Samples shall be of sufficient size and quantity to clearly illustrate:
1. Functional characteristics of the product, with integrally related parts and attachment devices.
  2. Full range of color, texture and pattern.
  3. A minimum of two samples of each item shall be submitted.
- C. Each sample shall have a label indicating:
1. Name of product.
  2. Name of Contractor and Subcontractor.
  3. Material or equipment represented.
  4. Place of origin.
  5. Name of Producer and Brand (if any).
  6. Location in project.  
(Samples of finished materials shall have additional markings that will identify them under the finished schedules.)
  7. Reference specification paragraph.
- D. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples containing the information required above. He shall enclose a copy of this letter with the shipment and send a copy of this

letter to the Engineer. Review of a sample shall be only for the characteristics or use named in such and shall not be construed to change or modify any Contract requirements.

- E. Reviewed samples not destroyed in testing shall be sent to the Engineer or stored at the site of the work. Reviewed samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the reviewed samples. If requested at the time of submission, samples which failed testing or were rejected shall be returned to the Contractor at his expense.

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**

**END OF SECTION**



## **SECTION 01370**

### **SCHEDULE OF VALUES**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. The Contractor shall submit to the Engineer a Schedule of Values allocated to the various portions of the work, within 10 days from the date of Notice to Proceed.
- B. Upon request of the Engineer, the Contractor shall support the values with data which will substantiate their correctness.
- C. The Schedule of Values shall be used only as the basis for the Contractor's Applications for Payment.

##### **1.02 FORM AND CONTENT OF SCHEDULE OF VALUES**

- A. Schedule of Values will be considered for approval by Engineer upon Contractor's request. Identify schedule with:
  - 1. Title of Project and location.
  - 2. Project number.
  - 3. Name and address of Contractor.
  - 4. Contract designation.
  - 5. Date of submission.
- B. Schedule of Values shall list the installed value of the component parts of the work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. Follow the table of contents for the Contract Document as the format for listing component items for structures:
  - 1. Identify each line item with the number and title of the respective major section of the specification.
  - 2. For each line item, list sub values of major products or operations under item.
- D. Follow the bid sheets included in this Contract Documents as the format for listing component items for pipe lines.
- E. The sum of all values listed in the schedule shall equal

the total Contract sum.  
**PART 2        PRODUCTS (NOT USED)**

**PART 3        EXECUTION (NOT USED)**

**END OF SECTION**



## **SECTION 01380**

### **CONSTRUCTION PHOTOGRAPHS**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. The Contractor shall employ a competent photographer to take construction record photographs or perform video recording including furnishing all labor, materials, equipment and incidentals necessary to obtain photographs and/or video recordings of all construction areas.
- B. Preconstruction record information shall consist of video recordings on digital video disks (DVD).
- C. Construction progress information shall consist of photographs and digital photographs on a recordable compact disc (CD-R).

##### **1.02 QUALIFICATIONS**

- A. All photography shall be done by a competent camera operator who is fully experienced and qualified with the specified equipment.
- B. For the video recording, the audio portion should be done by a person qualified and knowledgeable in the specifics of the Contract, who shall speak with clarity and diction so as to be easily understood.

##### **1.03 PROJECT PHOTOGRAPHS**

- A. Provide two prints of each photograph with each pay application.
- B. Provide one recordable compact disc with digital photographs with each pay application.
- C. Negatives:
  - 1. All negatives shall remain the property of photographer.
  - 2. The Contractor shall require that photographer maintain negatives or protected digital files for a period of two years from date of substantial completion of the project.

3. Photographer shall agree to furnish additional prints to Owner and Engineer at commercial rates applicable at time of purchase. Photographer shall also agree to participate as required in any litigation requiring the photographer as an expert witness.
- D. The Contractor shall pay all costs associated with the required photography and prints. Any parties requiring additional photography or prints shall pay the photographer directly.
- E. All project photographs shall be a single weight, color image. All finishes shall be smooth surface and glossy and all prints shall be 8 inches x 10 inches.
- F. Each print shall have clearly marked on the back, the name of the project, the orientation of view, the date and time of exposure, name and address of the photographer and the photographers numbered identification of exposure.
- G. All project photographs shall be taken from locations to adequately illustrate conditions prior to construction, or conditions of construction and state of progress. The Contractor shall consult with the Engineer at each period of photography for instructions concerning views required.

#### **1.04 VIDEO RECORDINGS**

- A. Video recording shall be done along all routes that are scheduled for construction. Video, recording shall include full, recording of both sides of all streets and the entire width of easements plus 10 feet on each side on which construction is to be performed. All video recording shall be in full color.
- B. A complete view, in sufficient detail with audio description of the exact location shall be provided.
- C. The engineering plans shall be used as a reference for stationing in the audio portion of the recordings for easy location identification.
- D. Two complete sets of video recordings shall be delivered to the Engineer on digital video disks (DVD) for the permanent and exclusive use of the Engineer prior to the start of any construction on the project.

- E. All video recordings shall contain the name of the project, the date and time of the video, recording, the name and address of the photographer and any other identifying information required.
- F. Construction shall not start until preconstruction video recordings are completed, submitted and accepted by the Engineer. In addition, no progress payments shall be made until the preconstruction video recordings are accepted by the Engineer.

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**

**END OF SECTION**



## **SECTION 01410**

### **TESTING AND TESTING LABORATORY SERVICES**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Owner shall employ and pay for the services of an independent testing laboratory to perform testing specifically indicated on the Contract Documents or called out in the Specifications. Owner may elect to have materials and equipment tested for conformity with the Contract Documents at any time.
  - 1. Contractor shall cooperate fully with the laboratory to facilitate the execution of its required services.
  - 2. Employment of the laboratory shall in no way relieve the Contractor's obligations to perform the work of the Contract.

##### **1.02 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY**

- A. Laboratory is not authorized to:
  - 1. Release, revoke, alter or enlarge on requirements of Contract Documents.
  - 2. Approve or accept any portion of the Work.
  - 3. Perform any duties of the Contractor.

##### **1.03 CONTRACTOR'S RESPONSIBILITIES**

- A. Cooperate with laboratory personnel; provide access to Work and/or to Manufacturer's operations.
- B. Secure and deliver to the laboratory adequate quantities of representational samples of materials proposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other material mixes which require control by the testing laboratory.
- D. Materials and equipment used in the performance of work under this Contract are subject to inspection and testing at the point of manufacture or fabrication. Standard

specifications for quality and workmanship are indicated in the Contract Documents. The Engineer may require the Contractor to provide statements or certificates from the manufacturers and fabricators that the materials and equipment provided by them are manufactured or fabricated in full accordance with the standard specifications for quality and workmanship indicated in the Contract Documents. All costs of this testing and providing statements and certificates shall be a subsidiary obligation of the Contractor and no extra charge to the Owner shall be allowed on account of such testing and certification.

E. Furnish incidental labor and facilities:

1. To provide access to work to be tested.
2. To obtain and handle samples at the project site or at the source of the product to be tested.
3. To facilitate inspections and tests.
4. For storage and curing of test samples.

F. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

1. When tests or inspections cannot be performed due to insufficient notice, Contractor shall reimburse Owner for laboratory personnel and travel expenses incurred due to Contractor's negligence.

G. Employ and pay for the services of the same or a separate, equally qualified independent testing laboratory to perform additional inspections, sampling and testing required for the Contractor's convenience and as approved by the Engineer.

H. If the test results indicate the material or equipment complies with the Contract Documents, the Owner shall pay for the cost of the testing laboratory. If the tests and any subsequent retests indicate the materials and equipment fail to meet the requirements of the Contract Documents, the contractor shall pay for the laboratory costs directly to the testing firm or the total of such costs shall be deducted from any payments due the Contractor.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

END OF SECTION





## **SECTION 01510**

### **TEMPORARY AND PERMANENT UTILITIES**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. The Contractor shall be responsible for furnishing all requisite temporary utilities, i.e., power, water, sanitation, etc. The Contractor shall obtain and pay for all permits required as well as pay for all temporary usages. The Contractor shall remove all temporary facilities upon completion of work.

##### **1.02 REQUIREMENTS OF REGULATORY AGENCIES**

- A. Comply with National Electric Code.
- B. Comply with Federal, State and Local codes and regulations and with utility company requirements.
- C. Comply with County Health Department regulations.

#### **PART 2 PRODUCTS**

##### **2.01 MATERIALS, GENERAL**

- A. Materials for temporary utilities may be "used". Materials for electrical utilities shall be adequate in capacity for the required usage, shall not create unsafe conditions and shall not violate requirements of applicable codes and standards.

##### **2.02 TEMPORARY ELECTRICITY AND LIGHTING**

- A. Arrange with the applicable utility company for temporary power supply. Provide service required for temporary power and lighting and pay all costs for permits, service and for power used.

##### **2.03 TEMPORARY WATER**

- A. The Contractor shall arrange with Manatee County Utilities Customer Service office to provide water for construction purposes, i.e., meter, pay all costs for installation, maintenance and removal, and service charges for water used.

- B. The Contractor shall protect piping and fitting against freezing.

#### **2.04 TEMPORARY SANITARY FACILITIES**

- A. The Contractor shall provide sanitary facilities in compliance with all laws and regulations.
- B. The Contractor shall service, clean and maintain facilities and enclosures.

### **PART 3 EXECUTION**

#### **3.01 GENERAL**

- A. The Contractor shall maintain and operate systems to assure continuous service.
- B. The Contractor shall modify and extend systems as work progress requires.

#### **3.02 REMOVAL**

- A. The Contractor shall completely remove temporary materials and equipment when their use is no longer required.
- B. The Contractor shall clean and repair damage caused by temporary installations or use of temporary facilities.

**END OF SECTION**

## **SECTION 01570**

### **TRAFFIC REGULATIONS**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. The Contractor shall be responsible for providing safe and expeditious movement of traffic through construction zones. A construction zone is defined as the immediate areas of actual construction and all abutting areas which are used by the Contractor and which interfere with the driving or walking public.
- B. The Contractor shall remove temporary equipment and facilities when no longer required, restore grounds to original or to specified conditions.

##### **1.02 TRAFFIC CONTROL**

- A. The necessary traffic control shall include, but not be limited to, such items as proper construction warning signs, signals, lighting devices, markings, barricades, channelization and hand signaling devices. The Contractor shall be responsible for installation and maintenance of all devices and detour routes and signage for the duration of the construction period. The Contractor shall utilize the appropriate traffic plan from the FDOT Maintenance of Traffic Standards, Series 600 of the FDOT Roadway & Traffic Design Standards, Latest Edition.
- B. Should there be the necessity to close any portion of a roadway carrying vehicles or pedestrians the Contractor shall submit a Traffic Control Plan (TCP) at least 5 days before a partial or full day closure, and at least 8 days before a multi-day closure. TCP shall be submitted, along with a copy of their accreditation, by a certified IMSA or ATSA Traffic Control Specialist.
  - 1. At no time will more than one (1) lane of a roadway be closed to vehicles and pedestrians without an approved road closure from the County Transportation Department. With any such closings, adequate provision shall be made for the safe expeditious movement of each.
  - 2. All traffic control signs must be in place and inspected at least 1 day in advance of the closure.

Multi-day closures notification signs shall be in place at least 3 days in advance of the closure. All signs must be covered when not in effect, and checked twice a day by the Worksite Traffic Supervisor when they are in effect.

- C. The Contractor shall be responsible for removal, relocation, or replacement of any traffic control device in the construction area which exists as part of the normal preconstruction traffic control scheme. Any such actions shall be performed by the Contractor under the supervision and in accordance with the instructions of the applicable highway department unless otherwise specified.
- D. The Engineer will consult with the Owner immediately on any vehicular or pedestrian safety or efficiency problem incurred as a result of construction of the project.
- E. The Contractor shall provide ready access to businesses and homes in the project area during construction. The Contractor shall be responsible for coordinating this work with affected homeowners.
- F. When conditions require the temporary installation of signs, pavement markings and traffic barriers for the protection of workers and traffic, the entire array of such devices shall be depicted on working drawings for each separate stage of work. These drawings shall be submitted to the Engineer for review and approval prior to commencement of work on the site.
- G. Precast concrete traffic barriers shall be placed adjacent to trenches and other excavations deeper than six inches below the adjacent pavement surface.

**PART 2      PRODUCTS (NOT USED)**

**PART 3      EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 01580**

### **PROJECT IDENTIFICATION AND SIGNS**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Furnish, install and maintain County project identification signs.
- B. Remove signs on completion of construction.
- C. Allow no other signs to be displayed except for traffic control and safety.

##### **1.02 PROJECT IDENTIFICATION SIGN (COUNTY)**

- A. One painted sign, of not less than 32 square feet (3 square meters) area, with painted graphic content to include:
  - 1. Title of Project.
  - 2. Name of Owner.
  - 3. Names and titles of authorities as directed by Owner.
  - 4. Prime Contractor.
- B. Graphic design, style of lettering and colors: As approved by the Engineer and subject to approval of the Owner.
- C. Erect on the site at a lighted location of high public visibility, adjacent to main entrance to site, as approved by the Engineer and the Owner

##### **1.03 INFORMATIONAL SIGNS**

- A. Painted signs with painted lettering, or standard products.
  - 1. Size of signs and lettering: as required by regulatory agencies, or as appropriate to usage.
  - 2. Colors: as required by regulatory agencies, otherwise of uniform colors throughout project.
- B. Erect at appropriate locations to provide required information.

**1.04 QUALITY ASSURANCE**

- A. Sign Painter: Professional experience in type of work required.
- B. Finishes, Painting: Adequate to resist weathering and fading for scheduled construction period.

**1.05 PUBLIC NOTIFICATION**

- A. Door Hangers: Manatee County Project Management shall generate and the General Contractor shall distribute door hangers to all residents who will be impacted by project construction.

1.0 Residents impacted include anyone who resides inside, or within 500 feet of project limits of construction.

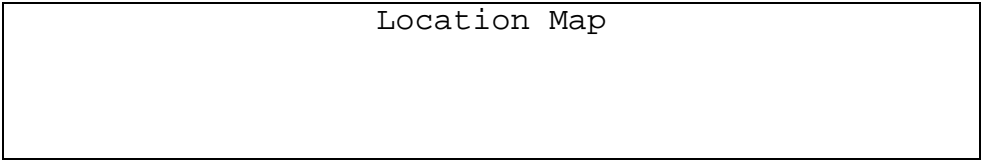
- B. Door Hangers shall be distributed prior to start of construction of the project. Hangers shall be affixed to doors of residents via elastic bands or tape.

EXAMPLE:

PLEASE PARDON THE INCONVENIENCE WHILE THE ROADWAY IS  
BEING RECONSTRUCTED IN YOUR NEIGHBORHOOD

This project consists of utility improvements and the reconstruction of?? Boulevard from U.S.??? to?? Street West. The project is expected to begin in August, 201X and be completed in July 201X.

Location Map



WE HOPE TO KEEP ANY INCONVENIENCE TO A MINIMUM. HOWEVER,  
IF YOU HAVE ANY PROBLEMS, PLEASE CONTACT THE FOLLOWING:

- A. Contractor  
Contractor Address  
Contractor Phone (Site Phone)
- B. Project Inspector  
Inspector Phone Number
- C. Project Manager

PM Address  
PM Phone No. & Ext.

AFTER HOURS EMERGENCY NUMBER - (941) 747-HELP  
THANK YOU FOR YOUR UNDERSTANDING AND PATIENCE  
MANATEE COUNTY GOVERNMENT - PROJECT MANAGEMENT  
DEPT.

**PART 2 PRODUCTS**

**2.01 SIGN MATERIALS**

- A. Structure and Framing: May be new or used, wood or metal, in sound condition structurally adequate to work and suitable for specified finish.
- B. Sign Surfaces: Exterior softwood plywood with medium density overlay, standard large sizes to minimize joints.
  - 1. Thickness: As required by standards to span framing members, to provide even, smooth surface without waves or buckles.
- C. Rough Hardware: Galvanized.
- D. Paint: Exterior quality, as specified in the Contract Documents.

**PART 3 EXECUTION**

**3.01 PROJECT IDENTIFICATION SIGN**

- A. Paint exposed surface or supports, framing and surface material; one coat of primer and one coat of exterior paint.
- B. Paint graphics in styles, size and colors selected.

**3.02 MAINTENANCE**

- A. The Contractor shall maintain signs and supports in a neat, clean condition; repair damages to structures, framing or sign.

**3.03 REMOVAL**

- A. The Contractor shall remove signs, framing, supports and foundations at completion of project.

**END OF SECTION**





## **SECTION 01590**

### **ENGINEER'S FIELD OFFICE**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Contractor shall furnish, install and maintain one temporary field office during the entire construction period for the sole use of the Engineer.

##### **1.02 OTHER REQUIREMENTS**

- A. Prior to installation of the Engineer's field office, the Contractor shall consult with the Engineer on location, access and related facilities.
- B. All site use approvals shall be obtained by the Contractor.
- C. Upon completion of construction, the Contractor shall remove the field office and restore the site to its original condition.

##### **1.03 REQUIREMENTS FOR FACILITIES**

- A. Construction:
  - 1. The field office shall be structurally sound, weather tight, with floors raised aboveground.
  - 2. At Contractor's option, portable or mobile buildings may be used.
- B. Office for Field Engineer:
  - 1. A separate office for sole use of the Engineer with secure entrance doors, key and lock shall be provided.
  - 2. Area: 250 sq. ft. minimum, with minimum dimension of 8 feet.
  - 3. Windows:
    - a. Minimum of three (3).
    - b. Operable sash and insect screens.
    - c. Locate field office to provide maximum view of construction areas.

4. Furnishings:
  - a. Two standard size chairs and desks with three drawers each.
  - b. One drafting table: 39"x72"x36" high, with one equipment drawer.
  - c. One metal, double-door storage cabinet with lock and key.
  - d. One plan rack to hold a minimum of six sets of project drawings.
  - e. One standard four-drawer legal-size metal filing cabinet with lock and key.
  - f. Six linear feet of bookshelves.
  - g. One swivel arm chair.
  - h. Two straight chairs.
  - i. One drafting table stool.
  - j. One waste basket.
  - k. One tackboard, 36"x30".
  - l. One fire extinguisher.
  - m. One first aid kit.
5. Services:
  - a. Adequate lighting.
  - b. Exterior lighting at entrance door.
  - c. Automatic heating and mechanical cooling equipment to maintain comfort conditions.
  - d. Minimum of four 110 volt duplex electric convenience outlets, at least one on each wall.
  - e. Electric distribution panel: Two circuits minimum 110 volt, 60 hertz service.
  - f. Convenient access to drinking water and toilet facilities.
  - g. Telephone: One private direct line instrument.
  - h. Fax: combination fax/duplicator.

## **PART 2 PRODUCTS**

### **2.01 MATERIALS, EQUIPMENT, FURNISHINGS**

- A. May be new or used, but must be serviceable, adequate for required purpose and must adhere to all applicable codes or regulations including the Manatee County Building Codes.

## **PART 3 EXECUTION**

### **3.01 PREPARATION**

- A. Fill and grade site as necessary for temporary structure

to provide positive surface drainage.

**3.02        INSTALLATION**

- A.    Construct temporary field office on proper foundation and provide connections for all utility services.
  - 1.    Secure portable or mobile building when used.
  - 2.    Provide steps and landings at entrance doors.

**END OF SECTION**



## **SECTION 01600**

### **MATERIAL AND EQUIPMENT**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Material and equipment incorporated into the work:
  - 1. Conform to applicable specifications and standards.
  - 2. Comply with size, make, type and quality specified, or as specifically approved in writing by the Engineer.
  - 3. Manufactured and Fabricated Products:
    - a. Design, fabricate and assemble in accordance with the best engineering and shop practices.
    - b. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
    - c. Two or more items of the same kind shall be identical and manufactured by the same manufacturer.
    - d. Products shall be suitable for service conditions.
    - e. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
  - 4. Do not use material or equipment for any purpose other than that for which it is specified.
  - 5. All material and equipment incorporated into the project shall be new.

##### **1.02 MANUFACTURER'S INSTRUCTIONS**

- A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including two copies to Engineer. Maintain one set of complete instructions at the job site during installation and until completion.

- B. Handle, install, connect, clean, condition and adjust products in strict accordance with such instructions and in conformity with specified requirements. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Engineer prior to proceeding. Do not proceed with work without clear instructions.

### **1.03 TRANSPORTATION AND HANDLING**

- A. Arrange deliveries of products in accordance with construction schedules, coordinate to avoid conflict with work and conditions at the site.
  - 1. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
  - 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals and that products are properly protected and undamaged.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage to products or packaging.

### **1.04 SUBSTITUTIONS AND PRODUCT OPTIONS**

Contractor's Options:

- 1. For products specified only by reference standard, select any product meeting that standard.
- 2. For products specified by naming one or more products or manufacturers and "or equal", Contractor must submit a request for substitutions of any product or manufacturer not specifically named in a timely manner so as not to adversely affect the construction schedule.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 01620**

### **STORAGE AND PROTECTION**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Provide secure storage and protection for products to be incorporated into the work and maintenance and protection for products after installation and until completion of Work.

##### **1.02 STORAGE**

- A. Store products immediately on delivery and protect until installed in the Work, in accord with manufacturer's instructions, with seals and labels intact and legible.
- B. Exterior Storage
  - 1. Provide substantial platform, blocking or skids to support fabricated products above ground to prevent soiling or staining.
    - a. Cover products, subject to discoloration or deterioration from exposure to the elements, with impervious sheet coverings. Provide adequate ventilation to avoid condensation.
    - b. Prevent mixing of refuse or chemically injurious materials or liquids.
- C. Arrange storage in manner to provide easy access for inspection.

##### **1.03 MAINTENANCE OF STORAGE**

- A. Maintain periodic system of inspection of stored products on scheduled basis to assure that:
  - 1. State of storage facilities is adequate to provide required conditions.
  - 2. Required environmental conditions are maintained on continuing basis.
  - 3. Surfaces of products exposed to elements are not adversely affected. Any weathering of products, coatings and finishes is not acceptable under requirements of these Contract Documents.

- B. Mechanical and electrical equipment which requires servicing during long term storage shall have complete manufacturer's instructions for servicing accompanying each item, with notice of enclosed instructions shown on exterior of package.
1. Equipment shall not be shipped until approved by the Engineer. The intent of this requirement is to reduce on-site storage time prior to installation and/or operation. Under no circumstances shall equipment be delivered to the site more than one month prior to installation without written authorization from the Engineer.
  2. All equipment having moving parts such as gears, electric motors, etc. and/or instruments shall be stored in a temperature and humidity controlled building approved by the Engineer until such time as the equipment is to be installed.
  3. All equipment shall be stored fully lubricated with oil, grease, etc. unless otherwise instructed by the manufacturer.
  4. Moving parts shall be rotated a minimum of once weekly to insure proper lubrication and to avoid metal-to-metal "welding". Upon installation of the equipment, the Contractor shall start the equipment, at least half load, once weekly for an adequate period of time to insure that the equipment does not deteriorate from lack of use.
  5. Lubricants shall be changed upon completion of installation and as frequently as required, thereafter during the period between installation and acceptance.
  6. Prior to acceptance of the equipment, the Contractor shall have the manufacturer inspect the equipment and certify that its condition has not been detrimentally affected by the long storage period. Such certifications by the manufacturer shall be deemed to mean that the equipment is judged by the manufacturer to be in a condition equal to that of equipment that has been shipped, installed, tested and accepted in a minimum time period. As such, the manufacturer will guaranty the equipment equally in both instances. If such a certification is not given, the equipment shall be judged to be defective. It shall be removed and replaced at the Contractor's expense.



**1.04        PROTECTION AFTER INSTALLATION**

- A.        Provide protection of installed products to prevent damage from subsequent operations. Remove when no longer needed, prior to completion of work.
- B.        Control traffic to prevent damage to equipment and surfaces.
- C.        Provide coverings to protect finished surfaces from damage.

**PART 2        PRODUCTS (NOT USED)**

**PART 3        EXECUTION (NOT USED)**

**END OF SECTION**



## SECTION 01700

### CONTRACT CLOSEOUT

#### PART 1 GENERAL

##### 1.01 REQUIREMENTS INCLUDED

- A. Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the work.

##### 1.02 SUBSTANTIAL COMPLETION

- A. The Contractor shall submit the following items when the Contractor considers the work to be substantially complete:
  - 1. A written notice that the work or designated portion thereof, is substantially complete.
  - 2. A list of items to be completed or corrected.
- B. Within a reasonable time after receipt of such notice, the Engineer and Owner shall make an inspection to determine the status of completion.
- C. Project record documents and operations and maintenance manuals must be submitted before the project shall be considered substantially complete.
- D. If the Engineer determines that the work is not substantially complete:
  - 1. The Engineer shall notify the Contractor in writing, stating the reasons.
  - 2. The Contractor shall remedy the deficiencies in the work and send a second written notice of substantial completion to the Engineer.
  - 3. The Engineer shall reinspect the work.
- E. When the Engineer finds that the work is substantially complete:
  - 1. He shall prepare and deliver to the Owner a tentative Certificate of Substantial Completion (Manatee County Project Management Form PMD-8) with a tentative list of the items to be completed or

- corrected before final payment.
2. The Engineer shall consider any objections made by the Owner as provided in Conditions of the Contract. When the Engineer considers the work substantially complete, he will execute and deliver to the Owner and the Contractor a definite Certificate of Substantial Completion (Manatee County Project Management Form PMD-8) with a revised tentative list of items to be completed or corrected.

### **1.03 FINAL INSPECTION**

- A. When the Contractor considered the work to be complete, he shall submit written certification stating that:
  1. The Contract Documents have been reviewed.
  2. The work has been inspected for compliance with Contract Documents.
  3. The work has been completed in accordance with Contract Documents.
  4. The equipment and systems have been tested in the presence of the Owner's representative and are operational.
  5. The work is completed and ready for final inspection.
- B. The Engineer shall make an inspection to verify the status of completion after receipt of such certification.
- C. If the Engineer determines that the work is incomplete or defective:
  1. The Engineer shall promptly notify the Contractor in writing, listing the incomplete or defective work.
  2. The Contractor shall take immediate steps to remedy the stated deficiencies and send a second written certification to Engineer that the work is complete.
  3. The Engineer shall reinspect the work.
- D. Upon finding the work to be acceptable under the Contract Documents, the Engineer shall request the Contractor to make closeout submittals.

- E. For each additional inspection beyond a total of three (3) inspections for substantial and final completion due to the incompleteness of the work, the Contractor shall reimburse the Owner for the Engineer's fees.

#### **1.04 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER**

- A. Project Record Documents (prior to substantial completion).
- B. Operation and maintenance manuals (prior to substantial completion).
- C. Warranties and Bonds.
- D. Evidence of Payment and Release of Liens: In accordance with requirements of General and Supplementary Conditions.
- E. Certification letter from Florida Department of Transportation and Manatee County Department of Transportation, as applicable.
- F. Certificate of Insurance for Products and Completed Operations.
- G. Final Reconciliation, Warranty Period Declaration, and Contractor's Affidavit (Manatee County Project Management Form PMD-9).

#### **1.05 FINAL ADJUSTMENT OF ACCOUNTS**

- A. Submit a final statement of accounting to the Engineer.
- B. Statement shall reflect all adjustments to the Contract Sum:
  - 1. The original Contract Sum.
  - 2. Additions and deductions resulting from:
    - a. Previous Change Orders
    - b. Unit Prices
    - c. Penalties and Bonuses
    - d. Deductions for Liquidated Damages
    - e. Other Adjustments
  - 3. Total Contract Sum, as adjusted.
  - 4. Previous payments.
  - 5. Sum remaining due.
- C. Project Management shall prepare a final Change Order, reflecting approved adjustments to the Contract Sum which

were not previously made by Change Orders.

**1.06 FINAL APPLICATION FOR PAYMENT**

- A. Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 01710**

### **CLEANING**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Execute cleaning during progress of the work and at completion of the work, as required by the General Conditions.

##### **1.02 DISPOSAL REQUIREMENTS**

- A. Conduct cleaning and disposal operations to comply with all Federal, State and Local codes, ordinances, regulations and anti-pollution laws.

#### **PART 2 PRODUCTS**

##### **2.01 MATERIALS**

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

#### **PART 3 EXECUTION**

##### **3.01 DURING CONSTRUCTION**

- A. Execute periodic cleaning to keep the work, the site and adjacent properties free from accumulation of waste materials, rubbish and wind-blown debris, resulting from construction operations.
- B. Provide on-site containers for the collection of waste materials, debris and rubbish.
- C. Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

**3.02 DUST CONTROL**

- A. Clean interior spaces prior to the start of finish painting and continue cleaning on an as-needed basis until painting is finished.
- B. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly-coated surfaces.

**3.03 FINAL CLEANING**

- A. Employ skilled workmen for final cleaning.
- B. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
- C. Prior to final completion or Owner occupancy, Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces and all work areas to verify that the entire work is clean.

**END OF SECTION**



## **SECTION 01720**

### **PROJECT RECORD DOCUMENTS**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Contractor shall maintain at the site for the Owner one record copy of:
  - 1. Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other modifications to the Contract.
  - 5. Engineer's field orders or written instructions.
  - 6. Approved shop drawings, working drawings and samples.
  - 7. Field test records.
  - 8. Construction photographs.

##### **1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES**

- A. Store documents and samples in Contractor's field office apart from documents used for construction.
  - 1. Provide files and racks for storage of documents.
  - 2. Provide locked cabinet or secure storage space for storage of samples.
- B. File documents and samples in accordance with CSI format.
- C. Maintain documents in a clean, dry, legible, condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by the Engineer.

##### **1.03 MARKING DEVICES**

- A. Provide felt tip marking pens for recording information in the color code designated by the Engineer.

##### **1.04 RECORDING**

- A. Label each document "PROJECT RECORD" in neat large printed letters.

- B. Record information concurrently with construction progress.
- C. Do not conceal any work until required information is recorded.
- D. Drawings - Legibly mark to record actual construction:
  - 1. All underground piping with elevations and dimensions; Changes to piping location; Horizontal and vertical locations of underground utilities and appurtenances (referenced to permanent surface improvements. Actual installed pipe material, class, etc.). Locations of drainage ditches, swales, water lines and force mains shall be shown every 200 feet (measured along the centerline) or alternate lot lines, whichever is closer. Dimensions at these locations shall indicate distance from centerline of right-of-way to the facility.
  - 2. Field changes of dimension and detail.
  - 3. Changes made by Field Order or by Change Order.
  - 4. Details not on original contract drawings.
  - 5. Equipment and piping relocations.
  - 6. Locations of all valves, fire hydrants, manholes, water and sewer services, water and force main fittings, underdrain cleanouts, catch basins, junction boxes and any other structures located in the right-of-way or easement, shall be located by elevation and by station and offset based on intersection P.I.'s and centerline of right-of-way. For facilities located on private roads, the dimensioning shall be from centerline of paving or another readily visible baseline.
  - 7. Elevations shall be provided for all manhole rim and inverts; junction box rim and inverts; catch basin rim and inverts; and baffle, weir and invert elevations in control structures. Elevations shall also be provided at the PVI's and at every other lot line or 200 feet, whichever is less, of drainage swales and ditches. Bench marks and elevation datum shall be indicated.

8. Slopes for pipes and ditches shall be recalculated, based on actual field measured distances, elevations, pipe sizes, and type shown. Cross section of drainage ditches and swales shall be verified.
9. Centerline of roads shall be tied to right-of-way lines. Elevation of roadway centerline shall be given at PVI's and at all intersections.
10. Record drawings shall show bearings and distances for all right-of-way and easement lines, and property corners.
11. Sidewalks, fences and walls, if installed at the time of initial record drawing submittal, shall be located every 200 feet or alternate lot lines, whichever is closer. Dimensions shall include distance from the right-of-way line and the back of curb and lot line or easement line.
12. Sanitary sewer mainline wyes shall be located from the downstream manhole. These dimensions shall be provided by on-site inspections or televising of the sewer following installation.
13. Elevations shall be provided on the top of operating nuts for all water and force main valves.
14. Allowable tolerance shall be  $\pm 6.0$  inches for horizontal dimensions. Vertical dimensions such as the difference in elevations between manhole inverts shall have an allowable tolerance of  $\pm 1/8$  inch per 50 feet (or part thereof) of horizontal distance up to a maximum tolerance of  $\pm 2$  inch.
15. Properly prepared record drawings on mylar, together with two copies, shall be certified by a design professional (Engineer and/or Surveyor registered in the State of Florida), employed by the Contractor, and submitted to the Owner/Engineer.

E. Specifications and Addenda; Legibly mark each Section to record:

1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
2. Changes made by field order or by change order.

F. Shop Drawings (after final review and approval):

1. Five sets of record drawings for each process equipment, piping, electrical system and instrumentation system.

#### **1.05 SUBMITTAL**

- A. Prior to substantial completion and prior to starting the bacteria testing of water lines, deliver signed and sealed Record Documents and Record Drawings to the Engineer. These will be reviewed and verified by the inspector. If there are any required changes or additions, these shall be completed and the entire signed and sealed set resubmitted prior to final pay application.
- B. The Contractor shall employ a Professional Engineer or Surveyor registered in the State of Florida to verify survey data and properly prepare record drawings. Record drawings shall be certified by the professional(s) (Engineer or Surveyor licensed in Florida), as stipulated by the Land Development Ordinance and submitted on signed and dated mylar drawings together with a recordable compact disk (CD).
- C. The CD shall contain media in AutoCAD Version 2005 or later, or in any other CAD program compatible with AutoCAD in DWG or DXF form. All fonts, line types, shape files or other pertinent information used in the drawing and not normally included in AutoCAD shall be included on the media with a text file or attached noted as to its relevance and use.
- D. Accompany submittal with transmittal letter, containing:
  1. Date.
  2. Project title and number.
  3. Contractor's name and address.
  4. Title and number of each Record Document.
  5. Signature of Contractor or his authorized representative.

Note: The data required to properly prepare these record drawings shall be obtained at the site, at no cost to the County by the responsible design professional or his/her duly appointed representative. The appointed representative shall be a qualified employee of the responsible design professional or a qualified inspector retained by the responsible design professional on a project-by-project basis.

**PART 2       STANDARDS**

**2.01       MINIMUM RECORD DRAWING STANDARDS FOR ALL RECORD  
DRAWINGS SUBMITTED TO MANATEE COUNTY**

- A.    Record drawings shall be submitted to at least the level of detail in the contract documents. It is anticipated that the original contract documents shall serve as at least a background for all record information. Original drawings in CAD format may be requested of the Engineer.
- B.    Drawings shall meet the criteria of paragraph 1.04 D above.

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**



## **SECTION 01730**

### **OPERATING AND MAINTENANCE DATA**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under Contract.
- B. Prepare operating and maintenance data as specified in this and as referenced in other pertinent sections of Specifications.
- C. Instruct Owner's personnel in maintenance of products and equipment and systems.
- D. Provide three (3) sets of operating and maintenance manuals for each piece of equipment provided within this Contract.

##### **1.02 FORM OF SUBMITTALS**

- A. Prepare data in form of an instructional manual for use by Owner's personnel.
- B. Format:
  - 1. Size: 8-1/2 inch x 11 inch
  - 2. Paper: 20 pound minimum, white, for typed pages
  - 3. Text: Manufacturer's printed data or neatly typewritten
  - 4. Drawings:
    - a. Provide reinforced punched binder tab, bind in with text.
    - b. Fold larger drawings to size of text pages.
  - 5. Provide fly-leaf for each separate product or each piece of operating equipment.
    - a. Provide typed description of product and major component parts of equipment.
    - b. Provide indexed tabs.
  - 6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS".  
List:
    - a. Title of Project.
    - b. Identity of separate structures as applicable.
    - c. Identity of general subject matter covered in the manual.

C. Binders:

1. Commercial quality three-ring binders with durable and cleanable plastic covers.
2. Maximum ring size: 1 inch.
3. When multiple binders are used, correlate the data into related consistent groupings.

**1.03      MANUAL FOR EQUIPMENT AND SYSTEMS**

- A. Submit three copies of complete manual in final form.
- B. Content for each unit of equipment and system, as appropriate:
1. Description of unit and component parts.
    - a. Function, normal operating characteristics and limiting conditions.
    - b. Performance curves, engineering data and tests.
    - c. Complete nomenclature and commercial number of replaceable parts.
  2. Operating Procedures:
    - a. Start-up, break-in, routine and normal operating instructions.
    - b. Regulation, control, stopping, shut-down and emergency instructions.
    - c. Summer and winter operating instructions.
    - d. Special operating instructions.
  3. Maintenance Procedures:
    - a. Routine operations.
    - b. Guide to "trouble-shooting".
    - c. Disassembly, repair and reassembly.
    - d. Alignment, adjusting and checking.
  4. Servicing and lubricating schedule.
    - a. List of lubricants required.
  5. Manufacturer's printed operating and maintenance instructions.
  6. Description of sequence of operation by control manufacturer.



7. Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for maintenance.
    - a. List of predicted parts subject to wear.
    - b. Items recommended to be stocked as spare parts.
  8. As installed control diagrams by controls manufacturer.
  9. Each contractor's coordination drawings.
    - a. As installed color coded piping diagrams.
  10. Charts of valve tag numbers, with location and function of each valve.
  11. List of original manufacturer's spare parts, manufacturer's current prices and recommended quantities to be maintained in storage.
  12. Other data as required under pertinent sections of specifications.
- C. Content, for each electric and electronic system, as appropriate:
1. Description of system and component parts.
    - a. Function, normal operating characteristics and limiting conditions.
    - b. Performance curves, engineering data and tests.
    - c. Complete nomenclature and commercial number of replaceable parts.
  2. Circuit directories of panelboards.
    - a. Electrical service.
    - b. Controls.
    - c. Communications.
  3. As-installed color coded wiring diagrams.
  4. Operating procedures:
    - a. Routine and normal operating instructions.
    - b. Sequences required.
    - c. Special operating instructions.

5. Maintenance procedures:
    - a. Routine operations.
    - b. Guide to "trouble-shooting".
    - c. Disassembly, repair and reassembly.
    - d. Adjustment and checking.
  6. Manufacturer's printed operating and maintenance instructions.
  7. List of original manufacture's spare parts, manufacturer's current prices and recommended quantities to be maintained in storage.
  8. Prepare and include additional data when the need for such data becomes apparent during instruction of Owner's personnel.
- D. Prepare and include additional data when the need for such data becomes apparent during instruction on Owner's personnel.
- E. Additional requirements for operating and maintenance data: Respective sections of Specifications.

#### **1.04 SUBMITTAL SCHEDULE**

- A. Submit one copy of completed data in final form fifteen days prior to substantial completion.
1. Copy will be returned after substantial completion, with comments (if any).
- B. Submit two copies of approved data in final form. Final acceptance will not be provided until the completed manual is received and approved.

#### **1.05 INSTRUCTION OF OWNER'S PERSONNEL**

- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in operation, adjustment and maintenance of products, equipment and systems.
- B. Operating and maintenance manual shall constitute the basis of instruction.
1. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

PART 2      PRODUCTS (NOT USED)

PART 3      EXECUTION (NOT USED)

END OF SECTION



## **SECTION 01740**

### **WARRANTIES AND BONDS**

#### **PART 1 GENERAL**

##### **1.01 REQUIREMENTS INCLUDED**

- A. Compile specified warranties and bonds.
- B. Compile specified service and maintenance contracts.
- C. Co-execute submittals when so specified.
- D. Review submittals to verify compliance with Contract Documents.
- E. Submit to Engineer for review and transmittal to Owner.

##### **1.02 SUBMITTAL REQUIREMENTS**

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers and subcontractors.
- B. Number of original signed copies required: Two each.
- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
  - 1. Product or work item.
  - 2. Firm, with name of principal, address and telephone number.
  - 3. Scope.
  - 4. Date of beginning of warranty, bond or service and maintenance contract.
  - 5. Duration of warranty, bond or service maintenance contract.
  - 6. Provide information for Owner's personnel:
    - a. Proper procedure in case of failure.
    - b. Instances which might affect the validity of warranty or bond.
  - 7. Contractor, name of responsible principal, address and telephone number.

##### **1.03 FORM OF SUBMITTALS**

- A. Prepare in duplicate packets.

B. Format:

1. Size 8-1/2 inch x 11 inch punched sheets for standard 3-ring binder. Fold larger sheets to fit into binders.
2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". List:
  - a. Title of Project.
  - b. Name of Contractor.

C. Binders: Commercial quality, three-ring, with durable and cleanable plastic covers.

**1.04 TIME OF SUBMITTALS**

- A. Make submittals within ten days after date of substantial completion and prior to final request for payment.
- B. For items of work, where acceptance is delayed materially beyond date of substantial completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

**1.05 SUBMITTALS REQUIRED**

- A. Submit warranties, bonds, service and maintenance contracts as specified in respective sections of Specifications.
- B. Approval by the Owner of all documents required under this section is a pre-requisite to requesting a final inspection and final payment

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

## **SECTION 02050**

### **DEMOLITION**

#### **PART 1 GENERAL**

##### **1.01 DESCRIPTION OF WORK**

- A. This Section includes demolition, debris removal and items to be salvaged as indicated on the Drawings and as specified herein.
- B. Demolition items consist of the following:
  - 1. Removal of: pipes, valves, slide gates, grating, handrails, concrete caps, lake intake structures, portions of earth berms for the North reclaimed water storage pond, concrete, asphalt, sidewalk, various sizes and lengths of yard piping, and other items as shown on the drawings and as specified herein.
- C. Items to be salvaged and turned over to the Owner shall be identified by the Owner during the preconstruction meeting.

##### **1.02 QUALITY ASSURANCE**

- A. Accomplish all demolition work so there is no injury to any persons and no damage to adjacent structures or property. All demolition methods shall be in full compliance with municipal, county, state, and federal ordinances. Demolition work shall comply with the requirements of the Occupational Safety and Health Administration (OSHA).
- B. The Contractor shall comply with all municipal, county, state and federal ordinances regarding the disposal of rubble, scrap metal, and refuse.
- C. Demolition procedures shall provide for safe conduct of the work, protection of property which is to remain undisturbed, and coordination with other work in progress.

##### **1.03 JOB CONDITIONS**

- A. It shall be the responsibility of the Contractor to visit the site and inspect the nature and condition of

the items to be removed and salvaged before submitting his bid.

- B. Dust Control: Control the amount of dust resulting from demolition to prevent the spread of dust to occupied portions of buildings and to avoid creation of a nuisance in the surrounding area. Do not use water when it will result in, or create, hazardous or objectionable conditions such as flooding and pollution.
- C. Protection of Existing Work: Protect existing work. Work damaged by the Contractor shall be repaired to match existing work.
- D. No interference with plant operations: Demolition work shall be scheduled and conducted so there is no interference with normal plant operations or deliveries.

## **PART 2 PRODUCTS**

### **2.01 REPAIR AND REPLACEMENT MATERIALS**

- A. Materials used in the repair or replacement of existing work to remain shall be identical or equal to the materials used in existing work when new.

## **PART 3 EXECUTION**

### **3.01 STRUCTURES AND BUILDINGS**

- A. Remove all parts of existing structures to be demolished to a minimum depth of 3-ft below grade unless otherwise shown on the drawings. Structures left below grade shall be punctured to allow water to pass through and prevent flotation.

### **3.02 EQUIPMENT**

- A. Completely remove equipment which is designated to be removed.
- B. Remove concrete equipment bases if the existing bases are not to be used for new equipment.
- C. Completely remove isolated equipment bases.



### **3.03 PIPING**

- A. Completely remove piping, conduit, and wiring in structures and buildings which are to be demolished, partially demolished, and where otherwise designated to be removed as shown on the Drawings. When not indicated on the Drawings, the removal of said piping, conduit and wiring shall be a minimum of 5-feet from the outside of the structure or building. The Contractor shall schedule underground pipe removal and new pipe installation in order to minimize disruption of the existing piping system and reduce bypass pumping.
- B. Underground piping, conduit, and wiring which are to be abandoned and do not interfere with new work may be left in place, unless otherwise shown on the Drawings. Plug and seal ends of underground piping to be abandoned. Grout fill abandoned pipes in accordance with plans. Do not leave abandoned branches of piping and wiring "live". Isolate abandoned branches by closing branch valve at main or by disconnecting branch at main. Plug, cap, and seal active branch at isolating valve or point of disconnection.
- C. Properly disconnect, seal and plug utility services to structures and buildings which are completely demolished. Properly disconnect, seal, and plug utility lines within structures and buildings which are partially demolished.

### **3.04 STORAGE AND REMOVAL OF EXCAVATED MATERIAL**

- A. Suitable excavated material required for filling and backfilling operations may be stockpiled on the job site.
- B. Excavated material shall be separated into at least 4 stockpiles:
  - 1. Acceptable fill for the bottoms of the Reject storage Pond and the North reclaimed water storage pond.
  - 2. Acceptable fill for the earth berms for the Reject storage pond and North reclaimed water storage pond.

3. Acceptable topsoil that can be used for the growth of vegetation, including planted grass, sod, flowers, bushes, trees, etc.
  4. Unsuitable excavation material.
- C. Remove unsuitable materials from the job site as soon as unsuitable materials are excavated.
  - D. Excavated suitable surplus materials shall remain the Owner's property and shall be stockpiled at the location (s) on the treatment plant site designated by the Owner.

### **3.05 DISPOSAL**

- E. Equipment, piping, and materials which are designated to remain the property of the Owner shall be moved to a location within the project site designated by the Owner.
- F. All removed equipment, piping, and materials not specifically designated to remain the property of the Owner shall become the property of the Contractor and shall be removed from the site.
- G. Do not allow debris and rubbish to accumulate on the site. Remove debris and rubbish from the site.
- H. If the Contractor uses the Manatee County Sanitary Landfill for disposal, the Contractor shall be required to pay a tipping fee when crossing the landfill weighing scales.

### **3.06 FILLING**

- A. Backfill excavations resulting from demolition.
- B. Backfill excavations which will not be beneath new structures, buildings, piping, or other new work as specified in this paragraph.
- C. Backfill excavations more than three feet deep or more than five cubic yards in volume as specified in Section 02200 - Earthwork.
- D. Place and compact backfill in other excavations to produce an adequate foundation for grassing.

**3.07        CLEAN-UP**

- A.    Clean-up in areas where other work is to be done following demolition shall be as specified in the applicable Sections.
- B.    Clean-up the job site in areas where no other work is to be done under this Contract following demolition. Remove all debris and rubbish, temporary facilities, and equipment. Level surface irregularities to eliminate depressions. Leave the work in a neat and presentable condition.

**END OF SECTION**



## **SECTION 02110**

### **CLEARING AND GRUBBING**

#### **PART 1 GENERAL**

##### **1.01 DESCRIPTION OF WORK**

- A. Traffic: Conduct site-clearing operations to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks, or other occupied or used facilities without written permission from the Owner.
- B. Protection: Provide temporary fences, barricades, coverings, or other protection to preserve existing items indicated to remain and to prevent injury or damage to persons or property. Provide protection for adjacent properties as required.
- C. Restore or replace damaged work to existing or better condition than prior to start of Work.
- D. Protect existing trees and vegetation from physical damage. Do not store materials or equipment within tree drip lines. Use licensed arborist for tree damage repair. Replace damaged trees that cannot be restored to full growth, as determined by arborist, unless otherwise acceptable to the Owner.
- E. Existing Services: Locations indicated are approximate; determine exact location before commencing Work. Coordinate with local utility service requirements and comply with their instructions.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION**

##### **3.01 GENERAL**

- A. Site Clearing: Remove trees, shrubs, grass, and other vegetation, improvements, or obstructions as indicated or that interfere with new construction. Removal includes digging out stumps and roots, together with subsequent off-site disposal.
- B. Strip and stockpile topsoil that will be reused in the Work.

- C. Remove existing improvements, both above-grade and below-grade, to extent indicated on the drawings or as otherwise required to permit new construction.
- D. Salvageable Items: Carefully remove items indicated to be salvaged and store on premises where indicated or directed by the Owner.
- E. Control air pollution caused by dust and dirt; comply with governing regulations.
- F. Fill depressions and voids resulting from site-clearing operations. Using satisfactory soil materials, place in maximum 6-inch-deep horizontal layers and compact each layer to density of surrounding original ground.
- G. Grade ground surface to conform to required contours and to provide surface drainage.
- H. Dispose of waste materials, including trash, debris, and excess topsoil, off property.
- I. Burning of any waste materials on site is not permitted.

**END OF SECTION**

## **SECTION 02200**

### **EARTHWORK**

#### **PART 1 GENERAL**

##### **1.01 DESCRIPTION OF WORK**

- A. This Section includes digging of excavations for structures, piping, ponds and roadways; backfilling around structures and piping; shaping and contouring the ground surface to conform to established grades and elevations; compacting of earth or rock materials to specified densities; bracing, sheeting and shoring; dewatering; removal of surplus excavated materials; and related work as shown on the Drawings and as specified herein.

##### **1.02 DEFINITIONS**

- A. Excavation: Removal of earth and rock to form cavities for the construction of foundations and structures and to form trenches for the installation of piping or conduits.
- B. Cavity: Formed by the removal of earth and rock.
- C. Earth: Unconsolidated material in the crust of the earth derived by weathering and erosion. Earth includes:
  - 1. Materials of both inorganic and organic origin
  - 2. Boulders less than 1/3 cubic yard in volume, gravel, sand, silt, and clay
  - 3. Materials which can be excavated with a backhoe, trenching machine, drag line, clam shell, bulldozer, highlift, or similar excavating equipment without the use of explosives, rock rippers, rock hammers, or jack hammers
- D. Rock: A natural aggregate of mineral particles connected by strong and permanent cohesive forces. Rock includes:
  - 1. Limestone, sandstone, dolomite, granite, marble, and lava
  - 2. Boulders 1/3 cubic yard or more in volume

- 3. Materials which cannot be excavated by equipment which is used to remove earth overburden without the use of explosives, rock rippers, rock hammers, or jack hammers.
- E. Undercutting: Excavation of rock and unsuitable earth below the bottom of a foundation, structure, pipe or conduit to be constructed or installed.
- F. Subgrade: Undisturbed bottom of an excavation
- G. Bedding: Earth placed in trench to support pipe and conduit.
- H. Backfill and Fill: Earth placed around structures from the bottom of an excavation to finished grade, or to the subbase of pavement. Earth placed in a trench from the top of bedding to finished grade, or to subbase of pavement.
- I. Structural Compact Fill: Required to establish the finished grade should consist of clean cohesionless fill comprising the SP to SP-SM unified soil classification or AASHTO A-3 Classification. Each lift, which should not exceed 12 inches, should be uniformly compacted to not less than 95% of the modified proctor maximum density.
- J. Topsoil: Earth containing sufficient organic materials to support the growth of grass.

#### **1.03 JOB CONDITIONS**

- A. Carefully maintain bench marks, monuments and other reference points, and if disturbed or destroyed, replace as directed.
- B. Should the Contractor encounter unusual subsurface and/or latent conditions at the site, he shall immediately give notice to the Owner and Engineer of such conditions before they are disturbed.

#### **1.04 QUALITY ASSURANCE**

- A. Codes and Standards: Perform excavation and landfill work in compliance with applicable requirements of governing authorities having jurisdiction.
- B. Testing and Inspection Service: The Owner will retain a Soils Engineer to perform soil testing and inspection



service for quality control testing of earthwork operations. Tests revealing satisfactory results will be paid for by the Owner. The cost of tests revealing unsatisfactory results will be deducted from monies due to the Contractor.

## **PART 2 PRODUCTS**

### **2.01 MATERIALS**

- A. Earth for General Fill and Backfill: Earth used for fill or backfill shall be of such gradation and moisture content that it will compact to the specified density and remain stable.
- B. Pipe Bedding: Pipe bedding material for Type A-2 trenches shall be No. 57 crushed stone with gradation as noted in Table 1 of Section 901 of the FDOT Standard Specifications.
- C. Pipe Cover Material: Pipe cover material shall consist of durable particles ranging in size from fine to coarse (No. 200 to 1-inch) in size, in a substantially uniform combination. Unwashed bank run sand and crushed bank-run gravel will be considered generally acceptable. Bedding material may be used for cover material.
- D. Special Backfill: Special backfill shall be the following soils, classified by the Unified Soil Classification System, ASTM D-2487:

<u>Group Symbols</u>	<u>Typical Name</u>
GW	Well-graded gravels and gravel-sand mixtures, little or no fines
GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
SW	Well-graded sands and gravelly sands, little or no fines
SP	Poorly graded sands and gravelly sands, little or no fines

- E. Suitable Backfill: Suitable backfill shall be the following soils, classified by the Unified Soil Classification System, ASTM D-2487:

<u>Group Symbols</u>	<u>Typical Name</u>
GW	Well-graded gravels and gravel-sand mixtures, little or no fines
GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
GM	Silty gravels, gravel-sand-silt mixtures
GC	Clayey gravels, gravel-sand-clay mixtures
SW	Well-graded sands and gravelly sands, little or no fines
SP	Poorly graded sands and gravelly sands, little or no fines
SM	Silty sands, sand-silt mixtures
SC	Clayey sands, sand-clay mixtures
ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays

F. Unsuitable Materials: Materials which are unsuitable for backfill include stones greater than 6-inches in their largest dimension, pavement, rubbish, debris, wood, metal, plastic, and the following soils, classified by the Unified Soil Classification System, ASTM D-2487:

<u>Group Symbols</u>	<u>Typical Name</u>
OL	Organic silts and organic silty clays of low plasticity
MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
CH	Inorganic clays of high plasticity, fat clays

OH                      Organic clays of medium to high plasticity

PT                      Peat, muck, and other highly organic soils

- G.     Structural/Pond Compact Fill: Preparation of the subgrade prior to backfilling shall necessitate removal and replacement of silts as well as the very loose silty soils on the flanks of the structure or pond (see the Geotechnical Report for further requirements). The entire footprint, plus a margin of at least 5 feet outside the perimeter shall be stripped down to the existing elevations, including over-excavation of any accumulated sediments, followed by proof-rolling with heavy vibratory compaction equipment. Compaction shall consist of no greater than 12-inch lifts throughout the entire area plus a margin of not less than 5 feet beyond the perimeters. The perimeter area for the ponds and structures shall be densified at the bottom of footing elevations. Compaction shall continue so as to develop a uniform density of not less than 95% of the modified proctor maximum dry density per ASTM D-1557. Compaction tests shall be conducted at intervals of no less than 1 test for each 2500 square feet and each 50 feet of foundation perimeter at a depth of 1 foot and at the compacted subgrade elevation.

### **PART 3       EXECUTION**

#### **3.01       PROTECTION OF EXISTING FACILITIES**

- A.     Support and protect all poles, fences, utility pipes, wire, conduits, buildings and structures.
- B.     Proceed with caution during excavation so the exact location of underground utilities and structures, both known and unknown, may be determined. Contractor shall be responsible for the repair of utilities and structures when broken or otherwise damaged.
- C.     Wherever water, or other pipes or conduits cross the excavation, the Contractor shall support said pipes and conduits without damage to them and without interrupting this Contract. The manner of supporting such pipes, or similar items, shall be subject to the approval of the Engineer.
- D.     When utilities that have to be removed or relocated are encountered within the areas of operations, the

Contractor shall notify the Owner in ample time for the necessary measure to be taken to prevent interruption of the service.

- E. The Contractor shall so conduct the work that no equipment, material, or debris will be placed or allowed to fall upon private property in the vicinity of the work, unless he shall have first obtained the property Owner's written consent to do so and shall have shown said written consent to the Owner.
- F. All excavated material shall be piled in a manner that will not obstruct driveways. Hydrants under pressure, valve pit covers, valve boxes, curb stop boxes, or other utility controls shall be left unobstructed and accessible until the work is completed. Drainageways shall be kept clear or other satisfactory provisions made for drainage.
- G. Natural watercourses shall not be obstructed, except where specifically permitted for the construction of outfall and subaqueous crossings.

### **3.02 CLEARING AND GRUBBING**

- A. Before excavating, clear and remove logs, stumps, brush, vegetation, rubbish, and other perishable matter from the project site. Clearing and grubbing shall be in accordance with FDOT "Standard Specification for Road and Bridge Construction" Sections 110 and 120.
- B. Do not remove or damage trees that do not interfere with the finished work. Completely remove trees required to be removed, including stumps and roots. Replace trees removed unnecessarily. Properly treat damaged trees which can be saved.

### **3.03 STRIPPING AND STOCKPILING TOPSOIL**

- A. Strip topsoil and vegetation from the areas to be excavated. Clean topsoil may be stockpiled for reuse; the Contractor shall coordinate with the Owner for location of excavated stockpiled materials.

### **3.04 EXCAVATING**

- A. Make excavations to elevations and dimensions necessary to permit bracing, sheeting, erection of forms, inspection of foundation and installation of piping or conduits. Excavate trenches to the required alignment,

depth and width. Excavate trenches in advance of pipe and conduit installation only as far as necessary to provide proper alignment and grade. Plan trenching operations to cause a minimum of danger to adjacent property and a minimum of inconvenience to the public.

- B. The width of trenches at the top of the pipe shall be ample to permit the pipe to be laid and joined properly and to allow the backfill to be placed and compacted as specified. Maximum trench width shall be such that design loadings on pipe will not be exceeded. Trenches shall be of such extra width, when required, to permit the placement of supports, sheeting, bracing, and appurtenances.
- C. Depth of trenches shall be such as to allow installation of pipelines at the grades or elevations shown.
- D. Trees, boulders, and other surface encumbrances, located so as to create a hazard to anyone involved in the excavation work or who is in the vicinity of the work at anytime during operations, shall be removed or made safe before excavating is begun.
- E. Contractor shall be responsible for the determination of the angle of repose of the soil in which the excavating is to be done. Excavate all slopes to at least the angle of repose except for areas where solid rock allows for line drilling or presplitting.
- F. Sides, slopes, and faces of all excavations shall meet accepted engineering requirements by scaling, benching, barricading, rock bolting, wire meshing, or other equally effective means. Give special attention to slopes which may be adversely affected by weather or moisture content.
- G. Flatten the excavation sides when an excavation has water conditions, silty materials, loose boulders, and areas where erosion and slide planes appear.
- H. Shore or otherwise support sides of excavations in hard or compact soil when the excavation is more than five feet in depth. In lieu of shoring, the sides of the excavation above the five-foot level may be sloped to preclude collapse, but shall not be steeper than a one-foot rise to each 1/2-foot horizontal.
- I. Use diversion ditches, dikes, or other suitable means to prevent surface water from entering an excavation

and to provide adequate drainage of the area adjacent to the excavation. Do not allow water to accumulate in an excavation. If possible, the grade should be away from the excavation.

- J. Excavations shall be inspected by a competent Contractor's representative after every rainstorm or other hazard-increasing occurrence, and the protection against slides and cave-ins shall be increased if necessary.
- K. Do not store excavated or other material nearer than four feet from the edge of any excavation. Store and retain materials to prevent them from falling or sliding back into the excavation. Install substantial stop logs or barricades when mobile equipment is utilized or allowed adjacent to excavations.

### **3.05 DEWATERING**

- A. Keep excavations free from water until foundations, structures, and piping are completed and will safely withstand forces generated by water. Provide sufficient dewatering equipment and make proper arrangements for the disposal of water from dewatering operation. Dewatering shall not damage property, create nuisances, or interfere with other work. Do not use sanitary sewers for the disposal of water from dewatering operations.

### **3.06 SHEETING**

- A. The Contractor has the option of sheeting excavations.
- B. Supporting systems, such as piling, cribbing, shoring, and bracing shall be designed by a qualified Contractor's representative and meet accepted engineering requirements. When tie rods are used to restrain the top of sheeting or other retaining systems, securely anchor the tie rods well back of the angle of repose. When tight sheeting or sheet piling is used, assume full loading due to groundwater table, unless prevented by weep holes or drains or other means. Provide additional stringers, ties, and bracing to allow for any necessary temporary removal of individual supports.
- C. Materials used for sheeting, sheet piling, cribbing, bracing, shoring and underpinning shall be in good,

serviceable condition. Timbers shall be sound, free from large or loose knots, and of proper dimensions.

- D. Take special precautions in sloping or shoring the sides of excavations adjacent to a previously backfilled excavation or a fill, particularly when the separation is less than the depth of the excavation. Pay particular attention to joints and seams of material comprising a face and to the slope of such seams and joints.
- E. If it is necessary to place or operate power shovels, derricks, trucks, materials, or other heavy objects on a level above or near an excavation, sheet-pile, shore, and brace the side of the excavation as necessary to resist the extra pressure due to such superimposed loads.
- F. If the stability of adjoining buildings or walls is endangered by excavations, provide shoring, bracing, or underpinning as necessary to ensure the safety of adjoining buildings or walls. Such shoring, bracing or underpinning shall be inspected daily or more often, as conditions warrant, by a competent Contractor's representative and the protection effectively maintained.
- G. The Contractor shall be held responsible for the sufficiency of all sheeting and bracing used, and for all damage to persons or property resulting from the improper quality, strength, placing, maintaining, or removing of the same. This includes damage to trees, sidewalks, and other property on the project site as well as on the private grounds.
- H. Drive sheeting ahead of excavation. Do not remove sheeting until the excavation backfill has reached within two feet of the top of the excavation, except that the lower course of sheeting may be removed from a double sheeted excavation. When sheeting is drawn, completely fill all cavities remaining in or adjoining the excavation. When sheeting is left in place, completely fill all cavities behind such sheeting.

### **3.07      ROCK REMOVAL**

- A. Rock, boulders or other hard, lumpy or unyielding materials encountered in trench bottoms shall be removed to a depth at least 12-inches below the bottom of any pipes to be installed. All rock and other hard

foundation material under structures shall be freed of all loose material, cleaned, and cut to a firm surface; either level, stepped vertically and horizontally or serrated, as may be directed. All seams shall be cleaned out and filled with concrete or mortar.

- B. Blasting of rock or other hard to remove materials will not be permitted on this project.

### **3.08 SUBGRADES**

- A. Do not construct foundations, footings, slabs, or piping on loose soil, mud, or other unstable or unsuitable soil.
- B. Fill excess cuts under foundations, footings, and slabs with concrete.
- C. Fill excess cuts under piping with compacted bedding as specified in this Section.

### **3.09 FOUNDATION SOILS REMOVAL AND COMPACTION**

- A. In areas where buildings, structure foundations, and precast concrete tanks are located just below the surface, the site shall be proofrolled using a large vibratory roller (Dynapac CA-25 or equivalent). Proofrolling shall consist of at least ten overlapping passes. Water shall be added in order to achieve moisture content near optimum to facilitate compaction. Purpose of the proofrolling is to detect any areas of unstable or unsuitable soils as well as to density the near-surface soils. Materials which yield excessively during the proofrolling shall be undercut and replaced with well-compacted structural fill.
- B. The Owner will retain a Soils Engineer to be present during proofrolling operations to observe the proofrolling and recommend the nature and extent of any remedial work.
- C. In areas where foundations and storage ponds are located, preparation of the subgrade prior to pond backfilling will necessitate removal and replacement of pond bottom silts as well as the very loose silty soils on the flanks of the pond (see the Geotechnical Report for further requirements). The entire pond footprint, plus a margin of at least 5 feet outside the perimeter shall be stripped down to the existing pond bottom elevation, including over-excavation of any accumulated sediments, followed by proof-rolling with heavy



vibratory compaction equipment. The contractor shall anticipate the excavation will extend to approximately EL 10.00 feet. Compaction should consist of no less than ten (10) complete coverages throughout the entire pond area plus a margin of not less than 5 feet beyond the pond perimeters. Compaction shall continue so as to develop a uniform density of not less than 95% of the modified proctor maximum dry density per ASTM D-1557. Compaction tests shall be conducted at intervals of no less than 1 test for each 2500 square feet at a depth of 1 foot and at the compacted subgrade elevation.

- D. Any fill required to achieve finished grade in structural areas or used as structural compact fill shall be inorganic, non-plastic granular soil containing less than 10% material passing a No. 200 sieve. Fill shall be placed in level lifts not to exceed 12-inches loose thickness and compacted to a minimum of 95% of the modified Proctor maximum dry density as determined by ASTM Specification D-1557. In-place density tests will be performed on each lift to verify that the specified degree of compaction has been achieved.

### **3.10 BACKFILLING FOUNDATION AND STRUCTURE EXCAVATIONS**

- A. Remove debris and other unstable or unsuitable materials from excavations before backfilling is started.
- B. Backfill excavations in areas to be paved with Special Backfill. Place Special Backfill in 12-inch lifts. Compact each lift of backfill to not less than 100% of the maximum dry density as determined in accordance with AASHTO T99, Method A. Compaction shall be by hand tamping or approved mechanical tamping devices, or in larger excavations by approved rollers. Do not compact backfill by puddling, unless permitted by the Engineer.
- C. Backfill excavations not requiring Special Backfill with Suitable Material. Place backfill and fill materials in lifts no greater than 12-inches in loose depth. Place backfill and fill materials in lifts no greater than four inches in loose depth where hand tampers are used. Backfill and fill shall be within 2% of optimum moisture content. For soils containing less than 5% material passing a No. 200 sieve, moisture content may be increased to within 3% of optimum. Compact backfill and fill to not less than 95% of the

maximum dry density. Compact backfill and fill for restoration of dirt driveways shall be not less than 100% of the maximum dry density for the last lift. Tests for determination of maximum dry density shall meet the requirements of ASTM D698 Method C. Use compaction equipment which is suited to the soil being compacted.

- D. If suitable, use stored excavated material for backfill and fill. Provide additional material, if required, to complete backfill and fill. Additional backfill and fill material shall be provided at no additional cost to the Owner.
- E. Do not use the following materials for backfill:
  - 1. Unsuitable materials
  - 2. Materials which are too wet or too dry to be compacted to the densities specified in this Section.
- F. Place the backfill and fill in a manner which will not overload foundations or structures. Place backfill and fill evenly on all sides of foundations and structures. Do not use equipment that will overload foundations or structures during filling or backfilling.
- G. Do all cutting, filling, and grading necessary to bring the entire area around foundations and outside of structures to the following subgrade levels:
  - 1. To the underside of the respective surfacing for walks and pavement
  - 2. To finished grade for lawns and planted areas within the project site.

### **3.11 BACKFILLING PIPING TRENCHES**

- A. Do not backfill trenches and excavations until all utilities have been inspected by the Owner's representative and until all underground utilities and piping systems are installed in accordance with the requirements of the specifications and the drawings.
- B. Remove debris and other unsuitable materials from excavations before backfilling is started.

- C. Place and tamp bedding and backfilling in a manner which will not damage pipe coating, wrapping, or encasement.
- D. Bedding procedures shall be as specified in the particular Section for the applicable pipe material.
- E. If bedding does not cover the pipe, place pipe cover material from the top of bedding to 12-inches over the pipe. Compact pipe cover material to the density required to allow backfill over the pipe cover material to be compacted to the density specified.
- F. Do not use the following materials for backfilling:
  - 1. Unsuitable Materials
  - 2. Materials which are too wet or too dry to be compacted to the densities specified in this Section.
- G. If suitable, use stored excavated material for backfill and fill. Provide additional material, if required, to complete backfill and fill. Additional backfill and fill material shall be provided at no additional cost to the Owner. Backfill excavations in areas to be paved with Special Backfill. Place Special Backfill in 12-inch lifts. Compact each lift of backfill to not less than 100% of the maximum dry density as determined in accordance with AASHTO T99, Method A. Compaction shall be by hand tamping or approved mechanical tamping devices, or in larger excavations by approved rollers. Backfill and fill materials shall be within 2% of optimum moisture content. Do not compact backfill by puddling, unless permitted by the Engineer.
- H. Backfill trenches not requiring Special Backfill with Suitable Material. Place backfill and fill materials in lifts no greater than 12-inches in loose depth and compact to produce an adequate foundation for seeding. The top 4-inches of backfill shall not contain stones or other objects larger than 1-inch in maximum dimension. Mound backfill above finish grade to allow for settlement. Fill and restore any settlement of the backfill. Grade area to be restored to finish grade after settlement of backfill and immediately before restoration of vegetated areas.

**3.12 SHELL BASE**

- A. Construction of a base course composed of shell shall be as specified in Section 250 of the FDOT Standard Specifications.

### **3.13 FINISH GRADING**

- A. Shape the surface of all earthwork to conform to the lines, grades, contours and cross-sections shown on the drawings. Hand dressing may be required in certain areas or in confined areas where equipment operation is restricted.
- B. In final shaping of the surface of the earthwork a tolerance of 0.1 foot above or below the plan elevation will be allowed with the following exceptions:
  - 1. Earthwork shall be shaped to slope away from all buildings and structures.
  - 2. Earthwork shall be shaped to match adjacent pavement, curb, sidewalks, and similar appurtenances.
  - 3. Ditch bottoms and swales shall be shaped so that no water will be impounded except in areas designated for impoundment.

### **3.14 CLEANUP AND MAINTENANCE**

- A. Cleanup the job site as grading is completed. Remove excess earth, rock, bedding, materials, and backfill materials. Remove unused piping materials, structure components, and appurtenances. Restore items moved, damaged, or destroyed during construction.
- B. Maintain the job site until the work has been completed and accepted. Fill excavations which settle when settlement is visible. Restore items damaged by construction or improper restorations. Keep dust conditions to a minimum.

### **3.15 STORAGE AND REMOVAL OF EXCAVATED MATERIAL**

- A. Suitable excavated material required for filling and backfilling operations may be stockpiled on the job site.
- B. Remove unsuitable materials from the job site as unsuitable materials are excavated. Remove surplus

suitable materials from the job site as excavations are backfilled.

- C. Excavated suitable surplus materials shall remain the Owner's property and shall be stockpiled at the location(s) on the treatment plant site designated by the Owner.

### **3.16 DUST CONTROL**

- A. The Contractor shall take all steps possible to prevent and reduce dust arising from the construction activity. The Contractor shall have adequate water trucks on the site at all times and water, as necessary, the areas where dust may arise. He shall cooperate fully with the Owner's Representative and water immediately when instructed to do so.

**END OF SECTION**



## **SECTION 02211**

### **STEEL SHEET PILES**

#### **PART 1 GENERAL**

##### **1.01 SCOPE OF WORK**

- A. The Contractor shall furnish and install steel sheet piles to brace and shore open excavations for workers' safety and/or protection of adjacent facilities, or as required by these specifications or as shown on the Drawings.

##### **1.02 SUBMITTALS**

- A. Submittals shall be in accordance with Specification 01340 - Shop Drawings, Project Data and Samples and shall include details of the construction and erection of the steel sheet piling, shoring and bracing and the procedure the Contractor intends to follow in performing the work.
- B. Submit complete erection drawings showing bolt locations and details of openings, etc. Erection drawings shall show all necessary secondary steel framing members required to support the steel pilings.
- C. Drawings of the sheeting and bracing and design computations shall be submitted to the Owner and construction shall not be started until such drawings are received. The drawings and computations shall be prepared and sealed by a Florida registered Engineer employed by the contractor and shall be in sufficient detail to disclose the method of operation for each of the various stages of construction, if required, for the completion of the substructures.

#### **PART 2 PRODUCTS**

##### **2.01 MATERIAL**

- A. Steel Sheet Piles
  - 1. Steel Sheet Piles shall conform to ASTM A328. Steel pile sections shall be the continuously interlocking deep arch equal to PLZ23. The section modulus per linear foot shall not be less than 30.2 cubic inches and the weight shall be not less than 22.6 pounds per square foot of wall.

Sheet pile sections shall be not less than 3/8-inch thick.

2. All sheet piles shall be furnished with standard pulling holes located approximately four inches below the top of the pile, unless specified otherwise.

- B. Wales and Caps: Structural steel shapes and plates shall conform to ASTM A36. Bolts shall conform to ASTM A307.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. The Contractor shall furnish, put in place, and maintain such sheeting and bracing as may be required to support the sides of excavations, to prevent any movement which could in any way diminish the width of the excavation below that necessary for proper construction, and to protect adjacent structures or roadways from undermining or other damage. If the County's Representative is of the opinion that sufficient or proper supports have not been provided, the County's Representative may order additional supports put in at the expense of the Contractor, and compliance with such order shall not relieve or release the Contractor from his responsibility for the sufficiency of such supports. Care shall be taken to prevent voids outside of the sheeting, but if voids are formed, they shall be immediately filled and rammed.
- B. All sheeting and bracing shall be carefully removed in such manner as not to endanger the construction or other structures, utilities, or property. All voids left or caused by withdrawal of sheeting shall be immediately refilled with sand by ramming with tools especially adapted to that purpose, by watering or otherwise as may be directed.
- C. The County shall have the right to order sheeting and bracing left in place and this right shall not be construed as creating any obligation on the County's part to issue such orders, and the County's failure to exercise its right to do so shall not relieve the Contractor from liability for damages to persons or property occurring from or upon the work occasioned by negligence or otherwise, growing out of a failure on the part of the Contractor to leave in place sufficient



sheeting and bracing to prevent any caving or moving of the ground.

- D. Prior to setting, the sheet piles shall be thoroughly cleaned and inspected for defects and for proper interlock dimensions. The Contractor shall provide a tool for checking the interlock dimensions.
- E. Each sheet pile shall have sufficient clearance in the interlocks to slide, under its own weight, in the interlock of the sheet pile previously placed during the setting operation until the top of existing ground is reached by the tip of the sliding pile. In no case during the setting operation shall a vibratory or drive hammer be used to force the interlock of a pile into the interlock of an adjacent pile.
- F. Before driving is started, check the sheet piles for position and alignment. Vertical alignment of each sheet pile shall be not more than 1/8 inch per foot from the vertical in all directions. Provide a plumb line or other device for checking vertical alignment.
- G. Excavation shall not be carried in advance of the steel sheet piling.
- H. Drive sheet piles in rotating stages such that the tip of any sheet pile is not more than 5 feet below the tip of any adjacent sheet pile nor more than 8 feet below the tip of any other sheet pile in the bulkhead.
- I. Use a suitable driving head to keep deformation of the driving end to a minimum. If any sheet pile is driven out of interlock, it shall be removed and replaced at the Contractor's sole expense.
- J. Piles shall be driven with air, steam, or diesel hammer having sufficient energy to achieve the required penetration. However, the means and methods selected by the Contractor shall be to prevent damage to any nearby structures.
- K. Obstructions encountered before the specified penetration for the piles is obtained shall be removed. Damaged piling or one with faulty alignment shall be withdrawn and new piling driven properly in its place. The cost of such additional work shall be considered as part of the pile driving and shall be borne by the Contractor.

- L. Cut the tops of the sheet piles on a true horizontal line with a tolerance of plus or minus 1/2 inch by burning or other suitable method that will not damage the pile. For trench sheeting of pipes, no sheeting is to be withdrawn if driven below mid-diameter of pipe.

**END OF SECTION**

## **SECTION 02212**

### **WOOD SHEETING LEFT IN PLACE**

#### **PART 1 GENERAL**

##### **1.01 SCOPE OF WORK**

- A. The Contractor shall furnish and install shoring and sheeting to brace and shore open excavating for workers safety and/or protection of adjacent facilities or as required by these specifications or as shown on the Drawings.

##### **1.02 SUBMITTALS**

- A. All submittals shall be in accordance with Specification 01340 - shop Drawings, Project Data and Samples.

#### **PART 2 PRODUCTS**

##### **2.01 MATERIALS**

- A. Wood for shoring and sheeting shall be 3-inches maximum thickness and green, rough cut hardwood planking, square edges of tongue and groove.

#### **PART 3 EXECUTION**

##### **3.01 INSTALLATION**

- A. The Contractor shall furnish, install, and maintain such sheeting and bracing as may be required to support the sides of excavations, to prevent any movement which could in any way diminish the width of the excavation below that which is necessary for proper construction, and to protect adjacent structures from undermining or other damage. If the Owner's Representative is of the opinion that sufficient or proper supports have not been provided, he may order additional supports installed at the expense of the Contractor. Compliance with such order shall not relieve or release the Contractor from his responsibility for the sufficiency of such supports. Care shall be taken to prevent voids outside of the sheeting, but if voids are formed, they shall be immediately filled and rammed.

- B. The Contractor shall leave in place to be embedded in the backfill all sheeting, bracing, and other related items as shown on the Drawings. For trench sheeting of pipes, no wood sheeting shall be cut off at a level lower than 1 foot above the top of the pipe, unless otherwise directed by the Owner's Representative.
- C. All sheeting and bracing not left in place shall be carefully removed in such manner as not to endanger the construction or other structures, utilities, or property.
- D. The right of the Owner to order sheeting and bracing left in place shall not be construed as creating any obligation on the Owner's part to issue such orders, and the Owner's failure to exercise its right to do so shall not relieve the Contractor from liability for damages to persons or property occurring from or upon the work occasioned by negligence or otherwise, growing out of a failure on the part of the Contractor to leave in place sufficient sheeting and bracing to prevent any caving or moving of the ground.
- E. The Contractor shall receive no payment other than that included in the lump sum price for the project for any timber used for sheeting, bracing, or other related items. The Contractor shall receive no payment for such timber which has actually been left in the trench for the convenience of the Contractor.

**END OF SECTION**

## **SECTION 02221**

### **TRENCHING, BEDDING AND BACKFILL FOR PIPE**

#### **PART 1 GENERAL**

##### **1.01 SCOPE OF WORK**

- A. The Contractor shall furnish all labor, materials, equipment and incidentals necessary to perform all excavation, backfill, fill, grading, trench protection or other related work required to complete the piping work shown on the Drawings and specified herein. The work shall include, but not be limited to: vaults; duct conduit; pipe; roadways and paving; backfilling; required fill or borrow operations; grading; disposal of surplus and unsuitable materials; and all related work such as sheeting, bracing and dewatering.
- B. Prior to commencing work, the Contractor shall examine the site and review test borings if available, or undertake his own subsurface investigations and take into consideration all conditions that may affect his work.
- C. The Contractor is responsible for the protection of every tree which is scheduled to remain in the project area. This includes trees which may or may not be shown on the plans. Every tree shall be adequately protected in place at no additional cost to the County. This includes, but is not limited to protecting the root systems and adjusting grades as necessary for tree/root protection.

##### **1.02 PROTECTION**

- A. Sheeting and Bracing in Excavations
  - 1. In connection with construction of underground structures, the Contractor shall properly construct and maintain cofferdams. These shall consist of: sheeting and bracing as required to support the sides of excavations, to prevent any movement which could in any way diminish the width of the excavation below that necessary for proper construction and to protect adjacent structures, existing yard pipe and/or foundation material from disturbance, undermining, or other damage. Care shall be taken to prevent voids outside of the sheeting, but if voids are formed, they shall be immediately filled and rammed.

2. Trench sheeting for pipes: no sheeting is to be withdrawn if driven below, mid-diameter of any pipe and no wood sheeting shall be cut off at a level lower than one foot above the top of any pipe unless otherwise directed by the Engineer. During the progress of the work, the Engineer may direct the Contractor in writing to leave additional wood sheeting in place. If steel sheeting is used for trench sheeting, removal shall be as specified above, unless written approval is given for an alternate method of removal.
3. All sheeting and bracing not left in place shall be carefully removed in such a manner as not to endanger the construction or other structures, utilities, existing piping, or property. Unless otherwise approved or indicated on the Drawings or in the Specifications, all sheeting and bracing shall be removed after completion of the piping or structure, care being taken not to disturb or otherwise injure the pipeline or finished masonry. All voids left or caused by withdrawal of sheeting shall be immediately refilled with sand by ramming with tools specifically made for that purpose, by watering, or as may otherwise be directed.
4. The Contractor shall construct, to the extent he deems is necessary for his method of operation, the cofferdams and sheeting outside the neat lines of the pipeline trench or foundation unless otherwise indicated on the Drawings or directed by the Owner. Sheeting shall be plumb and securely braced and tied in position. Sheeting, bracing and cofferdams shall be adequate to withstand all pressures to which the pipeline or structure will be subjected. Pumping, bracing and other work within the cofferdam shall be done in a manner to avoid disturbing any construction of the pipeline or the enclosed masonry. Any movement or bulging which may occur shall be corrected by the Contractor at his own expense so as to provide the necessary clearances and dimensions.
5. Drawings of the cofferdams and design computations shall be submitted to the Owner's Representative and approved prior to any construction. However, approval of these drawings shall not relieve the Contractor of the responsibility for the cofferdams. The drawings and computations shall be prepared and stamped by a Registered Professional

Engineer in the State of Florida and shall be in sufficient detail to disclose the method of operation for each of the various stages of construction, if required, for the completion of the pipeline and substructures.

B. Dewatering, Drainage and Flotation

1. The Contractor shall construct and place all pipelines, concrete work, structural fill, bedding rock and limerock base course, in-the-dry. In addition, the Contractor shall make the final 24" of excavation for this work in-the-dry and not until the water level is a minimum of 6" below proposed bottom of excavation.
2. The Contractor shall, at all times during construction, provide and maintain proper equipment and facilities to remove promptly and dispose of properly all water entering excavation and keep such excavations dry so as to obtain a satisfactory undisturbed subgrade foundation condition until the fill, structure, or pipes to be built thereon have been completed to such extent that they will not be floated or otherwise damaged by allowing water levels to return to natural elevations.
3. Dewatering shall at all times be conducted in such a manner as to preserve the natural undisturbed bearing capacity of the subgrade soils at proposed bottom of excavation.
4. Wellpoints may be required for dewatering the soil prior to final excavation for deeper in-ground structures or piping and for maintaining the lowered groundwater level until construction has been completed to avoid the structure, pipeline, or fill from becoming floated or otherwise damaged. Wellpoints shall be surrounded by suitable filter sand and no fines shall be removed by pumping. Pumping from wellpoints shall be continuous and standby pumps shall be provided.
5. The Contractor shall furnish all materials and equipment to perform all work required to install and maintain the proposed drainage systems for handling groundwater and surface water encountered during construction of structures, pipelines and compacted fills.
6. Where required, the Contractor shall provide a

minimum of two operating groundwater observation wells at each structure to determine the water level during construction of the pipeline or structure. Locations of the observation wells shall be at structures and along pipelines as approved by the Owner's Representative prior to their installation. The observation wells shall be extended to 6 inches above finished grade, capped with screw-on caps protected by 24" x 24" wide concrete bases and left in place at the completion of this Project.

7. Prior to excavation, the Contractor shall submit his proposed method of dewatering and maintaining dry conditions to the Owner's Representative for approval. Such approval shall not relieve the Contractor of the responsibility for the satisfactory performance of the system. The Contractor shall be responsible for correcting any disturbance of natural bearing soils for damage to pipeline or structures caused by an inadequate dewatering system or by interruption of the continuous operation of the system as specified.
8. As part of his request for approval of a dewatering system, the Contractor shall demonstrate the adequacy of the proposed system and wellpoint filter sand by means of a test installation. Discharge water shall be clear, with no visible soil particles in a one quart sample. Discharge water shall not flow directly into wetlands or Waters of the State as defined by FDEP and SWFWMD.
9. During backfilling and construction, water levels shall be measured in observation wells located as directed by the Engineer.
10. Continuous pumping will be required as long as water levels are required to be below natural levels.

## **PART 2      PRODUCTS**

### **2.01        MATERIALS**

#### **A.        General**

1. Materials for use as fill and backfill shall be as described below. For each material, the Contractor shall notify the Owner's Representative of the



source of the material and shall furnish to the Owner's Representative, for approval, a representative sample weighing approximately 50 pounds, at least ten calendar days prior to the date of anticipated use of such material.

2. Additional materials shall be furnished as required from off-site sources and hauled to the site.

B. Structural Fill

1. Structural fill shall be used below spread footing foundations, slab-on-grade floors and other structures as backfill within three feet of the below grade portions of structures.
2. Structural fill material shall be a minimum of 60 percent clean sand, free of organic, deleterious and/or compressible material. Minimum acceptable density shall be 98 percent of the maximum density as determined by AASHTO T-180. Rock in excess of 2-1/2" in diameter shall not be used in the fill material. If the moisture content is improper for attaining the specified density, either water shall be added or material shall be permitted to dry until the proper moisture content for compaction is reached.

C. Base Course

1. Asphalt, crushed concrete, soil cement or approved equal, shall be used as base course for bituminous paved roads and parking areas.

D. Common Fill

1. Common fill material shall be free from organic matter, muck or marl and rock exceeding 2-1/2" in diameter. Common fill shall not contain broken concrete, masonry, rubble or other similar materials. Existing soil may be used to adjust grades over the site with the exception of the construction area.
2. Material falling within the above specification, encountered during the excavation, may be stored in segregated stockpiles for reuse. All material which, in the opinion of the Engineer, is not suitable for reuse shall be spoil as specified herein for disposal of unsuitable materials by the Contractor.

E. Crushed Stone

1. Crushed stone may be used for pipe bedding, manhole bases, as a drainage layer below structures with underdrains and at other locations indicated on the Drawings.
2. Crushed stone shall be size No. 57 with gradation as noted in Table 1 of Section 901 of the Florida Department of Transportation, Standard Specifications for Road and Bridge Construction, latest edition.

**PART 3 EXECUTION**

**3.01 FILL PLACEMENT**

A. General

1. Material placed in fill areas under and around pipelines and structures shall be deposited within the lines and to the grades shown on the Drawings or as directed by the Owner's Representative, making due allowance for settlement of the material. Fill shall be placed only on properly prepared surfaces which have been inspected and approved by the Owner's Representative. If sufficient common fill material is not available from excavation on site, the Contractor shall provide borrow as may be required.
2. Limerock base course material, structural fill and screened limerock, may be provided as borrow.
3. Fill shall be brought up in substantially level lifts throughout the site, starting in the deepest portion of the fill. The entire surface of the work shall be maintained free from ruts and in such condition that construction equipment can readily travel over any section. Fill shall not be placed against concrete structures until they have attained sufficient strength.
4. Fill shall be dumped and spread in layers by a bulldozer or other approved method. During the process of dumping and spreading, all roots, debris and stones greater in size than specified under Materials, shall be removed from the fill areas.

The Contractor shall assign a sufficient number of men to this work to insure satisfactory compliance with these requirements.

5. If the compacted surface of any layer of material is determined to be too smooth to bond properly with the succeeding layer, it shall be loosened by harrowing or by another approved method before the succeeding layer is placed.
6. All fill materials shall be placed and compacted "in-the-dry". The Contractor shall dewater excavated areas and is required to perform the work in such manner as to preserve the undisturbed state of the natural inorganic soil.

### **3.02 COMPACTION**

- A. Structural fill, limerock base course and screened limerock in open areas, shall be placed in layers not to exceed nine inches in depth as measured before compaction. Each layer shall be compacted by a minimum of six coverages (3 passes each way) with the equipment described below, to at least 98 percent of the maximum density, as determined by AASHTO T-180. Incidental compaction due to traffic by construction equipment will not be credited toward the required minimum six coverages.
- B. Common fill shall be placed and compacted in a manner similar to that described above for structural fill, with the following exceptions: layer thickness prior to compaction may be increased to 12-inches in open areas; and common fill except dike fill, required below water level in peat excavation areas may be placed as one lift, in-the-wet, to an elevation one foot above the water level at the time of filling.
- C. Compaction equipment in open areas shall consist of a medium-heavy vibrator roller (minimum static weight of 10 tons) operated at resonant frequency and at a speed of 2 fps or less or other compaction equipment approved by the Engineer.
- D. Areas adjacent to pipelines, structures and other confined areas inaccessible to the vibrator roller shall be compacted with a manually operated sled-type vibratory compactor. The Contractor shall also conform to additional backfill requirements at pipelines and structures as specified in the Contract Documents. Compaction of the fill by such means shall be to the same

degree of compaction as obtained by the rubber-tired equipment, and the Owner's Representative may make the necessary tests to determine the amount of compactive effort necessary to obtain equal compaction. Unless such tests indicate that modifications may be made, the fill compacted by mechanical compactors shall be placed in 6-inch layers and thoroughly tamped over the entire surface.

Compaction equipment is subject to approval by the Owner's Representative.

- E. It is the intention that the fill materials with respect to moisture be used in the condition they are excavated insofar as this is practicable. Material which is too wet shall be spread on the fill area and permitted to dry, assisted by harrowing if necessary, until the moisture content is reduced to allowable limits.
- F. If the Engineer determines that added moisture is required, water shall be applied by sprinkler tanks or other sprinkler systems, which will insure uniform distribution of the water over the area to be treated and give complete and accurate control of the amount of water to be used. If too much water is added, the area shall be permitted to dry before compaction is continued.
- G. The Contractor shall supply all hose, piping, valves, sprinklers, pumps, sprinkler tanks, hauling equipment and all other materials and equipment necessary to place the water in the fill in the manner specified.

### **3.03 TRENCH EXCAVATION AND BACKFILLING**

- A. Excavation for all trenches required for the installation of pipes and electrical ducts shall be made to the depths indicated on the Drawings and in such manner and to such widths as will give suitable room for laying the pipe or installing the ducts within the trenches.
- B. Rock shall be removed to a minimum 6" clearance around the bottom and sides of all the pipe or ducts being laid.
- C. Where pipes or ducts are to be laid in limerock bedding or encased in concrete, the trench may be excavated by machinery to or just below the designated subgrade provided that the material remaining in the bottom of the trench is no more than slightly disturbed.
- D. Where the pipes or ducts are to be laid directly on the trench bottom, the lower part of the trenches shall not

be excavated to grade by machinery. The last of the material being excavated manually, shall be done in such a manner that will give a flat bottom true to grade so that pipe or duct can be evenly supported on undisturbed material. Bell holes shall be made as required.

- E. Backfilling over pipes shall begin as soon as practicable after the pipe has been laid, jointed and inspected and the trench filled with suitable compacted material to the mid-diameter of the pipe.
- F. Backfilling over ducts shall begin not less than three days after placing concrete encasement.
- G. All backfilling shall be prosecuted expeditiously and as detailed on the Drawings.
- H. Any space remaining between the pipe and sides of the trench shall be packed full by hand shovel with selected earth, free from stones having a diameter greater than 2" and thoroughly compacted with a tamper as fast as placed, up to a level of one foot above the top of the pipe.
- I. The filling shall be carried up evenly on both sides with at least one man tamping for each man shoveling material into the trench.
- J. The remainder of the trench above the compacted backfill, as just described above, shall be filled and thoroughly compacted by rolling, ramming, or puddling, as the Engineer may direct, sufficiently to prevent subsequent settling.

#### **3.04 BEDDING AND BACKFILL FOR INSTALLATION OF HDPE AND PVC PIPE BY OPEN CUT**

- A. Excavate trench to 6-inches below the bottom of the pipe and provide and compact 6-inches of bedding, consisting of Class I material. Excavate bedding to match bells. Place and Compact haunching material to the springline of the pipe. Haunching material shall consist of Class I or II, SM or SC soils. Place and compact initial backfill to 12-inches over the top of the pipe using Class II or III and SM or SC soils. All soils shall be compacted to 98% maximum density in accordance with AASHTO T-180

#### **3.05 GRADING**

- A. Grading shall be performed at such places as are indicated on the Drawings, to the lines, grades and elevations shown or as directed by the Engineer and shall

be made in such a manner that the requirements for formation of embankments can be followed. All unacceptable material encountered, of whatever nature within the limits indicated, shall be removed and disposed of as directed. During the process of excavation, the grade shall be maintained in such condition that it will be well drained at all times. When directed, temporary drains and drainage ditches shall be installed to intercept or divert surface water which may affect the prosecution or condition of the work.

- B. If at the time of excavation it is not possible to place any material in its proper section of the permanent pipeline structure, it shall be stockpiled in approved areas for later use.
- C. Minute adjustments in lines or grades may be made if found necessary as the work progresses, due to discrepancies on the Drawings or in order to obtain satisfactory construction.
- D. Stones or rock fragments larger than 2-1/2" in their greatest dimensions shall not be permitted in the top 6" of the subgrade line of all dikes, fills or embankments.
- E. All fill slopes shall be uniformly dressed to the slope, cross-section and alignment shown on the Drawings, or as directed by the Owner's Representative.
- F. In cuts, all loose or protruding rocks on the back slopes shall be barred loose or otherwise removed to line or finished grade of slope. All fill slopes shall be uniformly dressed to the slope, cross section and alignment shown on the Drawings or as directed by the Engineer.
- G. No grading is to be done in areas where there are existing pipelines that may be uncovered or damaged until such lines which must be maintained are relocated, or where lines are to be abandoned and removed, all required valves are closed and drains plugged at manholes.

**END OF SECTION**

## **SECTION 02260**

### **FINISH GRADING**

#### **PART 1 GENERAL**

##### **1.01 WORK INCLUDED**

- A. The Contractor shall finish grade sub-soil.
- B. The Contractor shall cut out areas to receive stabilizing base course materials for paving and sidewalks.
- C. The Contractor shall place, finish grade and compact top soil.

##### **1.02 PROTECTION**

- A. Prevent damage to existing, facilities, fencing, trees, landscaping, natural features, bench marks, pavement and utility lines. Correct damage at no cost to the Owner.

#### **PART 2 PRODUCTS**

##### **2.01 GENERAL**

- A. Topsoil: Friable loam free from subsoil, roots, grass, excessive amount of weeds, stones, and foreign matter; pH of 5.5 to 7.5; containing a minimum of 4 percent and a maximum of 25 percent organic matter. Use topsoil stockpiles on site if conforming to these requirements.

#### **PART 3 EXECUTION**

##### **3.01 SUB-SOIL PREPARATION**

- A. Rough grade sub-soil systematically to allow for a maximum amount of natural settlement and compaction. Eliminate uneven areas and low spots. Remove debris, roots, branches, stones, etc. Remove sub-soil which has been contaminated with petroleum products.
- B. Cut out areas to sub-grade elevation, which are to receive stabilizing base for paving and sidewalks.
- C. Bring sub-soil to required levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.

- D. Slope grade away from building minimum 2 inches in 10 feet unless indicated otherwise on the Drawings.
- E. Cultivate sub-grade to a depth of 3 inches, where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted sub-soil.
- F. The Contractor shall not change grades to cause water to flow onto adjacent property.

### **3.02 PLACING TOPSOIL**

- A. Place topsoil in areas where seeding, sodding and planting are to be performed. Place to the following minimum depths, up to finished grade elevations.
  - 1. 6 inches for seeded areas.
  - 2. 4-1/2 inches for sodded areas.
  - 3. 24 inches for shrub beds.
  - 4. 18 inches for flower beds.
- B. Use topsoil in relatively dry state. Place during dry weather.
- C. Fine grade topsoil eliminating rough and low areas to ensure positive drainage. Maintain levels, profiles and contours of sub-grades.
- D. Remove stone, roots, grass, weeds, debris, and other foreign material while spreading.
- E. Manually spread topsoil around trees, plants, building, to prevent damage which may be caused by grading equipment.
- F. Lightly compact placed topsoil.

### **3.03 SURPLUS MATERIAL**

- A. Remove surplus sub-soil and topsoil from site.
- B. Leave stockpile areas and entire job site clean and raked, ready to receive landscaping.

**END OF SECTION**



## **SECTION 02276**

### **TEMPORARY EROSION AND SEDIMENTATION CONTROL**

#### **PART 1 GENERAL**

##### **1.01 DESCRIPTION**

- A. The work specified in this Section consists of furnishing, maintaining, and removing temporary erosion and sedimentation controls as necessary.
- B. Temporary erosion controls include, but are not limited to, sodding, mulching, netting, watering, and reseeding on-site surfaces and spoil and borrow area surfaces and providing interceptor ditches at ends of berms and at those locations which will ensure that erosion during construction will be either eliminated or maintained within acceptable limits as established by the Owner.
- C. Temporary sedimentation controls include, but are not limited to, silt dams, traps, floating turbidity barriers, and appurtenances at the foot of sloped surfaces which will ensure that sedimentation pollution will be either eliminated or maintained within acceptable limits as established by the Owner.
- D. The Contractor is responsible for providing effective temporary erosion and sediment control measures during construction or until final controls become effective.

##### **1.02 SUBMITTALS**

- A. All submittals shall be in accordance with Specification 01340 - Shop Drawings, Project Data and Samples.

#### **PART 2 PRODUCTS**

##### **2.01 EROSION CONTROL**

- A. Sod specified in Section 02900 - Seeding and Sodding.
- B. Netting - fabricated of material acceptable to the Owner.

##### **2.02 SEDIMENTATION CONTROL**

- A. Bales - clean, seed free cereal hay type.

- B. Netting - fabricated of material acceptable to the Owner.
- C. Filter stone - crushed stone conforming to Florida Dept. of Transportation specifications.
- D. Concrete block - hollow, non-load-bearing type.
- E. Concrete - exterior grade not less than one inch thick.

### **PART 3 EXECUTION**

#### **3.01 EROSION CONTROL**

- A. Minimum procedures for grassing are:
  - 1. Scarify slopes to a depth of not less than six inches and remove large clods, rock, stumps, roots larger than 1/2 inch in diameter and debris.
  - 2. Sow seed within twenty-four (24) hours after the ground is scarified with either mechanical seed drills or rotary hand seeders.
  - 3. Apply mulch loosely and to a thickness of between 3/4-inch and 1-1/2 inches.
  - 4. Apply netting over mulched areas on sloped surfaces.
  - 5. Roll and water seeded areas in a manner which will encourage sprouting of seeds and growing of grass. Reseed areas which exhibit unsatisfactory growth. Backfill and seed eroded areas.

#### **3.02 SEDIMENTATION CONTROL**

- A. Install and maintain silt dams, traps, barriers, and appurtenances as shown on the approved descriptions and working drawings. Hay bales which deteriorate and filter stones which are dislodged shall be replaced.

#### **3.03 PERFORMANCE**

- A. Should any of the temporary erosion and sediment control measures employed by the Contractor fail to produce results which comply with the requirements of the State of Florida, Contractor shall immediately take whatever steps are necessary to correct the deficiency at his own expense.

END OF SECTION



## **SECTION 02513**

### **ASPHALT CONCRETE PAVING**

#### **PART 1 GENERAL**

##### **1.01 SCOPE OF WORK**

- A. Furnish all labor, materials and equipment necessary to complete all asphalt concrete paving as shown on the Drawings.

##### **1.02 QUALITY ASSURANCE**

- A. Qualifications of Asphalt Concrete Producer: Use only materials which are furnished by a bulk asphalt concrete producer regularly engaged in production of hot-mix, hot-laid asphalt concrete.
- B. Qualification of Testing Agency: The Owner will employ commercial testing laboratories to conduct tests and evaluations of asphalt concrete materials and design.
  - 1. Provide asphalt concrete testing and inspection service acceptable to Engineer.
  - 2. Include sampling and testing asphalt concrete materials proposed, and tests and calculations for asphalt concrete mixtures.
  - 3. Provide field testing facilities for quality control testing during paving operations.
- C. Requirements of Regulatory Agencies: Comply with applicable requirements of:
  - 1. Manatee County Public Works Department
  - 2. Florida Department of Transportation

##### **1.03 PAVING QUALITY REQUIREMENTS**

- A. General: In addition to other specified conditions, comply with following minimum requirements:
  - 1. Test in-place asphalt concrete courses for compliance with requirements for density, thickness and surface smoothness.
  - 2. Provide final surfaces of uniform texture, conforming to required grades and cross sections.

3. Take not less than four inch diameter pavement specimens for each completed course, from locations as directed by the Engineer.
4. Repair holes from test specimens as specified for patching defective work.

B. Density:

1. Compare density of in-place material against laboratory specimen of same asphalt concrete mixture, when subjected to 50 blows of standard Marshall hammer on each side of specimen.
2. Minimum acceptable density of in-place course material is 98% of the recorded laboratory specimen density.

C. Thickness: In-place compacted thicknesses will not be acceptable if less than the thicknesses shown on the Drawings.

D. Surface Smoothness:

1. Test finished surface of each asphalt concrete course for smoothness, using a 10 ft. straightedge applied parallel to and at right angles to centerline of paved areas.
2. Check surfaced areas at intervals directed by Engineer.
3. Surfaces will not be acceptable if exceeding the following:
  - a) Base Course: 1/4 in. in 10 ft.
  - b) Surface Course: 3/16 in. in 10 ft.
  - c) Crowned Surfaces:
    - 1) Test crowned surfaces with a crown template, centered and at right angles to the crown.
    - 2) Surfaces will not be acceptable if varying more than 1/4 in. from the template.

#### **1.04 SUBMITTALS**

- A. All submittals shall be in accordance with Specification 01340 - Shop Drawings, Project Data and Samples.
- B. Samples: Provide samples of materials for laboratory testing and job-mix design.
- C. Test Reports: Submit laboratory reports for following materials tests:
  - 1. Coarse and fine aggregates from each material source and each required grading:
    - a) Sieve Analysis: ASTM C 136 (AASHTO T 27)
    - b) Unit Weight of Slag: ASTM C29 (AASHTO T 19)
    - c) Soundness: ASTM C 88 (AASHTO T 104) for surface course aggregates only.
    - d) Sand Equivalent: ASTM D 2419 (AASHTO T 176)
    - e) Abrasion of Coarse Aggregate: ASTM C131 (AASHTO T 96), for surface course aggregates only.
  - 2. Asphalt cement for each penetration grade:
    - a) Penetration: ASTM D5 (AASHTO T49)
    - b) Viscosity (Kinematic): ASTM D2170 (AASHTO T 201)
    - c) Flash Point: ASTM D92 (AASHTO T 48)
    - d) Ductility: ASTM D 113 (AASHTO T 51)
    - e) Solubility: ASTM D 4 (AASHTO T 44)
    - f) Specific Gravity: ASTM D 70 (AASHTO T 43).
  - 3. Job-mix design mixtures for each material or grade:
    - a) Bulk Specific Gravity for Coarse Aggregate: ASTM C 117 (AASHTO T 85)
    - b) Bulk Specific Gravity for Fine Aggregate: ASTM C 128 (AASHTO T 84)

4. Uncompacted asphalt concrete mix: Maximum Specific Gravity: ASTM D 2041 (AASHTO T 209).
5. Compacted asphalt concrete mix:
  - a) Bulk Density: ASTM D 1188 (AASHTO T 166)
  - b) Marshall Stability and Flow: ASTM D 1559
6. Density and voids analysis:
  - a) Provide each series of asphalt concrete mixture test specimens, in accordance with A.I. MS-2 "Mix Design Methods for Asphalt Concrete".
  - b) Use Marshall method of mix design unless otherwise directed or acceptable to the Engineer.
  - c) Report the quantity of absorbed asphalt cement in pounds of dry aggregate, percent air voids, and percent voids in mineral aggregate.
7. Sampling and testing of asphalt concrete mixtures for quality control during paving operations:
  - a) Uncompacted asphalt concrete mix.
    - 1) Asphalt Cement Content: ASTM D 2172 (AASHTO T 164)
    - 2) Penetration of Recovered Asphalt Cement: ASTM D 5 (AASHTO T 49)
    - 3) Ductibility of Recovered Asphalt Cement: ASTM D 113 (AASHTO T 51)
  - b) Compacted asphalt concrete mix:
    - 1) Bulk Density: ASTM D 1188 (AASHTO T 166)
    - 2) Marshall Stability and Flow: ASTM D 1559)
  - c) Perform at least one test for each day's paving.



8. Asphalt plant inspection: ASTM D 290.
9. Additional testing:
  - a) Perform as may be required if any of the previous tests indicate insufficient values, or if directed by the Engineer.
  - b) Continue testing until specified values have been attained.
10. Asphalt concrete materials not complying with specified requirements will not be permitted in the work.

#### **1.05 JOB CONDITIONS**

##### **A. Weather Limitations:**

1. Apply bituminous prime and tack coats only when the ambient temperature in the shade is above 50 degrees F. and when the temperature has not been below 35 degrees F. for 12 hours immediately prior to application.
2. Do not apply when the base surface is wet or contains an excess of moisture which would prevent uniform distribution and the required penetration.
3. Construct asphalt concrete surface course only when atmospheric temperature is above 40 degrees F., when the underlying base is dry, and when weather is not rainy.
4. Base course may be placed when air temperature is not below 30 degrees F. and rising, when acceptable to the Engineer.

##### **B. Grade Control: Establish and maintain the required lines and grades, including crown and cross-slope, for each course during construction operations.**

##### **C. Traffic Control: Maintain vehicular and pedestrian traffic during paving operations, as required for other construction activities.**

## **PART 2      PRODUCTS**

### **2.01      MATERIALS**

- A.    Shell Marl Stabilized Sub-Base: as specified in FDOT Section 260, "Shell tabilized Base," and on the plans.
- B.    Limerock Base Course:    as specified in FDOT Section 200, "Limerock Base," and on the plans.
- C.    Aggregate for Asphalt Concrete, General:
  - 1.    Sound, angular crushed stone, crushed gravel, or crushed slag:    ASTM D 692.
  - 2.    Sand, stone, or slag screening:    ASTM D 1073.
  - 3.    Provide aggregate in gradations for various courses to comply with local highway standards.
- D.    Surface Course Aggregates:    Provide natural sand, unless sand prepared from stone, slag, or gravel or combinations are required to suit local conditions.
- E.    Asphalt Cement:    Comply with ASTM D 946 for 85-100 penetration grade.
- F.    Prime Coat:
  - 1.    Cut-back liquid asphalt.
  - 2.    Medium-Curing type:    ASTM D 2027, Grade MC-70.

### **2.02      ASPHALT-AGGREGATE MIXTURES**

- A.    Job-mix criteria:
  - 1.    Provide job-mix formulas for each required asphalt-aggregate mixture.    Provide FDOT Section 333 Type III asphaltic concrete.
  - 2.    Establish a single percentage of aggregate passing each required sieve size, a single percentage of asphalt cement to be added to aggregate, and a single temperature at which asphalt concrete is to be produced.
  - 3.    Comply with the mix requirements of local governing highway standards.

4. Maintain material quantities within allowable tolerances of the governing standards.

## **2.03        TRAFFIC AND PARKING MARKING MATERIALS**

- A. Traffic lane marking paint with chlorinated rubber base.
- B. Factory mixed, quick drying and non bleeding, FS TT-P-115C, Type III.
- C. Color: Driving Lane Dividers - White
- D. No Parking Zone - Yellow
- E. Parking Dividers - White

## **PART 3       EXECUTION**

### **3.01        SURFACE PREPARATION**

- A. Subbase Preparation:
  1. The Contractor shall remove from the area all organic substance encountered to a depth of six or eight inches (6" or 8"), or to such depth and width as directed by the Engineer. The entire area shall be plowed and dragged prior to placing a stabilizing additive, if required to meet minimum bearing value.
  2. Subbase shall be compacted to a minimum density of 98 percent of the maximum as determined by the Modified Proctor Density AASHTO T180, and shall have a minimum bearing value of 40 pounds per square inch as determined by the Florida Bearing Test.
- B. Base Course:
  1. Check subgrade for conformity with elevations and section immediately before placing base material.
  2. Place base material in compacted layers not more than 6 inches thick, unless continuing tests indicate the required results are being obtained with thicker layers.
  3. In no case will more than 8-inches of compacted base be placed in one lift.

4. Spread, shape, and compact all base material deposited on the subgrade during the same day.
  5. Compact base course material to be not less than 95% of maximum density: ASTM D 1557, Method D (98 percent maximum density: AASHTO T-180).
  6. Test density of compacted base course: ASTM D 2167.
  7. Conduct one test for each 250 sq. yds. of in-place material, but in no case not less than one daily for each layer.
- C. Loose and Foreign Material:
1. Remove loose and foreign material from compacted subbase surface immediately before application of paving.
  2. Use power brooms or blowers, and brooming as required.
  3. Do not displace subbase material.
- D. Prime Coat:
1. Uniformly apply at rate of 0.20 to 0.5 gal. per sq. yd. over compacted and cleaned subbase surface.
  2. Apply enough material to penetrate and seal, but not flood the surface.
  3. Allow to cure and dry as long as required to attain penetration and evaporation of volatile, and in no case less than 24 hours unless otherwise acceptable to the Engineer.
  4. Blot excess asphalt with just enough sand to prevent pick-up under traffic.
  5. Remove loose sand before paving.
- E. Tack Coat:
1. Dilute material with equal parts of water and apply to contact surfaces of previously constructed asphalt concrete or portland cement concrete and similar surfaces.

2. Apply at rate of 0.05 to 0.15 gal. per sq. yd. of surface.
3. Apply tack coat by brush to contact surfaces of structures projecting into or abutting asphalt concrete pavement.
4. Allow surfaces to dry until material is at condition of tackiness to receive pavement.

### **3.02 FRAME ADJUSTMENTS (IF APPLICABLE)**

- A. Placing frames:
  1. Surround frames set to elevation with a ring of compacted asphalt concrete base prior to paving.
  2. Place asphalt concrete mixture up to 1 in. below top of frame, slope to grade, and compact by hand tamping.
- B. Adjust frames to proper position to meet paving.
- C. If permanent covers are not in place, provide temporary covers over openings until completion of rolling operations.
- D. Set cover frames to grade, flush with surface of adjacent pavement.

### **3.03 PREPARING THE MIXTURE**

- A. Comply with ASTM D 995 for material storage, control, and mixing, and for plant equipment and operation.
- B. Stockpiles:
  1. Keep each component of the various-sized combined aggregates in separate stockpiles.
  2. Maintain stockpiles so that separate aggregate sizes will not be intermixed and to prevent segregation.
- C. Heating:
  1. Heat the asphalt cement at the mixing plant to viscosity at which it can be uniformly distributed throughout mixture.

2. Use lowest possible temperature to suit temperature-viscosity characteristics of asphalt.
  3. Do not exceed 350 degrees F. (176.6 degrees C.).
- D. Aggregate:
1. Heat-dry aggregates to reduce moisture content to not more than 2.0%.
  2. Deliver dry aggregate to mixer at recommended temperature to suit penetration grade and viscosity characteristics of asphalt cement, ambient temperature, and workability of mixture.
  3. Accurately weigh or measure dry aggregates and weigh or meter asphalt cement to comply with job-mix formula requirements.
- E. Mix aggregate and asphalt cement to achieve 90-95% of coated particles for base mixtures and 85-90% of coated particles for surface mixture, when tested in accordance with ASTM D 2489.
- F. Transporting:
1. Transport asphalt concrete mixtures from mixing site in trucks having tight, clean compartments.
  2. Coat hauling compartments with a lime-water mixture to prevent asphalt concrete mixture from sticking.
  3. Elevate and drain compartment of excess solution before loading mix.
  4. Provide covers over asphalt concrete mixture when transporting to protect from weather and to prevent loss of heat.
  5. During periods of cold weather or for long-distance deliveries, provide insulation around entire truck bed surfaces.

### **3.04 EQUIPMENT**

- A. Provide size and quantity of equipment to complete the work specified within project time schedule.
- B. Bituminous Pavers: Self-propelled that spread hot asphalt concrete mixtures without tearing, shoving or

gouging surfaces, and control pavement edges to true lines without use of stationary forms.

C. Rolling Equipment:

1. Self-propelled, steel-wheeled and pneumatic-tired rollers that can reverse direction without backlash.
2. Other type rollers may be used if acceptable to the Engineer.

D. Hand Tools: Provide rakes, lutes, shovels, tampers, smoothing irons, pavement cutters, portable heaters, and other miscellaneous small tools to complete the work specified.

**3.05 PLACING THE MIX**

- A. Place asphalt concrete mixture on prepared surface, spread and strike-off using paving machine.
- B. Spread mixture at a minimum temperature of 225 degrees F. (107.2 degrees C.).
- C. Inaccessible and small areas may be placed by hand.
- D. Place each course at thickness so that when compacted, it will conform to the indicated grade, cross-section, finish thickness, and density indicated.
- E. Paver Placing:
1. Unless otherwise directed, begin placing along centerline of areas to be paved on crowned section, and at high side of sections on one-way slope, and in direction of traffic flow.
  2. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips.
  3. Complete base courses for a section before placing surface courses.
  4. Place mixture in continuous operation as practicable.
- F. Hand Placing:

1. Spread, tamp, and finish mixture using hand tools in areas where machine spreading is not possible, as acceptable to Engineer.
2. Place mixture at a rate that will insure handling and compaction before mixture becomes cooler than acceptable working temperature.

G. Joints:

1. Carefully make joints between old and new pavements, or between successive days' work, to ensure a continuous bond between adjoining work.
2. Construct joints to have same texture, density and smoothness as adjacent sections of asphalt concrete course.
3. Clean contact surfaces free of sand, dirt, or other objectionable material and apply tack coat.
4. Offset transverse joints in succeeding courses not less than 24 inches.
5. Cut back edge of previously placed course to expose an even, vertical surface for full course thickness.
6. Offset longitudinal joints in succeeding courses not less than 6 inches.
7. When the edges of longitudinal joints are irregular, honeycombed, or inadequately compacted, cut back unsatisfactory sections to expose an even, vertical surface for full course thickness.

**3.06 COMPACTING THE MIX**

- A. Provide sufficient rollers to obtain the required pavement density.
- B. Begin rolling operations as soon after placing when the mixture will bear weight of roller without excessive displacement.
- C. Do not permit heavy equipment, including rollers to stand on finished surface before it has thoroughly cooled or set.
- D. Compact mixture with hot hand tampers or vibrating plate compactors in areas inaccessible to rollers.



- E. Start rolling longitudinally at extreme lower side of sections and proceed toward center of pavement. Roll to slightly different lengths on alternate roller runs.
- F. Do not roll centers of sections first under any circumstances.
- G. Breakdown Rolling:
  - 1. Accomplish breakdown or initial rolling immediately following rolling of transverse and longitudinal joints and outside edge.
  - 2. Operate rollers as close as possible to paver without causing pavement displacement.
  - 3. Check crown, grade, and smoothness after breakdown rolling.
  - 4. Repair displaced areas by loosening at once with lutes or rakes and filling, if required, with hot loose material before continuing rolling.
- H. Second Rolling:
  - 1. Follow breakdown rolling as soon as possible, while mixture is hot and in condition for compaction.
  - 2. Continue second rolling until mixture has been thoroughly compacted.
- I. Finish Rolling:
  - 1. Perform finish rolling while mixture is still warm enough for removal of roller marks.
  - 2. Continue rolling until roller marks are eliminated and course has attained specified density.
- J. Patching:
  - 1. Remove and replace defective areas.
  - 2. Cut-out and fill with fresh, hot asphalt concrete.
  - 3. Compact by rolling to specified surface density and smoothness.
  - 4. Remove deficient areas for full depth of course.

5. Cut sides perpendicular and parallel to direction of traffic with edges vertical.
6. Apply tack coat to exposed surfaces before placing new asphalt concrete mixture.

### **3.07 MARKING ASPHALT CONCRETE PAVEMENT**

- A. Cleaning:
  1. Sweep surface with power broom supplemented by hand brooms to remove loose material and dirt.
  2. Do not begin marking asphalt concrete pavement until acceptable to the Engineer.
- B. Apply paint with mechanical equipment.
  1. Provide uniform straight edges.
  2. Not less than two separate coats in accordance with manufacturer's recommended rates (min. wet film thickness of 15 mils).
  3. Width of Stripe: Width shall be 4-inches unless shown otherwise.

### **3.08 CLEANING AND PROTECTION**

- A. Cleaning: After completion of paving operations, clean surfaces of excess or spilled asphalt materials to the satisfaction of the Engineer.
- B. Protection:
  1. After final rolling, do not permit vehicular traffic on asphalt concrete pavement until it has cooled and hardened, and in no case sooner than 6 hours.
  2. Provide barricades and warning devices as required to protect pavement.
  3. Cover openings of structures in the area of paving until permanent coverings are placed (if applicable).

**END OF SECTION**

## **SECTION 02900**

### **SEEDING AND SODDING**

#### **PART 1 GENERAL**

##### **1.01 SCOPE OF WORK**

- A. The Contractor shall furnish all labor, materials and equipment necessary to satisfactorily return all construction areas to their original conditions or better.
- B. Work shall include furnishing and placing seed or sod, fertilizing, planting, watering and maintenance until acceptance by Owner.

##### **1.02 RELATED WORK NOT INCLUDED**

- A. Excavation, filling and grading required to establish elevation shown on the Drawings are included under other sections of these Specifications.

##### **1.03 QUALITY ASSURANCE**

- A. Requirements
  - 1. It is the intent of this Specification that the Contractor is obliged to deliver a satisfactory stand of grass as specified. If necessary, the Contractor shall repeat any or all of the work, including grading, fertilizing, watering and seeding or sodding at no additional cost to the Owner until a satisfactory stand is obtained. For purposes of grassing, a satisfactory stand of grass is herein defined as a full lawn cover over areas to be sodded or seeded, with grass free of weeds, alive and growing, leaving no bare spots larger than 3/4 square yard within a radius of 8 feet.
  - 2. All previously grassed areas where pipelines are laid shall be sodded. All sodding and grassing shall be installed in accordance with these Specifications or as directed by the Owner's Representative.

##### **1.04 SUBMITTALS**

- A. All submittals shall be in accordance with Specification 01340 - Shop Drawings, Project Data and Samples.

**PART 2      PRODUCTS**

**2.01        MATERIALS**

A.     Fertilizer

1.     The fertilizer shall be of the slow-release type meeting the following minimum requirements: 12 percent nitrogen, 8 percent phosphorus, 8 percent potassium; 40 percent other available materials derived from organic sources. At least 50 percent of the phosphoric acid shall be from normal super phosphate or an equivalent source which will provide a minimum of two units of sulfur. The amount of sulfur shall be indicated on the quantitative analysis card attached to each bag or other container. Fertilizer shall be uniform in composition, dry and free flowing delivered to sites in original unopened containers bearing manufacturer's statement or guarantee.

B.     Seeding/Grassing

1.     The Contractor shall grass all unpaved areas disturbed during construction which do not require sod. All grassing shall be completed in conformance with FDOT Specifications, Sections 570 and 981. The grassed areas shall be mulched and fertilized in accordance with FDOT Specifications, except that no additional payment will be made for mulching, fertilizing and/or watering.

C.     Sodding

1.     Sod shall be provided as required on the construction drawings or at locations as directed by the Owner's Representative in accordance with Florida Department of Transportation, Specifications Section 575 and 981. The Contractor shall furnish Bahia grass sod or match existing sod whichever is more stringent. Placement and watering requirements shall be in accordance with FDOT Specifications Section 575, except that no additional payment will be made for placement and/or watering. This cost shall be included in the Contract lump sum prices bid for the treatment plant improvements.

D. Topsoil

1. Topsoil stockpiled during excavation may be used as necessary. If additional topsoil is required to replace topsoil removed during construction, it shall be obtained off site at no additional cost to the Owner. Topsoil shall be fertile, natural surface soil, capable of producing all trees, plants and grassing specified herein.

E. Water

1. It is the Contractor's responsibility to supply all water to the site, as required during seeding and sodding operations and through the maintenance period and until the work is accepted. The Contractor shall make whatever arrangements may be necessary to ensure an adequate supply of water to meet the needs for his work. He shall also furnish all necessary hose, equipment, attachments and accessories for the adequate irrigation of lawns and planted areas as may be required. Water shall be suitable for irrigation and free from ingredients harmful to plant life. The Owner shall provide reclaimed water at no cost to the Contractor for irrigation of grass, plants and trees planted or installed during construction. The Contractor shall provide all conveyance equipment (tank trucks, pumps, pipes) and irrigation equipment to irrigate the vegetation.

**PART 3 EXECUTION**

**3.01 INSTALLATION**

- A. When the trench backfill has stabilized sufficiently, the Contractor shall commence work on lawns and grassed areas, including fine grading as necessary and as directed by the Owner's Representative.
- B. Finish Grading
  1. Areas to be seeded or sodded shall be finish graded, raked, and debris removed. Soft spots and uneven grades shall be eliminated.
- C. Protection
  1. Seeded and sodded areas shall be protected against traffic or other use by placing warning signs or erecting barricades as necessary. Any areas damaged

prior to acceptance by the Owner shall be repaired by the Contractor as directed by the Owner's Representative.

**3.02 CLEANUP**

- A. Soil or similar materials spilled onto paved areas shall be removed promptly, keeping those areas as clean as possible at all times. Upon completion of seeding and sodding operations, all excess soil, stones and debris remaining shall be removed from the construction areas.

**3.03 MAINTENANCE**

- A. Any existing seeded or sodded areas damaged or altered during construction by the Contractor shall be restored or replaced.
- B. Maintain new seeded or sodded areas for a period of 90 days immediately following complete installation of work or until Owner accepts project. Watering, weeding, cultivating, restoration of grade, mowing and trimming, protection from insects and diseases, fertilizing and similar operations as needed to ensure normal growth and good health for live plant material shall be included at no additional cost to the Owner.

**3.04 REPAIRS TO LAWN AREAS DISTURBED BY CONTRACTOR'S OPERATORS**

- A. Lawn areas planted under this Contract and all lawn areas damaged by the Contractor's operation shall be repaired at once by proper soil preparation, fertilizing, sodding, and watering in accordance with these Specifications.

**END OF SECTION**