PORT ST. LUCIE CITY COUNCIL
AGENDA ITEM REQUEST

COUNCIL ITEM 13F
DATE 8/22/11

Meeting Date: August 22, 2011

Public Hearing ____ Ordinance ____ Resolution ____ Motion X

Legal Advertisement: June 2, 2011 & June 9, 2011 Broadcast Date: May 28, 2011

Item: Contract #20110079 – EWIP Landscaping & Irrigation at Various EWIP Sites

Recommended Action:

1) Approval of Award and Contract Documents with Natures Keeper, Inc. for the EWIP Landscaping & Irrigation at Various EWIP Sites in the amount of **$987,084.59**. Contract period is two hundred forty (240) calendar days with no option for renewal.

Exhibits: Department memo attached [X] yes [ ] no
Copies of the E-Bid Specifications and all Addenda, Responses from proposers, E-Bid tabulation report, and related documents.

Summary Explanation/Background Information: Three (3) proposals were received from Contractors for the EWIP Landscaping & Irrigation at Various EWIP Sites. There are six (6) sites to be completed. Natures Keeper, Inc. submitted the lowest responsive responsible bid in the amount of $987,084.59, which is $966,584.78 lower than the next bid submitted by Sunshine Land Design, Inc. in the amount of $1,953,669.37. Contract period will be 240 calendar days for final completion. The Engineering Department and the Engineer of Record have reviewed Natures Keeper's proposal and recommend City Council approve the award.

Purchase is budgeted in the 403 Fund.

Expenditure: **$ 987,084.59**

Department requests expenditure from the following:

Fund	403	EWIP Fund
Cost Center	4126	Streets & Drainage
Object Code	568812	Infrastructure
Project	00000	n/a

Director of OMB concurs with award: DAF City Manager concurs with award: JAB

Department requests __-0-___ minutes to make a presentation.

Submitted by: Patricia Roebling, PE Date Submitted: 8/16/2011

Title: City Engineer

RECEIVED
AUG 18 2011
City Manager's Office

CITY OF PORT ST. LUCIE

ENGINEERING/PUBLIC WORKS

"The art of applying scientific and mathematical principals, experience, judgement, and common sense to make things that benefit people." - A.S.E.E.

"A City for All Ages"

CELEBRATE 1961 50 2011 PORT ST. LUCIE

MEMORANDUM

TO: CHERYL SHANABERGER – DEPUTY DIRECTOR OF OMB

FROM: JAMES E. ANGSTADT, P.E., CIVIL ENGINEER JEA

DATE: JULY 29, 2011

RE: LANDSCAPING & IRRIGATION CONTRACT #20110079
EASTERN WATERSHED IMPROVEMENT PROJECT
NATURE'S KEEPER, LLC
RECOMMENDATION OF AWARD

The Landscaping & Irrigation contract is one of the final elements of the Eastern Watershed Improvement Project (EWIP) to be undertaken. It involves the supplying and installation of landscaping, aquatic plants and irrigation facilities into the Elks-Cane Slough Stormwater Treatment Area (STA), the Lennard Square STA, the Mary Terrace STA, the Leithgow STA, the Tiffany Channel and the Loutus Drainage Pond.

Bids for this project were received on July 28, 2011 with three contractors submitting proposals. Attached, please find a bid tabulation report which summarizes the bid proposals provided. The Engineering/Public Works Department has reviewed the bid documents and the bid tabulation report and we recommend that Nature's Keeper be awarded the Eastern Watershed Improvement Project Landscaping and Irrigation contract with a bid of $987,084.59.

We hereby request that this award recommendation be scheduled for the next available City Council meeting for their review and consideration. We anticipate the project construction will commence in late August. This contract is funded by Acct. No. 403-4126-568812-00000. If you have any questions or require additional information, please do not hesitate to contact me.

/jea

c: Greg Oravec, Assistant City Manager/CRA Director
Jesus Merejo, Utility Systems Director
Patricia Roebling, P.E., City Engineer
Kim Graham, P.E., Assistant City Engineer
Dave Pollard, Director of OMB
Steve Jungjohan, Manager CIP

S:\projects\EWIP\3.0 Design\3.9 Bid Documents\3.9.10 Landscaping\11-07-29 OMB EWIP LS & IR Natures K Rec to OMB.doc

CITY OF PORT SAINT LUCIE
CONTRACT #20110079

This CONTRACT, executed this _____ day of _____, 2011, by and between the CITY OF PORT ST. LUCIE, Florida, a municipal corporation, duly organized under the laws of the State of Florida, hereinafter called "City," party of the first part, and **NATURE'S KEEPER, INC.**,3795 Sneed Road, Fort Pierce, Florida 34945, Telephone No. (772) 467-1230 Fax No. (772) 467-8923, hereinafter called "Contractor," party of the second part.

RECITALS

In consideration of the below agreements and covenants set forth herein, the parties agree as follows:

CONTRACT SUPERVISOR

As used herein the Contract Supervisor shall mean Steve Jungjohan, Engineering Department at (772) 871-7640, or his designee

Engineer of Record shall mean Mr. Joseph W. Capra, P.E., Captec Engineering and he can be reached at (772) 692-4344, or his designee.

SECTION I
DESCRIPTION OF SERVICES TO BE PROVIDED

The specific work that the Contractor has agreed to perform pursuant to the E-Bid Specifications #20110079 consisting of pages 1 - 55, all Addenda, Technical Specifications Parts 1 & 2 consisting of pages 1 - 28, Attachments A – E, and Construction Plans prepared by Captec Engineering, Inc. dated 2/1/11 consisting of pages 1 – 56 for the construction of the **EWIP Landscaping and Irrigation / Various EWIP Sites** are hereby incorporated herein by this reference.

SECTION II
TIME OF PERFORMANCE

Contract period shall commence on _____ and terminate two hundred forty (240) calendar days thereafter on _____, 2011. In the event all work required in the bid specifications has not been completed by the specified date, the Contractor agrees to provide work as authorized by the Contract Supervisor until all work specified in the bid specifications has been rendered.

SECTION III
COMPENSATION

The total amount to be paid by the City to the Contractor is on a per unit fixed price basis in the amount of **$987,084.59** as indicated on Schedule A attached hereto and made a part of this contract, which includes a one-time ten-dollar ($10.00) payment for indemnification as provided in Section V of this Contract herein below. Payments will be disbursed in the following manner:

The Contract Sum - Work to be paid for on the basis of per unit prices: each, lump sum, linear feet, square yards, system, etc.

Progress Payments- The City will make partial payment during the progress of the work as follows: Partial payments, calculated from quantities of work in place multiplied by the Contract unit prices will be made Net 30 days after the receipt of the Pay Request. Pursuant to FS Section 218.735(8)(a)-(b), the City may withhold, as retainage, ten percent (10%) from each progress payment made to the Contractor for each invoice submitted until fifty (50%) completion of the construction services purchased under this Contract. The City will make payment unless the City feels there are grounds for withholding the payment of Retainage. If the City makes payment of the Retainage to the Contractor then the Contractor shall timely remit payment of such Retainage to all subcontractors and suppliers attributable to the labor, services or material supplied. All remaining retained amounts will be released to the Contractor Net 30 days after final completion of work and the City's acceptance of project. Partial Release of Liens from all Contractors, subcontractors, suppliers for materials and sub-sub contractors are to be attached to each pay request. Retainage and progress payments may be negotiated if payment is made by the Visa Procurement Card.

Acceptance and Final Payment - Upon receipt of written notice that the work is ready for final inspection and acceptance, the City will promptly make such inspection. When City finds the work acceptable under the terms of the Contract and the Contract is fully performed, City will promptly issue a final certificate, stating that the work provided for in this Contract has been completed, and that the City's final acceptance of the Contractor's work under the terms and the conditions of the Contract is recommended, and the entire balance due the Contractor, subject to the covenants in the Standard Specifications and subject to any liquidated damages, if any assessed against the Contractor, will be paid to the Contractor net thirty (30) calendar days after the date of City's issuance of said final certificate of work completion and acceptance.

Before issuance of final payment, the Contractor shall submit evidence that all payrolls, material bills and other indebtedness connected with the work have been paid. Final Release of Liens from all Contractors, subcontractors, suppliers for materials and sub-sub contractors are to be attached to the final invoice.

Invoices for services shall be submitted once a month, by the 10th of each month, and payments shall be made net thirty calendar (30) days unless Contractor has chosen to take advantage of the Purchasing Card Program, which guarantees payment within several days. Payment shall be made Net thirty calendar days (30) of receipt of Contractor's valid invoice, provided invoice is accompanied by adequate supporting documentation, partial release of liens and approved by the Contract Supervisor as provided in Section XII of the Contract.

No payment for projects involving improvements to real property shall be due until Contractor delivers to City a complete release of all claims arising out of the Contract or receipts in full in lieu thereof, and an affidavit on his personal knowledge that the releases and receipts include labor and materials for which a lien could be filed.

All invoices and correspondence relative to this Contract must contain the City's Contract number and Purchase Order number or Visa Authorization number.

The Contractor shall not be paid additional compensation for any loss or damage, arising out of the nature of the work, from the action of the elements, or from any delay or unforeseen obstruction or difficulties encountered in the performance of the work, or for any expenses incurred by or in consequence of the suspension or discontinuance of the work.

SECTION IV
CONFORMANCE WITH BID

It is understood that the materials and/or work required herein are in accordance with the bid made by the Contractor pursuant to the Invitation to Bid and Specifications on file in the Office of Management and Budget of the City. All documents submitted by the Contractor in relation to said bid, and all documents promulgated by the City for inviting bids are, by reference, made a part hereof as if set forth herein in full.

SECTION V
INDEMNIFICATION/INSURANCE

The Contractor agrees to indemnify, defend, and hold harmless the City, its officers and employees, from liabilities, damages, losses and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligent act, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract. As consideration for this indemnity provision the Contractor shall be paid the sum of ten dollars ($10.00), which will be added to the contract price, and paid prior to commencement of work.

The Contractor shall, on a primary basis and at its sole expense, agree to maintain in full force and effect at all times during the life of this Contract, insurance coverage, limits, including endorsements, as described herein. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by Contractor under the Contract.

The parties agree and recognize that it is not the intent of the City of Port St. Lucie that any insurance policy/coverage that it may obtain pursuant to any provision of this Contract will provide insurance coverage to any entity, corporation, business, person, or organization, other than the City of Port St. Lucie and the City shall not be obligated to provide any insurance coverage other than for the City of Port St. Lucie or extend its immunity pursuant to Section 768.28, Florida Statutes, under its self insured program. Any provision contained herein to the contrary shall be considered void and unenforceable by any party. This provision does not apply to any obligation imposed on any other party to obtain insurance coverage for this project, any obligation to name the City of Port St. Lucie as an additional insured under any other insurance policy, or otherwise protect the interests of the City of Port St. Lucie as specified in this Contract.

The Contractor shall agree to maintain Workers' Compensation Insurance & Employers' Liability in accordance with Section 440, Florida Statutes. Employers' Liability must include limits of at least $100,000 each accident, $100,000 each disease/employee, $500,000 each disease/maximum. A Waiver of Subrogation endorsement must be provided. Coverage should apply on a primary basis. Should scope of work performed by Contractor qualify its employee for benefits under Federal Workers' Compensation Statute (example, U.S. Longshore & Harbor Workers Act or Merchant Marine Act), proof of appropriate Federal Act coverage must be provided.

Commercial General Liability insurance issued under an Occurrence form basis, including Contractual liability, to cover the hold harmless agreement set forth herein, with limits of not less than:

Each occurrence	$1,000,000
Personal/advertising injury	$1,000,000
Products/completed operations aggregate	$2,000,000
General aggregate	$2,000,000
Fire damage	$100,000 any 1 fire
Medical expense	$10,000 any 1 person

An Additional Insured endorsement **must** be attached to the certificate of insurance and must include coverage for Completed Operations (should be ISO CG20101185 or CG20371001 & CG20100704) under the General Liability policy. Products & Completed Operations coverage to be provided for a minimum of 5 years from the date of possession by owner or completion of contract. Coverage is to be written on an occurrence form basis and shall apply as primary. A per project aggregate limit endorsement should be attached. Defense costs are to be in addition to the

limit of liability. A waiver of subrogation is to be provided in favor of the City. Coverage for the hazards of explosion, collapse and underground property damage (XCU) must also be included when applicable to the work performed. Coverage shall extend to independent contractors and fellow employees. Contractual Liability is to be included. Coverage is to include a cross liability or severability of interests provision as provided under the standard ISO form separation of insurers clause. There shall be no exclusion for Mold, Silica or Respirable Dust or Bodily Injury or Property Damage arising out of heat, smoke, fumes or ash from a hostile fire.

Except as to Workers' Compensation and Employers' Liability, said Certificate(s) and policies shall clearly state that coverage required by the Contract has been endorsed to include the City of Port St. Lucie, a political subdivision of the State of Florida, its officers, agents and employees as Additional Insured with a CG 2026-Designated Person or Organization endorsement, or similar endorsement, added to its Commercial General Liability policy and Business Auto policy. The name for the Additional Insured endorsement issued by the insurer shall read **"City of Port St. Lucie, political subdivision of the State of Florida, its officers, employees and agents, and Contract #20110079 for the EWIP Landscaping & Irrigation / Various EWIP Sites shall be listed as additionally insured"**. The Certificate of Insurance and policy shall unequivocally provide thirty- (30) day written notice to the City prior to any adverse changes, cancellation, or non-renewal of coverage thereunder. Said liability insurance must be acceptable by and approved by the City as to form and types of coverage. In the event that the statutory liability of the City is amended during the term of this Contract to exceed the above limits, the Contractor shall be required, upon thirty - (30) days written notice by the City, to provide coverage at least equal to the amended statutory limit of liability of the City. Copies of the Additional Insured endorsements including Completed Operations coverage should be attached to the Certificate of Insurance. All independent contractors and subcontractors utilized in this project must furnish a Certificate of Insurance to the City in accordance with the same requirements set forth herein.

The Contractor shall agree to maintain Business Automobile Liability at a limit of liability not less than $500,000 each accident covering any auto, owned, non-owned and hired automobiles. In the event, the Contractor does not own any automobiles; the Business Auto Liability requirement shall be amended allowing Contractor to agree to maintain only Hired & Non-Owned Auto Liability. This amended requirement may be satisfied by way of endorsement to the Commercial General Liability, or separate Business Auto Coverage form. Certificate holder must be listed as additional insured. A waiver of subrogation must be provided. Coverage should apply on a primary basis.

The Contractor shall agree by entering into this Contract to a Waiver of Subrogation for each required policy. When required by the insurer, or should a policy condition not permit an Insured to enter into a pre-loss Contract to waive subrogation without an endorsement then Contractor shall agree to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy where a condition to the policy specifically prohibits such an endorsement, or voids coverage should Contractor enter into such a Contract on a pre-loss basis.

It shall be the responsibility of the Contractor to ensure that all subcontractors comply with the same insurance requirements referenced above.

All deductible amounts shall be paid for and be the responsibility of the Contractor for any and all claims under this Contract.

The Contractor may satisfy the minimum limits required above for either Commercial General Liability, Business Auto Liability, and Employers' Liability coverage under Umbrella or Excess Liability. The Umbrella or Excess Liability shall have an Aggregate limit not less than the highest "Each Occurrence" limit for either Commercial General Liability, Business Auto Liability, or Employers' Liability. When required by the insurer, or when Umbrella or Excess Liability is written on Non-Follow Form," the City shall be endorsed as an "Additional Insured."

Payment & Performance Bonds: The Contractor shall furnish an acceptable Performance and Payment Bond complying with the statutory requirements set forth in Section 255.05, Florida Statutes, in the amount of 100% of the Contract price. A fully authorized Surety, licensed by the State of Florida shall execute the Performance and Payment Bond. The Performance and Payment Bond shall remain in full force a minimum of one (1) years after the work required has been completed and final acceptance by the City.

Should the Surety become irresponsible during the time the Contract is in force, the City may require additional and sufficient sureties and the Contractor shall furnish same to the satisfaction of the City within ten (10) days after written notice to do so. In default thereof, the Contract may be suspended as herein provided.

SECTION VI
PROHIBITION AGAINST FILING OR MAINTAINING LIENS AND SUITS

Subject to the laws of the State of Florida and of the United States, neither Contractor nor any Subcontractor, supplier of materials, laborer or other person shall file or maintain any lien for labor or materials delivered in the performance of this Contract against the City. The right to maintain such lien for any or all of the above parties is hereby expressly waived.

SECTION VII
WORK CHANGES

The City reserves the right to order work changes in the nature of additions, deletions or modifications without invalidating the Contract, and agrees to make corresponding adjustments in the Contract price and time for completion. Any and all changes must be authorized by a written change order signed by the City Manager or his designee as representing the City. Work shall be changed and the Contract price and completion time shall be modified only as set out in the written change order. Any adjustment in the Contract price resulting in a credit or a charge to the City shall be determined by mutual agreement of the parties.

SECTION VIII
COMPLIANCE WITH LAWS

The Contractor shall give all notices required by and shall otherwise comply with all applicable laws, ordinances and codes and shall, at his own expense, secure and pay the fees and charges for all permits required for the performance of the Contract. All materials furnished and works done are to comply with all local, state and federal laws and regulations. Contractor will comply with the requirements of 28 C.F.R. § 35.151.

Davis-Bacon Act Wage Rate Decision:

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General Decision Number: FL100278 01/21/2011  FL278
Superseded General Decision Number: FL20080278
State: Florida
Construction Type: Heavy
County: St Lucie County in Florida.

HEAVY CONSTRUCTION PROJECTS (Including Sewer and Water Lines)

Modification Number      Publication Date
          0               03/12/2010
          1               10/29/2010
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2 11/19/2010
3 01/21/2011

* ELEC0728-006 09/01/2010

	Rates	Fringes
ELECTRICIAN	$ 28.46	8.60

ENGI0487-014 01/01/2010

	Rates	Fringes
OPERATOR: Crane All Tower Cranes Mobile, Rail, Climbers, Static-Mount; All Cranes with Boom Length 150 Feet & Over (With or without jib) Friction, Hydraulic, Electric or Otherwise; Cranes 150 Tons & Over; Cranes with 3 Drums (When 3rd drum is rigged for work); Gantry & Overhead Cranes; Hydraulic Cranes Over 25 Tons but not more than 50 Tons; Hydraulic/Friction Cranes; & All Types of Flying Cranes; Boom Truck	$ 28.30	8.78
Cranes with Boom Length Less than 150 Feet (With or without jib); Hydraulic Cranes 25 Tons & Under, & Over 50 Tons (With Oiler); Boom Truck	$ 27.57	8.78
OPERATOR: Drill	$ 25.05	8.78
OPERATOR: Oiler	$ 22.24	8.78

IRON0402-003 04/01/2009

	Rates	Fringes
IRONWORKER, STRUCTURAL	$ 22.22	7.65

LABO1652-004 05/01/2009

	Rates	Fringes
LABORER: Grade Checker	$ 14.50	4.67

PAIN0452-007 08/01/2010

	Rates	Fringes
PAINTER: Brush, Roller and Spray	$ 16.00	6.20

SUFL2009-175 06/24/2009

	Rates	Fringes
CARPENTER, Includes Form Work....	$ 15.50	0.00
CEMENT MASON/CONCRETE FINISHER...	$ 16.46	0.00
LABORER: Common or General.....	$ 10.52	0.00
LABORER: Landscape.....	$ 7.25	0.00
LABORER: Pipelayer.....	$ 13.93	0.00
LABORER: Power Tool Operator (Hand Held Drills/Saws, Jackhammer and Power Saws.....	$ 10.63	2.20
OPERATOR: Asphalt Paver.....	$ 11.59	0.00
OPERATOR: Backhoe Loader Combo.....	$ 16.10	2.44
OPERATOR: Backhoe/Excavator.....	$ 21.70	0.00
OPERATOR: Blade/Grader.....	$ 16.00	2.84
OPERATOR: Bulldozer.....	$ 16.07	0.00
OPERATOR: Loader.....	$ 14.11	0.00
OPERATOR: Mechanic.....	$ 14.32	0.00
OPERATOR: Roller.....	$ 11.25	0.00
OPERATOR: Scraper.....	$ 11.00	1.74
OPERATOR: Trackhoe.....	$ 20.92	5.50
OPERATOR: Tractor.....	$ 10.54	0.00
TRUCK DRIVER: Lowboy Truck.....	$ 12.73	0.00
TRUCK DRIVER: Off the Road Truck.....	$ 12.21	1.97
TRUCK DRIVER: Servicer.....	$ 12.00	0.00
TRUCK DRIVER: Dump Truck.....	$ 10.60	0.00

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 (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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.

END OF GENERAL DECISION

SECTION IX
CLEANING UP

Contractor shall, during the performance of this Contract, remove and properly dispose of resulting dirt and debris, and keep the work area reasonably clear. On completion of the work, Contractor shall remove all Contractors' equipment and all excess materials, and put the work area in a neat, clean and sanitary condition.

SECTION X
NOTICE OF PERFORMANCE

When required materials have been delivered and required work performed Contractor shall submit a request for inspection in writing to the Contract Supervisor.

SECTION XI
DELIVERY DOCUMENTATION

Not applicable.

SECTION XII
INSPECTION AND CORRECTION OF DEFECTS

In order to determine whether the required material has been delivered or the required work performed in accordance with the terms and conditions of the Contract documents, the Contract Supervisor shall make inspection as soon as practicable after receipt from the Contractor of a Notice of Performance or delivery ticket. If such inspection shows that the required material has been delivered and required work performed in accordance with terms and conditions of the Contract documents and that the material and work is entirely satisfactory, the Contract Supervisor shall approve the invoice when it is received. Thereafter the Contractor shall be entitled to payment, as described in Section III. If, on such inspection the Contract Supervisor is not satisfied, he shall as promptly as practicable inform the parties hereto of the specific respects in which his findings are not favorable. Contractor shall then be afforded an opportunity if desired by him, to correct the deficiencies so pointed out at no additional charge to the City, and otherwise on terms and conditions specified by the Contract Supervisor. Such examination, inspection, or tests made by the Contract Supervisor, shall not relieve Contractor of its responsibility to remedy any deviation, deficiency, or defect.

SECTION XIII
ADDITIONAL REQUIREMENTS

In the event of any conflict between the terms and conditions, appearing on any purchase order issued relative to this Contract, and those contained in this Contract and the Specifications herein referenced, the terms of this Contract and Specifications herein referenced shall apply. If there is a conflict between the Contract and specifications, the Contract will control.

SECTION XIV
LICENSING

Contractor warrants that he possesses all licenses and certificates necessary to perform required work and is not in violation of any laws. Contractor warrants that his license and certificates are current and will be maintained throughout the duration of the Contract.

SECTION XV
SAFETY PRECAUTIONS

Precaution shall be exercised at all times for the protection of persons, including employees, and property. The safety provisions of all applicable laws and building and construction codes shall be observed.

SECTION XVI
ASSIGNMENT

Contractor shall not delegate, assign or subcontract any part of the work under this Contract or assign any monies due him hereunder without first obtaining the written consent of the City.

SECTION XVII
TERMINATION, DELAYS AND LIQUIDATED DAMAGES

A. Termination of Contract. If the Contractor refuses or fails to deliver material as required and/or prosecute the work with such diligence as will insure its completion within the time specified in this Contract, the City by written notice to the Contractor, may terminate Contractor's rights to proceed. Upon such termination, the City may take over the work and prosecute the same to completion, by Contract or otherwise, and the Contractor and his sureties shall be liable to the City for any additional cost incurred by it in its completion of the work. The City may also in event of termination obtain undelivered materials, by Contract or otherwise, and the Contractor and his sureties shall be liable to the City for any additional cost incurred for such material. Contractor and his sureties shall also be liable to the City for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is so terminated, the City may take possession of and utilize in completing the work such materials, tools, equipment and facilities as may be on the site of the work and necessary therefore.

B. Liquidated Damages for Delays. If material is not provided or work is not completed within the time stipulated in this Contract, including any extensions of time for excusable delays as herein provided, (it being impossible to determine the actual damages occasioned by the delay) the Contractor shall provide to the City one thousand one hundred forty-eight ($1,148.00) dollars as fixed, agreed and liquidated damages for each calendar day of delay until the work is completed. The Contractor and his sureties shall be jointly and severally liable to the City for the amount thereof.

C. Excusable Delays. The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work or delivery of materials due to: (1) any acts of the Federal Government, including controls or restrictions or requisitioning of materials, equipment, tools or labor by reason of war, national defense or any other national emergency, (2) any adverse acts of the City, (3) causes not reasonably foreseeable by the parties at the time of the execution of the Contract that are beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of the public enemy, acts of another Contractor in the performance of some other Contract with the City, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions, and (4) any delay of any Subcontractor occasioned by any of the above mentioned causes. However, the Contractor must promptly notify the City in writing within two (2) days of the

cause of delay. If, on the basis of the facts and the terms of this Contract, the delay is properly excusable the City shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

D. The City may terminate this Contract with or without cause by giving the Contractor thirty (30) days notice in writing. Upon delivery of said notice and upon expiration of the thirty (30) day period, the Contractor shall discontinue all services in connection with the performance of this Contract and shall proceed to cancel promptly all related existing third party Contracts. Termination of the Contract by the City pursuant to this paragraph shall terminate all of the City's obligations hereunder and no charges, penalties or other costs shall be due Contractor except for work timely completed.

SECTION XVIII
LAW AND VENUE

This Contract is to be construed as though made in and to be performed in the State of Florida and is to be governed by the laws of Florida in all respects without reference to the laws of any other state or nation. The venue of any action taken to enforce this Contract shall be in St. Lucie County, Florida.

SECTION XIX
REIMBURSEMENT FOR INSPECTION

The Contractor agrees to reimburse the City for any expenditures incurred by the City in the process of testing materials supplied by the Contractor against the specifications under which said materials were procured, if said materials prove to be defective, improperly applied, and/or in other manners not in compliance with specifications. Expenditures as defined herein shall include, but not be limited to, the replacement value of materials destroyed in testing, the cost paid by the City to testing laboratories and other entities utilized to provide tests, and the value of labor and materials expended by the City in the process of conducting the testing. Reimbursement of charges as specified herein shall not relieve the Contractor from other remedies provided in the Contract.

SECTION XX
APPROPRIATION APPROVAL

The Contractor acknowledges that the City of Port Saint Lucie's performance and obligation to pay under this Contract is contingent upon an annual appropriation by the City Council. The Contractor agrees that, in the event such appropriation is not forthcoming, the City may terminate this Contract and that no charges, penalties or other costs shall be assessed.

SECTION XXI
RENEWAL OPTION

Not applicable to this contract.

SECTION XXII
ENTIRE CONTRACT

The written terms and provisions of this Contract shall supersede all prior verbal statements of any official or other representative of the City. Such statements shall not be effective or be construed as entering into, or forming a part of, or altering in any manner whatsoever, this Contract or Contract documents.

IN WITNESS WHEREOF, the parties have executed this Contract at Port St. Lucie, Florida, the day and year first above written.

CITY OF PORT ST. LUCIE FLORIDA
By: _____
City Manager

ATTEST:
By: _____
City Clerk

By:_____
Authorized Representative of Nature's Keeper, Inc.

State of:_____

County of:_____

Before me personally appeared: _____)
(please print)

Please check one:

Personally known _____

Produced Identification: _____
(type of identification)

Identification No. _____

and known to me to be the person described in and who executed the foregoing instrument, and acknowledged to and before me that _____ executed said instrument for the purposes therein expressed.
(he/she)

WITNESS my hand and official seal, this _____ day of _____, 2011.

_____
Notary Signature

Notary Public-State of _____ at Large.

My Commission Expires _____.

(*seal*)

Schedule "A"

SCHEDULE 1 - CANE SLOUGH / ELKS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	200	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	7500	$ 2.95	$ 22,125.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	7500	$ 1.40	$ 10,500.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS (LA/IRR)	LS	1	$ 16,317.00	$ 16,317.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MON	12	$ 787.50	$ 9,450.00
10	**Total for General Items**	--	--	--	**$ 64,392.00**

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 3,286.80	$ 3,286.80
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 12,985.00	$ 12,985.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
14	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	EA	5343	$ 5.63	$ 30,081.09
15	4" Nibco TI-8 Gate Valve	EA	5	$ 450.00	$ 2,250.00
16	Carson 1419 Valve Box with Lid	LF	5	$ 50.00	$ 250.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	20	$ 325.00	$ 6,500.00
18	Carson 1220 Jumbo Valve Box with Lid	EA	19	$ 62.00	$ 1,178.00
19	Class 200 PVC Lateral with Schedule 40 PVC fittings (size per plan)	EA	15150	$ 1.05	$ 15,907.50
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	342	$ 18.50	$ 6,327.00
21	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	2	$ 28.00	$ 56.00
22	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	21	$ 28.00	$ 588.00
23	Hunter PGP-04-CV with #6 Nozzle	EA	4	$ 32.00	$ 128.00
24	Hunter PGP-04-CV with #9 Nozzle	EA	75	$ 32.00	$ 2,400.00

25	Hunter PGP-04-CV with #12 Nozzle	EA	47	$ 32.00	$ 1,504.00
26	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	6	$ 45.00	$ 270.00
27	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	52	$ 45.00	$ 2,340.00
28	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	25	$ 45.00	$ 1,125.00
29	**Total for Irrigation Items**	--	--	--	**$ 87,776.39**

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO.	DESCRIPTION (Common Name)	DESCRIPTION *(Scientific Name)*	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
30	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	3,380	$ 0.42	$ 1,419.60
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	4,790	$ 0.63	$ 3,017.70
32	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	-	155	$ 3.96	$ 613.80
33	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	129	$ 8.60	$ 1,109.40
34	Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	18" FULL	348	$ 6.09	$ 2,119.32
35	Green Island Ficus	*FICUS MICROCARPA*	1 GAL	-	70	$ 3.01	$ 210.70
36	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	154	$ 2.70	$ 415.80
37	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	1,030	$ 2.91	$ 2,997.30
38	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	FULL	1,280	$ 2.91	$ 3,724.80
39	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	210	$ 3.01	$ 632.10
40	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	7,730	$ 0.63	$ 4,869.90
41	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	9,910	$ 0.42	$ 4,162.20
42	Maidencane	*PANICUM HEMITOMON*	BR	-	4,570	$ 0.42	$ 1,919.40
43	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	3,160	$ 0.42	$ 1,327.20
44	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	4,030	$ 0.63	$ 2,538.90
45	Soft Rush	*JUNCUS EFFUSUS*	BR	-	760	$ 0.42	$ 319.20
46	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	2,720	$ 0.74	$ 2,012.80
47	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	16,946	$ 0.68	$ 11,523.28
48	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" full	2,119	$ 4.20	$ 8,899.80
49		**Total for Shrubs and Groundcover**	--	--	--	--	**$53,833.20**

TREES							
LINE NO.	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
50	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	203	$ 53.24	$ 10,807.72
51	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	203	$ 74.60	$ 15,143.80
52	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'-4"Cal OA	205	$ 148.37	$ 30,415.85
53	Royal Palm	*ROYSTONEA REGIA*	-	10-12'	40	$ 347.05	$ 13,882.00
54	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	85	$ 148.54	$ 12,625.90
55	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8'	109	$ 21.65	$ 2,359.85
56	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10'	109	$ 33.44	$ 3,644.96
57	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12'	109	$ 78.22	$ 8,525.98
58	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16',8'SPR	12	$ 247.52	$ 2,970.24
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	24	$ 146.98	$ 3,527.52
60	Dahoon Holly	*IILEX CASSINE*	30 GAL	10'-12'x2"OA	73	$ 96.61	$ 7,052.53
61	Cabbage Palm	*SABAL PALMETTO*	FG	12'-18' STG	12	$ 144.27	$ 1,731.24
62	Simpson's Stopper	*MYRCIANTHES FRAGRANS*	30 GAL	8'-9'(B)	30	$ 141.46	$ 4,243.80
63	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	36	$ 146.98	$ 5,291.28
64	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7-9'	13	$ 99.12	$ 1,288.56
65	Sea Grape	*COCCOLOBA UVIFERA*	15 GAL	8'-10' ML	254	$ 101.40	$ 25,755.60
66	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	16	$ 129.28	$ 2,068.48
67		**Total for Trees**	--	--	--	--	**$151,335.31**

	SCHEDULE 1 - CANE SLOUGH / ELKS STA LANDSCAPING/ IRRIGATION BID TOTAL	--	**$357,336.90**

SCHEDULE 2 - LENNARD SQUARE / AZZI STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	150	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.95	$ 7,375.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 1.40	$ 3,500.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 16,317.00	$ 16,317.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 367.50	$ 4,410.00
	Total for General Items	--	--	--	**$ 37,602.00**

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
9	3" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	3207	$ 5.60	$ 17,959.20
10	3" Nibco T-113 Gate Valve	EA	3	$ 339.00	$ 1,017.00
11	Carson 1419 Valve Box with Lid	EA	3	$ 50.00	$ 150.00
12	2" Rain Bird PESB Series Remote Control Valve	EA	10	$ 325.00	$ 3,250.00
13	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 62.00	$ 496.00
14	Class 200 PVC Lateral Line with Schedule 40 PVC gasketed Fittings (size per plan)	LF	8100	$ 1.25	$ 10,125.00
15	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	143	$ 18.50	$ 2,645.50
16	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	91	$ 28.00	$ 2,548.00
17	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	16	$ 28.00	$ 448.00
18	Hunter PGP-04-CV with #6 Nozzle	EA	3	$ 32.00	$ 96.00
19	Hunter PGP-04-CV with #9 Nozzle	EA	9	$ 32.00	$ 288.00
20	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	4	$ 45.00	$ 180.00
21	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	59	$ 45.00	$ 2,655.00

22	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	10	$ 45.00	$ 450.00
23	**Total for Irrigation Items**	--	--	--	**$ 42,307.70**

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO.	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
24	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,960	$ 0.42	$ 823.20
25	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	73	$ 6.09	$ 444.57
26	Wild Coffee	*PSYCHOTRIA NERVOSA*	3 GAL	-	293	$ 6.71	$ 1,966.03
27	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	600	$ 3.33	$ 1,998.00
28	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	2,180	$ 0.63	$ 1,373.40
29	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,810	$ 0.42	$ 1,600.20
30	Maidencane	*PANICUM HEMITOMON*	BR	-	6,750	$ 0.42	$ 2,835.00
31	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	1,630	$ 0.42	$ 684.60
32	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	1,742	$ 0.63	$ 1,097.46
33	Soft Rush	*JUNCUS EFFUSUS*	BR	-	2,510	$ 0.42	$ 1,054.20
34	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,465	$ 0.74	$ 3,304.10
35	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	17,624	$ 0.68	$ 11,984.32
36	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	12"	582	$ 3.96	$ 2,304.72
37	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	482	$ 2.91	$ 1,402.62
38	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	122	$ 8.60	$ 1,049.20
39	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	360	$ 2.70	$ 972.00
40	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	146	$ 3.01	$ 439.46
41	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	451	$ 2.91	$ 1,312.41
42	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	1,954	$ 4.20	$ 8,206.80
43		**Total for Shrubs and Groundcover**	--	--	--	--	**$44,852.29**

TREES							
LINE NO.	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
44	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7'-9' OA	10	$ 99.12	$ 991.20
45	Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'+2" OA	60	$ 53.24	$ 3,194.40
46	Cypress	*TAXODIUM DISTICHUM*	45 GAL	12'+3" OA	60	$ 74.60	$ 4,476.00
47	Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" C	60	$ 148.37	$ 8,902.20
48	Green Buttonwood	*CONOCARPUS ERECTUS*	30 GAL	14'(B)OA	9	$ 140.70	$ 1,266.30
49	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	71	$ 148.54	$ 10,546.34
50	Red Bay	*PERSEA BORBONIA*	3 GAL	2'-4' OA	28	$ 82.40	$ 2,307.20
51	Red Bay	*PERSEA BORBONIA*	15 GAL	6'-8' OA	28	$ 39.81	$ 1,114.68
52	Red Bay	*PERSEA BORBONIA*	25 GAL	8'-10' OA	29	$ 82.40	$ 2,389.60
53	Royal Poinciana	*DELONIX REGIA*	45 GAL	12'-14'x8'SPR OA	7	$ 247.52	$ 1,732.64
54	Royal Palm	*ROYSTONEA REGIA*		10'-12' OA	28	$ 347.05	$ 9,717.40
55	Red Maple	*ACER RUBRUM*	10 GAL	8' OA	64	$ 36.58	$ 2,341.12
56	Red Maple	*ACER RUBRUM*	25 GAL	8'-10' OA	63	$ 79.01	$ 4,977.63
57	Red Maple	*ACER RUBRUM*	45 GAL	12'-14' OA	63	$ 91.58	$ 5,769.54
58	Red Maple	*ACER RUBRUM*	65 GAL	14'-16'x4"Cal OA	11	$ 124.18	$ 1,365.98
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	4	$ 146.98	$ 587.92
60	Cabbage Palm	*SABAL PALMETTO*	FG	12'-14' OA	124	$ 144.27	$ 17,889.48
61		**Total for Trees**	--	--	--	--	**$79,569.63**

	SCHEDULE 2 - LENNARD SQ / AZZI STA LANDSCAPING /IRRIGATION BID TOTAL	--	**$204,331.62**

SCHEDULE 3 - TIFFANY CHANNEL STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -

2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.95	$ 7,375.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 1.40	$ 3,500.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,292.00	$ 5,292.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	**Total for General Items**	--	--	--	**$ 22,167.00**

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 3,286.80	$ 3,286.80
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 12,985.00	$ 12,985.00
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
13	4" Class 200 PVC Mainline/Fittings	LF	2276	$ 5.63	$ 12,813.88
14	4" Nibco T-8 Gate Valve	EA	1	$ 450.00	$ 450.00
15	Carson 1419 Valve Box with Lid	EA	1	$ 50.00	$ 50.00
16	2" Rain Bird PESB Series Remote Control Valve	EA	12	$ 325.00	$ 3,900.00
17	Carson 1220 Jumbo Valve Box with Lid	EA	13	$ 62.00	$ 806.00
18	Class 200 PVC Lateral Line/Fittings (size per plan)	LF	10800	$ 1.05	$ 11,340.00
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	244	$ 18.50	$ 4,514.00
20	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	28	$ 28.00	$ 784.00
21	Hunter PGP-04-CV with #6 Nozzle	EA	5	$ 32.00	$ 160.00
22	Hunter PGP-04-CV with #9 Nozzle	EA	56	$ 32.00	$ 1,792.00
23	Hunter PGP-04-CV with #12 Nozzle	EA	31	$ 32.00	$ 992.00
24	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 45.00	$ 90.00
25	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	10	$ 45.00	$ 450.00
26	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	18	$ 45.00	$ 810.00

27	**Total for Irrigation Items**	--	--	--	**$ 55,823.68**

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO.	DESCRIPTION (Common Name)	DESCRIPTION *(Scientific Name)*	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
28	Red Tip Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	24"	140	$ 6.09	$ 852.60
29	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	831	$ 3.33	$ 2,767.23
30	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	Full	700	$ 2.91	$ 2,037.00
31	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	944	$ 4.20	$ 3,964.80
32		***Total for Shrubs and Groundcover***	--	--	--	--	**$9,621.63**

TREES

LINE NO.	DESCRIPTION (Common Name)	DESCRIPTION *(Scientific Name)*	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
33	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	14	$ 129.28	$ 1,809.92
34	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"CAL OA	66	$ 148.54	$ 9,803.64
35	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$ 153.65	$ 3,226.65
36	Slash Pine	*PINUS ELLIOTII(South Florida Densa)*	45 GAL	10'-12' OA	118	$ 91.58	$ 10,806.44
37	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	26	$ 146.98	$ 3,821.48
38		**Total for Trees**	--	--	--	--	**$29,468.13**

	SCHEDULE 3 - TIFFANY CHANNEL STA LANDSCAPING/ IRRIGATION BID TOTAL	--	**$117,080.44**

SCHEDULE 4 - LEITHGOW STREET STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ -	$ -

3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	50	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	1250	$ 2.95	$ 3,687.50
5	BAHIA SOD (PLACE AS DIRECTED)	SY	1250	$ 1.40	$ 1,750.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 4,851.00	$ 4,851.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 210.00	$ 2,520.00
10	**Total for General Items**	--	--	--	**$ 18,808.50**

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 2,285.80	$ 2,285.80
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rain sensor	EA	1	$ 10,895.00	$ 10,895.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
14	3" Class 200 PVC Mainline/Fittings	LF	1660	$ 5.60	$ 9,296.00
15	3" Nibco T-113 Gate Valve	EA	2	$ 339.00	$ 678.00
16	Carson 1419 Valve Box with Lid	EA	2	$ 50.00	$ 100.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	8	$ 325.00	$ 2,600.00
18	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 62.00	$ 496.00
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	1640	$ 1.60	$ 2,624.00
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	98	$ 18.50	$ 1,813.00
21	Hunter PGP-04-CV with #6 Nozzle	EA	1	$ 32.00	$ 32.00
22	Hunter PGP-04-CV with #9 Nozzle	EA	44	$ 32.00	$ 1,408.00
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 45.00	$ 135.00
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	4	$ 45.00	$ 180.00
25	**Total for Irrigation Items**	--	--	--	**$ 33,142.80**

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO.	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
26	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,740	$ 0.42	$ 730.80
27	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,420	$ 0.63	$ 894.60
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,270	$ 0.42	$ 1,373.40
29	Maidencane	*PANICUM HEMITOMON*	BR	-	1,740	$ 0.42	$ 730.80
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	2,500	$ 0.42	$ 1,050.00
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	2,180	$ 0.63	$ 1,373.40
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,790	$ 0.74	$ 3,544.60
33	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	517	$ 0.68	$ 351.56
34	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	22	$ 6.09	$ 133.98
35	Fire Flag	*THALIA GENICULATA*	BR	-	1,420	$ 0.53	$ 752.60
36	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	269	$ 2.91	$ 782.79
37	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	BR	-	1,310	$ 0.68	$ 890.80
38	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	383	$ 2.91	$ 1,114.53
39	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	326	$ 4.20	$ 1,369.20
40		**Total for Shrubs and Groundcover**	--	--	--	--	**$15,093.06**

TREES

LINE NO.	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
41	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	13	$ 129.28	$ 1,680.64
42	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	37	$ 53.24	$ 1,969.88
43	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	37	$ 74.60	$ 2,760.20
44	Bald Cypress	*TAXODIUM DISTICHUM*	65 GAL	14' OA	39	$ 148.37	$ 5,786.43
45	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	4	$ 148.54	$ 594.16
46	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	28	$ 21.65	$ 606.20
47	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	28	$ 33.44	$ 936.32
48	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	29	$ 78.22	$ 2,268.38
49	Royal Poinciana	*DELONIX REGIA*	60 GAL	14'-16'x8"SPR OA	2	$ 247.52	$ 495.04

50	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	15	$ 124.18	$ 1,862.70
51	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'x2"Cal	6	$ 146.98	$ 881.88
52	Cabbage Palm	*SABAL PALMETTO*	-	12'-18' STG	17	$ 144.27	$ 2,452.59
53	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	3	$ 129.28	$ 387.84
54		**Total for Trees**	--	--	--	--	**$22,682.26**

	SCHEDULE 4 - LEITHGOW STREET STA LANDSCAPING/ IRRIGATION BID TOTAL	--	**$89,726.62**

SCHEDULE 5 - LOUTUS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	5000	$ 2.95	$ 14,750.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	5000	$ 1.40	$ 7,000.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,733.00	$ 5,733.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	**Total for General Items**	--	--	--	**$ 33,483.00**

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 2,285.80	$ 2,285.80
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rain sensor	EA	1	$ 10,895.00	$ 10,895.00
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00

13	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	4229	$ 5.63	$ 23,809.27
14	4" Nibco T-8 Gate Valve	EA	3	$ 450.00	$ 1,350.00
15	Carson 1419 Valve Box with Lid	EA	3	$ 50.00	$ 150.00
16	2" Rain Bird PESB Series Remote Control Valve	EA	17	$ 325.00	$ 5,525.00
17	Carson 1220 Jumbo Valve Box with Lid	EA	17	$ 62.00	$ 1,054.00
18	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	10060	$ 1.05	$ 10,563.00
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	184	$ 18.50	$ 3,404.00
20	Hunter PGP-04-CV with #6 Nozzle	EA	6	$ 32.00	$ 192.00
21	Hunter PGP-04-CV with #9 Nozzle	EA	88	$ 32.00	$ 2,816.00
22	Hunter PGP-04-CV with #12 Nozzle	EA	2	$ 32.00	$ 64.00
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 45.00	$ 90.00
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	22	$ 45.00	$ 990.00
25	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	5	$ 45.00	$ 225.00
25	**Total for Irrigation Items**	--	--	--	**$ 64,013.07**

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO.	DESCRIPTION (Common Name)	DESCRIPTION *(Scientific Name)*	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
26	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	1,196	$ 0.68	$ 813.28
27	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	687	$ 2.91	$ 1,999.17
28	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	855	$ 2.91	$ 2,488.05
29	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	952	$ 4.20	$ 3,998.40
30		***Total for Shrubs and Groundcover***	--	--	--	--	**$9,298.90**

TREES

LINE NO.	DESCRIPTION (Common Name)	DESCRIPTION *(Scientific Name)*	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
31	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	75	$ 148.54	$ 11,140.50
32	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$ 153.65	$ 3,226.65

33	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8'SPR OA	8	$ 297.78	$ 2,382.24
34	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	40	$ 124.18	$ 4,967.20
35	Sycamore	*PLANTANUS*	65 GAL	14'-16'x4"Cal OA	10	$ 123.00	$ 1,230.00
36	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	10	$ 146.98	$ 1,469.80
37	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	13	$ 129.28	$ 1,680.64
38		**Total for Trees**	--	--	--	--	**$26,097.03**

	SCHEDULE 5 - LOUTUS STA LANDSCAPING /IRRIGATION BID TOTAL	--	**$132,892.00**

SCHEDULE 6 - MARY TERRACE STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.95	$ 7,375.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 1.40	$ 3,500.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,292.00	$ 5,292.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 210.00	$ 2,520.00
10	**Total for General Items**	--	--	--	**$ 24,687.00**

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 2,285.80	$ 2,285.80
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rain sensor	EA	1	$ 10,895.00	$ 10,895.00

13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
14	2 1/2" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	1160	$ 5.55	$ 6,438.00
15	2 1/2" Nibco T-113 Gate Valve	EA	1	$ 268.00	$ 268.00
16	Carson 1419 Valve Box with Lid	EA	1	$ 50.00	$ 50.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	7	$ 325.00	$ 2,275.00
18	Carson 1220 Jumbo Valve Box with Lid	EA	7	$ 62.00	$ 434.00
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	2960	$ 1.70	$ 5,032.00
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	129	$ 18.50	$ 2,386.50
21	Hunter PGP-04-CV with #6 Nozzle	EA	30	$ 32.00	$ 960.00
22	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 45.00	$ 135.00
23	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	6	$ 45.00	$ 270.00
24	**Total for Irrigation Items**	--	--	--	**$ 32,029.30**

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO.	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
25	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	2,070	$ 0.42	$ 869.40
26	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,200	$ 0.63	$ 756.00
27	Fire Flag	*THALIA GENICULATA*	BR	-	440	$ 0.53	$ 233.20
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	1,850	$ 0.42	$ 777.00
29	Maidencane	*PANICUM HEMITOMON*	BR	-	110	$ 0.42	$ 46.20
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	870	$ 0.42	$ 365.40
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	440	$ 0.63	$ 277.20
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	3,050	$ 0.74	$ 2,257.00
33	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	LN	-	650	$ 0.89	$ 578.50
34	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	355	$ 0.68	$ 241.40
35	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	359	$ 2.91	$ 1,044.69
36	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	348	$ 2.91	$ 1,012.68

37	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	272	$ 4.20	$ 1,142.40
38		**Total for Shrubs and Groundcover**	--	--	--	--	**$9,601.07**

TREES

LINE NO.	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
39	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	38	$ 53.24	$ 2,023.12
40	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	38	$ 74.60	$ 2,834.80
41	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" Cal OA	38	$ 148.37	$ 5,638.06
42	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"Cal	11	$ 148.54	$ 1,633.94
43	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	2	$ 153.65	$ 307.30
44	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	18	$ 21.65	$ 389.70
45	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	18	$ 33.44	$ 601.92
46	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	18	$ 78.22	$ 1,407.96
47	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8"Spr OA	2	$ 247.52	$ 495.04
48	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	20	$ 124.18	$ 2,483.60
49	Sycamore	*PLANTANUS*	65 GAL	14'-16x4"' OA	2	$ 123.00	$ 246.00
50	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	2	$ 146.98	$ 293.96
51	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	8	$ 129.28	$ 1,034.24
52		**Total for Trees**	--	--	--	--	**$19,389.64**

	SCHEDULE 6 - MARY TERRACE STA LANDSCAPING/ IRRIGATION BID TOTAL	--	**$85,707.01**

BID SUMMARY:	
SCHEDULE 1 SUB TOTAL:	$357,336.90
SCHEDULE 2 SUB TOTAL:	$204,331.62
SCHEDULE 3 SUB TOTAL:	$117,080.44
SCHEDULE 4 SUB TOTAL:	$89,726.62
SCHEDULE 5 SUB TOTAL:	$132,892.00
SCHEDULE 6 SUB TOTAL:	$85,707.01
INDEMNIFICATION FEE:	$10.00

	SCHEDULES 1 - 6 BID TOTAL	--	$987,084.59

E-BID TABULATION REPORT

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079 OPENED: JULY 28, 2011 @ 1:30 PM

				ARAZOZA BROTHERS CORP		NATURES KEEPER, INC		SUNSHINE LAND DESIGN	
SCHEDULE 1 - CANE SLOUGH / ELKS STA									
GENERAL ITEMS									
LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 55,000.00	$ 55,000.00	$ -	$ -	$ 26,760.00	$ 26,760.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 12.00	$ 1,200.00	$ -	$ -	$ 14.40	$ 1,440.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	200	$ 2.00	$ 400.00	$ -	$ -	$ 3.60	$ 720.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	7500	$ 2.50	$ 18,750.00	$ 2.95	$ 22,125.00	$ 5.00	$ 37,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	7500	$ 2.52	$ 18,900.00	$ 1.40	$ 10,500.00	$ 4.12	$ 30,900.00
6	SITE ACCESS RESTORATION	LS	1	$ 5,000.00	$ 5,000.00	$ -	$ -	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS (LA/IRR)	LS	1	$ 10,000.00	$ 10,000.00	$ 16,317.00	$ 16,317.00	$ 15,000.00	$ 15,000.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 3,000.00	$ 36,000.00	$ 500.00	$ 6,000.00	$ 360.00	$ 4,320.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 750.00	$ 9,000.00	$ 787.50	$ 9,450.00	$ 780.00	$ 9,360.00
10	Total for General Items	--	--	--	$ 154,250.00	--	$ 64,392.00	--	$ 130,200.00
IRRIGATION ITEMS									
LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,875.00	$ 7,875.00	$ 3,286.80	$ 3,286.80	$ 8,800.00	$ 8,800.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 32,500.00	$ 32,500.00	$ 12,985.00	$ 12,985.00	$ 21,780.00	$ 21,780.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 400.00	$ 400.00	$ 600.00	$ 600.00	$ 1,204.50	$ 1,204.50
14	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	EA	5343	$ 8.00	$ 42,744.00	$ 5.63	$ 30,081.09	$ 5.50	$ 29,386.50
15	4" Nibco TI-8 Gate Valve	EA	5	$ 750.00	$ 3,750.00	$ 450.00	$ 2,250.00	$ 253.00	$ 1,265.00
16	Carson 1419 Valve Box with Lid	LF	5	$ 250.00	$ 1,250.00	$ 50.00	$ 250.00	$ 70.40	$ 352.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	20	$ 1,761.88	$ 35,237.60	$ 325.00	$ 6,500.00	$ 952.60	$ 19,052.00
18	Carson 1220 Jumbo Valve Box with Lid	EA	19	$ 250.00	$ 4,750.00	$ 62.00	$ 1,178.00	$ 136.40	$ 2,591.60
19	Class 200 PVC Lateral with Schedule 40 PVC fittings (size per plan)	EA	15150	$ 2.39	$ 36,208.50	$ 1.05	$ 15,907.50	$ 0.83	$ 12,574.50
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	342	$ 8.44	$ 2,886.48	$ 18.50	$ 6,327.00	$ 13.48	$ 4,610.16
21	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	2	$ 30.00	$ 60.00	$ 28.00	$ 56.00	$ 23.93	$ 47.86
22	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	21	$ 35.00	$ 735.00	$ 28.00	$ 588.00	$ 34.93	$ 733.53
23	Hunter PGP-04-CV with #6 Nozzle	EA	4	$ 31.50	$ 126.00	$ 32.00	$ 128.00	$ 36.58	$ 146.32
24	Hunter PGP-04-CV with #9 Nozzle	EA	75	$ 31.50	$ 2,362.50	$ 32.00	$ 2,400.00	$ 36.58	$ 2,743.50
25	Hunter PGP-04-CV with #12 Nozzle	EA	47	$ 31.50	$ 1,480.50	$ 32.00	$ 1,504.00	$ 36.58	$ 1,719.26
26	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	6	$ 33.50	$ 201.00	$ 45.00	$ 270.00	$ 42.35	$ 254.10
27	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	52	$ 33.50	$ 1,742.00	$ 45.00	$ 2,340.00	$ 42.35	$ 2,202.20
28	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	25	$ 33.50	$ 837.50	$ 45.00	$ 1,125.00	$ 42.35	$ 1,058.75
29	Total for Irrigation Items	--	--	--	$ 175,146.08	--	$ 87,776.39	--	$ 118,521.78
LANDSCAPING AND GRASSES									
HERBACEOUS									
LINE NO	DESCRIPTION	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
	(Common Name) (Scientific Name)									
30	Duck Potato *SAGITTARIA LATIFOLIA*	BR	-	3,380	$0.60	$ 2,028.00	$ 0.42	$ 1,419.60	$0.53	$ 1,791.40
31	Crinum Lily *CRINUM AMERICANUM*	BR	-	4,790	$0.90	$ 4,311.00	$ 0.63	$ 3,017.70	$0.80	$ 3,832.00
32	Leather Fern *ACROSTICHUM DANAEIFOLIUM*	1 GAL	-	155	$7.00	$ 1,085.00	$ 3.86	$ 613.80	$4.74	$ 734.70
33	Dwarf Bougainvillea *DWARF BOUGAINVILEA "HELEN JOHNSON"*	3 GAL	18"x18"	128	$8.00	$ 1,032.00	$ 8.60	$ 1,100.40	$10.80	$ 1,393.20
34	Cocoplum *CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	18" FULL	348	$8.00	$ 2,784.00	$ 6.09	$ 2,119.32	$7.80	$ 2,714.40
35	Green Island Ficus *FICUS MICROCARPA*	1 GAL	-	70	$4.00	$ 280.00	$ 3.01	$ 210.70	$4.80	$ 336.00
36	Liriope *LIRIOPE MUSCARI*	1 GAL	-	154	$3.00	$ 462.00	$ 2.70	$ 415.80	$3.42	$ 526.68
37	Sword Fern *NEPHROLEPIS EXALTATA*	1 GAL	-	1,030	$4.00	$ 4,120.00	$ 2.91	$ 2,997.30	$3.42	$ 3,522.60
38	Macho Fern *NEPHROLEPIS FALCATA*	1 GAL	FULL	1,280	$4.00	$ 5,120.00	$ 2.91	$ 3,724.80	$3.42	$ 4,377.60
39	Asian Jasmine *TRACHELOSPERMUM ASIATICUM*	1 GAL	-	210	$4.00	$ 840.00	$ 3.01	$ 632.10	$4.50	$ 945.00
40	Giant Bulrush *SCIRPUS CALIFORNICUS*	BR	-	7,730	$0.90	$ 6,957.00	$ 0.63	$ 4,869.90	$0.72	$ 5,565.60
41	Jointed Spikerush *ELEOCHARIS INTERSTINCTA*	BR	-	9,910	$0.60	$ 5,946.00	$ 0.42	$ 4,162.20	$0.53	$ 5,252.30

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079 OPENED: JULY 28, 2011 @ 1:30 PM

						ARAZOZA BROTHERS CORP		NATURES KEEPER, INC		SUNSHINE LAND DESIGN	
42	Maidencane	*PANICUM HEMITOMON*	BR	-	4,570	$0.60	$ 2,742.00	$ 0.42	$ 1,919.40	$0.53	$ 2,422.10
43	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	3,160	$0.60	$ 1,896.00	$ 0.42	$ 1,327.20	$0.53	$ 1,674.80
44	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	4,030	$0.90	$ 3,627.00	$ 0.63	$ 2,538.90	$0.60	$ 2,418.00
45	Soft Rush	*JUNCUS EFFUSUS*	BR	-	760	$0.60	$ 456.00	$ 0.42	$ 319.20	$0.58	$ 440.80
46	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	2,720	$1.50	$ 4,080.00	$ 0.74	$ 2,012.80	$0.72	$ 1,958.40
47	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	16,946	$1.50	$ 25,419.00	$ 0.68	$ 11,523.28	$0.72	$ 12,201.12
48	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" full	2,119	$7.50	$ 15,892.50	$ 4.20	$ 8,898.80	$7.20	$ 15,256.80
49		Total for Shrubs and Groundcover	--	--	--	--	$89,077.50	--	$53,833.20	--	$67,363.50
				TREES							
LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)									
50	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	203	$200.00	$ 40,600.00	$ 53.24	$ 10,807.72	$173.88	$ 35,297.64
51	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	203	$300.00	$ 60,900.00	$ 74.60	$ 15,143.80	$285.68	$ 57,988.98
52	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'-4"Cal OA	205	$600.00	$ 123,000.00	$ 148.37	$ 30,415.85	$558.90	$ 114,574.50
53	Royal Palm	*ROYSTONEA REGIA*	-	10-12'	40	$500.00	$ 20,000.00	$ 347.05	$ 13,882.00	$198.72	$ 7,948.80
54	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	85	$500.00	$ 42,500.00	$ 148.54	$ 12,625.90	$583.74	$ 49,617.90
55	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8'	109	$100.00	$ 10,900.00	$ 21.65	$ 2,359.85	$104.33	$ 11,371.97
56	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10'	109	$250.00	$ 27,250.00	$ 33.44	$ 3,644.96	$279.45	$ 30,460.05
57	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12'	109	$300.00	$ 32,700.00	$ 78.22	$ 8,525.98	$273.24	$ 29,783.16
58	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16',8'SPR	12	$300.00	$ 3,600.00	$ 247.52	$ 2,970.24	$409.86	$ 4,918.32
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	24	$400.00	$ 9,600.00	$ 146.98	$ 3,527.52	$397.44	$ 9,538.56
60	Dahoon Holly	*ILEX CASSINE*	30 GAL	10'-12'x2"OA	73	$200.00	$ 14,600.00	$ 96.61	$ 7,052.53	$186.30	$ 13,599.90
61	Cabbage Palm	*SABAL PALMETTO*	FG	12'-18' STG	12	$200.00	$ 2,400.00	$ 144.27	$ 1,731.24	$161.46	$ 1,937.52
62	Simpson's Stopper	*MYRCIANTHES FRAGRANS*	30 GAL	8'-9'(B)	30	$250.00	$ 7,500.00	$ 141.46	$ 4,243.80	$248.40	$ 7,452.00
63	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	36	$300.00	$ 10,800.00	$ 145.98	$ 5,291.28	$372.60	$ 13,413.60
64	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7-9'	13	$200.00	$ 2,600.00	$ 99.12	$ 1,288.56	$186.30	$ 2,421.90
65	Sea Grape	*COCCOLOBA UVIFERA*	15 GAL	6'-10' ML	254	$135.00	$ 34,290.00	$ 101.40	$ 25,755.60	$86.94	$ 22,082.76
66	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	16	$300.00	$ 4,800.00	$ 129.28	$ 2,068.48	$347.76	$ 5,564.16
67		Total for Trees	--	--	--	--	$448,040.00	--	$151,335.31	--	$417,971.72
		SCHEDULE 1 - CANE SLOUGH / ELKS STA LANDSCAPING/IRRIGATION BID TOTAL				--	$866,513.58		$357,336.90		$726,057.00

SCHEDULE 2 - LENNARD SQUARE / AZZI STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 25,000.00	$ 25,000.00	$ -	$ -	$ 19,680.00	$ 19,680.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	150	$ 12.00	$ 1,800.00	$ -	$ -	$ 14.40	$ 2,160.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ 2.00	$ 500.00	$ -	$ -	$ 3.60	$ 900.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.50	$ 6,250.00	$ 2.95	$ 7,375.00	$ 5.00	$ 12,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 2.52	$ 6,300.00	$ 1.40	$ 3,500.00	$ 4.12	$ 10,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 1,500.00	$ 1,500.00	$ -	$ -	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00	$ 16,317.00	$ 16,317.00	$ 8,160.00	$ 8,160.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,000.00	$ 12,000.00	$ 500.00	$ 6,000.00	$ 360.00	$ 4,320.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 750.00	$ 9,000.00	$ 367.50	$ 4,410.00	$ 600.00	$ 7,200.00
8	Total for General Items	--	--	--	$ 67,350.00	--	$ 37,602.00	--	$ 69,428.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
9	3" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	3207	$ 7.00	$ 22,449.00	$ 5.60	$ 17,959.20	$ 4.40	$ 14,110.80
10	3" Nibco T-113 Gate Valve	EA	3	$ 545.70	$ 1,637.10	$ 339.00	$ 1,017.00	$ 627.00	$ 1,881.00
11	Carson 1419 Valve Box with Lid	EA	3	$ 250.00	$ 750.00	$ 50.00	$ 150.00	$ 70.40	$ 211.20
12	2" Rain Bird PESB Series Remote Control Valve	EA	10	$ 1,570.80	$ 15,700.80	$ 325.00	$ 3,250.00	$ 952.60	$ 9,526.00
13	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 250.00	$ 2,000.00	$ 62.00	$ 496.00	$ 136.40	$ 1,091.20
14	Class 200 PVC Lateral Line with Schedule 40 PVC gasketed Fittings (size	LF	8100	$ 2.01	$ 16,281.00	$ 1.25	$ 10,125.00	$ 0.83	$ 6,723.00
15	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	143	$ 8.44	$ 1,206.92	$ 18.50	$ 2,645.50	$ 13.48	$ 1,927.64
16	Rain Bird 1800-SAM-PRS with Hunter MP Rotator Nozzle	EA	91	$ 31.50	$ 2,866.50	$ 28.00	$ 2,548.00	$ 23.93	$ 2,177.63
17	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	16	$ 32.70	$ 523.20	$ 28.00	$ 448.00	$ 34.93	$ 558.88
18	Hunter PGP-04-CV with #6 Nozzle	EA	3	$ 31.50	$ 94.50	$ 32.00	$ 96.00	$ 36.58	$ 109.74
19	Hunter PGP-04-CV with #9 Nozzle	EA	9	$ 31.50	$ 283.50	$ 32.00	$ 288.00	$ 36.58	$ 329.22

CITY OF FORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079 OPENED: JULY 28, 2011 @ 1:30 PM

					ARAZOZA BROTHERS CORP		NATURES KEEPER, INC		SUNSHINE LAND DESIGN	
20	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	4		$ 33.50	$ 134.00	$ 45.00	$ 180.00	$ 42.35	$ 169.40
21	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	59		$ 33.50	$ 1,976.50	$ 45.00	$ 2,655.00	$ 42.35	$ 2,498.65
22	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	10		$ 33.50	$ 335.00	$ 45.00	$ 450.00	$ 42.35	$ 423.50
23	Total for Irrigation Items	--	--		--	$ 66,236.02	--	$ 42,307.70	--	$ 41,737.86
	LANDSCAPING AND GRASSES									
	HERBACEOUS									
LINE NO	DESCRIPTION	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
	(Common Name) (Scientific Name)									
24	Duck Potato *SAGITTARIA LATIFOLIA*	BR	-	1,960	$0.60	$ 1,176.00	$ 0.42	$ 823.20	$0.53	$ 1,038.80
25	Firebush *HAMELIA PATENS*	3 GAL	20"-24"	73	$8.00	$ 584.00	$ 6.09	$ 444.57	$7.80	$ 569.40
26	Wild Coffee *PSYCHOTRIA NERVOSA*	3 GAL	-	293	$9.00	$ 2,637.00	$ 6.71	$ 1,966.03	$6.40	$ 2,461.20
27	Saw Palmetto *SERENOA REPENS*	1 GAL	10"	600	$6.00	$ 3,600.00	$ 3.33	$ 1,998.00	$4.80	$ 2,880.00
28	Giant Bulrush *SCIRPUS CALIFORNICUS*	BR	-	2,180	$0.90	$ 1,962.00	$ 0.63	$ 1,373.40	$0.72	$ 1,569.60
29	Joinled Spikerush *ELEOCHARIS INTERSTINCTA*	BR	-	3,810	$0.60	$ 2,286.00	$ 0.42	$ 1,600.20	$0.53	$ 2,019.30
30	Maidencane *PANICUM HEMITOMON*	BR	-	6,750	$0.60	$ 4,050.00	$ 0.42	$ 2,835.00	$0.53	$ 3,577.50
31	Pickerel Weed *PONTEDERIA CORDATA*	BR	-	1,630	$0.60	$ 978.00	$ 0.42	$ 684.60	$0.53	$ 863.90
32	Soft-Stem Bulrush *SCIRPUS VALIDUS*	LN	-	1,742	$0.90	$ 1,567.80	$ 0.63	$ 1,097.46	$0.60	$ 1,045.20
33	Soft Rush *JUNCUS EFFUSUS*	BR	-	2,510	$0.60	$ 1,506.00	$ 0.42	$ 1,054.20	$0.58	$ 1,455.80
34	Sand Cordgrass *SPARTINA BAKERI*	LN	-	4,465	$1.50	$ 6,697.50	$ 0.74	$ 3,304.10	$0.72	$ 3,214.80
35	Muhly Grass *MUHLENBERGIA CAPILLARIS*	LN	-	17,624	$1.50	$ 26,436.00	$ 0.68	$ 11,984.32	$0.72	$ 12,689.28
36	Leather Fern *ACROSTICHUM DANAEIFOLIUM*	1 GAL	12"	582	$7.00	$ 4,074.00	$ 3.96	$ 2,304.72	$4.80	$ 2,793.60
37	Macho Fern *NEPHROLEPIS FALCATA*	1 GAL	Full	482	$4.00	$ 1,928.00	$ 2.91	$ 1,402.62	$3.42	$ 1,648.44
38	Dwarf Bougainvillea *DWARF BOUGAINVILEA 'HELEN JOHNSON'*	3 GAL	18"x18"	122	$8.00	$ 976.00	$ 8.60	$ 1,049.20	$10.80	$ 1,317.60
39	Liriope *LIRIOPE MUSCARI*	1 GAL	-	360	$3.00	$ 1,080.00	$ 2.70	$ 972.00	$3.42	$ 1,231.20
40	Asian Jasmine *TRACHELOSPERMUM ASIATICUM*	1 GAL	-	146	$4.00	$ 584.00	$ 3.01	$ 439.46	$4.50	$ 657.00
41	Sword Fern *NEPHROLEPIS EXALTATA*	1 GAL	-	451	$4.00	$ 1,804.00	$ 2.91	$ 1,312.41	$3.42	$ 1,542.42
42	Fakahatchee Grass *TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	1,954	$7.50	$ 14,655.00	$ 4.20	$ 8,206.80	$7.20	$ 14,068.80
43	Total for Shrubs and Groundcover	--	--	--	--	$78,581.30	--	$44,852.29	--	$56,643.84
	TREES									
LINE NO	DESCRIPTION	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
	(Common Name) (Scientific Name)									
44	Crape Myrtle *LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7'-9' OA	10	$200.00	$ 2,000.00	$ 99.12	$ 991.20	$186.30	$ 1,863.00
45	Cypress *TAXODIUM DISTICHUM*	25 GAL	10'+2" OA	60	$200.00	$ 12,000.00	$ 53.24	$ 3,194.40	$173.88	$ 10,432.80
46	Cypress *TAXODIUM DISTICHUM*	45 GAL	12'+3" OA	60	$300.00	$ 18,000.00	$ 74.60	$ 4,476.00	$285.66	$ 17,139.60
47	Cypress *TAXODIUM DISTICHUM*	100 GAL	14'x4" C	60	$600.00	$ 36,000.00	$ 148.37	$ 8,902.20	$558.90	$ 33,534.00
48	Green Buttonwood *CONOCARPUS ERECTUS*	30 GAL	14'(B)OA	9	$200.00	$ 1,800.00	$ 140.70	$ 1,266.30	$173.88	$ 1,564.92
49	Live Oak *QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	71	$500.00	$ 35,500.00	$ 148.54	$ 10,546.34	$563.74	$ 41,445.54
50	Red Bay *PERSEA BORBONIA*	3 GAL	2'-4' OA	28	$12.00	$ 336.00	$ 82.40	$ 2,307.20	$99.36	$ 2,782.08
51	Red Bay *PERSEA BORBONIA*	15 GAL	6'-8' OA	28	$150.00	$ 4,200.00	$ 39.81	$ 1,114.68	$223.56	$ 6,259.68
52	Red Bay *PERSEA BORBONIA*	25 GAL	8'-10' OA	29	$350.00	$ 10,150.00	$ 82.40	$ 2,389.60	$347.76	$ 10,085.04
53	Royal Poinciana *DELONIX REGIA*	45 GAL	12'-14'x8'SPR OA	7	$300.00	$ 2,100.00	$ 247.52	$ 1,732.64	$409.86	$ 2,869.02
54	Royal Palm *ROYSTONEA REGIA*		10'-12' OA	28	$500.00	$ 14,000.00	$ 347.05	$ 9,717.40	$198.72	$ 5,564.16
55	Red Maple *ACER RUBRUM*	10 GAL	8' OA	64	$100.00	$ 6,400.00	$ 36.58	$ 2,341.12	$62.10	$ 3,974.40
56	Red Maple *ACER RUBRUM*	25 GAL	8'-10' OA	63	$200.00	$ 12,600.00	$ 79.01	$ 4,977.63	$149.04	$ 9,389.52
57	Red Maple *ACER RUBRUM*	45 GAL	12'-14' OA	63	$250.00	$ 15,750.00	$ 91.58	$ 5,769.54	$322.92	$ 20,343.96
58	Red Maple *ACER RUBRUM*	65 GAL	14'-16'x4"Cal OA	11	$350.00	$ 3,850.00	$ 124.18	$ 1,365.98	$372.60	$ 4,098.60
59	Gumbo Limbo *BURSERA SIMARUBA*	65 GAL	14'-15' OA	4	$400.00	$ 1,600.00	$ 146.98	$ 587.92	$397.44	$ 1,589.76
60	Cabbage Palm *SABAL PALMETTO*	FG	12'-14' OA	124	$200.00	$ 24,800.00	$ 144.27	$ 17,889.48	$172.64	$ 21,407.36
61	Total for Trees	--	--	--	--	$201,086.00	--	$79,569.63	--	$194,343.44
	SCHEDULE 2 - LENNARD SQ / AZZI STA LANDSCAPING/IRRIGATION BID TOTAL					$413,255.32		$204,331.62		$362,145.14

CITY OF FORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110029 OPENED: JULY 28, 2011 @ 1:30 PM

	ARAZOZA BROTHERS CORP		NATURES KEEPER, INC		SUNSHINE LAND DESIGN	

SCHEDULE 3 - TIFFANY CHANNEL STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 16,000.00	$ 16,000.00	$ -	$ -	$ 15,960.00	$ 15,960.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 12.00	$ 1,200.00	$ -	$ -	$ 14.40	$ 1,440.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ 2.00	$ 200.00	$ -	$ -	$ 3.60	$ 360.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.50	$ 6,250.00	$ 2.95	$ 7,375.00	$ 5.00	$ 12,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 2.52	$ 6,300.00	$ 1.40	$ 3,500.00	$ 4.12	$ 10,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 2,500.00	$ 2,500.00	$ -	$ -	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00	$ 5,292.00	$ 5,292.00	$ 4,200.00	$ 4,200.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,500.00	$ 18,000.00	$ 500.00	$ 6,000.00	$ 360.00	$ 4,320.00
9	Total for General Items	--	--	--	$ 55,450.00	--	$ 22,167.00	--	$ 53,280.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,875.00	$ 7,875.00	$ 3,286.80	$ 3,286.80	$ 11,000.00	$ 11,000.00
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 32,500.00	$ 32,500.00	$ 12,985.00	$ 12,985.00	$ 21,780.00	$ 21,780.00
12	Baseline Water Tec S100 Soil Moisture Sensor Interface and field sensor	EA	1	$ 500.00	$ 500.00	$ 600.00	$ 600.00	$ 1,204.50	$ 1,204.50
13	4" Class 200 PVC Mainline/Fittings	LF	2276	$ 8.00	$ 18,208.00	$ 5.63	$ 12,813.88	$ 5.50	$ 12,518.00
14	4" Nibco T-8 Gate Valve	EA	1	$ 750.00	$ 750.00	$ 450.00	$ 450.00	$ 253.00	$ 253.00
15	Carson 1419 Valve Box with Lid	EA	1	$ 250.00	$ 250.00	$ 50.00	$ 50.00	$ 70.40	$ 70.40
16	2" Rain Bird PESB Series Remote Control Valve	EA	12	$ 1,086.49	$ 13,037.88	$ 325.00	$ 3,900.00	$ 952.60	$ 11,431.20
17	Carson 1220 Jumbo Valve Box with Lid	EA	13	$ 250.00	$ 3,250.00	$ 62.00	$ 806.00	$ 136.40	$ 1,773.20
18	Class 200 PVC Lateral Line/Fittings (size per plan)	LF	10800	$ 1.46	$ 15,768.00	$ 1.05	$ 11,340.00	$ 0.83	$ 8,964.00
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	244	$ 8.44	$ 2,059.36	$ 18.50	$ 4,514.00	$ 13.48	$ 3,289.12
20	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	28	$ 31.50	$ 882.00	$ 28.00	$ 784.00	$ 34.93	$ 978.04
21	Hunter PGP-04-CV with #6 Nozzle	EA	5	$ 31.50	$ 157.50	$ 32.00	$ 160.00	$ 36.58	$ 182.90
22	Hunter PGP-04-CV with #9 Nozzle	EA	56	$ 31.50	$ 1,764.00	$ 32.00	$ 1,792.00	$ 36.58	$ 2,048.48
23	Hunter PGP-04-CV with #12 Nozzle	EA	31	$ 31.50	$ 976.50	$ 32.00	$ 992.00	$ 36.58	$ 1,133.98
24	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 33.50	$ 67.00	$ 45.00	$ 90.00	$ 42.35	$ 84.70
25	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	10	$ 33.50	$ 335.00	$ 45.00	$ 450.00	$ 42.35	$ 423.50
26	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	18	$ 33.50	$ 603.00	$ 45.00	$ 810.00	$ 42.35	$ 762.30
27	Total for Irrigation Items	--	--	--	$ 98,983.24	--	$ 55,823.68	--	$ 77,897.32

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
28	Red Tip Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	24"	140	$8.00	$ 1,120.00	$ 6.09	$ 852.60	$7.80	$ 1,092.00
29	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	831	$6.00	$ 4,986.00	$ 3.33	$ 2,767.23	$4.80	$ 3,988.80
30	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	Full	700	$4.00	$ 2,800.00	$ 2.91	$ 2,037.00	$3.42	$ 2,394.00
31	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	944	$7.50	$ 7,080.00	$ 4.20	$ 3,964.80	$7.20	$ 6,796.80
32		Total for Shrubs and Groundcover	--	--	--	--	$15,986.00	--	$9,621.63	--	$14,271.60

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
33	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	14	$600.00	$ 8,400.00	$ 129.28	$ 1,809.92	$347.76	$ 4,868.64
34	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"CAL OA	66	$500.00	$ 33,000.00	$ 148.54	$ 9,803.64	$745.20	$ 49,183.20
35	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16' OA	21	$350.00	$ 7,350.00	$ 153.65	$ 3,226.65	$372.60	$ 7,824.60
36	Slash Pine	*PINUS ELLIOTII(South Florida Densa)*	45 GAL	10'-12' OA	118	$250.00	$ 29,500.00	$ 91.58	$ 10,806.44	$211.14	$ 24,914.52
37	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	26	$400.00	$ 10,400.00	$ 146.98	$ 3,821.48	$397.44	$ 10,333.44
38		Total for Trees	--	--	--	--	$88,650.00	--	$29,468.13	--	$97,124.40

SCHEDULE 3 - TIFFANY CHANNEL STA LANDSCAPING/IRRIGATION BID TOTAL	$259,069.24	$117,080.44	$242,573.32

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079 OPENED: JULY 28, 2011 @ 1:30 PM

		ARAZOZA BROTHERS CORP		NATURES KEEPER, INC		SUNSHINE LAND DESIGN	

SCHEDULE 4 - LEITHGOW STREET STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 15,000.00	$ 15,000.00	$ -	$ -	$ 15,120.00	$ 15,120.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ 12.00	$ 600.00	$ -	$ -	$ 14.40	$ 720.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	50	$ 2.00	$ 100.00	$ -	$ -	$ 3.60	$ 180.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	1250	$ 2.50	$ 3,125.00	$ 2.95	$ 3,687.50	$ 5.00	$ 6,250.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	1250	$ 2.52	$ 3,150.00	$ 1.40	$ 1,750.00	$ 4.12	$ 5,150.00
6	SITE ACCESS RESTORATION	LS	1	$ 1,500.00	$ 1,500.00	$ -	$ -	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00	$ 4,851.00	$ 4,851.00	$ 3,360.00	$ 3,360.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,000.00	$ 12,000.00	$ 500.00	$ 6,000.00	$ 360.00	$ 4,320.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 750.00	$ 9,000.00	$ 210.00	$ 2,520.00	$ 360.00	$ 4,320.00
10	Total for General Items	--	--	--	$ 49,475.00	--	$ 18,808.50	--	$ 43,620.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,500.00	$ 7,500.00	$ 2,285.80	$ 2,285.80	$ 8,800.00	$ 8,800.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 15,000.00	$ 15,000.00	$ 10,895.00	$ 10,895.00	$ 20,294.12	$ 20,294.12
13	Baseline Water Tec S100 Soil Moisture Sensor Interface and field sensor	EA	1	$ 400.00	$ 400.00	$ 600.00	$ 600.00	$ 1,204.50	$ 1,204.50
14	3" Class 200 PVC Mainline/Fittings	LF	1660	$ 7.00	$ 11,620.00	$ 5.60	$ 9,296.00	$ 4.40	$ 7,304.00
15	3" Nibco T-113 Gate Valve	EA	2	$ 750.00	$ 1,500.00	$ 339.00	$ 678.00	$ 627.00	$ 1,254.00
16	Carson 1419 Valve Box with Lid	EA	2	$ 250.00	$ 500.00	$ 50.00	$ 100.00	$ 70.40	$ 140.80
17	2" Rain Bird PESB Series Remote Control Valve	EA	8	$ 780.62	$ 6,244.96	$ 325.00	$ 2,600.00	$ 952.60	$ 7,620.80
18	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 250.00	$ 2,000.00	$ 62.00	$ 496.00	$ 136.40	$ 1,091.20
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	1640	$ 1.84	$ 3,017.60	$ 1.60	$ 2,624.00	$ 1.65	$ 2,706.00
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	98	$ 8.44	$ 827.12	$ 18.50	$ 1,813.00	$ 13.48	$ 1,321.04
21	Hunter PGP-04-CV with #6 Nozzle	EA	1	$ 31.50	$ 31.50	$ 32.00	$ 32.00	$ 36.58	$ 36.58
22	Hunter PGP-04-CV with #9 Nozzle	EA	44	$ 31.50	$ 1,386.00	$ 32.00	$ 1,408.00	$ 36.58	$ 1,609.52
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 33.50	$ 100.50	$ 45.00	$ 135.00	$ 42.35	$ 127.05
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	4	$ 33.50	$ 134.00	$ 45.00	$ 180.00	$ 42.35	$ 169.40
25	Total for Irrigation Items	--	--	--	$ 50,261.68	--	$ 33,142.80	--	$ 53,679.01

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
26	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,740	$0.60	$ 1,044.00	$ 0.42	$ 730.80	$0.53	$ 922.20
27	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,420	$0.90	$ 1,278.00	$ 0.63	$ 894.60	$0.72	$ 1,022.40
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,270	$0.60	$ 1,962.00	$ 0.42	$ 1,373.40	$0.53	$ 1,733.10
29	Maidencane	*PANICUM HEMITOMON*	BR	-	1,740	$0.60	$ 1,044.00	$ 0.42	$ 730.80	$0.53	$ 922.20
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	2,500	$0.60	$ 1,500.00	$ 0.42	$ 1,050.00	$0.53	$ 1,325.00
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	2,180	$0.90	$ 1,962.00	$ 0.63	$ 1,373.40	$0.80	$ 1,744.00
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,790	$1.50	$ 7,185.00	$ 0.74	$ 3,544.60	$0.72	$ 3,448.80
33	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	517	$1.50	$ 775.50	$ 0.68	$ 351.56	$0.72	$ 372.24
34	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	22	$8.00	$ 176.00	$ 6.09	$ 133.98	$7.80	$ 171.60
35	Fire Flag	*THALIA GENICULATA*	BR	-	1,420	$0.90	$ 1,278.00	$ 0.53	$ 752.60	$0.66	$ 937.20
36	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	269	$4.00	$ 1,076.00	$ 2.91	$ 782.79	$3.42	$ 919.98
37	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	BR	-	1,310	$1.30	$ 1,703.00	$ 0.68	$ 890.80	$0.84	$ 1,100.40
38	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	383	$4.00	$ 1,532.00	$ 2.91	$ 1,114.53	$3.42	$ 1,309.86
39	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	326	$7.50	$ 2,445.00	$ 4.20	$ 1,369.20	$7.20	$ 2,347.20
40	Total for Shrubs and Groundcover	--	--	--	--	--	$24,960.50	--	$15,093.06	--	$18,276.18

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
41	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	13	$600.00	$ 7,800.00	$ 129.28	$ 1,680.64	$496.80	$ 6,458.40
42	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	37	$200.00	$ 7,400.00	$ 53.24	$ 1,969.88	$173.88	$ 6,433.56
43	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	37	$300.00	$ 11,100.00	$ 74.60	$ 2,760.20	$285.66	$ 10,569.42
44	Bald Cypress	*TAXODIUM DISTICHUM*	65 GAL	14' OA	39	$600.00	$ 23,400.00	$ 148.37	$ 5,786.43	$409.86	$ 15,984.54
45	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	4	$500.00	$ 2,000.00	$ 148.54	$ 594.16	$583.74	$ 2,334.96
46	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	28	$100.00	$ 2,800.00	$ 21.65	$ 606.20	$104.33	$ 2,921.24
47	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	28	$300.00	$ 8,400.00	$ 33.44	$ 936.32	$279.45	$ 7,824.60
48	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	29	$500.00	$ 14,500.00	$ 78.22	$ 2,268.38	$273.24	$ 7,923.96
49	Royal Poinciana	*DELONIX REGIA*	60 GAL	14'-16'x8"SPR OA	2	$300.00	$ 600.00	$ 247.52	$ 495.04	$409.86	$ 819.72
50	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	15	$350.00	$ 5,250.00	$ 124.18	$ 1,862.70	$372.60	$ 5,589.00
51	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'x2"Cal	6	$300.00	$ 1,800.00	$ 146.98	$ 881.88	$372.60	$ 2,235.60
52	Cabbage Palm	*SABAL PALMETTO*	-	12'-18' STG	17	$200.00	$ 3,400.00	$ 144.27	$ 2,452.59	$161.46	$ 2,744.82
53	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	3	$300.00	$ 900.00	$ 129.28	$ 387.84	$347.76	$ 1,043.28
54	Total for Trees	--	--	--	--	--	$89,350.00	--	$22,682.26	--	$72,883.10

SCHEDULE 4 - LEITHGOW STREET STA LANDSCAPING/IRRIGATION BID TOTAL:	$214,047.18	$89,726.62	$188,458.29

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079 OPENED: JULY 28, 2011 @ 1:30 PM

				ARAZOZA BROTHERS CORP		NATURES KEEPER, INC		SUNSHINE LAND DESIGN	
SCHEDULE 5 - LOUTUS STA									
GENERAL ITEMS									
LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 17,000.00	$ 17,000.00	$ -	$ -	$ 15,840.00	$ 15,840.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 12.00	$ 1,200.00	$ -	$ -	$ 14.40	$ 1,440.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ 2.00	$ 500.00	$ -	$ -	$ 3.60	$ 900.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	5000	$ 2.50	$ 12,500.00	$ 2.95	$ 14,750.00	$ 5.00	$ 25,000.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	5000	$ 2.52	$ 12,600.00	$ 1.40	$ 7,000.00	$ 4.12	$ 20,600.00
6	SITE ACCESS RESTORATION	LS	1	$ 1,500.00	$ 1,500.00	$ -	$ -	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00	$ 5,733.00	$ 5,733.00	$ 4,080.00	$ 4,080.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,000.00	$ 12,000.00	$ 500.00	$ 6,000.00	$ 360.00	$ 4,320.00
9	Total for General Items	--	--	--	$ 62,300.00	--	$ 33,483.00	--	$ 76,380.00
IRRIGATION ITEMS									
LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
10	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,875.00	$ 7,875.00	$ 2,285.80	$ 2,285.80	$ 8,800.00	$ 8,800.00
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 15,000.00	$ 15,000.00	$ 10,895.00	$ 10,895.00	$ 20,294.12	$ 20,294.12
12	Baseline Water Tec S100 Soil Moisture Sensor Interface and field sensor	EA	1	$ 500.00	$ 500.00	$ 600.00	$ 600.00	$ 1,204.50	$ 1,204.50
13	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	4229	$ 8.00	$ 33,832.00	$ 5.63	$ 23,809.27	$ 5.50	$ 23,259.50
14	4" Nibco T-8 Gate Valve	EA	3	$ 750.00	$ 2,250.00	$ 450.00	$ 1,350.00	$ 253.00	$ 759.00
15	Carson 1419 Valve Box with Lid	EA	3	$ 250.00	$ 750.00	$ 50.00	$ 150.00	$ 70.40	$ 211.20
16	2" Rain Bird PESB Series Remote Control Valve	EA	17	$ 1,034.21	$ 17,581.57	$ 325.00	$ 5,525.00	$ 952.60	$ 16,194.20
17	Carson 1220 Jumbo Valve Box with Lid	EA	17	$ 250.00	$ 4,250.00	$ 62.00	$ 1,054.00	$ 136.40	$ 2,318.80
18	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	10060	$ 1.98	$ 19,918.80	$ 1.05	$ 10,563.00	$ 0.83	$ 8,349.80
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	184	$ 8.44	$ 1,552.96	$ 18.50	$ 3,404.00	$ 13.48	$ 2,480.32
20	Hunter PGP-04-CV with #6 Nozzle	EA	6	$ 31.50	$ 189.00	$ 32.00	$ 192.00	$ 36.58	$ 219.48
21	Hunter PGP-04-CV with #9 Nozzle	EA	88	$ 31.50	$ 2,772.00	$ 32.00	$ 2,816.00	$ 36.58	$ 3,219.04
22	Hunter PGP-04-CV with #12 Nozzle	EA	2	$ 31.50	$ 63.00	$ 32.00	$ 64.00	$ 36.58	$ 73.16
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 33.50	$ 67.00	$ 45.00	$ 90.00	$ 42.35	$ 84.70
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	22	$ 33.50	$ 737.00	$ 45.00	$ 990.00	$ 42.35	$ 931.70
25	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	5	$ 33.50	$ 167.50	$ 45.00	$ 225.00	$ 42.35	$ 211.75
25	Total for Irrigation Items	--	--	--	$ 107,505.83	--	$ 64,013.07	--	$ 88,611.27
LANDSCAPING AND GRASSES									
HERBACEOUS									
LINE NO	DESCRIPTION	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
	(Common Name) (Scientific Name)									
26	Muhly Grass *MUHLENBERGIA CAPILLARIS*	LN	-	1,196	$1.60	$ 1,794.00	$ 0.68	$ 813.28	$0.72	$ 861.12
27	Macho Fern *NEPHROLEPIS FALCATA*	1 GAL	Full	687	$4.00	$ 2,748.00	$ 2.91	$ 1,999.17	$3.42	$ 2,349.54
28	Sword Fern *NEPHROLEPIS EXALTATA*	1 GAL	-	855	$4.00	$ 3,420.00	$ 2.91	$ 2,488.05	$3.42	$ 2,924.10
29	Fakahatchee Grass *TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	952	$7.50	$ 7,140.00	$ 4.20	$ 3,998.40	$7.20	$ 6,854.40
30	*Total for Shrubs and Groundcover*	--	--	--	--	$15,102.00	--	$9,298.90	--	$12,989.16
TREES										
LINE NO	DESCRIPTION	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
	(Common Name) (Scientific Name)									
31	Live Oak *QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	75	$500.00	$ 37,500.00	$ 148.54	$ 11,140.50	$583.74	$ 43,780.50
32	Mahogony *SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$350.00	$ 7,350.00	$ 153.65	$ 3,226.65	$248.40	$ 5,216.40
33	Royal Poinciana *DELONIX REGIA*	45 GAL	14'-16'x8'SPR OA	8	$300.00	$ 2,400.00	$ 297.78	$ 2,382.24	$409.86	$ 3,278.88
34	Red Maple *ACER RUBRUM*	65 GAL	14' OA	40	$400.00	$ 16,000.00	$ 124.18	$ 4,967.20	$372.60	$ 14,904.00
35	Sycamore *PLANTANUS*	65 GAL	14'-16'x4"Cal OA	10	$400.00	$ 4,000.00	$ 123.00	$ 1,230.00	$385.02	$ 3,850.20
36	Gumbo Limbo *BURSERA SIMARUBA*	65 GAL	14'-16' OA	10	$400.00	$ 4,000.00	$ 146.98	$ 1,469.80	$397.44	$ 3,974.40
37	Glaucous Cassia *SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	13	$300.00	$ 3,900.00	$ 129.26	$ 1,680.64	$347.76	$ 4,520.88
38	Total for Trees	--	--	--	--	$75,150.00	--	$26,097.03	--	$79,525.26
SCHEDULE 5 - LOUTUS STA LANDSCAPING/IRRIGATION BID TOTAL						$260,057.83		$132,892.00		$257,505.69

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079 OPENED: JULY 28, 2011 @ 1:30 PM

		ARAZOZA BROTHERS CORP		NATURES KEEPER, INC		SUNSHINE LAND DESIGN	

SCHEDULE 6 - MARY TERRACE STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 15,000.00	$ 15,000.00	$ -	$ -	$ 15,120.00	$ 15,120.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ 12.00	$ 600.00	$ -	$ -	$ 14.40	$ 720.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ 2.00	$ 200.00	$ -	$ -	$ 3.60	$ 360.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.50	$ 6,250.00	$ 2.95	$ 7,375.00	$ 5.00	$ 12,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 2.52	$ 6,300.00	$ 1.40	$ 3,500.00	$ 4.12	$ 10,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 1,500.00	$ 1,500.00	$ -	$ -	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00	$ 5,292.00	$ 5,292.00	$ 3,240.00	$ 3,240.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,000.00	$ 12,000.00	$ 500.00	$ 6,000.00	$ 360.00	$ 4,320.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 750.00	$ 9,000.00	$ 210.00	$ 2,520.00	$ 360.00	$ 4,320.00
10	Total for General Items	--	--	--	$ 55,850.00	--	$ 24,687.00	--	$ 55,080.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 8,400.00	$ 8,400.00	$ 2,285.80	$ 2,285.80	$ 7,700.00	$ 7,700.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 15,000.00	$ 15,000.00	$ 10,895.00	$ 10,895.00	$ 20,294.12	$ 20,294.12
13	Baseline Water Tec S100 Soil Moisture Sensor Interface and field sensor	EA	1	$ 400.00	$ 400.00	$ 600.00	$ 600.00	$ 1,204.50	$ 1,204.50
14	2 1/2" Class 200 PVC Maintine with Schedule 40 PVC gasketed Fittings	LF	1160	$ 8.00	$ 9,280.00	$ 5.55	$ 6,438.00	$ 3.85	$ 4,466.00
15	2 1/2" Nibco T-113 Gate Valve	EA	1	$ 750.00	$ 750.00	$ 268.00	$ 268.00	$ 495.00	$ 495.00
16	Carson 1419 Valve Box with Lid	EA	1	$ 250.00	$ 250.00	$ 50.00	$ 50.00	$ 70.40	$ 70.40
17	2" Rain Bird PESB Series Remote Control Valve	EA	7	$ 1,115.12	$ 7,805.84	$ 325.00	$ 2,275.00	$ 952.60	$ 6,668.20
18	Carson 1220 Jumbo Valve Box with Lid	EA	7	$ 250.00	$ 1,750.00	$ 62.00	$ 434.00	$ 136.40	$ 954.80
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	2960	$ 1.81	$ 5,357.60	$ 1.70	$ 5,032.00	$ 0.83	$ 2,456.80
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	129	$ 8.44	$ 1,088.76	$ 18.50	$ 2,386.50	$ 13.48	$ 1,738.92
21	Hunter PGP-04-CV with #6 Nozzle	EA	30	$ 31.50	$ 945.00	$ 32.00	$ 960.00	$ 36.58	$ 1,097.40
22	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 33.50	$ 100.50	$ 45.00	$ 135.00	$ 42.35	$ 127.05
23	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	6	$ 33.50	$ 201.00	$ 45.00	$ 270.00	$ 42.35	$ 254.10
24	Total for Irrigation Items	--	--	--	$ 51,328.70	--	$ 32,029.30	--	$ 47,527.29

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	(Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
25	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	2,070	$0.60	$ 1,242.00	$ 0.42	$ 869.40	$0.53	$ 1,097.10
26	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,200	$0.90	$ 1,080.00	$ 0.63	$ 756.00	$0.72	$ 864.00
27	Fire Flag	*THALIA GENICULATA*	BR	-	440	$0.90	$ 396.00	$ 0.53	$ 233.20	$0.66	$ 290.40
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	1,850	$0.60	$ 1,110.00	$ 0.42	$ 777.00	$0.53	$ 980.50
29	Maidencane	*PANICUM HEMITOMON*	BR	-	110	$0.60	$ 66.00	$ 0.42	$ 46.20	$0.53	$ 58.30
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	870	$0.60	$ 522.00	$ 0.42	$ 365.40	$0.53	$ 461.10
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	440	$0.90	$ 396.00	$ 0.63	$ 277.20	$0.80	$ 352.00
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	3,050	$1.50	$ 4,575.00	$ 0.74	$ 2,257.00	$0.72	$ 2,196.00
33	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	LN	-	650	$1.30	$ 845.00	$ 0.89	$ 578.50	$0.84	$ 546.00
34	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	355	$1.50	$ 532.50	$ 0.68	$ 241.40	$0.72	$ 255.60
35	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	359	$4.00	$ 1,436.00	$ 2.91	$ 1,044.69	$3.42	$ 1,227.78
36	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	348	$4.00	$ 1,392.00	$ 2.91	$ 1,012.68	$3.42	$ 1,190.16
37	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	272	$7.50	$ 2,040.00	$ 4.20	$ 1,142.40	$7.20	$ 1,958.40
38	Total for Shrubs and Groundcover		--	--	--	--	$15,632.50	--	$9,601.07	--	$11,477.34

TREES

LINE NO	DESCRIPTION (Common Name)	(Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
39	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	38	$200.00	$ 7,600.00	$ 53.24	$ 2,023.12	$136.62	$ 5,191.56
40	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	38	$300.00	$ 11,400.00	$ 74.60	$ 2,834.80	$211.14	$ 8,023.32
41	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" Cal OA	38	$600.00	$ 22,800.00	$ 148.37	$ 5,638.06	$558.90	$ 21,238.20
42	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"Cal	11	$500.00	$ 5,500.00	$ 148.54	$ 1,633.94	$583.74	$ 6,421.14
43	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	2	$350.00	$ 700.00	$ 153.65	$ 307.30	$372.60	$ 745.20
44	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	18	$100.00	$ 1,800.00	$ 21.65	$ 389.70	$104.33	$ 1,877.94
45	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	18	$300.00	$ 5,400.00	$ 33.44	$ 601.92	$279.45	$ 5,030.10
46	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	18	$600.00	$ 10,800.00	$ 78.22	$ 1,407.96	$273.24	$ 4,918.32
47	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8"Spr OA	2	$300.00	$ 600.00	$ 247.52	$ 495.04	$409.86	$ 819.72
48	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	20	$350.00	$ 7,000.00	$ 124.18	$ 2,483.60	$211.14	$ 4,222.80
49	Sycamore	*PLANTANUS*	65 GAL	14'-16x4" OA	2	$400.00	$ 800.00	$ 123.00	$ 246.00	$385.02	$ 770.04
50	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	2	$400.00	$ 800.00	$ 146.98	$ 293.96	$397.44	$ 794.88
51	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	8	$300.00	$ 2,400.00	$ 129.28	$ 1,034.24	$347.76	$ 2,782.08
52	Total for Trees		--	--	--	--	$77,600.00	--	$19,389.64	--	$62,835.30

SCHEDULE 6 - MARY TERRACE STA LANDSCAPING/IRRIGATION BID TOTAL	$200,411.20	$85,707.01	$176,919.93

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079 OPENED: JULY 28, 2011 @ 1:30 PM

	ARAZOZA BROTHERS CORP	NATURES KEEPER, INC	SUNSHINE LAND DESIGN
BID SUMMARY:			
SCHEDULE 1 SUB TOTAL:	$866,513.58	$357,336.90	$726,057.00
SCHEDULE 2 SUB TOTAL:	$413,255.32	$204,331.62	$362,145.14
SCHEDULE 3 SUB TOTAL:	$259,069.24	$117,080.44	$242,573.32
SCHEDULE 4 SUB TOTAL:	$214,047.18	$89,726.62	$188,458.29
SCHEDULE 5 SUB TOTAL:	$260,057.83	$132,892.00	$257,505.69
SCHEDULE 6 SUB TOTAL:	$200,411.20	$85,707.01	$176,919.93
INDEMNIFICATION FEE:	$10.00	$10.00	$10.00
SCHEDULES 1 - 6 BID TOTAL:	$2,213,364.35	$987,084.59	$1,953,669.37
	ARAZOZA BROTHERS	NATURES KEEPER	SUNSHINE LAND DESIGN
1 Acknowledge all Addenda.	Yes	Yes	Yes
2 5% original Bid Bond.	Yes	Yes	Yes
3 Copy of current Insurance.	Yes	Yes	Yes
4 Review & accept all City terms and conditions.	Yes	Yes	Yes
5 Submitted all licenses required to perform the work.	Yes	Yes	Yes
6 Submitted the Questionnaire.	Yes	Yes	Yes
7 Submitted all required Federal forms.	Yes	Yes	
8 Listed all subcontractors with the required "Lobbying" form & minority status.	Not using subs	Not using subs	1 sub listed/no form
9 Submitted 5 reference check forms.	Yes	Yes	Yes
10 Has the Bidder or any of its principals ever been declared bankrupt or reorganized under Chapter 11 or been put into receivership?	No	No	No
11 Any pending litigations or completed lawsuits involving the corporation, partnership or individuals with more than 10%	Did not answer	None	None
12 Any judgments from lawsuits in the past 5 years?	Did not answer	None	None
13 Any criminal violations and/or convictions of the Bidder and/or any of the partners?	Did not answer	None	None
14 Bonding capacity.	$10 mil	$25 mil	$6 mil
15 Accepts Visa.	No	Yes	Yes
16 Discount offered when using Visa.	n/a	0%	0%
17 Submitted W-9 form.	Yes	Yes	Yes

E-Bid #20110079

- Bid Request Form
- Legal Advertisement
- E-Bid Specifications
- Attachment A – Technical Specifications
- Attachment B – Construction Plans (on a disc)
- Attachment C
- Attachment D
- Attachment E
- E-Bid Reply Form

- Pre Bid Meeting Agenda
- Addendum #1 – Pre Bid Meeting Notes
- Pre Bid Meeting Sign In Sheet
- Addendum #2, 2A, 2B, 2C, 2D, 2E & 2F
- Addendum #3
- Addendum #4
- Addendum #5, 5A, 5B & 5C

BID REQUEST / RFP REQUEST

Department: **Engineering** Department Technical Specialist: **Jim Angstadt** Extension: **x4239**

Item/Description of Work Summary: **EWIP – Landscaping and Irrigation/Installation of temporary irrigation systems, including pumps as well as the installation of trees, grasses and aquatic plantings at six project sites of the Eastern Watershed Improvement Project.**

Technical Specifications Attached: [**X**] Yes [ ] No (must be submitted electronically in word or excel)
Technical documents must be in word in one file, no logos
Bid Reply, must be in excel and a separate file, no logos
Plans may be PDF but must be in one file, dated and numbered consecutively.

Date plans received approval by City Building Department N/A

Replacement: [ ] Yes[**X**] No Budgeted Amount: **$1,718,017.00** Any grant funds being used. **Yes**

If not budgeted, authorization from Director of OMB is required.

Account Number	Fund	Cost Center	Object Code	Project
	403	4126	568812	00000

Suggested Bidders (Use separate sheet if necessary): These will be added to DemandStar broadcast list.

Bidder Name	Address	Fax Number	Contact Person

Reason for purchase or service: **Eastern Watershed Improvement Project.**

If digging or trenching is required what is the depth? N/A

If work is in water, what is the depth? N/A Is the water navigable? N/A

If this is a building, how many stories? **N/A**

Department Head Approval

5/12/11
Date

5/11/2011

REQUEST FOR SEALED E-BID

Request for Sealed Electronic Bid #20110079 for the Eastern Watershed Improvement Project (EWIP) Landscaping & Irrigation at Various EWIP Sites will be received by the City of Port St. Lucie, in the Office of Management & Budget, 3rd Floor, Suite 390, Bldg "A" of the Municipal Complex, at 121 SW Port St. Lucie Blvd., Port St. Lucie, FL 34984-5099, until 3:00:00 p.m. on July 14, 2011. There will be a one-time only Pre Bid Conference on Tuesday, June 14, 2011 at 1:30 P.M. in Room 390 of the City Hall Complex, Bldg A, 3rd Floor, 121 SW Port St. Lucie Blvd., Port St. Lucie, Fl. 34984. Project is funded by Federal Funds and requires special reporting requirements. Specifications may be obtained from DemandStar by Onvia, telephone (800) 711-1712, or from the Office of Management and Budget. A Bid package received from any other source is at the vendor's risk.

Billing for this advertisement must be sent to:

City of Port St. Lucie
Office of Management & Budget
121 SW Port St. Lucie Boulevard
Port St. Lucie, FL 34984-5099

This advertisement is to run on:

Thursday, June 2, 2011 &Thursday, June 9, 2011

****

This section for Office of Management & Budget use only.

Advertisement placed by: Robyn Holder, CPPB

Telephone Number: 772-344-4293 Fax Number:772-871-7337

(place an 'x' in the box below for the appropriate newspaper)

Tribune	Date:	1st Ad	2nd Ad
Post	Date:	1st Ad	2nd Ad

Fax to 600-1450 or

E-mail to: stlucielegals@scripps.com

Foreign Account Number : 11515278

Ad # : 2280342

Ad Net Cost : $89.39

Name (Primary) : CITY OF PORT ST. LUCIE

Company (Primary) : CITY OF PORT ST. LUCIE

Street 1 (Primary) : 121 SW PORT ST. LUCIE BLVD

City (Primary) : PORT ST LUCIE

State (Primary) : FL

ZIP (Primary) : 34984

Phone (Primary) : (772) 344-4390

Class Code : 9424SC - Notice of Meeting

Start Date : 6/2/2011

Stop Date : 6/9/2011

Prepayment Amount : $0.00

Ad Sales Rep. : 190 - Barbara Wentzel

Width : 1

Depth : 61

REQUEST FOR SEALED E-BID

Request for Sealed Electronic Bid #20110079 for the Eastern Watershed Improvement Project (EWIP) Landscaping & Irrigation at Various EWIP Sites will be received by the City of Port St. Lucie, in the Office of Management & Budget, 3rd Floor, Suite 390, Bldg "A" of the Municipal Complex, at 121 SW Port St. Lucie Blvd., Port St. Lucie, FL 34984 5099, until 3:00:00 p.m. on July 14, 2011. There will be a one-time only Pre Bid Conference on Tuesday, June 14, 2011 at 1:30 P.M. in Room 390 of the City Hall Complex, Bldg A, 3rd Floor, 121 SW Port St. Lucie Blvd., Port St. Lucie, Fl. 34984. Project is funded by Federal Funds and requires special reporting requirements. Specifications may be obtained from DemandStar by Onvia, telephone (800) 711-1712, or from the Office of Management and Budget. A Bid package received from any other source is at the vendor's risk.

Publish: June 2, 9, 2011
2280342

"A City for All Ages"

CITY OF PORT ST. LUCIE

Sealed Electronic Bid #20110079
(E-Bid)

Eastern Watershed Improvement Project (EWIP)
Landscaping & Irrigation / Various EWIP Sites

Prepared By:
Robyn Holder, CPPB
Office of Management & Budget
121 SW Port St. Lucie Boulevard
Port St. Lucie, FL 34984-5099
772-344-4293
rholder@cityofpsl.com

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INVITATION TO E-BID

Sealed Electronic Bid #20110079 for the Landscaping and Irrigation Projects at various sites throughout the Eastern Watershed Improvement (EWIP) area will be received by the Office of Management and Budget of the City of Port St. Lucie no later than **3:00:00 p.m. on July 14, 2011**. Specifications are attached.

All bids must be received by the date and time specified above, when they will be opened and publicly read aloud. The bid time must be and shall be scrupulously observed. Under no circumstances shall bids uploaded to Demandstar.com after the time specified be accepted or considered. It is the sole responsibility of the Bidder to ensure that his or her bid is uploaded on or before the closing date and time. The City shall in no way be responsible for delays caused by any power outages or internet failures. No exceptions will be made.

Electronic replies will be the **only** method allowed for Bidders to respond to this solicitation. All submittals must be compatible with Microsoft Office 2003. E-Bidding will be done through a secure locked box. Bidders can only view/submit their E-Bid and will not have access to any other Bidder's submittals. The Bidder's E-Bid may be changed at the Bidder's discretion until the due date and time have been reached at which time the Bidder will no longer change or have access to the electronic bid submittal. The City will then open the E-Bids. Bidders who are e-bidding for the first time are strongly encouraged to contact Demandstar at (800) 771-1712 or obtain assistance by e-mailing questions to supplierservices@onvia.com

A Pre-Bid Conference for all Bidders will be held in the Office of Management & Budget Conference Room #390, Building A, located at 121 SW Port St. Lucie Blvd, Port St. Lucie, FL 34984, on **June 14, 2011 at 1:30 pm.** At this time, the specifications and other bidding documents will be explained, and questions regarding the project will be discussed.

The City of Port St. Lucie reserves the right to reject any and all bids, to waive any and all informalities or irregularities, and to accept or reject all or any part of any bid as it may deem to be in the best interest of the citizens of the City.

Each Bidder(s) must deposit with his/her bid, a bid bond, or bid guaranty, in the amount of five percent (5%) of the bid total, made payable to the City of Port St. Lucie. This must be uploaded at time of submittal and then mailed immediately after opening. Thus showing evidence that a bid bond was obtained. Contractors will send the Bond to the City via regular mail immediately after the opening date.

For the purpose of this bid, the term Bidder, E-Bidder and Contractor may be used interchangeably.

Documents required for this E-Bid:

- E-Bid Specifications, pages 1 - 55.
- E-Bid Reply Sheet #20110079, pages 20 - 22 (included in E-Bid Specifications).
- E-Bid Reply Excel Spreadsheet, page 1 - 7 (not included in E-Bid Specifications).
- Attachment A – Technical Specifications, Parts 1 & 2, pages 1 - 28 (not included in E-Bid Specifications).
- Attachment B – Construction Plans prepared by Captec Engineering, Inc. dated 2/1/11, pages 1-56 (not included in E-Bid Specifications).
- Attachment C- Fact Sheet #66: The Davis-Bacon and Related Acts (DBRA), pages 1 - 2 (not included in E-Bid Specifications).
- Attachment D – Davis Bacon and Related Acts, pages 1 – 8 (not included in E-Bid Specifications).
- Attachment E – Whistleblowers Know Your Rights poster, page 1 (not included in E-Bid Specifications).

Robyn Holder, CPPB
Contract Specialist

CAUTION: ***Bidders should take caution if United States mail or mail delivery services are utilized for the submission of bids. Internal mail distribution in City Hall frequently does not occur prior to 2:00 pm. It is suggested that you mail your response in adequate time to assure that it will arrive on the day prior to the closing date.***

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SPECIFICATIONS
E-BID #20110079

Eastern Watershed Improvement Projects (EWIP)
Landscaping and Irrigation / Various EWIP SITES

OVERVIEW

The City of Port St. Lucie desires to obtain quotations from qualified contractors, individuals, firms, and legal entities relative to supplying and installing plants, trees and irrigation for the Landscaping and Irrigation Projects at various sites throughout the Eastern Watershed Improvement (EWIP) area. Contract period will be two hundred forty (240) calendar days with no option for renewal.

NOTE: The City may not accept proposals from firms, that have had adversarial relationships with the City or firms that have represented entities that have had adversarial relationships with the City. This includes the firm, employees and financial or legal interests.

INTENT

It is the intent of the City to enter into a per unit fixed price basis contract with one (1) qualified Contractor to supply and install plants, trees and irrigation at various EWIP project sites located in the eastern section of Port St. Lucie. The unit prices shall include all labor, materials, equipment guarantees and warranties.

Scope of Work: This project involves the supplying and installation of trees, grasses, aquatic plants and irrigation facilities into, on and around six (6) newly constructed drainage features known as the Elks – Cane Slough STA, the Lennard Square / Azzi STA, the Tiffany Intake Channel, the Leithgow Street Pond, the Mary Terrace Pond and the Loutus Pond which are components of the Eastern Watershed Improvement Project (EWIP) in the City of Port St. Lucie. The project includes, but is not limited to: the supply and installation of trees, shrubs, grasses and aquatic plants as well as the installation of an irrigation system (including pump) and all work needed to provide a complete project.

1. GENERAL REQUIREMENTS

1.1 Invitation to Bid - All requirements contained in the Invitation to Bid are hereby incorporated in this specification.

1.2 Cost of Preparation of Bid - The City will not be responsible for any cost incurred by any Bidder in the preparation of his/her bid.

1.3 Examination of Drawings and Contract Documents - Bidders shall thoroughly examine these specifications and all other drawings, documents or other materials referred to herein and conduct such investigations and visits as may be necessary to thoroughly inform themselves regarding existing plant, facility, personnel and other conditions relative to compliance with this specification. No plea of ignorance by the Bidder of conditions that exist or may hereafter exist, as a result of failure or omission on the part of the Bidder to make said investigations and visits, and/or failure to fulfill in every detail the requirements of this specification and documents promulgated therein, will be accepted as a basis for varying the requirements of the City or the compensation of the Bidder(s).

1.4 Bid Price - Bidders must agree to furnish all item(s) that are awarded to them as a result of their response to this specification at the unit rice(s) indicated on their respective E-Bid Reply Excel Spreadsheet. Bidders shall guarantee that said price(s) shall be firm, not subject to escalation, for the 90 days after bid opening period. Submittal of a bid shall be prima facie evidence of the Bidder's intent to comply with this requirement. Any bid submitted with escalation clauses shall be rejected.

1.5 Qualifications - Bidders shall have the necessary organization, experience, capital, and equipment to carry out the provisions of the Contract to the satisfaction of the City. Bidders will submit all required licenses and certifications required to perform these projects with the E-Bid Reply Sheet #20110079. References from five (5) existing firms to which it has provided these types of services in the past or with which it is under Contract for such services presently and the names of company representatives who may be contacted for references shall be furnished on the Reference Check Form and returned with the E-Bid Reply Sheet #20110079. The City of Port St. Lucie shall **NOT** be used as a reference. References are subject to verification by the City and will be utilized as part of the award process. Performance history, list of projects recently completed and in process, major equipment available for this project, and experience of the principal members of the Bidder's organization must be furnished within seven (7) days, *if requested.*

1.6 Award of Contract – The City shall take measures as deemed necessary to determine the ability of the Bidder to perform the obligations of the Contract. The City may reject any bid where an investigation of the available information indicates a Bidder is not the most qualified to perform the obligation of the Contract. The City may require a Bidder to furnish additional statements of qualifications. Award of Contract will be to the lowest responsive responsible Bidder for the bid price listed on the E-Bid Reply Sheet #20110079 Section 5.3. This total must agree with the amount stated on the E-Bid Reply Excel Spreadsheet "EWIP Landscaping and Irrigation / Various EWIP sites Total". Discrepancies that occur between the dollar amounts listed on Demandstar (amount filled in when uploading bid documents), the dollar amount on the E-Bid Reply Excel Spreadsheet and the dollar amount list on the E-Bid Reply Sheet #20110079 will be resolved in favor of the E-Bid Reply Excel Spreadsheet.

- City Ordinance Section 35.12 Local Preference will not apply.

The award date is the date that City Council executes the motion to award the bid(s) regardless of the date Bidder received the notification of award. Notification of the award may be given by e-mail, facsimile, U.S. mail system, courier, or on the web site.

1.7 Variances to Specifications - Bidders must indicate any variances to the Specifications. Additionally, if bids are based on alternate products, Bidder must indicate the manufacturer's name and number of the alternate item(s) being offered and attach appropriate specifications. If variations and/or alternates are not stated in Bidder's reply, it shall be construed that the bid fully conforms to the specifications.

1.8 OSHA Compliance - Bidders must agree that the products furnished and application methods will comply with applicable provisions of the Williams-Steiger Occupational Safety and Health Act of 1970. These requirements shall include all primary and refresher training mandated under the OSHA guidelines.

1.9 Submittal of E-Bid - Unless otherwise provided herein, all bids shall be submitted by completing and returning the E-Bid Reply Sheet and any other documentation that is required by this bid. The E-Bid Reply Sheet #20110079 should be typed or printed and signed in black ink. The individual signing the bid must initial all changes. All submittals are required to be electronic. No hard copies will be accepted.

A. Request Bid Specifications, #20110079 from Onvia, via phone 800-711-1712 or via internet www.cityofpsl.com

B. Download the E-Bid Reply Excel Spreadsheet and save to your hard drive, program is in Excel Office 2003 Professional. Enter unit prices on the E-Bid Reply Excel Spreadsheet and save. The form will automatically total the unit prices. Do not hand write the unit prices.

C. Complete company information on E-Bid Reply Sheet #20110079.

D. Enter total price on E-Bid Reply Sheet #20110079. Totals shall agree with the E-Bid Reply Excel Spreadsheet that is to be uploaded at time of submittal. Discrepancies between the E-Bid Excel Spreadsheet uploaded on Demandstar, the dollar amount listed on the web page at time of submittal and the E-Bid Reply Sheet #20110079 uploaded on Demandstar will be resolved in favor of the E-Bid Excel Spreadsheet that is uploaded at time of submittal.

E. Electronically sign the E-Bid Reply Sheet #20110079 where indicated.

F. Upload and submit the E-Bid Reply Sheet #20110079, E-Bid Reply Excel Spreadsheet, Contractor's Questionnaire, Non-Collusion Affidavit of Prime Bidder, Buy America Certificate of Compliance, Certification Regarding Lobbying, Certification Regarding Debarment, Contractor Verification Form, Trench Safety Act Compliance form, 5% Bid Bond (**MUST** be received within 3 days after the opening or your bid will not be considered), Five (5) completed Reference Check Forms (top portion only), Insurance Certificate(s), Drug Free Workplace Form, W-9 Form and the Checklist onto Demandstar by the due date and time. Acknowledge all Addenda on the E-Bid Reply Sheet #20110079.

G. Upload and submit a copy of your license for this type of work; or in compliance with Florida Statute Chapter 489, a copy of the certificate issued by the State of Florida authorizing the Bidder(s) to transact business within the state.

**** Only electronic replies are required. No hard copies will be accepted.**

1.9.1 Bid Documents for the project include the following:

- Bid Specifications– Pages 1 – 55.
- Bid Reply Sheet #20110079.
- Contractor's Questionnaire.
- Reference Check Form (5 to be submitted with Bid).
- E-Bid Reply Excel Spreadsheet.
- Non-Collusion Affidavit of Prime Bidder.
- Buy America Certificate of Compliance.
- Certification Regarding Lobbying.
- Certification Regarding Debarment.
- Contractor Verification Form.
- Trench Safety Compliance Form.
- Drug Free Workplace Form.
- E-Bid Reply Excel Spreadsheet – Pages 1 - 7
- Attachments:

  Attachment A – Technical Specifications, Parts 1 & 2, pages 1 - 28.

Attachment B – Construction Plans prepared by Captec Engineering, Inc. dated 2/1/11, pages 1-56.
Attachment C- Fact Sheet #66: The Davis-Bacon and Related Acts (DBRA), pages 1 - 2.
Attachment D – Davis Bacon and Related Acts, pages 1 – 8.
Attachment E – Whistleblowers Know Your Rights poster, page 1.

1.9.2 Right to Reject -The City reserves the right to waive irregularities, reject and/or accept any and all bids, in whole or in part, to solicit and re-advertise for new bids, abandon the project in its entirety, or take other such action as serves the best interests of the City.

1.9.3 Timeliness of Submittal - All bids must be uploaded by the date and time specified above, when they will be opened and publicly read aloud. The bid time must be and shall be scrupulously observed. Under no circumstances shall bids uploaded after the time specified be considered. It is the sole responsibility of the Bidder to ensure that his or her bid is uploaded to Demandstar.com on or before the closing date and time. The City shall in no way be responsible for delays caused by power outages or internet failures.

1.9.4 E-Bid Opening Extension – The City reserves the right to extend the bid opening date when no responses or only one (1) response is received. The City will return the received response unopened.

1.9.5 Checklist - Bidders are requested to return the attached Checklist that is contained in the bid package with the Bid Reply Sheet.

1.9.6 Bid Security Bond - All Contractors shall include a Bid Security payable to the City of Port St. Lucie, Florida, in the amount of five percent (5%) of the total bid price. Security shall be either certified check, cashier's check, Irrevocable Letter of Credit from a solvent national or state bank, or Bid Bond issued by a Surety licensed to conduct business in the State of Florida. Surety shall have a rating of A or A+ by "Best's Rating Guide". This must be uploaded on Demandstar.com with all other required responses. Then the 5% Bid Bond must be mailed immediately after the opening and **MUST** be received within 3 days after the opening or your bid will not be considered. Thus showing evidence that a Bid Bond was obtained.

The accepted Contractor's security will be retained until execution of the Contract. The City will retain the remaining Contractors' security until a Contract has been executed, or until ninety (90) calendar days after the quote opening date, whichever is shorter.

1.10 Shipping Terms - Bidders shall quote F.O.B. Destination.

1.11 Payment Terms - Invoices shall be submitted once a month, by the10th of the month and payments shall be made Net thirty - (30) days from receipt of an acceptable invoice, unless Contractor has chosen to use the Purchasing Card. Cash discounts for using the Purchasing Card will be considered when evaluating bids.

PLEASE NOTE

The City has implemented a **Purchasing Card Program.** The Bidder can take advantage of this program and in consideration receive payment within several days instead of the City's policy of Net

30 Days After Receipt of Invoice (ARI). Any percentage off the bid price for the acceptance of Visa will be considered in the bid award. If no such percentage is given, the City shall assume 0% discount applies.

Bidders are requested to state on the Bid Reply Sheet #20110079 if they will honor the VISA Purchasing Card. In the event of failure on the part of the Bidder to make this statement the City shall assume the purchase or Contract price shall be governed by the Net 30 ARI.

1.12 Execution of Contract or Purchase Order - The Bidder will be required to execute a Standard City Contract within ten (10) days after notification by the City that Contract is available and thereafter comply with the terms and conditions contained therein. No Contract shall be considered binding upon the City until all parties have properly executed it and a purchase order or Visa order form has been issued.

NOTE: The Bidder will be required to accept the terms and conditions of the City's Contract as provided in this proposal. Read the insurance requirements carefully. If Bidder cannot accept these terms and conditions do not submit a bid.

1.13 Failure to Execute Contract – Failure on the part of the Bidder to execute the Contract as required may be justification for the annulment of the award.

1.14 Subcontracting or Assigning of the Contract – The Bidder shall not subcontract, sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of the work provided for therein, or of his right, title or interest therein, to any person, firm or corporation without the written consent of the City. Each Bidder shall list all subcontractors and the work provided by the suppliers in the area provided on the Contractor's Questionnaire form.

1.15 Time of Award - The City reserves the right to hold bid guarantees for a period not to exceed 90 days after the date of the bid opening stated in the Invitation to Bid before making award.

1.16 Public Entity Statement - A person or affiliate who has been placed on the convicted vendor list following a conviction for any public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statute, Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

1.16.1 Discrimination – An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not award or perform work as a contractor, supplier, subcontractor, or consultant under contract with any public entity, and may not transact business with any public entity.

1.17 City's Public Relations Image – The Bidder's personnel shall at all times handle complaints and any public contact with due regard to the City's relationship with the public. Any personnel in the employ of the Bidder involved in the execution of work that is deemed to be conducting him/her self in an

unacceptable manner shall be removed from the project at the request of the City Manager, or his/her designee.

1.18 Dress Code – All personnel in the employ of the selected Bidder(s) shall be appropriately attired. Employees engaged in the course of work shall wear company uniforms neat and clean in appearance, readily identifiable to all City employees and the public. No tee shirts with obscene pictures or writings will be allowed. Swimsuits, tank tops, shorts and sandals are also prohibited. Safety toed shoes shall be worn at all times.

1.19 Patent Fees, Royalties, and Licenses – If the Bidder requires or desires to use any design, trademark, device, material or process covered by letters of patent or copyright, the Bidder and his surety shall indemnify and hold harmless the City from any and all claims for infringement in connection with the work agreed to be performed. The Bidder shall indemnify the City from any cost, expense, royalty or damage which the City may be obligated to pay by reason of any infringement at any time during the prosecution of or after completion of the work.

1.20 Tie Bid Statement - Identical tie bids, in accordance with Section 287.087, Florida Statutes, preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids that are equal with respect to price, quality, and service are received by the City for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Please submit the form that is enclosed with your bid response.

1.21 Cooperative Purchasing Agreement - This bid may be expanded to include other governmental agencies provided a cooperative Purchasing Agreement exists or an Inter-local Agreement for joint purchasing exists between the City of Port St. Lucie and other public agencies. Bidders may agree to allow other public agencies to contract with them for the same items at the same terms and conditions as this bid, during the period of time that this bid is in effect. Each political entity will be responsible for execution of its own requirements with the Bidder.

1.22 Material Safety Data Sheets – Bidders shall provide MSDS's and description literature for each chemical/compound/mixture used in the performance of the Contract to the City before the commencement of any work. All MSDS's shall be of the latest version and comply with 29 CFR1910.1200. Hazardous products shall not be used except with prior approval of the City, and must be disposed of properly by the bidder in accordance with U.S. Environmental Protection Agency 40-CFR 260-265. The Bidder shall maintain and have readily accessible on-site a complete MSDS book of all chemicals, compounds/mixtures used in the execution of the contract.

1.23 Personal Protective Equipment (PPE) - All personnel are required to wear PPE in the process of the work including eye protection, hearing protection, respiratory protection as necessary, gloves, approved safety boots with steel or composite toes, reflective vests and any other PPE as necessary for the work.

1.24 Permits – The Bidder shall be responsible for obtaining all permits, licenses, certifications, etc., required by federal, state, county, and municipal laws, regulations codes, and ordinances for the performance of the work required in these specifications and to conform to the requirements of said legislation.

1.24.1 The selected Bidder shall be required to complete a **W-9 Taxpayer Identification Form** provided with the City's contract and return it with the contract and insurance documents.

1.25 Familiarity with Laws – The Bidder is assumed to be familiar with all federal, state and local laws, ordinances, rules and regulations that may affect the work. Ignorance on the part of the Bidder will in no way relieve him from responsibility. Bidder will submit all proposals in compliance with the 28 C.F.R. § 35.151.

1.26 Damage to Property – The Bidder shall preserve from damage all property along the line of work, or which is in the vicinity of or is in any way affected by the work, the removal, or destruction of which is not called for by the plans. This applies to public and private property, public and private utilities, trees, shrubs, crops, signs, monuments, fences, guardrail, pipe and underground structures, public highways, etc. Whenever such property is damaged due to the activities of the Bidder, it shall be immediately restored to a condition equal to or better than existing before such damage or injury was done by the Bidder, and at the Bidders expense. The Bidder's special attention is directed to protection of any geodetic monument, horizontal, vertical or property corner, located within the limits of construction.

National Geodetic Vertical Datum 1929 (NGVD '29) or North American Vertical Datum 1988 (NAVD '88) monuments shall be protected. If in danger of damage, notify:

Geodetic Information Center
6001 Executive Boulevard
Rockville, MD 20852
Attn: Mark Maintenance Center
(301) 443-8319

City of Port St. Lucie vertical or horizontal datum shall also be protected. In case of damage or if relocation is needed, notify:

City of Port St. Lucie
Engineering Department
121 SW Port St. Lucie Boulevard
Port St. Lucie, FL 34984-5099
(772) 871-5175

2. SPECIAL REQUIREMENTS

2.1 Implied Warranty of Merchantability - It is understood that the implied warranty of merchantability and fitness for the specified purpose are not disclaimed not withstanding any representation to the contrary.

2.2 Warranty and Guarantee – Bidders shall warrant that all materials are to be free of defects in workmanship and substance for a period of not less than 365 days; said warranty period shall commence on the date materials are installed, or accepted by the City, whichever is the latter of the two (2) dates.

2.2.1 Repair or Replacement - Should any defect appear during this warranty period, the Bidder(s) shall, at Bidder's sole cost and expense, repair or replace any and all defective items upon receipt of written notice from the City of said defect. Said repair or replacement must be accomplished within 7 days after receipt of notification from the City of the defect.

2.3 Samples - Samples of items, when required, must be furnished free of charge to the City and, if not destroyed, will upon written request, be returned at the Bidder's expense. Request for the return of samples must be made within 30 days following opening of bids. Each individual sample must be labeled with Bidder's name, bid number, and item number. Failure of Bidder to either deliver required samples or to clearly identify samples as indicated may be reason for rejection of the bid. Unless otherwise indicated, samples should be delivered to the Office of Management and Budget, or designated site.

2.4 Safety Precautions - The Bidder shall erect and maintain all necessary safeguards for the protection of the Bidder's employees and subcontractors, City personnel, and the general public; including, but not limited to, posting danger signs, and other warnings against hazards as is prudent and/or required by law to protect the public interest. All damage, injury or loss to persons and/or property caused, directly or indirectly, in whole or in part, by the Bidder's employees, or subcontractor(s), or anyone directly or indirectly employed by said parties shall be remedied by the Bidder.

2.5 Discrepancies - If, in the course of performing work resulting from an award under this specification, the Bidder finds any discrepancy between the area defined in these specifications and the actual area where work is being performed, the Bidder shall discontinue work on the subject area and inform the Contract Supervisor of the discrepancy. The Bidder shall thereafter proceed as authorized by the Contract Supervisor who will document any modification to these specifications that he/she authorized in writing as soon as possible.

2.6 Suspension of Work - The City may at any time suspend work on the entire job or any part thereof by giving three (3) calendar days written notice, signed by the Contract Supervisor, to the Bidder. The Bidder shall resume the work within three (3) calendar days after a written notice to resume work, signed by the Contract Supervisor, is issued to the Bidder.

2.7 Emergencies - In the event of emergencies affecting the safety of persons, the work, or property, at the site or adjacent thereto, the Bidder, or his designee, without special instruction or authorization from the City, is obligated to act, at the Bidder's discretion, to prevent threatened damage, injury or loss. In the event such actions are taken, the Bidder shall promptly give to the Contract Supervisor written notice of any significant changes in work or deviations from the Contract documents caused thereby, and if such action is deemed appropriate by the Contract Supervisor a written authorization signed by the Contract Supervisor covering the approved changes and deviations will be issued. Appropriate compensation adjustments will be approved, provided the cause of the emergency was beyond the control of the Bidder.

2.8 Deductions - In the event the City deems it expedient to perform work which has not been done by the Bidder as required by these Specifications, or to correct work which has been improperly and/or inadequately performed by the Bidder as required in these Specifications, all expenses thus incurred by the City, at the City's option, will be invoiced to the Bidder and/or deducted from payments due to the Bidder. Deductions thus made will not excuse the Bidder from other penalties and conditions contained in the Contract.

3. SPECIFIC REQUIREMENTS

3.1 Pre-Bid Conference - A pre-bid conference for all Bidders will be held at the City of Port St. Lucie in the Office of Management and Budget at **1:30 p.m. on June 14, 2011**, at this time, the specifications and other bidding documents will be explained, and questions regarding the project will be discussed. This is not a mandatory meeting.

3.2 Interpretation of the Approximate Quantities - The Bidder's attention is called to the fact that any estimate of quantities of work to be done and materials to be furnished under the specifications as shown on the proposed form, or elsewhere, is approximate only and not guaranteed. The City does not assume any responsibility that the final quantities shall remain in strict accordance with the estimated quantities, nor shall the Bidder plead misunderstanding or deception because of such estimate of quantities or of the character, location of the work, or other condition pertaining thereto.

3.3 Scope of Work - This project involves the supplying and installation of trees, grasses, aquatic plants and irrigation facilities into, upon, under and around six (6) newly constructed drainage features known as the Elks – Cane Slough STA, the Lennard Square / Azzi STA, the Tiffany Intake Channel, the Leithgow Street Pond, the Mary Terrace Pond and the Loutus Pond which are components of the Eastern Watershed Improvement Project (EWIP) in the City of Port St. Lucie. The project includes, but is not limited to: the supply and installation of trees, shrubs, grasses and aquatic plants as well as the installation of an irrigation system (including pump) and all work needed to provide a complete project. Contract period will be 240 calendar days with no option for renewal.

3.4 Hours of Service - The standard hours of work allowed in the City of Port St. Lucie's right-of-way are from 7:00 a.m. to sundown Monday through Friday. Any work performed by the Contractor outside of the aforementioned time limit requires special authorization from the City and requires that the Contractor obtain a noise permit from the City Police Department. All equipment operated at night shall comply with the noise levels established by the City of Port St. Lucie noise ordinance. Any additional costs associated with work outside of the hours of work allowed shall be borne solely by the Contractor. This shall include, but not be limited to costs of inspection, testing, police assistance, and construction administration.

All night, Saturday, Sunday, and/or Holiday work must be authorized by the City and requires that the Contractor obtain a noise permit from the City Police Department. All night work within the City's right-of-way requires a minimum 48-hour prior notice to the City. This clause shall not pertain to crews organized to perform maintenance work on equipment or to operate and maintain special equipment such as dewatering pumps, which may be required to work 24 hours per day.

3.5 Davis-Bacon Act – The following General Decision, or latest decision, will apply.

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General Decision Number: FL100278 01/21/2011  FL278
Superseded General Decision Number: FL20080278
State: Florida
Construction Type: Heavy
County: St Lucie County in Florida.

HEAVY CONSTRUCTION PROJECTS (Including Sewer and Water Lines)

Modification Number      Publication Date
          0               03/12/2010
          1               10/29/2010
          2               11/19/2010
          3               01/21/2011

* ELEC0728-006 09/01/2010
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	Rates	Fringes
ELECTRICIAN	$ 28.46	8.60

ENGI0487-014 01/01/2010

	Rates	Fringes
OPERATOR: Crane All Tower Cranes Mobile, Rail, Climbers, Static-Mount; All Cranes with Boom Length 150 Feet & Over (With or without jib) Friction, Hydraulic, Electric or Otherwise; Cranes 150 Tons & Over; Cranes with 3 Drums (When 3rd drum is rigged for work); Gantry & Overhead Cranes; Hydraulic Cranes Over 25 Tons but not more than 50 Tons; Hydraulic/Friction Cranes; & All Types of Flying Cranes; Boom Truck	$ 28.30	8.78
Cranes with Boom Length Less than 150 Feet (With or without jib); Hydraulic Cranes 25 Tons & Under, & Over 50 Tons (With Oiler); Boom Truck	$ 27.57	8.78
OPERATOR: Drill	$ 25.05	8.78
OPERATOR: Oiler	$ 22.24	8.78

IRON0402-003 04/01/2009

	Rates	Fringes
IRONWORKER, STRUCTURAL	$ 22.22	7.65

LABO1652-004 05/01/2009

	Rates	Fringes
LABORER: Grade Checker	$ 14.50	4.67

PAIN0452-007 08/01/2010

	Rates	Fringes
PAINTER: Brush, Roller and Spray	$ 16.00	6.20

SUFL2009-175 06/24/2009

	Rates	Fringes

CARPENTER, Includes Form Work	$ 15.50	0.00
CEMENT MASON/CONCRETE FINISHER	$ 16.46	0.00
LABORER: Common or General	$ 10.52	0.00
LABORER: Landscape	$ 7.25	0.00
LABORER: Pipelayer	$ 13.93	0.00
LABORER: Power Tool Operator (Hand Held Drills/Saws, Jackhammer and Power Saws	$ 10.63	2.20
OPERATOR: Asphalt Paver	$ 11.59	0.00
OPERATOR: Backhoe Loader Combo	$ 16.10	2.44
OPERATOR: Backhoe/Excavator	$ 21.70	0.00
OPERATOR: Blade/Grader	$ 16.00	2.84
OPERATOR: Bulldozer	$ 16.07	0.00
OPERATOR: Loader	$ 14.11	0.00
OPERATOR: Mechanic	$ 14.32	0.00
OPERATOR: Roller	$ 11.25	0.00
OPERATOR: Scraper	$ 11.00	1.74
OPERATOR: Trackhoe	$ 20.92	5.50
OPERATOR: Tractor	$ 10.54	0.00
TRUCK DRIVER: Lowboy Truck	$ 12.73	0.00
TRUCK DRIVER: Off the Road Truck	$ 12.21	1.97
TRUCK DRIVER: Servicer	$ 12.00	0.00
TRUCK DRIVER: Dump Truck	$ 10.60	0.00

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 (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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.

END OF GENERAL DECISION

4. BID, PERFORMANCE AND PAYMENT BOND REQUIREMENTS

4.1 Proposal Guaranty - A Bid Bond, certified check, cashiers check, bank money order, bank draft on any national or state bank, or cash, in the amount of five percent (5%) of the total bid price made payable to the "City of Port St. Lucie", shall accompany each proposal as a guarantee that the Bidder will execute the required Contract and promptly deliver the required Insurance Certificates, and other documentation required by these Specifications. Bid Bonds must be executed by a fully authorized Surety licensed by the State of Florida. The failure on the part of the Bidder to comply with this requirement and send the original Bid Bond in immediately after the opening will be cause for the rejection of the bid.

4.2 Return of Proposal Guaranty - After the bids have been reviewed, the Purchasing Agent may, at his/her discretion, return the guaranty deposit accompanying such proposals as in his/her judgment would not likely be considered in making the award. All other proposal guaranties will be held until the Contract has been executed, after which the proposal guaranty will be returned to the respective Bidders whose proposals they accompanied.

4.3 Payment & Performance Bonds - The selected Bidder shall furnish an acceptable Performance and Payment Bond complying with the statutory requirements set forth in Section 255.05, Florida Statutes, in the amount of 100% of the Contract price. The City will execute the Contract, however it is agreed and understood that the City will not be bound unless and until it has been duly authorized by the City Council and has been executed by the City Manager. A fully authorized Surety, licensed by the State of Florida shall execute the Performance and Payment Bond. The Performance and Payment Bond shall remain in full force a minimum of one (1) year after the work required has been completed and final acceptance by the City.

Should the Surety become irresponsible during the time the Contract is in force, the City may require additional and sufficient sureties and the selected Bidder shall furnish same to the satisfaction of the City within ten (10) days after written notice to do so. In default thereof, the Contract may be suspended. The City, by and through its Risk Management Department, reserves the right, but not the obligation, to review and reject any insurer providing coverage.

The failure on the part of the selected Bidder to execute the Contract and/or punctually deliver the required Insurance Certificates and other documentation may be cause for the annulment of the award.

4.4Execution of Contract - After the recipient of an award has been determined and necessary approvals obtained, the City will prepare a formal Contract to be executed by the parties. The Contract will be in substance the same as the Contract given to the Bidder with these Specifications. The Bidder shall execute the Contract, deliver the required Insurance Certificates and policies, and other documentation, and furnish an acceptable Performance and Payment Bond (when required) complying with the statutory requirements set forth in Section 255.05, Florida Statutes, in the amount of 100% of the Contract price, when required. The City will execute the Contract, however, it is agreed and understood that the City will not be bound by the Contract unless and until it has been duly authorized by the City Council and has been executed by the City Manager and a purchase order or Visa order form has been issued.

4.5 Failure to Execute - The failure on the part of the Bidder to execute the Contract and/or punctually deliver the required Insurance Certificates and other documentation may be cause for the annulment of the award. In the event of the annulment of the award, the amount of guaranty deposited with the proposal will be retained or be paid upon demand to the City, not as a forfeiture, but rather as liquidated damages for the breach of the Contract, it being agreed to by each Bidder in advance that the City will sustain certain damages by reason of the failure of the Bidder to sign the Contract and/or deliver the required Insurance Certificates and other documentation and that such damages equal the amount of the bid security, or exceed the same, and in no event shall the Bidder thereafter be permitted to contest to the contrary and does waive such right upon submitting a bid.

5. INSURANCE REQUIREMENTS – Bidder(s) are required to submit a copy of their current insurance certificates with the Bid Reply Sheet. The Bidder shall maintain insurance coverage reflecting the minimum amounts and conditions as required by the City. **Insurance requirements are defined in the Contract Form.**

5.1 Indemnification – The Bidder shall indemnify and hold harmless the City, and its Officers and their employees, from liabilities, damages, losses, and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Bidder and all persons employed or utilized by the Bidder in the performance of the Contract. As consideration for this indemnity provision the Bidder shall be paid the sum of $10.00 (ten dollars), which will be added to the Contract price and paid prior to commencement of work.

5.2 Right to Review - The City by and through its Risk Management Department reserves the right, but not the obligation, to review and reject any insurer providing coverage.

6. ADDITIONAL INFORMATION

6.1 Brand Names - The use of any manufacturer's name, trade name, brand name, or catalog number in this specification is for the sole purpose of describing and establishing the minimum requirements for levels of quality, standards of performance and design required, and is in no way intended to prohibit the bidding of any other manufacturer's items of equal quality. The Bidder or his/her designee shall be the sole judge of the equality of alternate products proposed and his/her decision shall be final.

6.2 Collusion - The City reserves the right to disqualify bids, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the Bidder. More than one (1) bid from an individual, partnership, corporation, association, firm, or other legal entity under the same or different names will not be considered. Reasonable grounds for believing that a Bidder is interested in more than one (1) proposal for the same work will be cause for rejection of all proposals in which such Bidders are believed to be

interested. Any or all proposals will be rejected if there is any reason to believe that collusion exists among the Bidders.

6.3 Withdrawal of Bids - A Bidder may withdraw his bid without prejudice no later than the day and hour set in the "Invitation to Bid" by communicating his purpose in writing to the City at the address given in the "Invitation for Bid". When received, it will be returned to him unopened.

6.4 Bid Information - For information concerning procedures for responding to this bid, contact Robyn Holder at (772) 344-4293. Such contact is to be for clarification purposes only. To ensure fair consideration for all Bidders, it must be clearly understood that Robyn Holder is the only individual who is authorized to represent the City. Questions submitted to any other person in any other department will not be addressed. Additionally, the City prohibits communications initiated by a Bidder to **any** City Official or employee evaluating or considering the bids **(up to and including the Mayor and City Council)**, prior to the time an award decision has been made.

It is the responsibility of the Bidder to receive any and all bid information and documents. Material changes, if any, to the scope of services, or bidding procedures will be transmitted only by addendum by Onvia.com. The Bidder, in turn, shall acknowledge receipt of the addendum by marking the Bid Reply Sheet with the Addendum number and the date of issuance. The City will not be responsible for any interpretation, other than those transmitted by Addendum to the bid, made or given prior to the bid award. The Bidder is responsible for verifying it has received all Bid Addenda.

If you have obtained this document from a source other than directly from the City or from DemandStar by Onvia.com you are not on record as a plan holder. The Office of Management & Budget takes no responsibility to provide Addenda to parties not listed by the City as plan holders. It is the Bidder's responsibility to check with our office prior to submitting your proposal to ensure you have a complete, up-to-date package. The Bidder is responsible for verifying they have received all Bid Addenda.

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E-Bid Reply Sheet #20110079

EWIP Landscaping & Irrigation / Various EWIP Sites

1. **COMPANY NAME**: _____

DIVISION OF: _____

PHYSICAL ADDRESS: _____

MAILING ADDRESS: _____

CITY, STATE, ZIP CODE: _____

TELEPHONE NUMBER: ( )_____ FAX NO. ( )_____

CONTACT PERSON: _____ E-MAIL: _____

2. **ORGANIZATIONAL PROFILE**: (complete all appropriate information)

Is the firm incorporated? Yes--No If yes, in what state? _____

_____
President

_____
Vice President

_____
Treasurer

How long in present business: _____ How long at present location: _____

Is firm a minority business: Yes--No; Does firm have a drug-free workplace program: Yes--No
If no, is your company planning to implement such a program? _____

3. **ADDENDUM ACKNOWLEDGMENT** - Bidder acknowledges that the following addenda have been received and are included in its proposal/bid:

Addendum Number	Date Issued

4. **VENDOR'S LIST** – If your company offers commodities other than the one specified for this bid, and you wish to be put on the vendor's list, please contact Onvia.com at (800) 711-1712. Bid Tabulation Reports are advertised on the City's Web Site at www.Cityofpsl.com.

5. **BID RESPONSE:**

5.1 Bidder will / will not accept the Purchasing Card (Visa).
(please circle one)

5.2 Percentage of discount when payment is made with Visa: _____ %

5.3 Bid Reply Sheet Totals from Schedule "A": $_____.
(This figure must match the E-Bid Excel Reply Spreadsheet and the figure that is to be used on the Demandstar submittal page. Discrepancies between the E-Bid Excel Spreadsheet uploaded on Demandstar, the dollar amount listed on the web page at time of submittal and the E-Bid Reply Sheet #20110079 uploaded on Demandstar will be resolved in favor of the E-Bid Excel Spreadsheet that is uploaded at time of submittal.)

Bidders are cautioned that the anticipated quantities used for this computation will be estimates. The City makes no guarantee as to the actual quantity that will be utilized during the Contract period. A unit price for each item offered shall be shown, and such price shall include all labor, materials, equipment and warrantees unless otherwise specified. A total shall be entered in the "Total" column for each separate item. In case of discrepancy between the unit price and the extended price, the unit price will be presumed correct.

6. **INSURANCE CERTIFICATES LICENSE** - Bidders are required, in accordance with Section 5, to submit a copy of their Insurance Certificate for the type and dollar amount of insurance they currently maintain. Bidders are required to submit all licenses and certifications required to perform this project.

7. **COMPLETION OF FORM** - An authorized representative of the firm offering this Bid must complete this form in its entirety. Prices entered herein shall not be subject to withdrawal or escalation by Bidder. The City reserves the right to hold proposals and bid guarantees for a period not to exceed 90 days after the date of the bid opening stated in the Invitation to Bid before awarding the Contract. Contract award constitutes the date that City Council executes the motion to award the bid.

8. **CONTRACT** - Bidder agrees to comply with all requirements stated in the specifications for this bid.

9. **CERTIFICATION**

This bid is submitted by: Name (print)_____ who is an officer of the above firm duly authorized to sign bids and enter into Contracts. I certify that this bid is made without prior understanding, Contract, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of this bid.

_____ _____
Signature Date

10. <u>Bidder has read and accepts the terms and conditions of the City's standard Contract</u>:

_____ _____

Signature Title

If a corporation renders this Bid, the corporate seal attested by the secretary shall be affixed below. Any agent signing this Bid shall attach to this form evidence of legal authority.

(seal)

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CONTRACTOR'S QUESTIONNAIRE
E-BID #20110079
EWIP LANDSCAPING & IRRIGATION / VARIOUS EWIP SITES

It is understood and agreed that the following information is to be used by the City of Port St. Lucie to determine the qualifications of Bidders to perform the work required. The Bidder waives any claim against the City that might arise with respect to any decision concerning the qualifications of the Bidder.

The undersigned attests to the truth and accuracy of all statements made on this questionnaire. Also, the undersigned hereby authorizes any public official, Engineer, Surety, Bank, material or equipment manufacturer or distributor, or any person, firm or corporation to furnish the City of Port St. Lucie any pertinent information requested by the City deemed necessary to verify the information on this questionnaire.

Dated this _____ day of _____, 2011.

_____
Name of Organization / Proposer

Submitted by: _____
Name and Title

(If more space is needed, please attach additional sheets.)

1. Type of Organization: Corporation, Partnership, Joint Venture, Individual or other?
(***circle one***)

2. If a Corporation answer the following:
When incorporated_____
In what State _____
Name of Officers: President _____
Vice President _____
Secretary _____
Treasurer _____

3. If a Partnership, answer the following:
Date of organization _____
General Limited Partnership _____
Name and address of each partner:
_____
_____
_____
(Attach additional pages if necessary)

4. Firm's name and main office address, telephone, fax number, and e-mail address, contact person:
_____
_____
_____

5. Firm's previous names (if any) What year(s)

6. Area of expertise: _____

7. How many years has your organization been in business? _____

8. Describe organization profile, including the size, range of activities, licenses, etc.

(Attached additional pages if necessary.)

9. Number of full time personnel:

	Current	Maximum	Minimum
a. Partners			
b. Managers			
c. Supervisors Senior Staff			
d. Other Professional Staff			
g. Total number of full time personnel			

10. What is the drainage construction experience of the principals and supervisory personnel of your organization?
(Add resumes of person that will be assigned to this project – limit one page per person.)

Name	Title	Years of Experience	% of Time to be Spent on City Projects	In What Capacity and With Whom

11. Firm's experience with similar contracts. Indicate which team member(s) was part of similar contracts. Indicate specifically the nature and extent of the work performed by the individual(s) or firms on prior similar contracts.

Name	Work Performed

12. Provide an organizational chart identifying relationship of entity and sub-contractors (if any) and the role description of key personnel proposed.

13. State your firm's commitment to perform in a timely fashion:

14. Submit the current and projected workloads of identified key personnel to be assigned to this contract.

Name	Current and Projected Workloads

15. State your firm's ability to meet budget and schedule:

16. Provide information regarding any favorable cost containment approaches or ideas that have been successful for you:

17. Identify any sub-contractor(s) that will be involved, including address(s) and a description of qualification(s). **The "Certification Regarding Lobbying" form must be submitted with each subcontractor listed.**

Name	Address	Qualifications

18. Has the Bidder or any principals of the applicant organization failed to qualify as a responsible Contractor; refused to enter into a contract after an award has been made; failed to complete a contract during the past five (5) years; or been declared to be in default in any contract or been assessed liquidated damages in the last five (5) years? If yes, please explain:

(Attached additional pages if necessary.)

19. Has the Bidder or any of its principals ever been declared bankrupt or reorganized under Chapter 11 or put into receivership?

Yes ( ) No ( )

If yes, please explain:

20. List any lawsuits pending or completed involving the corporation, partnership or individuals with more than ten percent (10 %) interest:

21. List any judgments from lawsuits in the last five (5) years:

22. List any criminal violations and/or convictions of the Bidder and/or any of its principals:

23. Is firm claiming to be a Certified Minority Business Enterprise as defined by the Florida Small and Minority Business Assistance Act of 1985, and in accordance with Florida State Statutes, #287.09451?

Yes ( ) No ( )

If "Yes" was checked, include a copy of certificate with proposal.

24. Has the Bidder obtained a Payment & Performance Bond within the last five (5) years?

Yes ( ) No ( )

If "Yes" was checked, state the bonding capacity of the firm. $_____.

25. Describe any significant or unique accomplishment in previous contracts. Include any additional data pertinent to firm's capabilities. (Please limit to two (2) pages)

BALANCE OF PAGE INTENTIONALLY BLANK

********(THIS IS A SAMPLE ONLY - DO NOT EXECUTE)********

CITY OF PORT SAINT LUCIE
CONTRACT FORM

This CONTRACT, executed this _____ day of _____, 2011, by and between the CITY OF PORT ST. LUCIE, FLORIDA, a municipal corporation, duly organized under the laws of the State of Florida, hereinafter called "City" party of the first part, and *name of Contractor, address,* Telephone No. ( ) ____ Fax No. ( ) _____, hereinafter called "Contractor", party of the second part.

RECITALS

In consideration of the below agreements and covenants set forth herein, the parties agree as follows:

CONTRACT SUPERVISOR

As used herein the Contract Supervisor shall mean Steve Jungjohan, Engineering Department at (772) 871-7640, or his designee

Engineer of Record shall mean Mr. Joseph W. Capra, P.E., Captec Engineering and he can be reached at (772) 692-4344, or his designee.

SECTION I
DESCRIPTION OF SERVICES TO BE PROVIDED

The specific work that the Contractor has agreed to perform pursuant to the E-Bid Specifications #20110079 consisting of pages 1 - 55, all Addenda, Technical Specifications Parts 1 & 2 consisting of pages 1 - 28, Attachments A – E, and Construction Plans prepared by Captec Engineering, Inc. dated 2/1/11 consisting of pages 1 – 56 for the construction of the **EWIP Landscaping and Irrigation / Various EWIP Sites** are hereby incorporated herein by this reference.

SECTION II
TIME OF PERFORMANCE

Contract period shall commence on _____ and terminate two hundred forty (240) calendar days thereafter on _____, 2011. In the event all work required in the bid specifications has not been completed by the specified date, the Contractor agrees to provide work as authorized by the Contract Supervisor until all work specified in the bid specifications has been rendered.

SECTION III
COMPENSATION

The total amount to be paid by the City to the Contractor is on a per unit fixed price basis in the amount of $_____ as indicated on Schedule A attached hereto and made a part of this contract, which includes a one-time ten-dollar ($10.00) payment for indemnification as provided in Section V of this Contract herein below. Payments will be disbursed in the following manner:

The Contract Sum - Work to be paid for on the basis of per unit prices: each, lump sum, linear feet, square yards, system, etc.

Progress Payments- The City will make partial payment during the progress of the work as follows: Partial payments, calculated from quantities of work in place multiplied by the Contract unit prices will be made Net 30 days after the receipt of the Pay Request. Pursuant to FS Section 218.735(8)(a)-(b), the City may withhold, as retainage, ten percent (10%) from each progress payment made to the Contractor for each invoice submitted until fifty (50%) completion of the construction services purchased under this Contract. The City will make payment unless the City feels there are grounds for withholding the payment of Retainage. If the City makes payment of the Retainage to the Contractor then the Contractor shall timely remit payment of such Retainage to all subcontractors and suppliers attributable to the labor, services or material supplied. All remaining retained amounts will be released to the Contractor Net 30 days after final completion of work and the City's acceptance of project. Partial Release of Liens from all Contractor's, subcontractors, suppliers for materials and sub-sub contractors are to be attached to each pay request. Retainage and progress payments may be negotiated if payment is made by the Visa Procurement Card.

Acceptance and Final Payment - Upon receipt of written notice that the work is ready for final inspection and acceptance, the City will promptly make such inspection. When City finds the work acceptable under the terms of the Contract and the Contract is fully performed, City will promptly issue a final certificate, stating that the work provided for in this Contract has been completed, and that the City's final acceptance of the Contractor's work under the terms and the conditions of the Contract is recommended, and the entire balance due the Contractor, subject to the covenants in the Standard Specifications and subject to any liquidated damages, if any assessed against the Contractor, will be paid to the Contractor net thirty (30) calendar days after the date of City's issuance of said final certificate of work completion and acceptance.

Before issuance of final payment, the Contractor shall submit evidence that all payrolls, material bills and other indebtedness connected with the work have been paid. Final Release of Liens from all Contractors, subcontractors, suppliers for materials and sub-sub contractors are to be attached to the final invoice.

Invoices for services shall be submitted once a month, by the 10th of each month, and payments shall be made net thirty calendar (30) days unless Contractor has chosen to take advantage of the Purchasing Card Program, which guarantees payment within several days. Payment shall be made Net thirty calendar days (30) of receipt of Contractor's valid invoice, provided invoice is accompanied by adequate supporting documentation, partial release of liens and approved by the Contract Supervisor as provided in Section XII of the Contract.

No payment for projects involving improvements to real property shall be due until Contractor delivers to City a complete release of all claims arising out of the Contract or receipts in full in lieu thereof, and an affidavit on his personal knowledge that the releases and receipts include labor and materials for which a lien could be filed.

All invoices and correspondence relative to this Contract must contain the City's Contract number and Purchase Order number or Visa Authorization number.

The Contractor shall not be paid additional compensation for any loss or damage, arising out of the nature of the work, from the action of the elements, or from any delay or unforeseen obstruction or difficulties encountered in the performance of the work, or for any expenses incurred by or in consequence of the suspension or discontinuance of the work.

SECTION IV
CONFORMANCE WITH BID

It is understood that the materials and/or work required herein are in accordance with the bid made by the Contractor pursuant to the Invitation to Bid and Specifications on file in the Office of Management and Budget of the City. All documents submitted by the Contractor in relation to said bid, and all documents promulgated by the City for inviting bids are, by reference, made a part hereof as if set forth herein in full.

SECTION V
INDEMNIFICATION/INSURANCE

The Contractor agrees to indemnify, defend, and hold harmless the City, its officers and employees, from liabilities, damages, losses and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligent act, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract. As consideration for this indemnity provision the Contractor shall be paid the sum of ten dollars ($10.00), which will be added to the contract price, and paid prior to commencement of work.

The Contractor shall, on a primary basis and at its sole expense, agree to maintain in full force and effect at all times during the life of this Contract, insurance coverage, limits, including endorsements, as described herein. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by Contractor under the Contract.

The parties agree and recognize that it is not the intent of the City of Port St. Lucie that any insurance policy/coverage that it may obtain pursuant to any provision of this Contract will provide insurance coverage to any entity, corporation, business, person, or organization, other than the City of Port St. Lucie and the City shall not be obligated to provide any insurance coverage other than for the City of Port St. Lucie or extend its immunity pursuant to Section 768.28, Florida Statutes, under its self insured program. Any provision contained herein to the contrary shall be considered void and unenforceable by any party. This provision does not apply to any obligation imposed on any other party to obtain insurance coverage for this project, any obligation to name the City of Port St. Lucie as an additional insured under any other insurance policy, or otherwise protect the interests of the City of Port St. Lucie as specified in this Contract.

The Contractor shall agree to maintain Workers' Compensation Insurance & Employers' Liability in accordance with Section 440, Florida Statutes. Employers' Liability must include limits of at least $100,000 each accident, $100,000 each disease/employee, $500,000 each disease/maximum. A Waiver of Subrogation endorsement must be provided. Coverage should apply on a primary basis. Should scope of work performed by Contractor qualify its employee for benefits under Federal Workers' Compensation Statute (example, U.S. Longshore & Harbor Workers Act or Merchant Marine Act), proof of appropriate Federal Act coverage must be provided.

Commercial General Liability insurance issued under an Occurrence form basis, including Contractual liability, to cover the hold harmless agreement set forth herein, with limits of not less than:

Each occurrence	$1,000,000
Personal/advertising injury	$1,000,000
Products/completed operations aggregate	$2,000,000

General aggregate	$2,000,000
Fire damage	$100,000 any 1 fire
Medical expense	$10,000 any 1 person

An Additional Insured endorsement **must** be attached to the certificate of insurance and must include coverage for Completed Operations (should be ISO CG20101185 or CG20371001 & CG20100704) under the General Liability policy. Products & Completed Operations coverage to be provided for a minimum of 5 years from the date of possession by owner or completion of contract. Coverage is to be written on an occurrence form basis and shall apply as primary. A per project aggregate limit endorsement should be attached. Defense costs are to be in addition to the limit of liability. A waiver of subrogation is to be provided in favor of the City. Coverage for the hazards of explosion, collapse and underground property damage (XCU) must also be included when applicable to the work performed. Coverage shall extend to independent contractors and fellow employees. Contractual Liability is to be included. Coverage is to include a cross liability or severability of interests provision as provided under the standard ISO form separation of insurers clause. There shall be no exclusion for Mold, Silica or Respirable Dust or Bodily Injury or Property Damage arising out of heat, smoke, fumes or ash from a hostile fire.

Except as to Workers' Compensation and Employers' Liability, said Certificate(s) and policies shall clearly state that coverage required by the Contract has been endorsed to include the City of Port St. Lucie, a political subdivision of the State of Florida, its officers, agents and employees as Additional Insured with a CG 2026-Designated Person or Organization endorsement, or similar endorsement, added to its Commercial General Liability policy and Business Auto policy. The name for the Additional Insured endorsement issued by the insurer shall read "**City of Port St. Lucie, political subdivision of the State of Florida, its officers, employees and agents, and Contract #20110079 for the EWIP Landscaping & Irrigation / Various EWIP Sites shall be listed as additionally insured**". The Certificate of Insurance and policy shall unequivocally provide thirty- (30) day written notice to the City prior to any adverse changes, cancellation, or non-renewal of coverage thereunder. Said liability insurance must be acceptable by and approved by the City as to form and types of coverage. In the event that the statutory liability of the City is amended during the term of this Contract to exceed the above limits, the Contractor shall be required, upon thirty - (30) days written notice by the City, to provide coverage at least equal to the amended statutory limit of liability of the City. Copies of the Additional Insured endorsements including Completed Operations coverage should be attached to the Certificate of Insurance. All independent contractors and subcontractors utilized in this project must furnish a Certificate of Insurance to the City in accordance with the same requirements set forth herein.

The Contractor shall agree to maintain Business Automobile Liability at a limit of liability not less than $500,000 each accident covering any auto, owned, non-owned and hired automobiles. In the event, the Contractor does not own any automobiles; the Business Auto Liability requirement shall be amended allowing Contractor to agree to maintain only Hired & Non-Owned Auto Liability. This amended requirement may be satisfied by way of endorsement to the Commercial General Liability, or separate Business Auto Coverage form. Certificate holder must be listed as additional insured. A waiver of subrogation must be provided. Coverage should apply on a primary basis.

The Contractor shall agree by entering into this Contract to a Waiver of Subrogation for each required policy. When required by the insurer, or should a policy condition not permit an Insured to enter into a pre-loss Contract to waive subrogation without an endorsement then Contractor shall agree to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy where a condition to the policy specifically prohibits such an endorsement, or voids coverage should Contractor enter into such a Contract on a pre-loss basis.

It shall be the responsibility of the Contractor to ensure that all subcontractors comply with the same insurance requirements referenced above.

All deductible amounts shall be paid for and be the responsibility of the Contractor for any and all claims under this Contract.

The Contractor may satisfy the minimum limits required above for either Commercial General Liability, Business Auto Liability, and Employers' Liability coverage under Umbrella or Excess Liability. The Umbrella or Excess Liability shall have an Aggregate limit not less than the highest "Each Occurrence" limit for either Commercial General Liability, Business Auto Liability, or Employers' Liability. When required by the insurer, or when Umbrella or Excess Liability is written on Non-Follow Form," the City shall be endorsed as an "Additional Insured."

Payment & Performance Bonds: The Contractor shall furnish an acceptable Performance and Payment Bond complying with the statutory requirements set forth in Section 255.05, Florida Statutes, in the amount of 100% of the Contract price. A fully authorized Surety, licensed by the State of Florida shall execute the Performance and Payment Bond. The Performance and Payment Bond shall remain in full force a minimum of one (1) years after the work required has been completed and final acceptance by the City.

Should the Surety become irresponsible during the time the Contract is in force, the City may require additional and sufficient sureties and the Contractor shall furnish same to the satisfaction of the City within ten (10) days after written notice to do so. In default thereof, the Contract may be suspended as herein provided.

SECTION VI
PROHIBITION AGAINST FILING OR MAINTAINING LIENS AND SUITS

Subject to the laws of the State of Florida and of the United States, neither Contractor nor any Subcontractor, supplier of materials, laborer or other person shall file or maintain any lien for labor or materials delivered in the performance of this Contract against the City. The right to maintain such lien for any or all of the above parties is hereby expressly waived.

SECTION VII
WORK CHANGES

The City reserves the right to order work changes in the nature of additions, deletions or modifications without invalidating the Contract, and agrees to make corresponding adjustments in the Contract price and time for completion. Any and all changes must be authorized by a written change order signed by the City Manager or his designee as representing the City. Work shall be changed and the Contract price and completion time shall be modified only as set out in the written change order. Any adjustment in the Contract price resulting in a credit or a charge to the City shall be determined by mutual agreement of the parties.

SECTION VIII
COMPLIANCE WITH LAWS

The Contractor shall give all notices required by and shall otherwise comply with all applicable laws, ordinances and codes and shall, at his own expense, secure and pay the fees and charges for all permits required

for the performance of the Contract. All materials furnished and works done are to comply with all local, state and federal laws and regulations. Contractor will comply with the requirements of 28 C.F.R. § 35.151.

Davis-Bacon Act Wage Rate Decision:

General Decision Number: FL100278 01/21/2011 FL278
Superseded General Decision Number: FL20080278
State: Florida
Construction Type: Heavy
County: St Lucie County in Florida.

HEAVY CONSTRUCTION PROJECTS (Including Sewer and Water Lines)

Modification Number	Publication Date
0	03/12/2010
1	10/29/2010
2	11/19/2010
3	01/21/2011

* ELEC0728-006 09/01/2010

	Rates	Fringes
ELECTRICIAN	$ 28.46	8.60

ENGI0487-014 01/01/2010

	Rates	Fringes
OPERATOR: Crane All Tower Cranes Mobile, Rail, Climbers, Static-Mount; All Cranes with Boom Length 150 Feet & Over (With or without jib) Friction, Hydraulic, Electric or Otherwise; Cranes 150 Tons & Over; Cranes with 3 Drums (When 3rd drum is rigged for work); Gantry & Overhead Cranes; Hydraulic Cranes Over 25 Tons but not more than 50 Tons; Hydraulic/Friction Cranes; & All Types of Flying Cranes; Boom Truck	$ 28.30	8.78
Cranes with Boom Length Less than 150 Feet (With or without jib); Hydraulic Cranes 25 Tons & Under, & Over 50 Tons (With Oiler); Boom Truck	$ 27.57	8.78
OPERATOR: Drill	$ 25.05	8.78
OPERATOR: Oiler	$ 22.24	8.78

IRON0402-003 04/01/2009

	Rates	Fringes
IRONWORKER, STRUCTURAL	$ 22.22	7.65

LABO1652-004 05/01/2009

	Rates	Fringes
LABORER: Grade Checker	$ 14.50	4.67

PAIN0452-007 08/01/2010

	Rates	Fringes
PAINTER: Brush, Roller and Spray	$ 16.00	6.20

SUFL2009-175 06/24/2009

	Rates	Fringes
CARPENTER, Includes Form Work	$ 15.50	0.00
CEMENT MASON/CONCRETE FINISHER	$ 16.46	0.00
LABORER: Common or General	$ 10.52	0.00
LABORER: Landscape	$ 7.25	0.00
LABORER: Pipelayer	$ 13.93	0.00
LABORER: Power Tool Operator (Hand Held Drills/Saws, Jackhammer and Power Saws	$ 10.63	2.20
OPERATOR: Asphalt Paver	$ 11.59	0.00
OPERATOR: Backhoe Loader Combo	$ 16.10	2.44
OPERATOR: Backhoe/Excavator	$ 21.70	0.00
OPERATOR: Blade/Grader	$ 16.00	2.84
OPERATOR: Bulldozer	$ 16.07	0.00
OPERATOR: Loader	$ 14.11	0.00
OPERATOR: Mechanic	$ 14.32	0.00
OPERATOR: Roller	$ 11.25	0.00
OPERATOR: Scraper	$ 11.00	1.74

OPERATOR: Trackhoe.....$ 20.92 5.50

OPERATOR: Tractor.....$ 10.54 0.00

TRUCK DRIVER: Lowboy Truck.....$ 12.73 0.00

TRUCK DRIVER: Off the Road Truck.....$ 12.21 1.97

TRUCK DRIVER: Servicer.....$ 12.00 0.00

TRUCK DRIVER: Dump Truck.....$ 10.60 0.00

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

==========

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 (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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.

END OF GENERAL DECISION

SECTION IX
CLEANING UP

Contractor shall, during the performance of this Contract, remove and properly dispose of resulting dirt and debris, and keep the work area reasonably clear. On completion of the work, Contractor shall remove all Contractors' equipment and all excess materials, and put the work area in a neat, clean and sanitary condition.

SECTION X
NOTICE OF PERFORMANCE

When required materials have been delivered and required work performed Contractor shall submit a request for inspection in writing to the Contract Supervisor.

SECTION XI
DELIVERY DOCUMENTATION

Not applicable.

SECTION XII
INSPECTION AND CORRECTION OF DEFECTS

In order to determine whether the required material has been delivered or the required work performed in accordance with the terms and conditions of the Contract documents, the Contract Supervisor shall make inspection as soon as practicable after receipt from the Contractor of a Notice of Performance or delivery ticket. If such inspection shows that the required material has been delivered and required work performed in accordance with terms and conditions of the Contract documents and that the material and work is entirely satisfactory, the Contract Supervisor shall approve the invoice when it is received. Thereafter the Contractor shall be entitled to payment, as described in Section III. If, on such inspection the Contract Supervisor is not satisfied, he shall as promptly as practicable inform the parties hereto of the specific respects in which his findings are not favorable. Contractor shall then be afforded an opportunity if desired by him, to correct the deficiencies so pointed out at no additional charge to the City, and otherwise on terms and conditions specified by the Contract Supervisor. Such examination, inspection, or tests made by the Contract Supervisor, shall not relieve Contractor of its responsibility to remedy any deviation, deficiency, or defect.

SECTION XIII
ADDITIONAL REQUIREMENTS

In the event of any conflict between the terms and conditions, appearing on any purchase order issued relative to this Contract, and those contained in this Contract and the Specifications herein referenced, the terms of this Contract and Specifications herein referenced shall apply. If there is a conflict between the Contract and specifications, the Contract will control.

SECTION XIV
LICENSING

Contractor warrants that he possesses all licenses and certificates necessary to perform required work and is not in violation of any laws. Contractor warrants that his license and certificates are current and will be maintained throughout the duration of the Contract.

SECTION XV
SAFETY PRECAUTIONS

Precaution shall be exercised at all times for the protection of persons, including employees, and property. The safety provisions of all applicable laws and building and construction codes shall be observed.

SECTION XVI
ASSIGNMENT

Contractor shall not delegate, assign or subcontract any part of the work under this Contract or assign any monies due him hereunder without first obtaining the written consent of the City.

SECTION XVII
TERMINATION, DELAYS AND LIQUIDATED DAMAGES

A. Termination of Contract. If the Contractor refuses or fails to deliver material as required and/or prosecute the work with such diligence as will insure its completion within the time specified in this Contract, the City by written notice to the Contractor, may terminate Contractor's rights to proceed. Upon such termination, the City may take over the work and prosecute the same to completion, by Contract or otherwise, and the Contractor

and his sureties shall be liable to the City for any additional cost incurred by it in its completion of the work. The City may also in event of termination obtain undelivered materials, by Contract or otherwise, and the Contractor and his sureties shall be liable to the City for any additional cost incurred for such material. Contractor and his sureties shall also be liable to the City for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is so terminated, the City may take possession of and utilize in completing the work such materials, tools, equipment and facilities as may be on the site of the work and necessary therefore.

B. Liquidated Damages for Delays. If material is not provided or work is not completed within the time stipulated in this Contract, including any extensions of time for excusable delays as herein provided, (it being impossible to determine the actual damages occasioned by the delay) the Contractor shall provide to the City one thousand one hundred forty-eight ($1,148.00) dollars as fixed, agreed and liquidated damages for each calendar day of delay until the work is completed. The Contractor and his sureties shall be jointly and severally liable to the City for the amount thereof.

C. Excusable Delays. The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work or delivery of materials due to: (1) any acts of the Federal Government, including controls or restrictions or requisitioning of materials, equipment, tools or labor by reason of war, national defense or any other national emergency, (2) any adverse acts of the City, (3) causes not reasonably foreseeable by the parties at the time of the execution of the Contract that are beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of the public enemy, acts of another Contractor in the performance of some other Contract with the City, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions, and (4) any delay of any Subcontractor occasioned by any of the above mentioned causes. However, the Contractor must promptly notify the City in writing within two (2) days of the cause of delay. If, on the basis of the facts and the terms of this Contract, the delay is properly excusable the City shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

D. The City may terminate this Contract with or without cause by giving the Contractor thirty (30) days notice in writing. Upon delivery of said notice and upon expiration of the thirty (30) day period, the Contractor shall discontinue all services in connection with the performance of this Contract and shall proceed to cancel promptly all related existing third party Contracts. Termination of the Contract by the City pursuant to this paragraph shall terminate all of the City's obligations hereunder and no charges, penalties or other costs shall be due Contractor except for work timely completed.

SECTION XVIII
LAW AND VENUE

This Contract is to be construed as though made in and to be performed in the State of Florida and is to be governed by the laws of Florida in all respects without reference to the laws of any other state or nation. The venue of any action taken to enforce this Contract shall be in St. Lucie County, Florida.

SECTION XIX
REIMBURSEMENT FOR INSPECTION

The Contractor agrees to reimburse the City for any expenditures incurred by the City in the process of testing materials supplied by the Contractor against the specifications under which said materials were procured, if

said materials prove to be defective, improperly applied, and/or in other manners not in compliance with specifications. Expenditures as defined herein shall include, but not be limited to, the replacement value of materials destroyed in testing, the cost paid by the City to testing laboratories and other entities utilized to provide tests, and the value of labor and materials expended by the City in the process of conducting the testing. Reimbursement of charges as specified herein shall not relieve the Contractor from other remedies provided in the Contract.

SECTION XX
APPROPRIATION APPROVAL

The Contractor acknowledges that the City of Port Saint Lucie's performance and obligation to pay under this Contract is contingent upon an annual appropriation by the City Council. The Contractor agrees that, in the event such appropriation is not forthcoming, the City may terminate this Contract and that no charges, penalties or other costs shall be assessed.

SECTION XXI
RENEWAL OPTION

Not applicable to this contract.

SECTION XXII
ENTIRE CONTRACT

The written terms and provisions of this Contract shall supersede all prior verbal statements of any official or other representative of the City. Such statements shall not be effective or be construed as entering into, or forming a part of, or altering in any manner whatsoever, this Contract or Contract documents.

Balance of page left intentionally blank

IN WITNESS WHEREOF, the parties have executed this Contract at Port St. Lucie, Florida, the day and year first above written.

CITY OF PORT ST. LUCIE FLORIDA
By: _____
City Manager

ATTEST:
By: _____
City Clerk

By:_____
Authorized Representative of (company name)

State of:_____

County of:_____

Before me personally appeared: _____)
(please print)

Please check one:

Personally known _____

Produced Identification: _____
(type of identification)

Identification No. _____

and known to me to be the person described in and who executed the foregoing instrument, and acknowledged to and before me that _____ executed said instrument for the purposes therein expressed.
(he/she)

WITNESS my hand and official seal, this _____ day of _____, 2011.

_____
Notary Signature

Notary Public-State of _____ at Large.

My Commission Expires _____.

(*seal*)

CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: _____

Reference: _____ Fax #: _____
Email: _____ Telephone #: _____
Person to contact: _____

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

E-Bid #20110079

State of _____}

County of _____}

_____, being first duly sworn, disposes and says that:
(Name/s)

1. They are _____of _____ the Bidder that
(Title) (Name of Company)

has submitted the attached bid/PROPOSAL;

2. He is fully informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such Bid/PROPOSAL;

3. Such Bid/Proposal is genuine and is not a collusive or sham Bid;

4. Neither the said Bidder/Proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Proposer, firm or person to submit a collusive or sham Bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such Contract or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Proposer, firm or person to fix the price or prices in the attached Proposal or of any other Proposer, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Port St. Lucie or any person interested in the proposed Contract; and

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

(Signed) _____

(Title) _____

STATE OF FLORIDA }
COUNTY OF ST. LUCIE }SS:

The foregoing instrument was acknowledged before me this_____
(Date)

by:_____ who is personally known to me or who has produced

_____ as identification and who did (did not) take an oath.

_____
Notary (print & sign name)

Commission No. _____

E-Bid #20110079
BUY AMERICA CERTIFICATE OF COMPLIANCE

CERTIFICATE OF COMPLIANCE

COMPLIANCE

The Contractor hereby certifies that it will comply with the requirements of 23 C.F.R. 635.410, as amended, and utilize only iron or steel manufactured in the United States, or components made with iron or steel that meet the Buy America requirements. Contractor acknowledges that it will be required to produce Buy America certification(s) from the producer(s) of the steel or iron or components prior to incorporating any such materials into the work or project.

Company Name:_____

Authorized By:_____
(Sign) (Print Name)

Title:_____ Date:_____

E-BID #20110079
CERTIFICATION REGARDING LOBBYING

The undersigned Contractor certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying", 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the awards documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. 1352 (1)-(2)(A), any person who makes a prohibited expenditure of fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure]

The Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq., apply* to this certification and disclosure, if any.

Company Name:_____

Authorized By:_____
(Sign) (Print Name)

Title:_____ Date:_____

(All Subcontractors are required to submit this form with the Prime Contractor's Bid)

E-BID #20110079

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

The Contractor certifies that, the firm or any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of federal funds:

(a) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR s29.110(a), by any federal department or agency;

(b) have not within a three-year period preceding this certification been convicted of or had a civil judgment rendered against it for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state, or local government transaction or public contract; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property

(c) are not presently indicted for or otherwise criminally or civilly charged by a federal, state, or local governmental entity with commission of any of the offenses enumerated in paragraph (b) of this certification; and

(d) have not within a three-year period preceding this certification had one or more federal, state, or local government public transactions terminated for cause or default.

The Contractor certifies that it shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this project by any federal agency unless authorized by the Florida Department of Transportation."

Company Name:_____

Authorized By:_____
(Sign) (Print Name)

Title:_____ Date:_____

CITY OF PORT ST. LUCIE
E-BID # 20110079

PROJECT TITLE: EWIP Landscaping & Irrigation / Various EWIP Sites

CONTRACTOR VERIFICATION FORM

THE FOLLOWING IS TO COMPLETED BY PRIME BIDDER:

Name of Firm:_____

Corporate Title: _____

Address: _____

_____
(Zip Code)

By:_____
(Print name) (Print title)

_____
(Authorized Signature)

Telephone: ( ) _____

Fax: ( ) _____

State License # _____ **(ATTACH COPY)**

County License # _____ **(ATTACH COPY)**

City License: **(ATTACH PROOF OF REGISTRATION WITH THE CITY)**

Type of License: _____

Unlimited _____ (yes/no)

If "NO", Limited to what trade? _____

TRENCH SAFETY ACT COMPLIANCE STATEMENT

Project Name: EWIP Landscaping & Irrigation / Various EWIP Sites

Project Location: Port St. Lucie, Florida

Project Number 20110079

Project Location (See Plans)

Instructions:

Chapter 90-96 of the Laws of Florida requires all Contractors' engaged by The City of Port St. Lucie, Florida to comply with Occupational Safety and Health Administration Standard 29 C.F.R. s. 1926.650 Subpart P. All prospective Contractor's are required to sign the compliance statement and provide compliance cost information where indicated below. The costs for complying with the Trench Safety Act must be incorporated into this project's base bid.
Certify this form in the presence of a notary public or other officer authorized to administer oaths.

Certification

1. I understand that Chapter 90-96 of the Laws of Florida (The Trench Safety Act) requires me to comply with OSHA Standard 29 C.F.R. s. 1926.650 Subpart P. I will comply with The Trench Safety Act and I will design and provide trench safety systems at all trench excavations in excess of five feet in depth for this project.

2. The estimated cost imposed by compliance with The Trench Safety Act will be:

   _____ Dollars
   (Written) (Figures)

3. The amount listed above has been included within the Base Bid.

Certified: _____
(Company-Contractor)

By: _____
(President's Signature)
(President's Typed or Printed Name)

Sworn to and subscribed before me in _____ County, Florida on the __ day of _____, 2011.

_____
NOTARY PUBLIC

DRUG-FREE WORKPLACE FORM

The undersigned vendor in accordance with Section 287.087, Florida Statutes hereby certifies that _____ does:
(Name of Business)

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

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

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

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

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

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

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

_____
Bidder's Signature

_____
Date

STATEMENT OF NO BID

To: City of Port St. Lucie
Office of Management & Budget
121 S.W. Port St. Lucie Boulevard
Port St. Lucie, FL 34984-5099

E-Bid: #_____

E-Bid Title: _____

We, the undersigned have declined to bid on the subject bid for the following reasons:

[ ] Insufficient time to respond to the Invitation to Bid

[ ] We do not offer this product or service.

[ ] Our schedule would not permit us to perform.

[ ] We are unable to meet specifications.

[ ] We are unable to meet bond requirements.

[ ] Specifications are unclear (Explain below).

[ ] We are unable to meet insurance requirements.

[ ] Other (Specify below).

Remarks:_____

_____

Company Name:_____ Telephone: ( ) _____

Division: _____

Address: _____

_____

Signature: _____ Date: _____

WAIVER AND RELEASE OF LIEN UPON PROGRESS PAYMENT

The undersigned lienor, in consideration of the sum of $_____, hereby waives and releases its lien and right to claim a lien for labor, services, or materials furnished through _____ _____, to _____

(Insert name of customer)

on the job of _____
(Insert name of owner)

to the following described property:

_____

_____
(Description of property)

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

DATED on _____, _____.

_____

By:_____
Lienor

I am ____ I am not _____ a Certified Minority Business.

____ I have attached the Standard Form-LLL "Disclosure Form to Report Lobbying".

CHECKLIST
E-Bid #20110079
EWIP Landscaping & Irrigation / Various EWIP Sites

Name of Bidder:_____

This checklist is provided to assist Bidders in the preparation of their bid response. Included in this checklist are important requirements that are the responsibility of each Bidder to submit with their response in order to make their bid response fully compliant. This checklist is only a guideline -- it is the responsibility of each Bidder to read and comply with the Sealed E-Bid in its entirety.

_____ E-Bid Reply Sheet #20110079 with proper signature uploaded to Demandstar.

_____ E-Bid Reply Excel Spreadsheet uploaded to Demandstar.

_____ Drug-Free Workplace Form uploaded to Demandstar.

_____ 5% Bid Bond uploaded to Demandstar and mailed in immediately after opening.

_____ All pricing has been mathematically reviewed and all corrections have been initialed.

_____ All price extensions and totals have been thoroughly checked.

_____ Each Bid Addendum (when issued) is acknowledged on the E-Bid Reply Sheet #20110079.

_____ Required W-9 as per Section 1.24.1 uploaded to Demandstar.

_____ Copy of Insurance Certificate in accordance with Section 5 of the E-Bid documents uploaded to Demandstar.

_____ Copy of all required licenses and certifications to do work in the City of Port St. Lucie uploaded to Demandstar.

_____ Have reviewed the Contract and accept all City Terms and Conditions.

_____ Contractor's Questionnaire uploaded to Demandstar.

_____ Required forms: Non-Collusion Affidavit of Prime Bidder; Buy America Certificate of Compliance; Certification Regarding Lobbying; Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions; and Contractor Verification Form. All forms are to be uploaded to Demandstar.

_____ List of all sub-contractors with required forms for "Certification Regarding Lobbying" and Minority Status Statement. (Use the Questionnaire for the Minority Status providing all sub-contractors are listed). All requested information is to be uploaded to Demandstar.

_____ 5 completed Reference Check Forms uploaded to Demandstar.

_____ Copy of the Checklist uploaded to Demandstar.

THIS FORM SHOULD BE RETURNED WITH YOUR E-BID REPLY SHEET

ATTACHMENT A

Technical Specifications Parts 1 & 2

City of Port St. Lucie
EWIP Landscaping & Irrigation / Various EWIP Sites
City of Port St. Lucie, Florida

(28 pages follow as a separate attachment)

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ATTACHMENT B

Construction Plans for

City of Port St. Lucie
Eastern Watershed Improvement Project
Landscaping & Irrigation / Various EWIP Sites
City of Port St. Lucie, Florida

Prepared by CAPTEC Engineering, Inc.

Description	Pages / Sheets
Cover Sheet	Sheet 1
Cane Slough/Elks STA Landscaping Plans	Sheets LP1 – LP5
Cane Slough/Elks STA Irrigation Plans	Sheets IR1 – IR5
Lennard Square/Azzi STA Landscaping Plans	Sheets LP1 – LP5
Lennard Square/Azzi STA Irrigation Plans	Sheets IR1 – IR4
Tiffany Channel STA Landscaping Plans	Sheets LP1 – LP4
Tiffany Channel STA Irrigation Plans	Sheets IR1 – IR8
Leithgow Street STA Landscaping Plans	Sheets LP1 – LP3
Leithgow Street STA Irrigation Plans	Sheets IR1 – IR4
Loutus STA Landscaping Plans	Sheets IR1 – IR5
Mary Terrace STA Landscaping Plans	Sheets LP1 – LP3
Mary Terrace STA Irrigation Plans	Sheets IR1 – IR4

(56 pages follow as a separate attachment)

ATTACHMENT C

Fact Sheet #66: The Davis-Bacon and Related Acts (DBRA), pages 1 – 2.

City of Port St. Lucie
EWIP Landscaping & Irrigation / Various EWIP Sites
City of Port St. Lucie, Florida

(2 pages follow as a separate attachment)

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ATTACHMENT D

Davis Bacon and Related Acts
29 CFR Section 5.5, pages 1 – 8.

EWIP Landscaping & Irrigation / Various EWIP Sites
City of Port St. Lucie

(8 pages follow as a separate attachment)

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ATTACHMENT E

Whistleblowers Know Your Rights Poster

City of Port St. Lucie
EWIP Landscaping & Irrigation / Various EWIP Sites
City of Port St. Lucie, Florida

(1 page follow as a separate attachment)

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CITY OF PORT ST. LUCIE

Sealed Electronic Bid (E-Bid) #20110079 – Attachment A

Eastern Watershed Improvement Project (EWIP)

Landscaping & Irrigation / Various EWIP Sites

TECHNICAL SPECIFICATIONS – PART 1

LANDSCAPING INSTALLATION

Paragraph	Description
1	Scope of Work
2	Measurement and Basis Of Payment
3	Utilities
4	Water Resources
5	Fish and Wildlife Resources
6	Environmental Protection
7	Control and Disposal of Waste
8	Dust Control
9	Erosion and Sediment Controls
10	Sodding
11	Project Schedule
12	Landscaping
13	As-Built Record Drawings

SPECIAL CONDITIONS

Paragraph	Description
1	City Furnished Items
2	Survey Control
3	Construction Items in the Bid Form
4	Sequence of Construction
5	Contract Supervisor
6	Engineer
7	Private Property Notices
8	Project Progress Meetings
9	Protection of Gopher Tortoises
10	Debris Located within Project Limits
11	Video Tape/DVD

1. **SCOPE OF WORK** - Shall be as shown and described in the Contract Documents.

2. **MEASUREMENT AND BASIS OF PAYMENT**

A. Progress Payments

1. Measurement of quantities for progress payments shall be made by the CONTRACTOR. Such measurements are subject to the ENGINEER's review and correction.

2. Measurements for progress payments shall be made on in-place quantities in accordance with the Contract Form General Requirements. Requests for partial payment for materials on order, in warehouse or yard, or stockpiled on the project site will be accepted or denied at the CITY's discretion.

3. No item will be accepted for progress payment until all required testing has been successfully completed.

B. Final Payment

1. Final payment will not be made on any portion of the Contract until the entire scope of work under this contract is complete and all Final Release of Liens have been received.

3. **UTILITIES** - The CONTRACTOR shall be required to coordinate all work when necessary with the various utility companies so that utility service may be maintained. The CONTRACTOR shall exercise due caution when working adjacent to such utilities. Any damage to the utilities resulting from the CONTRACTOR's operations shall be repaired at Contractor's sole cost and expense. Any work involving conflict with utility companies shall be coordinated promptly without any delay to the project.

4. **WATER RESOURCES** - The CONTRACTOR shall not discharge without permit into the waters of lakes, rivers, canals, waterways and ditches, any fuels, oils, bitumen's, garbage, sewage, or other materials which may be harmful to fish, wildlife, or vegetation, or that may be detrimental to outdoor recreation. The CONTRACTOR shall be responsible for investigating and complying with all applicable federal, state and local laws and regulations governing pollution of waters. All work under this Contract shall be performed in such a manner that objectionable conditions will not be created in waters through or adjacent to the project areas. If a violation is noted during construction, all construction shall cease until the condition is corrected, at no additional cost to the CITY.

The CONTRACTOR shall exercise extreme care to minimize degradation of water quality at the site. All necessary provisions shall be taken to ensure compliance with the water quality standards of the State of Florida. Attention is called to Chapter 17-3, Florida Administrative Code. Adequate silt containment procedures and equipment shall be used to control turbidity within state standards.

If any waste material is dumped into unauthorized areas, the CONTRACTOR shall remove the material and restore the area to the condition of the adjacent undisturbed area. If necessary, contaminated ground shall be excavated, disposed of as directed by the ENGINEER and replaced with suitable fill materials, compacted and finished with topsoil, all at the expense of the CONTRACTOR.

All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

5. **FISH AND WILDLIFE RESOURCES** - The CONTRACTOR shall at all times perform all work and undertake such precautious measures and steps required to prevent any interference or disturbance to fish and wildlife. The CONTRACTOR shall not be permitted to alter water flows or otherwise significantly disturb native habitat adjacent to the project area which are critical to fish and wildlife except as may be indicated or specified.

All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

6. **ENVIRONMENTAL PROTECTION** - In order to prevent and to provide for abatement and control of any environmental pollution arising from the work of the CONTRACTOR and his Subcontractors in the performance of this Contract, the CONTRACTOR shall comply with all applicable federal, state and local laws and regulations concerning environmental pollution control and abatement, and all applicable provisions of the Army Corps of Engineers manual, EM 385-1-1, entitled General Safety Requirements, in effect on the date of the work, as well as the specifications, including the Corps of Engineers and Florida Department of Environmental Protection permits, if applicable to this project.

The CONTRACTOR shall provide and maintain environmental protection during the term of the Contract. Environmental protection measures shall be provided to control pollution that develops during normal earthwork, dredging and/or construction practices. The CONTRACTOR's operations shall comply with all federal, state, and local regulations pertaining to water, air, solid waste and noise pollution. Compliance with the provisions of this Specification by Subcontractors shall be the responsibility of the CONTRACTOR.

All materials, labor and equipment needed to prosecute the work required by this Specification shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this Contract, with no additional cost to be incurred by the CITY.

7. **CONTROL AND DISPOSAL OF WASTE** - Wastes shall be picked up and placed in containers that are emptied on a regular schedule. All handling and disposal shall be so conducted as to prevent contamination of the site and any other areas. Upon completion, the areas shall be left clean and natural looking. All sights of temporary construction and activities incidental to construction of the required permanent work in place shall be cleaned, removed and/or eliminated. CONTRACTOR shall transport all waste off of

CITY's property and dispose of it in a manner that complies with federal, state and local requirements. This item is considered incidental to the work.

8. **DUST CONTROL** - The CONTRACTOR will be responsible to provide adequate dust control on the project. The CONTRACTOR at a minimum is required to provide watering of the project limits to avoid excessive dust. The CITY requests the use of non-potable water for dust control. The CITY will only notify the CONTRACTOR one time of inadequate dust control. If the CONTRACTOR fails to respond within two (2) hours, then the CITY will provide dust control and back charge the CONTRACTOR. This item is considered incidental to the work.

9. **EROSION AND SEDIMENT CONTROLS** - The CONTRACTOR will provide, install, maintain, monitor, and remove the required erosion and sediment control measures on and around the project site as needed to prevent pollution of water, detrimental effects to public or private property or damage to the work of the project. CONTRACTOR shall construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as directed by the CITY or ENGINEER.

A. **Staked Silt Fence** - The CONTRACTOR shall furnish, install, maintain, and remove temporary silt fences in accordance with the manufacturer's directions, these Specifications, the details as shown on the plans, and the F.D.O.T. Roadway and Traffic Design Standards (2010 Edition) . 50% of the cost of this item is to be paid at installation, with 40% to be paid in equal monthly payments spread out over the remaining contract time, beginning in the 2nd month, and a final 10% paid at substantial completion.

The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the CITY.

Payment shall be made under STAKED SILT FENCE – per LINEAR FOOT.

B. **Floating Turbidity Barrier** - The CONTRACTOR shall install, maintain, and remove turbidity barriers to contain turbidity that may occur as the result of dredging, filling, or other construction activities which may cause turbidity to occur in the waters of the State. Barriers shall be placed prior to the commencement of any work that could impact the area of concern. Barriers shall be constructed and installed in accordance with the details shown in the plans and as shown in the F.D.O.T. Roadway and Traffic Design Standards (2010 Edition), or as approved by the ENGINEER. Ensure that the type barrier used and the deployment and maintenance of the barrier will minimize discharge of turbid waters from the construction site. The ENGINEER may approve alternate methods or materials. Operate turbidity barriers in such a manner to avoid or minimize the degradation of the water quality of the surrounding waters. 50% of the cost of this item is to be paid at installation, with 40% to be paid in equal monthly payments spread out over the remaining contract time, beginning in the 2nd month, and a final 10% paid at substantial

completion.

The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the CITY.

Payment shall be made under FLOATING TURBIDITY BARRIER – per LINEAR FOOT.

10. **SITE ACCESS RESTORATION** - CONTRACTOR shall be responsible for the repair and restoration of any and all areas that are damaged as a result of construction activities including, but not limited to the installation of landscaping and irrigation systems. In addition other construction activities for which the Contractor is responsible shall include, but is not limited to, repair of grading, sodding, mulching, improved soil, utilities, irrigation, drainage, pavement, curbing, etc.

The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the CITY.

Payment shall be made under SITE ACCESS RESTORATION – LUMP SUM.

11. **PROJECT SCHEDULE** - Within twenty-one (21) calendar days after the execution of the Contract, or at the pre-construction meeting whichever is earlier, CONTRACTOR shall submit for approval, three copies of a schedule of work showing in detail satisfactory to the CITY, the order in which the CONTRACTOR proposes to carry out the work, the interdependence of activities, the date on which it will start the individual activities, including procurement of materials, plans and equipment, submission and receipt of shop drawings, duration, monetary value, resource allocation, earliest and latest starting and completion dates for each operation. The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work schedule for completion at any time. All activities are to be described so that the work is readily identifiable and the progress on each activity can be readily measured. The schedule shall be prepared in such a manner that all elements are contained on the schedule diagram (i.e., Early Start, Late Start, Early Finish, Late Finish and Duration). Separate detail sheets containing this information are not acceptable. If CONTRACTOR elects to use a computer generated critical path method schedule (CPM) the selected software and output format (including size, color, order, etc.) is to be approved and accepted by the CITY before CPM preparation. The schedule shall be accompanied by a working plan which is a concise written description of CONTRACTOR's construction plan. This plan shall include but not be limited to the phasing, sequence, identification of work crews and summary of the work. CONTRACTOR shall resubmit revised a schedule whenever requested to comply with such comments as may be required by the CITY. Weekly revisions may be required by the CITY if there is deviation from the schedule.

CONTRACTOR shall enter on the above-mentioned chart the actual progress accompanied with a written description at monthly intervals and shall immediately

deliver to the CITY three copies thereof along with each progress payment request. If CONTRACTOR fails to submit a progress schedule within the time prescribed herein, the ENGINEER may withhold approval of a progress payment request until such time as CONTRACTOR submits the required progress schedule.

The CONTRACTOR must provide letters from his sub-contractors that indicate their acceptance of the proposed schedule.

The CONTRACTOR shall submit a concise written explanation of the schedule impacts attached to the delay claim and the next schedule update.

All material, labor and equipment required to perform the work effort for this item shall be carried out by the CONTRACTOR as incidental to the bid price of the various bid items of this contract, with no additional cost to be incurred by the CITY.

12. **LANDSCAPING:** The project will be constructed in full compliance with the landscape plans and specifications included. The plant material will be paid for as per Bid Schedule. The mulch/down guys/supplies/fertilizer/topsoil/etc will be included in the plant material. All plantings to include a one (1) year guarantee.

TREES, SHRUBS, AND GROUNDCOVER

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Provide all labor, materials, plant materials, soil additives, equipment, services, and facilities required to complete all landscape planting and related Work indicated on the Drawings and as specified.

1.02 RELATED WORK

A. Sodding, Mulch

1.03 QUALITY ASSURANCE

A. Contractor Qualifications: A qualified Landscape Contractor whose work has resulted in successful establishment of exterior plants.

1. Contractor's Field Supervision: Maintain an experienced full-time supervisor on project site when exterior planting is in progress.

B. Provide quality, size, genus, species, and variety of exterior plants indicated, complying with applicable requirements.

C. Tree and Shrub Measurements: Measure according to "ANSI Z60.1" and "Grades and Standards" with branches and canes in their normal position.

D Inspection: The CITY reserves the right to inspect trees and shrubs either at place of growth or at the site prior to planting to ascertain compliance with requirements for name, variety, size, and quality; however, final approval shall be based upon the in-place inspection.

E. Coordinate with the CITY in monitoring and approval of all items and areas of Work required.

F. Regulatory Requirements: Applicable federal, state, or other governing laws and standards as specified hereafter, or as may otherwise apply.

G. Pre-installation Conference: Conduct conference at project site with the CITY prior to commencing Work and extend invitation to Landscape Architect.

H. Source Quality Control:

1. Ship all landscape materials to the job with appropriate Florida State Department of Agriculture Bureau of Plant Industry Certificates of Inspection.
2. Provide trees and shrubs grown in a recognized nursery in accordance with good horticultural practice.
3. Prior to delivery of topsoil, submit written statements indicating:
   a. Location of properties from which topsoil is to be obtained.
   b. Names and addresses of owners.
   c. Depth to be stripped.
   d. Crops grown on property during past two (2) years.

1.04 SUBMITTALS

A. Installation Schedule:

1. Submit for approval a Planting Installation Schedule showing dates for starting each type of planting in each area of the site.

B. Product Data: Submit product sheets and samples for all manufactured items specified.

1. Plant Samples: Submit three plants of each shrub, groundcover, or vine 7 gallons or less as specified for approval by the CITY and to be used as representative size, specification, and plant type for all plant materials to be installed. Any plant materials that do not conform to the plans, specifications, or approved plant samples shall be rejected.
2. Sample plants shall be delivered and maintained on site for comparison. Any plants not equal to samples shall be rejected

C. Warranties, Certificates, and Inspection Tags:

1. Submit warranties, certificates, and inspection tags for all products and materials as defined under Paragraph 1.07 -" Delivery Storage and Handling".
2. Submit certificates of inspection for all materials and products subject to state or federal governmental inspection.

D. Plant Photographs: CONTRACTOR shall provide representative photographs of all plant materials specified over 7 gallons in size with a measuring rod included in the photograph. At CITY's option, CONTRACTOR may be required to coordinate with CITY tagging trips to view all larger plant materials.

E. Certificates, Reports and Samples Submittals

1. All certificates, reports, and samples shall be submitted by the CONTRACTOR to the CITY a minimum of two weeks prior to the installation of any of the materials. CONTRACTOR shall not begin Work until all submittals have been approved by the CITY. Submittals required but not limited to the following:
   a. Existing soil analysis including three (3) Soil Test Reports and sample per site
   b. Prepared soil analysis and sample
   c. Mulch sample
   d. Pre- and post-emergent herbicide
   e. Week eradication treatment for lawn grass
   f. Foliar spray fertilizer(s)
   g. Plant samples and/or photographs
   h. List of Personnel, qualifications, and schedule
   i. Guying methodologies
   j. Leaf anti-desiccant spray
   k. Maintenance manual
   l. Quantity schedule for "Diehard" micorrhizal inoculants.
   m. Used "Diehard" plastic bags

1.05 REFERENCES

A. Florida Department of Agriculture and Consumer Services, "Grades and Standards for Nursery Plants", hereafter referred to as "Grades and Standards".

B. American Nursery and Landscape Association (formerly American Association of Nurserymen) ANSI Z60.1, "American Standard for Nursery Stock", hereafter referred to as "ANSI Z60.1".

1.06 SUBSTITUTIONS

A. If the specified or detailed landscape materials are not obtainable, submit proof of non-availability and a proposal for use of equivalent material to the CITY.

1.07 DELIVERY, STORAGE AND HANDLING

A. Plant Materials:

1. Do not prune trees and shrubs before delivery, except as approved by the CITY. Protect bark, branches and root systems from sun scald, drying, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of exterior plants during delivery. Do not drop exterior plants during delivery.
2. Handle planting stock by root ball.
3. Deliver exterior plants after preparations for planting have been completed and install immediately. If planting is delayed for more than six hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist. Water root systems of plants stored on-site with a fine-mist sprayer. Water as often as necessary to maintain root systems in a moist condition.
4. Protect plants upon arrival on-site.
5. Thoroughly water and properly maintain until planting.
6. Do not allow plants to remain unprotected for a period exceeding twenty-four (24) hours.
7. Exercise workmanlike methods customary in good horticultural practice.
8. Do not prune plants prior to delivery, except as directed. In no case, are trees to be topped before delivery.
9. Prior to delivery to site, spray all trees for insects, fungus, and with a foliar antitranspirant. Deliver with foliage, limbs, trunk, and roots free of disease and pests.
10. Remove from the site all plants that are not approved and replace with plants that are in accord with specifications

B. Packaged Materials:

1. Deliver packaged materials in containers in good condition showing:
   a. Weight
   b. Analysis
   c. Name of manufacturer
   d. Trade name or trademark
   e. Protect from deterioration, contamination, adverse weather, and other damage.

C. Plant Materials:

1. Protect plants upon arrival on-site.
2. Thoroughly water and properly maintain until planting.

3. Do not allow plants to remain unprotected for a period exceeding twenty-four (24) hours.
4. Exercise workmanlike methods customary in good horticultural practice.
5. Do not prune plants prior to delivery, except as directed. In no case, are trees to be topped before delivery.
6. Prior to delivery to site, spray all trees for insects, fungus, and with a foliar antitranspirant. Deliver with foliage, limbs, trunk, and roots free of disease and pests.
7. Remove from the site all plants that are not approved and replace with plants that are in accord with specifications.

1.08 PROJECT CONDITIONS

A. Existing Conditions:

1. Examine the project site, verify elevations, observe the conditions under which the Work is to be done, and notify the CITY of any unsatisfactory conditions.
2. Do not proceed with Work on this Section until conditions have been corrected satisfactorily.
3. Utilities, as described in Section 2, Utility Locations.
4. Maintain grade stakes set by others until removal is approved by all parties concerned.
5. Excavations:

a. When conditions detrimental to plant growth are encountered such as rubble fill, adverse drainage conditions, or obstructions, notify the CITY prior to planting.

b. Rubble, rocks, fill and debris in excess of ½" (one-half inch) in diameter shall be removed to a depth of:
4" (four inches) in sodded areas
18" (eighteen inches) in shrub and groundcover beds and
36" (thirty-six inches) at trees
Rubble, rocks, fill and debris found or discovered in excess of ½" (one-half inch) in diameter must be discarded appropriately, at the CONTRACTORS expense, and not used in the backfill material.

c. CONTRACTOR shall conduct percolation tests in all planting areas, pits and holes prior to planting.

B. Protection: Protect and maintain, as part of the Work of this Section, all existing plant materials to remain.

1.09 COORDINATION

A. Sequencing and Coordination

1. Coordinate the Work of this Section with related Work of other disciplines and inform the CITY of any scheduling or other discrepancies relating to Work to be performed.
2. Prior to the starting of planting, verify that the underground sprinkler system and finish grading have been approved. Unless specified otherwise, do not commence planting until:
3. Site grading, soil import, and preparation has been completed and approved.
   a. Substantial provision for irrigation has been provided to maintain plant materials.
4. Proceed with and complete the landscape planting Work as rapidly as portions of the site become available, or as otherwise directed.

B. Warrant all plant materials, for a period of one year, from the date of Final Acceptance from the CITY, against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, or as a result of malpractice carried out by the Owner, abuse or damage by others, or unusual phenomena and incidents which are beyond the CONTRACTOR'S control.

C. Remove and replace dead plants immediately.

D. Remove and replace plants that are more than 25% dead or in an unhealthy condition at the end of the warranty period.

E. Replacements:
   1. Coordination with Lawns: Plant trees and shrubs after final grades are established and prior to planting of lawns, unless approved otherwise.
      a. When planting of trees and shrubs does occur after lawn Work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

F. Fertilizers and Soil Amendments

   1. Affix to each bag, used in connection with this Work, the manufacturer's certified analysis tag or label.
   2. Fertilizer analysis shall be:
      a. No less than minimum requirements of specifications.

G. Peat/Humus

   1. Certify in writing that the peat/humus used meets all requirements and criteria of the specifications.

1.10 WARRANTY

1. At any time during the warranty period, any plant or sod required under this Contract that is dead or showing indication of probable non-survival or lack of health and vigor, or which does not exhibit the characteristics and conditions such as to still qualify for the minimum grade as originally specified and, as determined by the or CITY, will not recover and be within grade by the end of the guarantee period shall be promptly replaced. Replacement plants shall be installed and maintained per the specifications for the planting of new plant material, as well as, guaranteed as specified above for new plant material.
2. CONTRACTOR shall perform all necessary watering over and above that provided by the automatic irrigation system which is necessary to establish replacement material.
3. Cost of repair for damage caused by the CONTRACTOR to items including, but not limited to, other plants, lawn, curbing, irrigation, walks, roads, etc. shall be the responsibility of this CONTRACTOR.
4. Coordinate replacements with the CITY.
5. Make replacements during the growth season following the end of warranty period, or as otherwise mutually agreed with the CITY.
6. Furnish and plant replacements that comply with all requirements indicated and specified for original material.

1.11 MAINTENANCE/IRRIGATION PERIOD

A. Until the date of Final Acceptance, maintain by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening and repairing stakes and guys, and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required keeping trees and shrubs free of insects and disease. Do not prune except as directed by the CITY.

B. The CONTRACTOR will be required to irrigate and maintain irrigation system and all trees included in this section, for the grow-in period of one year from the day of issuance of Substantial Completion by the CITY.

PART 2 - PRODUCTS

2.01 PLANT MATERIALS

A. Name and Variety:

1. As designated on the Plant List on the Drawings.
2. Provide all plant materials complying with the latest editions of "ANSI Z60.1" and "Grades and Standards".
3. Provide plant materials symmetrical and typical of their species or variety.

4. Attach appropriate identification tags to each plant for all varieties specified as "patented", "registered", or "trade marked".
   a. Do not remove tags until inspected and approved.

B. Quality:

1. Where plants are specified on the Plant List as "Specimen" or "Florida Fancy", provide plants that meet or exceed the "Florida Fancy" standard in accordance with "Grades and Standards".
2. For all plant material not otherwise specified to be "Specimen" or "Florida Fancy", provide plants that meet or exceed the "Florida No. 1" standard in accordance with "Grades and Standards".
3. Plants judged not in accordance with specified standards will be rejected.
4. Provide plant materials:
   a. With normal habit of growth.
   b. Healthy with well-developed root systems filling their containers, but not to the point of being root bound.
   c. Free of disease, insects, pests, and their eggs.
   d. Sound, free of mechanical or cultural injury by dents, and free of noticeable after effects of insects and borers.
   e. In the event that it becomes apparent that any nursery supplying plants for this Work has knowingly and consistently represented the grade of plants as being higher than the actual grade, as determined under the provisions of this Section, all plants already delivered from such source shall be removed from the job at the CONTRACTOR'S expense, and no further plants will be accepted from such nursery until written evidence is submitted and confirmed that all material for delivery has been inspected and approved by inspectors of the State Plant Board as being of the grade as represented.

C. Dimensions:

1. Measure height and spread of all plants with branches in their normal position. Height and spread dimensions specified refer to main body of plant and not extreme branch tip to tip. The measurements specified are the minimum size acceptable and are the measurements after pruning, where pruning is required.
2. When dimensions of plant materials are omitted from the plant list, provide plants of normal stock for type listed.
3. The caliper of tree trunks is to be taken six inches (6") above the ground if the size is four inches (4") caliper or less, and one foot (1') above the ground if greater than four inches (4") caliper in size.
4. Trees shall conform to the measurements specified or indicated in the Plant List on the Drawings and shall not vary from the size specified more than ten percent (10%) or have a caliper size which

varies more than one-fourth inch (1/4"). Where a trunk is specified as single or standard, the plant shall have a single-straight trunk for a height of not less than specified on the plant list.

5. Container and caliper sizes noted on the Plant List are minimums. Increase container and/or caliper as necessary to conform to specified height and spread.

D. Trees:

1. Provide healthy, vigorous stock grown under climatic conditions similar to conditions in the locality of the project and free of disease, insects, eggs, larvae, and defects such as knots, sun-scald, injuries, abrasions, or disfigurement.
2. Provide trees and shrubs of the sizes shown or specified. Trees and shrubs of larger size may be used if sizes of roots or balls are increased proportionately and if approved acceptable.
3. All trees specified as container-grown shall have been grown in a rigid container (grow bags are unacceptable) for a minimum of two (2) years prior to installation.

E. Shrubs and Ground Covers:

1. Plants shall have been grown in containers for a minimum of six (6) months and a maximum of two (2) years and shall have sufficient roots to hold earth together after removal from containers.
2. Plants which have become pot-bound, or for which the top system is too large for the size of the container, will not be accepted.
3. Plants shall not be removed from the container until immediately before planting.

F. Ball and Burlapped Plants and Wired-Balled and Burlapped Plants: (Only with Prior Approval by CITY)

1. No plant shall be accepted when the ball of earth surrounding its roots has been cracked or broken or which shows evidence of being "made".
2. The diameter of the ball must be sufficient to encompass the fibrous and feeding-root systems necessary for the maximum development of the plant and shall conform to sizes and ratios in the table of minimum-ball sizes as set forth in "ANSI Z60.1" and "Grades and Standards".
3. Root pruning shall have been done at the minimum of four (4) weeks before planting at the job, and, such fact, be certified on accompanying invoices. Where, in the opinion of the CITY, following his inspecting the grower's stock, adequate root pruning is being obtained by the grower's general cultivating practices, he may consider such fact as meeting this requirement, and, such fact, shall be certified accompanying invoices. Copy of invoices shall also be supplied to the CITY.

4. Balls shall be firmly wrapped with burlap or approved strong cloth. The root balls of these plants shall be properly protected until planting.

2.02 MISCELLANEOUS MATERIALS

A. Topsoil:

1. Provide topsoil that is:
   a. Natural surface soil from well-drained areas, fertile, friable and free of weeds, typical of productive, cultivated topsoils of the locality.
   b. Not excessively acid or alkaline (pH 5.5 to 7.0), nor containing toxic substances.
   c. Without admixture of sub-soil and reasonably free of clay, stones, stumps, roots, or other similar substances one half inch (1/2") or more in diameter or any other object which may be a hindrance to the finish-grading operation.
   d. Acceptable topsoil from the site and any imported soil used on the project shall be a natural, fertile, friable soil possessing characteristics representative of a well-drained area in Florida. Soil containing muck or poorly-drained soils shall not be used.
   e. Acceptable soil from the site may be substituted for topsoil and/or sand, based upon the results of the laboratory analysis.

B. Prepared Planting Mix:

1. Soil used for planting shall be free from sticks, roots, stones, or other extraneous material detrimental or injurious to plants. Particular care should be taken to remove pieces of mortar, cement, wood, and other similar remains of construction from all planting areas.
2. Soil used for planting mix shall be as follows: 1/3 approved topsoil, 1/3 Florida peat and 1/3 clean D.O.T. sand.
3. "Diehard Transplant" for trees and shrubs and "Diehard Palm" for palms, mycorrhizal inoculants as manufactured by Horticultural Alliance, Inc., (800) 628-6373 shall be incorporated into all planting pits, back fill and planting beds at the manufacturer's recommended rates and in conformance with their approved methods.
4. Mixing of the backfill mix will be out of the pit or bed by approved mechanical methods. The resultant shall be an even mixture which will be hand-shoveled into place.

C. Fertilizer:

1. Provide a complete commercial fertilizer mixture complying with the laws of manufacture regulating the sale and manufacture of fertilizer in the State of Florida.
2. Agriform Tablets - Agriform tablets shall be Agriform twenty-one (21 ~gram tablets, slow release, 20-10-5 analysis, or an approved equal.
3. Provide as specified by the Agricultural Soils Testing Laboratory.

D. Peat/Humus: Provide peat/humus consisting of:

1. Peat shall consist of ninety-percent (90%) organic peat and shall be suitable for horticultural purposes.
2. Peat shall be brown in color, clean, low in content of mineral and woody material, pH 4 to 5, and shall be shredded into particles not larger than one-half inch (1/2") in diameter.
3. Peat shall contain no more than thirty-five-percent (35%) moisture and the ash content not exceed ten percent (10%) and free from weedy grasses, sedges, rushes, or mineral matter harmful to plant growth.

E. Mulch for Planting Areas:

2. All mulch to be used in planting areas shall be "ECO Mulch" or approved equal as manufactured by Forestry Resources, Inc. (800) 986-4678.
3. Prior to delivery, mulch shall have been inspected and certified by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry as being free of Burrowing Nematodes. All proofs of delivery shall bear an official State of Florida stamp of inspection and certification.
4. Mulch shall be free of weed seeds, soil and any other organic or inorganic material.
5. Mulch shall be applied to a minimum compacted depth of 3" in planting beds and around trees. Mulch shall taper down to soil level at the base of trees and shrubs.
6. During processing, raw materials shall be stacked and stored in curing piles for a period of no less than 120 days.

F. Dolomitic Limestone:

1. Ground limestone containing not less than eighty-five percent (85%) of total carbonate and ground to such a size that fifty percent (50%) will pass through a 100-mesh sieve and ninety percent (90%) will pass through a 200-mesh sieve.
2. Coarser materials will be acceptable, provided the specified rates of application are increased proportionately on the basis of quantities passing the 100-mesh sieve.

G. Aluminum Sulfate: Shall be a recognized manufacturer's standard commercial grade.

H. Anti-Desiccant: "Wilt-Pruf", "Dowwax", "Foilgard", or approved equivalent delivered in manufacturer's containers.

I. Stakes for Guying Trees: As detailed on the Drawings.

J. Tree Wrapping: First-quality, heavy-waterproof crepe paper manufactured for tree wrapping.

K. Water:

1. Free of substances harmful to plant growth, objectionable odor or staining agents.

2. The water used for establishment of plant material shall be clean and free of dirt, debris, poisons, pesticides, contaminants and any other material or compound that is detrimental or inhibits vigorous plant growth

3. Provided by the CONTRACTOR and obtained from its source legally. Water drawn from canals and or lakes and access thereof will be done only with the express written approval of the owner of said property.

PART 3 - EXECUTION

3.01 INSPECTION

A. All scaled dimensions are approximate. Before proceeding with any Work, carefully check and verify all dimensions and quantities, and immediately inform the CITY of any discrepancies between the Drawings, Specifications, and actual conditions. Do not do Work in any area where there is a significant discrepancy until approval to proceed has been received from the CITY.

B. Verify that fine grading has been completed and there are not errors which will result in poor application or cause latent defects in fine grading and sodding.

C. Accept job site elevations at plus or minus two-tenths (±0.2) of a foot from finish-grade elevations.

3.02 PREPARATION

A. Preparation for Planting:

1. Weeding: Dig-out all weeds and grasses by the roots and dispose of off-site, in accordance with the City of Port St Lucie code or other rules and regulations. Grasses not of the perennial type less than two and one-half inches (2-1/2") high and not bearing seeds, may be turned under. Perennial weeds and grasses are to be removed. Also, remove other noxious or invasive weeds encountered on the site, in accordance with the CITY Code.
2. Loosen rough-graded material by roto-tilling to a depth of four inches (4") and regrade to maintain proper elevation.
3. Remove all stones over one-half inch (1\2") in size, rubbish, and all other extraneous matter.

B. Layout and Spacing:

1. Layout areas for multiple plantings and stake locations for individual trees and shrubs.
   a. In the event that underground utilities or other obstructions are encountered during planting, relocate and replant materials at alternate locations as directed by the CITY.

2. Obtain approval for all locations, spacing, and orientation prior to planting and make adjustments as directed, if necessary, to achieve project-design objectives.
   a. When plant material is spaced in rows, verify total dimension and space plants equally within the designated areas. Adjust quantities as required. Rows shall be parallel to curbs.
   b. Where plant material is indicated in a "loose" pattern, space the material as indicated on the Drawings, maintaining the spacing constant with proper consideration for trees, sprinkler irrigation patterns, light standards, and other features.
   c. Space ground cover material triangularly in straight rows at the spacing indicated.
   d. Set shrubs, that are to be located adjacent to walks or sod edges, back from edges the "on center" dimension of the individual shrub.
   e. When specimen trees are to be planted prior to construction of finish grades, use a surveyor to locate position and finish-grade relationship to top of root ball.

C. Fine Grading Verification:

1. Verify that all lawn and planting areas have been graded to a smooth, even, and uniform plane with no abrupt change of surface.
2. Verify that lawn and planting areas have been graded to provide positive surface drainage in all areas.

a. Do not Work soil when moisture content is so great that excessive compaction will occur nor when it is so dry, dust will form in the air.
b. Apply water, if necessary, to provide ideal moisture for filling and for planting, as herein specified.
c. Properly grade low spots and pockets to drain to established drainage structures.

3. The CONTRACTOR shall be required to re-establish any grades impacted as a result of the Work being performed.
4. The CONTRACTOR shall re-establish grade levels where settlement, erosion, or other grade changes occur from the point in time when the respective area is turned over to the CONTRACTOR. This CONTRACTOR shall adjust grades, as necessary, to provide positive drainage.

D. Fertilizing:

1. Remove or redistribute excess soil before application of fertilizer. Make allowances when establishing finish grades for earth excavated from planting pits and mulch.
2. Provide fertilizing applications as prescribed by Agricultural Soils Laboratory tests and recommendations.
3. For all shrubs and trees, place agriform fertilizer tablets (at specified rates) in the root zones, six to eight inches (6"-8") below the finish grade of the soil, no greater than four inches (4") away from the root ball. Verification of tablet placement will be required during final review.

E. Liming:

1. Immediately following or simultaneously with the incorporation of the fertilizer, distribute lime uniformly at a rate determined by tests and incorporate into the soil to a depth of at least one inch (1 ") by disking, harrowing, or other accepted methods.
2. Do not apply lime under trees.

F. Diehard Application:

1. Mix product with backfill in the top 8-10 inches of the planting pit adjacent to the root ball for plants larger than three gallon size and 4-6 inches for plants three gallon size and under. Making sure the product is in contact with the rootball.

G. Pre-Emergent/Post-Emergent Herbicide:

1. For weed and grass control, apply an approved pre- and post-emergent herbicides to all shrub, ground cover, and mulch beds.

3.03 PLANTING

A. General:

1. All plant material shall be reviewed and receive initial approval from the CITY prior to its delivery to the job site, as deemed necessary, by the CITY.
   a. The approval methods shall be by nursery site visits or by photographs submitted by the CONTRACTOR to the CITY as required under paragraph 1.04 Submittals. All photographs of plant material shall include an appropriate scale element adjacent to the individual plant. In the case of large quantities of trees or shrubs, photographs should be of representative specimens of each plant species and size.
   b. All photographs shall be in color and taken with a 35mm camera. Each picture shall have the date electronically imprinted. Two (2) sets of photographs for each plant submittal shall be delivered to the CITY.
   c. Approval of plant materials at this stage will not constitute final approval. Final approval for all materials will be given only at the time of Final Acceptance by the CITY.

2. Do not do any planting until all operations involved with the installation of the irrigation system have been completed, final grades have been established, and the planting areas have been properly graded and approved.
3. The CONTRACTOR shall field stake the locations of all plant material, contact the CITY to arrange a meeting to review stake locations and only install landscape when said locations have been approved by the CITY.
4. The relative position of each tree and plant is subject to approval by the CITY, and shall, if necessary to achieve project design objectives, be relocated as directed and at no additional cost to the CITY.
5. Remove each plant from its container and plant in such a manner that when settled, it will bear the same relation to the constructed finished grade as it bore to the grade in the container before being transplanted.
   a. Filling will not be permitted around trunks and stems.
   b. Cut and remove all wire and nylon rope used on root ball.
6. Backfill procedure:
   a. Tamp firm, prepared plant mix placed into plant pits.
   b. Form a shallow basin around plants to hold enough water to saturate the root ball and prepared plant mix.
   c. Maintain tree saucers until Final Acceptance.
7. Thoroughly water plants using a slow-soak technique immediately after planting. Rake all basins around trees away from root ball before sodding or mulching.
8. Prune at the time of planting with due regard to the natural forms and growth characteristics of each species and paint all cuts over

three-fourths-inch (3/4")-diameter with an approved tree-wound dressing.

9. Pruning shall be done in a manner complying with standard horticultural practices and shall be limited to the minimum necessary to remove injured twigs and branches and to compensate for the loss of roots during transplanting. Pruning shall not result in the removal of one-third (1/3) of the branching structure or more, nor shall pruning result in alterations to the basic plant structure. Broken or damaged roots shall be cut off smoothly.

10. Hand watering:
    a. CONTRACTOR shall be responsible for supplemental hand watering of trees and shrubs irrigated on an as-needed basis, but not less than three (3) times weekly, until the end of the sixty (60) day plant establishment period. Each time plants are watered, they shall be watered completely using a slow-soak technique, saturating the root ball to its full depth.
    b. Water is to be provided by the CONTRACTOR and obtained legally. Water drawn from canals and or lakes and access thereof will be done only with the express written approval of the owner of said property

11. Place mulch between and around specified trees and all shrubs within five (5) days after any planting.
    a. For individual trees outside of planting beds, spread mulch to cover the saucer area.
    b. When in place, water mulch thoroughly.

B. Planting Trees:

1. Maintain plants in nursery containers, or properly heeled-in, until time for transplanting.
2. Handle all plants by earth ball or container only. Handling by the plant itself will be cause for rejection.
3. Layout areas and set stakes for trees at locations indicated on Drawings. Secure approval from CITY before excavating pits. Make necessary adjustments as directed.
    a. Specimen trees to be planted prior to construction of finish grade shall be located by surveyor for position and relationship of top of root ball to finish grade.
    b. Dig each plant pit twice the diameter and the exact depth of the tree root ball. When hardpan or muck is encountered, break through to clean sand and backfill with prepared backfill as directed. Loosen compacted soil at sides and bottom by scarifying, or other approved method. Set tree to finish grade and fill the pit with prepared soil, progressively settling the soil about the root ball by water jetting and flooding to remove voids.

c. Excavation of plant pits located within five feet (5') of utility lines shall be preformed by hand.

4. Set trees in center of pits in a vertical position so that crown of balls will be three inches (3") above finish grade after allowing for watering and settlement.
5. Prepare watering basin same width as tree plant ball. Water thoroughly immediately following planting. Backfill all voids which develop with additional prepared planting soil to bring to finish grade. The basin shall remain in place following Final Acceptance and shall be removed by the Owner.
6. If burlap containing synthetic materials is used, the burlap is to be completely removed and properly disposed of.
7. Fill all tree pits with water to test proper drainage percolation prior to planting.
   a. Excavate pits which are found to be inadequately draining to a depth sufficient for proper drainage and backfill with course sand.
   b. No allowances will be made for plants lost due to improper installation and drainage.
8. Backfill with prepared planting mix.
9. Stake trees as shown on Drawings. All trees and palms shall be staked according to the Drawings. Staking is not at the discretion of the CONTRACTOR. Staking requirements may only be waived by written permission from the CITY and a credit for any unstaked tree or palm issued by the CONTRACTOR to the CITY.

C. Bed Preparation for Shrubs and Ground Cover Planting Areas:

1. Remove all existing grass including roots and other vegetation (by mechanical methods), construction debris, limerock, etc., and any soil which would be deleterious to plant growth completely. CONTRACTOR shall remove unwanted materials from project site and dispose of in accordance with the CITY Code.
2. For all areas to be planted with shrubs and ground covers, provide a six-inch (6") depth of prepared planting mix over entire planting bed, and till into bed in three-inch (3") lifts. Hand digging will be required in areas where mechanical means would cause damage to underground utilities. Vertical drill, if necessary, through compacted subgrade to ensure drainage in beds.

D. Planting of Individual Vines and Shrubs:

1. Plant individual vines and shrubs in pits at least twelve inches (12") greater in diameter than their root ball and at least six inches (6") deeper than the bottom of the ball. Loosen soil at bottom of pit. Fill pit with prepared soils to the bottom of the ball. When the plant has been properly set, fill the pit to the finish grade with prepared soil and thoroughly settle by tamping and watering. Remove all vines from stakes, untie, and securely fasten to the

wall, fence, or other surface next to which they are planted in a manner approved by the CITY.

2. Prepare a water basin as wide as the plant pit at each plant. Water thoroughly and backfill voids with additional prepared planting soil.

E. Planting Ground Cover, Aquatic, and Emergent Plants:

1. Space plants as shown in schedule on Drawings.
2. Moisten ground cover areas prior to planting. Do not set plants in dry soil.
   a. Do not allow rooted plants to dry out before or while being planted.
   b. Wilted plants will not be accepted.
3. Plant rooted cuttings sufficiently deep to cover all roots.
4. Plants that have been grown in liners are to remain in liners until time for transplanting.
   a. At time of transplanting, the soils are to contain sufficient moisture so that it does not fall from the roots when plants are lifted from the liners.
   b. Plant each plant with its proportionate amount of soil in a manner that will insure a minimum of disturbance to the root system.
5. At time of planting, firm up the earth around each plant sufficiently to force out all air pockets.
6. Use alternate procedures in the planting of ground covers or Aquatic plants, only when approved.
7. After all planting has been completed, top-dress all ground cover areas with three inches (3") of mulch as detailed on the Drawings.

3.04 FIELD QUALITY CONTROL

A. Notify the CITY at least two (2) days in advance so that the following minimum observations can be made as the Work progresses:

1. Conditions prior to finish grading and soil preparation.
2. Conditions upon completion of finish grading and soil preparation.
3. Plants, after delivery to site and prior to planting.
4. When vines, shrubs, and trees are spotted or staked for planting prior to excavation of planting holes.
5. Specimen trees at nursery source before delivery to on-site location.
6. Lawn areas prior to sodding.
7. Specimen trees for condition, upon delivery to job site, and for positioning progressively as Work is completed.

3.05 MAINTENANCE AND ADJUSTMENT

A. Maintenance:

1. Begin maintenance immediately after planting: Continuously protect all areas including lawn areas, plant materials, supports, etc., until written Substantial Completion acceptance of the Work. Maintenance shall consist of but not limited to weeding, fertilizing, mulching, pruning, watering, and maintenance of staking and water saucers.
2. Maintain trees, shrubs, ground covers, and other plants until receipt of written Substantial Completion approval by the CITY.
3. Spraying and dusting:
   a. During the maintenance period, and grow-in period, perform all seasonal spraying and dusting of trees and shrubs.
   b. Use materials and methods in accordance with the highest nursery standards and practices and as directed by CITY.

B. Adjustment:

1. If planting should occur after lawn preparation, provide proper protection at lawn areas and promptly repair all damage resulting from planting operations.
2. Provide other adjustments as follows:
   a. Resod areas, where necessary, for full and even coverage.
   b. Regrade, lightly compact, and replant around sprinkler heads, where necessary, to maintain proper vertical positioning in relation to general grade.
   c. Fill all depressions and eroded channels with sufficient soil mix to adjust grade to assure proper drainage. Compact lightly and replant the filled areas in accord with Contract Documents.

3.06 CLEAN UP

A. Clean Up:

1. During landscape Work, store materials and equipment where directed. Keep pavements clean and Work area in an orderly condition.
2. Protect plants from damage due to landscape operations, operations by other Contractors and trades, and others. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
3. Keep all planted areas free of debris, weeds, and insects. Cultivate, weed, and water until Final Acceptance of the Work.
4. Upon completion, remove all excess subsoil, cordage, wrappings, and other extraneous materials from the site.
   a. Remove all tools, equipment, and other materials, except those necessary, for maintenance Work.

b. Remove litter or other debris occurring from maintenance operations.

3.07 ACCEPTANCE

A. Inspection of the entire project shall be made upon written request of the CONTRACTOR.

B. A Substantial Completion inspection shall be conducted with all deficiencies noted and given to the CONTRACTOR as a list of items to be corrected. Substantial Completion acceptance will not be issued until all punch list items have been completed and a reinspection by the CITY is done.

C. For the purpose of establishing an "Acceptance" standard, all plant material shall be healthy, well-rooted, evenly colored, viable, and free of weeds and disease.

1. Perform other operations necessary to complete maintenance and ensure that plants are healthy, vigorous, visually pleasing, and undamaged.
2. Perform all maintenance tasks as specified in this section.

D. Once the reinspection for compliance with the punch list requirements has been conducted and barring any new deficiencies being noted during the re-inspection, the sixty (60) day hand watering grow-in period will begin, exclusive of possible replacement of plant material subject to warranty.

1. If any deficiencies of requirements exist, they will be noted in writing.

E. At the end of the sixty (60) day grow-in period, the CITY will issue Final Acceptance and transfer all responsibilities for maintenance of landscape work to the Owner. The CONTRACTOR is responsible for all maintenance as specified in this Section until the date of Final Acceptance.

F. At the conclusion of the one year warranty period, an inspection will be made to determine the condition of guaranteed plant material.

1. Remove all plant material noted as not being in a healthy-growing condition.
2. At no additional cost, replace plant material during the following planting season with material of like kind and size, in accordance with specification for original plant materials.
3. Warranty period also applies to replaced materials.
4. Remove all tree staking and down-guys and dispose of the material off-site.

3.08 GUARANTEE AND REPLACEMENT

A. Trees, Shrubs and Groundcover

1. All trees, shrubs and groundcover shall be established or exhibit signs of being established at the end of the sixty (60) day grow-in period or the plant material shall be removed and replaced at no additional cost to the CITY. Plant material installed by the CONTRACTOR shall be given a written warranty for a period of one (1) year from the date of Final Acceptance.

12. **IRRIGATION SYSTEM** – CONTRACTOR will furnish, install, maintain, and operate temporary irrigation systems for each of the areas where irrigation is to be installed. CONTRACTOR shall be responsible for the operation of each of the systems for a period of one (1) year following final acceptance of the site containing the system.

The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the CITY.

Payment shall be made under IRRIGATION – and paid per the listed Pay Items.

13. **AS-BUILT RECORD DRAWINGS** – Construction staking of the project will be provided by the CONTRACTOR'S Surveyor. Prior to completion of the work, the CONTRACTOR shall furnish to the CITY As-Built Plans of the project reflecting any and all changes incorporated into the work during the progress of the Contract. The cost for maintaining record changes, and preparation of the "As-Built Plans" shall be included in the prices bid for the appropriate items. This item is paid as per lump sum and includes all construction staking. CONTRACTOR to provide all as-built, certified by a Registered Land Surveyor in the State of Florida.

A. Landscape As-builts - shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all trees and all shrub, groundcover and annual bed lines (aquatics not included) in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Botanical name, Common name, condition, DBH, height, shrub/ground cover/annual bed line per species. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and a Database file in .XLS format delivered to the City of PSL Public Works on a compact disk (CD)

B. Irrigation/Electrical As-builts – SEE IRRIGATION PLANS FOR AS-BUILT REQUIREMENTS

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TECHNICAL SPECIFICATIONS – PART 2

SPECIAL CONDITIONS

1. **CITY FURNISHED ITEMS** - The CONTRACTOR shall bid all items for the project listed in the "Schedule of Contract Prices" based upon the material, labor, etc. necessary to complete each of the items.

2. **SURVEY CONTROL** - The bench marks for survey control for the project have been indicated in the construction plans. The location of these control points may at times be located within the construction area. It is the responsibility of the CONTRACTOR to locate, preserve, or offset these points as required to maintain proper survey control for the project for the duration of the construction efforts. Control points shall be re-established upon completion of construction at the expense of the CONTRACTOR.

   Grades shown are finished grades, and B.M. Datum is North American Vertical Datum 1988 (NAVD-1988) as noted in the plans.

3. **CONSTRUCTION ITEMS IN THE BID FORM** - Construction items in the Bid Form may be increased, decreased or deleted at the direction of the ENGINEER and CITY with no unit price adjustment.

4. **SEQUENCE OF CONSTRUCTION** - The construction sequence shall be established by the CONTRACTOR and forwarded to the CITY and ENGINEER for approval through the Project Schedule. The Schedule shall be prepared using a Critical Path Method or other approved project-scheduling tool.

5. **CONTRACT SUPERVISOR** - The Contract Supervisor for the CITY is Steve Jungjohan of the City of Port St. Lucie Engineering Department and he may be reached at (772)-871-7640.

6. **ENGINEER** - The "Engineer of Record" for the project is Mr. Joseph W. Capra, P.E., CAPTEC Engineering, Inc. and can be reached at (772) 692-4344. Mr. Capra is a Professional Engineer duly licensed and registered in the State of Florida and designated by the CITY as Design Engineer.

7. **PRIVATE PROPERTY NOTICES** - The CITY, will distribute notices (door hangers) to residents/occupants, 30 days in advance of construction. The notice will provide general information and allow the residents/occupants the opportunity of removing any items within the construction area they specifically desire to remove.

8. **PROJECT PROGRESS MEETINGS** - Project progress meetings will be held weekly at the City Engineering Department, or other mutually convenient location as designated by the ENGINEER. Representatives of CITY, ENGINEER, and CONTRACTOR are required to attend. Other representatives, such as utility company personnel may attend as necessary.

9. **PROTECTION OF GOPHER TORTOISES** - Should the CONTRACTOR discover any tortoises on the site, the CONTRACTOR shall notify the CITY and the CITY will

take the measures necessary to relocate the tortoise(s). No extras or additional payments will be made to the CONTRACTOR for the protection of Gopher Tortoises. Prior to construction the CITY will have all known gopher tortoises relocated from the project site.

10. **VIDEO TAPE/DVD** - The CONTRACTOR is required to videotape the project area prior to construction commencement. CONTRACTOR shall provide a copy of the videotape/DVD of the Project site to CITY for approval once complete and prior to issuance of Notice to Proceed. The cost of this shall be included in the Lump Sum item for Mobilization.

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Fact Sheet #66: The Davis-Bacon and Related Acts (DBRA)

This fact sheet provides general information concerning DBRA.

Coverage

DBRA requires payment of prevailing wages on federally funded or assisted construction projects. The Davis-Bacon Act applies to each federal government or District of Columbia contract in excess of $2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. Many federal laws that authorize federal assistance for construction through grants, loans, loan guarantees, and insurance are Davis-Bacon "related Acts." The "related Acts" include provisions that require Davis-Bacon labor standards apply to most federally assisted construction. Examples of "related Acts" include the Federal-Aid Highway Acts, the Housing and Community Development Act of 1974, and the Federal Water Pollution Control Act.

Basic Provisions/Requirements

Contractors and subcontractors must pay laborers and mechanics employed directly upon the site of the work at least the locally prevailing wages (including fringe benefits), listed in the Davis-Bacon wage determination in the contract, for the work performed. Davis-Bacon labor standards clauses must be included in covered contracts.

The Davis-Bacon "prevailing wage" is the combination of the basic hourly rate and any fringe benefits listed in a Davis-Bacon wage determination. The contractor's obligation to pay at least the prevailing wage listed in the contract wage determination can be met by paying each laborer and mechanic the applicable prevailing wage entirely as cash wages or by a combination of cash wages and employer-provided bona fide fringe benefits. Prevailing wages, including fringe benefits, must be paid on all hours worked on the site of the work.

Apprentices or trainees may be employed at less than the rates listed in the contract wage determination only when they are in an apprenticeship program registered with the Department of Labor or with a state apprenticeship agency recognized by the Department.

Contractors and subcontractors are required to pay covered workers weekly and submit weekly certified payroll records to the contracting agency. They are also required to post the applicable Davis-Bacon wage determination with the Davis-Bacon poster (WH-1321) on the job site in a prominent and accessible place where they can be easily seen by the workers.

Davis-Bacon Wage Determinations

Davis-Bacon wage determinations are published on the Wage Determinations On Line (WDOL) website for contracting agencies to incorporate them into covered contracts. The "prevailing wages" are determined based on wages paid to various classes of laborers and mechanics employed on specific types of construction projects in an area. Guidance on determining the type of construction is provided in All Agency Memoranda Nos. 130 and 131.

Penalties/Sanctions and Appeals

ATTACHMENT C
E-Bid #20110079

Contract payments may be withheld in sufficient amounts to satisfy liabilities for underpayment of wages and for liquidated damages for overtime violations under the Contract Work Hours and Safety Standards Act (CWHSSA). In addition, violations of the Davis-Bacon contract clauses may be grounds for contract termination, contractor liability for any resulting costs to the government and debarment from future contracts for a period up to three years.

Contractors and subcontractors may challenge determinations of violations and debarment before an Administrative Law Judge (ALJ). Interested parties may appeal ALJ decisions to the Department's Administrative Review Board. Final Board determinations on violations and debarment may be appealed to and are enforceable through the federal courts.

Typical Problems

(1) Misclassification of laborers and mechanics. (2) Failure to pay full prevailing wage, including fringe benefits, for all hours worked (including overtime hours). (3) Inadequate recordkeeping, such as not counting all hours worked or not recording hours worked by an individual in two or more classifications during a day. (4) Failure of to maintain a copy of bona fide apprenticeship program and individual registration documents for apprentices. (5) Failure to submit certified payrolls weekly. (6) Failure to post the Davis-Bacon poster and applicable wage determination.

Relation to State, Local, and Other Federal Laws

The Copeland "Anti-Kickback" Act prohibits contractors from in any way inducing an employee to give up any part of the compensation to which he or she is entitled under his or her contract of employment, and requires contractors to submit a weekly statement of the wages paid to each employee performing DBRA covered work.

Contractors on projects subject to DBRA labor standards may also be subject to additional prevailing wage and overtime pay requirements under State (and local) laws. Also, overtime work pay requirements under CWHSSA) and the Fair Labor Standards Act may apply.

Under Reorganization Plan No. 14 of 1950, (5 U.S.C.A. Appendix), the federal contracting or assistance-administering agencies have day-to-day responsibility for administration and enforcement of the Davis-Bacon labor standards provisions and, in order to promote consistent and effective enforcement, the Department of Labor has regulatory and oversight authority, including the authority to investigate compliance.

Where to Obtain Additional Information

For additional information, visit our Wage and Hour Division Website: http://www.wagehour.dol.gov and/or call our toll-free information and helpline, available 8 a.m. to 5 p.m. in your time zone, 1-866-4USWAGE (1-866-487-9243).

This publication is for general information and is not to be considered in the same light as official statements of position contained in the regulations.

U.S. Department of Labor
Frances Perkins Building
200 Constitution Avenue, NW
Washington, DC 20210

1-866-4-USWAGE
TTY: 1-866-487-9243
Contact Us

29 CFR 5.5 - Contract provisions and related matters. Davis Bacon Regulations

- **Section Number:** 5.5
- **Section Name:** Contract provisions and related matters.

(a) The Agency head shall cause or require the contracting officer to insert in full in any contract in excess of $2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in Sec. 5.1, the following clauses (or any modifications thereof to meet the particular needs of the agency, provided, that such modifications are first approved by the Department of Labor):

(1) Minimum wages.

(a) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in Sec. 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(2) Classifications of Workers:

A. - The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
(2) The classification is utilized in the area by the construction industry; and
(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

B. - If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

C. - In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

D. - The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(3) Fringe Benefit Information:

A. - Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics equivalent thereof.

(4) Fringe Benefit Costs:

A. - If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

B. - Withholding. The (write in name of Federal Agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

C. - Payrolls and basic records. (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(5) Payroll Information:

A. - The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired.

Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

B. - Each payroll submitted shall be accompanied by a ``Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

C. - The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the ``Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

D. - The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the (write the name of the agency) or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the

required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for

apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility. (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) Contract Work Hours and Safety Standards Act. The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Sec. 5.5(a) or 4.6 of part 4 of this title. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the conract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth iparagraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in Sec. 5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall

contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

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ATTACHMENT E
E-BID #20110079

U.S. DEPARTMENT OF TRANSPORTATION
OFFICE OF INSPECTOR GENERAL

WHISTLEBLOWERS
KNOW YOUR RIGHTS

On February 17, 2009 the American Recovery and Reinvestment Act (ARRA) was signed into law by President Obama to improve public welfare. If you protect America's interests by reporting fraud, abuse, or mismanagement of ARRA funds at your workplace, and are retaliated against as a result, know that America is here for you.

American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, Title XV, Subtitle D, Section 1553

ADMINISTRATIVE REVIEW:

You have the right to file a complaint with the Office of Inspector General and receive a timely investigation and response.

REPRISAL-FREE:

You have the right to be free from discharge, demotion, or discrimination as a result of disclosing:

- ***Gross mismanagement of a stimulus-funded project.***
- ***Gross waste of stimulus funds.***
- ***Danger to public health and safety related to a stimulus-funded project.***
- ***Violation of the law relating to stimulus funds or a stimulus-funded project.***
- ***Abuse of authority related to the implementation of stimulus funds.***

REMEDIES:

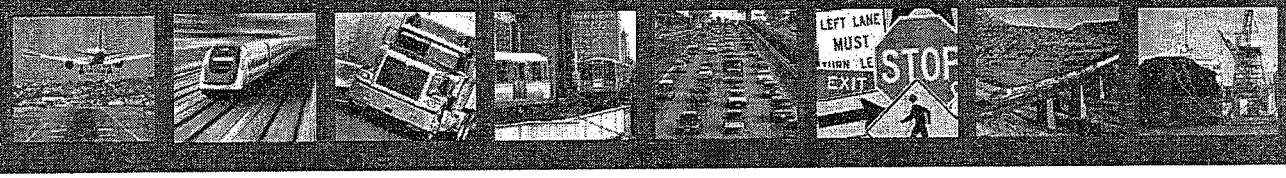
You have the right to receive remedies if the Office of Inspector General determines you were subjected to an unlawful reprisal. Your employer may be ordered to abate the reprisal, reinstate your employment, and you may receive compensation to reimburse you for your attorney fees and other financial suffering experienced as a result of the reprisal.

ALTERNATIVES:

You have the right to take action against your employer in civil district court if the Office of Inspector General does not respond within 210 days or determines that there was not an unlawful reprisal.

••• OIG HOTLINE •••

www.oig.dot.gov/recovery/whistleblower_protections.jsp
Phone: 1-800-424-9071
Email: hotline@oig.dot.gov



E-BID REPLY EXCEL SPREADSHEET

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

SCHEDULE 1 - CANE SLOUGH / ELKS STA

GENERAL ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	200		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	7500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	7500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS (LA/IRR)	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	ITT Flowtronex Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	EA	5343		$ -
15	4" Nibco TI-8 Gate Valve	EA	5		$ -
16	Carson 1419 Valve Box with Lid	LF	5		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	20		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	19		$ -
19	Class 200 PVC Lateral with Schedule 40 PVC fittings (size per plan)	EA	15150		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	342		$ -
21	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	2		$ -
22	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	21		$ -
23	Hunter PGP-04-CV with #6 Nozzle	EA	4		$ -
24	Hunter PGP-04-CV with #9 Nozzle	EA	75		$ -
25	Hunter PGP-04-CV with #12 Nozzle	EA	47		$ -
26	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	6		$ -
27	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	52		$ -
28	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	25		$ -
29	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
30	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	3,380		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	4,790		$ -
32	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	-	155		$ -
33	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	-	129		$ -
34	Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	-	348		$ -
35	Green Island Ficus	*FICUS MICROCARPA*	1 GAL	-	70		$ -
36	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	154		$ -
37	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	1,030		$ -
38	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	1,280		$ -
39	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	210		$ -
40	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	7,730		$ -
41	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	9,910		$ -
42	Maidencane	*PANICUM HEMITOMON*	BR	-	4,570		$ -
43	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	3,160		$ -
44	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	4,030		$ -
45	Soft Rush	*JUNCUS EFFUSUS*	BR	-	760		$ -
46	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	2,720		$ -
47	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	16,946		$ -
48	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	2,119		$ -
49		Total for Shrubs and Groundcover	--	--	--	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
50	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	203		$ -
51	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	203		$ -
52	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14' OA	205		$ -
53	Royal Palm	*ROYSTONEA REGIA*	-	10-12'	40		$ -
54	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA	85		$ -
55	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8'	109		$ -
56	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10'	109		$ -
57	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12'	109		$ -
58	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16' OA	12		$ -
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	24		$ -
60	Dahoon Holly	*ILEX CASSINE*	30 GAL	10'-12' OA	73		$ -
61	Cabbage Palm	*SABAL PALMETTO*	65 GAL	12'-18' CT	12		$ -
62	Simpson's Stopper	*MYRCIANTHES FRAGRANS*	30 GAL	8'-9'	30		$ -
63	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	36		$ -
64	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7-9'	13		$ -
65	Sea Grape	*COCCOLOBA UVIFERA*	15 GAL	8'-10'	254		$ -
66	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14' OA	16		$ -
67		Total for Trees	--	--	--	--	$0.00

SCHEDULE 1 - CANE SLOUGH / ELKS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 2 - LENNARD SQUARE / AZZI STA

GENERAL ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	150		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
8	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
9	3" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	3207		$ -
10	3" Nibco T-113 Gate Valve	EA	3		$ -
11	Carson 1419 Valve Box with Lid	EA	3		$ -
12	2" Rain Bird PESB Series Remote Control Valve	EA	10		$ -
13	Carson 1220 Jumbo Valve Box with Lid	EA	8		$ -
14	Class 200 PVC Lateral Line with Schedule 40 PVC gasketed Fittings (size	LF	8100		$ -
15	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	143		$ -
16	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	91		$ -
17	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	16		$ -
18	Hunter PGP-04-CV with #6 Nozzle	EA	3		$ -
19	Hunter PGP-04-CV with #9 Nozzle	EA	9		$ -
20	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	4		$ -
21	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	59		$ -
22	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	10		$ -
23	Total for Irrigation Items	--	--	--	$ -

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

LANDSCAPING AND GRASSES							
HERBACEOUS							
LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
24	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,960		$ -
25	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	73		$ -
26	Wild Coffee	*PSYCHOTRIA NERVOSA*	3 GAL	-	293		$ -
27	Saw Palmetto	*SERENOA REPENS*	1 GAL	-	600		$ -
28	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	2,180		$ -
29	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,810		$ -
30	Maidencane	*PANICUM HEMITOMON*	BR	-	6,750		$ -
31	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	1,630		$ -
32	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	1,742		$ -
33	Soft Rush	*JUNCUS EFFUSUS*	BR	-	2,510		$ -
34	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,465		$ -
35	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	17,624		$ -
36	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	12"	582		$ -
37	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	482		$ -
38	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON"*	3 GAL	-	122		$ -
39	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	360		$ -
40	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	146		$ -
41	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	451		$ -
42	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	1,954		$ -
43		Total for Shrubs and Groundcover	--	--	--	--	$0.00
TREES							
LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
44	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7'-9' OA	10		$ -
45	Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'+2" OA	60		$ -
46	Cypress	*TAXODIUM DISTICHUM*	45 GAL	12'+3" OA	60		$ -
47	Cypress	*TAXODIUM DISTICHUM*	100 GAL	4" C	60		$ -
48	Green Buttonwood	*CONOCARPUS ERECTUS*	30 GAL	14' OA	9		$ -
49	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4" CAL	71		$ -
50	Red Bay	*PERSEA BORBONIA*	3 GAL	2'-4' OA	28		$ -
51	Red Bay	*PERSEA BORBONIA*	15 GAL	6'-8' OA	28		$ -
52	Red Bay	*PERSEA BORBONIA*	25 GAL	6'-14' OA	29		$ -
53	Royal Poinciana	*DELONIX REGIA*	45 GAL	12'-14' OA	7		$ -
54	Royal Palm	*ROYSTONEA REGIA*		10'-12' OA	28		$ -
55	Red Maple	*ACER RUBRUM*	10 GAL	8' OA	64		$ -
56	Red Maple	*ACER RUBRUM*	25 GAL	8'-10' OA	63		$ -
57	Red Maple	*ACER RUBRUM*	45 GAL	12'-14' OA	63		$ -
58	Red Maple	*ACER RUBRUM*	65 GAL	14'-16' OA	11		$ -
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	4		$ -
60	Cabbage Palm	*SABAL PALMETTO*	45 GAL	12'-14' OA	124		$ -
61		Total for Trees	--	--	--	--	$0.00

SCHEDULE 2 - LENNARD SQ / AZZI STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

SCHEDULE 3 - TIFFANY CHANNEL STA

GENERAL ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
11	ITT Flowtronex Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
13	4" Class 200 PVC Mainline/Fittings	LF	2276		$ -
14	4" Nibco T-8 Gate Valve	EA	1		$ -
15	Carson 1419 Valve Box with Lid	EA	1		$ -
16	2" Rain Bird PESB Series Remote Control Valve	EA	12		$ -
17	Carson 1220 Jumbo Valve Box with Lid	EA	13		$ -
18	Class 200 PVC Lateral Line/Fittings (size per plan)	LF	10800		$ -
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	244		$ -
20	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	28		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	5		$ -
22	Hunter PGP-04-CV with #9 Nozzle	EA	56		$ -
23	Hunter PGP-04-CV with #12 Nozzle	EA	31		$ -
24	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2		$ -
25	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	10		$ -
26	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	18		$ -
27	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
28	Red Tip Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	24"	140		$ -
29	Saw Palmetto	*SERENOA REPENS*	1 GAL	-	831		$ -
30	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	700		$ -
31	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	944		$ -
32		*Total for Shrubs and Groundcover*	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
33	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16' OA	14		$ -
34	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4" CAL	66		$ -
35	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21		$ -
36	Slash Pine	*PINUS ELLIOTII*	45 GAL	10'-12' OA	118		$ -
37	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	26		$ -
38		Total for Trees	--	--	--	--	$0.00

SCHEDULE 3 - TIFFANY CHANNEL STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 4 - LEITHGOW STREET STA

GENERAL ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	50		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	1250		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	1250		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

IRRIGATION ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	ITT Flowtronex Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	3" Class 200 PVC Mainline/Fittings	LF	1660		$ -
15	3" Nibco T-113 Gate Valve	EA	2		$ -
16	Carson 1419 Valve Box with Lid	EA	2		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	8		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	8		$ -
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	1640		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	98		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	1		$ -
22	Hunter PGP-04-CV with #9 Nozzle	EA	44		$ -
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3		$ -
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	4		$ -
25	Total for Irrigation Items	--	--	--	$ -

LANDSCARING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
26	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,740		$ -
27	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,420		$ -
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,270		$ -
29	Maidencane	*PANICUM HEMITOMON*	BR	-	1,740		$ -
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	2,500		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	2,180		$ -
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,790		$ -
33	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	517		$ -
34	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	22		$ -
35	Fire Flag	*THALIA GENICULATA*	BR	-	1,420		$ -
36	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	269		$ -
37	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	BR	-	1,310		$ -
38	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	383		$ -
39	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	326		$ -
40		Total for Shrubs and Groundcover	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
41	Laurel Oak	*QUERCUS LAURIFOLIA*	100 GAL	14'-16' OA	13		$ -
42	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	37		$ -
43	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	37		$ -
44	Bald Cypress	*TAXODIUM DISTICHUM*	65 GAL	14' OA	39		$ -
45	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	4		$ -
46	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	28		$ -
47	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	28		$ -
48	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	29		$ -
49	Royal Poinciana	*DELONIX REGIA*	60 GAL	12'-14' OA	2		$ -
50	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	15		$ -
51	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	6		$ -
52	Cabbage Palm	*SABAL PALMETTO*	-	12'-18' OA	17		$ -
53	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14' OA	3		$ -
54		Total for Trees	--	--	--	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

SCHEDULE 4 - LEITHGOW STREET STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 5 - LOUTUS STA

GENERAL ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	5000		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	5000		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
11	ITT Flowtronex Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
13	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	4229		$ -
14	4" Nibco T-8 Gate Valve	EA	3		$ -
15	Carson 1419 Valve Box with Lid	EA	3		$ -
16	2" Rain Bird PESB Series Remote Control Valve	EA	17		$ -
17	Carson 1220 Jumbo Valve Box with Lid	EA	17		$ -
18	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	10060		$ -
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	184		$ -
20	Hunter PGP-04-CV with #6 Nozzle	EA	6		$ -
21	Hunter PGP-04-CV with #9 Nozzle	EA	88		$ -
22	Hunter PGP-04-CV with #12 Nozzle	EA	2		$ -
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2		$ -
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	22		$ -
25	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	5		$ -
25	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
26	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	1,196		$ -
27	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	687		$ -
28	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	855		$ -
29	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	952		$ -
30		*Total for Shrubs and Groundcover*	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
31	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	75		$ -
32	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21		$ -
33	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16' OA	8		$ -
34	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	40		$ -
35	Sycamore	*PLANTANUS*	65 GAL	16'-18' OA	10		$ -
36	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	10		$ -
37	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14' OA	13		$ -
38		Total for Trees	--	--	--	--	$0.00

SCHEDULE 5 - LOUTUS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

SCHEDULE 6 - MARY TERRACE STA

GENERAL ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	ITT Flowtronex Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	2 1/2" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	1160		$ -
15	2 1/2" Nibco T-113 Gate Valve	EA	1		$ -
16	Carson 1419 Valve Box with Lid	EA	1		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	7		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	7		$ -
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	2960		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	129		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	30		$ -
22	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3		$ -
23	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	6		$ -
24	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
25	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	2,070		$ -
26	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,200		$ -
27	Fire Flag	*THALIA GENICULATA*	BR	-	440		$ -
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	1,850		$ -
29	Maidencane	*PANICUM HEMITOMON*	BR	-	110		$ -
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	870		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	440		$ -
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	3,050		$ -
33	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	LN	-	650		$ -
34	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	355		$ -
35	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	359		$ -
36	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	348		$ -
37	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	272		$ -
38		Total for Shrubs and Groundcover	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
39	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	38		$ -
40	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	38		$ -
41	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14' OA	38		$ -
42	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	4"C	11		$ -
43	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	2		$ -
44	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	18		$ -
45	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	18		$ -
46	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	18		$ -
47	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16' OA	2		$ -
48	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	20		$ -
49	Sycamore	*PLANTANUS*	65 GAL	16'-18' OA	2		$ -
50	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	2		$ -
51	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14' OA	8		$ -
52		Total for Trees	--	--	--	--	$0.00

SCHEDULE 6 - MARY TERRACE STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

BID SUMMARY:

SCHEDULE 1 SUB TOTAL:	$0.00
SCHEDULE 2 SUB TOTAL:	$0.00
SCHEDULE 3 SUB TOTAL:	$0.00
SCHEDULE 4 SUB TOTAL:	$0.00
SCHEDULE 5 SUB TOTAL:	$0.00
SCHEDULE 6 SUB TOTAL:	$0.00
INDEMNIFICATION FEE:	$10.00

SCHEDULES 1 - 6 BID TOTAL	--	$10.00

AGENDA

Pre-Bid Conference
E-Bid #20110079
EWIP Landscaping & Irrigation at Various EWIP Sites
June 14, 2011 at 1:30 pm

This meeting is being recorded. During the question & answer period please clearly state your name and firm you are associated with before asking your questions. Thank you.

1. Sign-In Sheet

2. Introduction of key personnel

3. **Reminder**: Bid opening date is July 14, 2011 at 3:00 pm

   All Bids are to be submitted electronically. No hard copies will be accepted.

   No Bid will be accepted after that date and time.

4. Review of Specifications requirements:
   - 5% Bid bond is required. This is to be scanned and uploaded and submitted with the required documents. Immediately after the opening, the Bid Bond is to be mailed to the City. If the **original** Bid Bond is not received within 3 days after the opening, the bid will be null & void.
   - Last date for questions is July 6, 2011. All questions must be submitted in writing to Robyn Holder at rholder@cityofpsl.com.
   - Refer to Section 1.9 on Page 6 of 55 for the e-bid submittal requirements.
   - This project is some Federal funding involved so there are specific requirements involved, such as the Contractor must comply with the Davis-Bacon Wage Decision Act. If you have any questions regarding this requirement, please refer to Attachments C & D.

The bid reply is an electronic spread sheet that is already formatted with formulas. Please submit on the electronic bid sheet only. Hand written sheets should not be submitted.

An Addendum will be issued after this meeting with all the questions and comments listed.

5. Turn over to: Steve Jungjohan and the Engineer of Record from the Engineering Department.

6. Additional questions from Prospective Bidders.

7. Adjourn

Addendum #1
Pre-Bid Conference Minutes
E-Bid #20110079 - EWIP Landscaping & Irrigation at Various EWIP Sites
June 14, 2011 at 1:30 pm

This meeting is being recorded. During the question & answer period please clearly state your name and firm you are associated with before asking your questions. Thank you.

1. Sign-In Sheet
2. Introduction of key personnel: Rhuett Keene, Engineer (Captec); Steve Jungjohan, Project Manager, Engineering Department (City of PSL).
3. **Reminder**: Bid opening date is July 14, 2011 at 3:00 pm. All Bids are to be submitted electronically. No hard copies will be accepted. No Bid will be accepted after that date and time.
4. Review of Specifications requirements:
    - 5% Bid bond is required. This is to be scanned and uploaded and submitted with the required documents. Immediately after the opening, the Bid Bond is to be mailed to the City. If the **original** Bid Bond is not received within 3 days after the opening, the bid will be null & void.
    - Last date for questions is July 6, 2011. All questions must be submitted in writing to Robyn Holder at rholder@cityofpsl.com.
    - Refer to Section 1.9 on Page 6 of 55 of bid package for the e-bid submittal requirements.
    - This project is some Federal funding involved so there are specific requirements involved, such as the Contractor must comply with the Davis-Bacon Wage Decision Act. If you have any questions regarding this requirement, please refer to Attachments C & D.

The bid reply is an electronic spread sheet that is already formatted with formulas. Please submit on the electronic bid sheet only. Hand written sheets should not be submitted.

The meeting was turned over Steve Jungjohan and Rhuett Keene. Steve thanked everyone for showing up to review this. It is a big project and this will be pretty much the end of our EWIP jobs. Steve turned the meeting over to Rhuett.

Thanks everyone for coming out for this bid. It's good to see all of the competition and should be a great project for the City. This bid is for the Eastern Watershed Improvement Project, Landscaping and Irrigation, and is the last phase of the comprehensive EWIP program. It will be the clean-up crew coming in on the last phase of the project for the installation of the irrigation, landscaping, sod, etc. These projects were broken down into 6 separate schedules. Each schedule has a separate mobilization. You will not be doing all of the projects at one time. You will be going to each of the sites as they are being completed and you will be expected to coordinate with the contractor that is finishing up those sites in order to take over the site from them to install the irrigation, sod, landscaping and the aquatic vegetation. Again each schedule contains its own mobilization. There are also items in there for floating turbidity barriers and staked silt fence which may be needed. The linear feet items are shown and estimated and may or may not be needed. The sod is estimated to be put in place on the final site. The site access restoration is provided in each schedule and is for a lump sum to cover any damage that you may incur during construction. Survey work/preparation of as-built drawings as per specifications within the plans and the technical specifications on both the landscaping and the irrigation. There are also items in there for site mowing after completion of the project and also for the aquatic vegetation maintenance, again, after final acceptance. Other than that, the 6 projects are the Cane Slough/Elks STA which is currently cleared and under construction; Lennard Square/Azzi STA site which will be going to construction soon; Tiffany Channel STA which has not begun yet; Mary & Leithgow STA is currently started; Loutus STA which is out to bid currently. With that, if you have any questions, please let me know.

The sequence is that Mary Terrace will probably be first and then Leighgow, only because we are getting started on the smaller sites.

Q: Are we to assume that none of the sites will be concurrent or in any particular order?
A: They will all be staggered and each one has a separate mobilization, so plan on doing them one site at a time.

Completion wise, contractors should be done with Mary Terrace first and then Leighgow, the smaller sites.

Q: You had 240 days in the contract. Is there any leeway pending because we are working behind a GC? If something goes wrong with the GC, how are we to handle that?
A: I am sure that there are going to be concessions made. It probably needs to be clarified how the contractor's timeline per project will be after it is turned over to them from the current GC.

Q: Can you give us a notice to proceed on each project? That might be the easiest way to do that?

Robyn: Are you going to define, for each project, the number of calendar days? Once you give a notice to proceed...
A: We can probably break it out per project and that's probably the best way to do it.
Robyn: So we will address this in the addendum.

Q: The GPS of the as-builts. They are GPS as per the City's specifications with the CD and the whole 9 yards?
A: They need to be done so that they can be entered into the City's database.

Q: I just wanted to know who was going to install HPDE and the junction box between Cane Slough and Lennard? Is the site contractor doing that?
A: Yes

Q: Are they using gasket pipe or glue joint pipe? It's called on the specifications for gasket and I just want to make sure that the City of PSL was aware.
A: Are you speaking at the crossing?

Q: At the main line...you are calling for gasketed main line fitting.
A: Normally that's what we use with restraints.

Q: I have a set of plans and I was looking at the bid tabs and there were some issues related to specifications and the plans which don't marry-up with that and the bid tabs.
A: Can you provide a specific instance?

Q: The trees have caliber specifications and the bid tab – only the oaks have a caliber specification.
65 gal 14-16 gumbo limbo and on the plan it says 65 gal, 14-16, 4" caliber.
A: Is there a contradiction there or is it just that additional information is needed?

Q: A 4" caliber may dictate or be the driving force for the size of the tree. Whatever the dominate specification is, you have to adhere to. We have oak trees on the job, all 100 gal cylinder, 4" and some of 5". Those are reflected in the bid tabs and all of the other trees have caliber specifications and they weren't reflected in the bid tabs. So gumbos, sycamore, poinsettia, cassias. The sea grapes have a caliber specification. Each individual piece of business has that same situation. In the bid tab the only trees that had calibers were the oaks.
A: I would say, unless there is a contradiction, they both apply.

Q: So plans take precedence?
A: That's right. Again, unless there is a contradiction between them, they would both apply.

Q: There was no contradiction, just less information on the bid tabs.
A: The plans have additional information that's included. Planting-wise, whatever is in the bid tabs would override. Quality-wise they both control; you have to meet the specifications of both the bid tab and the plants. If there is a contradiction then we can address it.

Q: No, clarification was all that was needed.

NOTE: The bid opening date has not been changed.

Instructions to Bidder:
Each bidder must acknowledge receipt of any addenda on the Bid Reply Sheet in order to have his/her bid or proposal to be accepted

Pre-Bid Conference
E-BID #20110079
EWIP Landscaping & Irrigation at Various EWIP Sites
June 14, 2011 @ 1:30 pm

	Name (Please PRINT legibly)	Company Name	E-Mail Address	Telephone # & FAX #
1.	James D Gillenwalters	A.V.C	JD@AVcaquatic.com	T 561-845-5525
				F
2.	Angela Patchunka	martin co. Farm	APatchunka@AVcaquatic	T 561-262-3414
				F
3.	Dan Cupp	Treasure Coast Irrigation	danc@tcirrigation.com	T 772 260 5441
				F
4.	JOE QUINN	ARAZOZA BROS	TWO J QUINN@AOL.COM	T ~~305~~ 561 722-9531
				F
5.	RHETT KEENE	CARTEC ENGINEERING	RKEENE@GOCARTEC.COM	T 772 692 4344
				F 772 692 4341
6.	Ben Williams	Natures Keeper	Ben@Natureskeeper.com	T 772-467 1230
				F
7.	Robert Davis	NATURES KEEPER	robert@Natures-Keeper.com	T 467 1230
				F
8.				T

Pre-Bid Conference
E-BID #20110079
EWIP Landscaping & Irrigation at Various EWIP Sites
June 14, 2011 @ 1:30 pm

	Name (Please PRINT legibly)	Company Name	E-Mail Address	Telephone # & FAX #
	STEWART FEKETA	Nature's Keeper	STEWART@NATURESKEEPER.COM	F 772 467 8923
9.	MATT OSEP	CITY OF PSL PW	MOSEP@CITYOFPSL.COM	T 467 1230 F 323-4928
10.	STEVE JENGJOHAN	CITY/PSL	SJENGJOHANC@CITYPSL.COM	T 370-8229 F
11.	DALE MAJEWSKI	PSL R.W.	DMAJEWSKI@CITYOFPSL.COM	T 344-4128 F
12.	ERIC BROSS	Austin Outdoor	EBROSS@AUSTINOUTDOOR.NET	T 386.437.6211
				F

Pre-Bid Conference
E-BID #20110079
EWIP Landscaping & Irrigation at Various EWIP Sites
June 14, 2011 @ 1:30 pm

	Name (Please PRINT legibly)	Company Name	E-Mail Address	Telephone # & FAX #
13.	Mark Rosal	Valleycrest		T 772-631-7706
			mrosal@valleycrest.com	F 772-461-7869
14.	Shane Barry	Ag-Scape Services	ShaneB2055@Aol.com	T 772-473-1072
				F 772-778-5196
15.	Danny Lopez	TRIK-Construction		T 772-834-9974
				F
16.	Magen Fenton	Sunshine Land Design	mfenton@sunshinelanddesign.com	T 772-283-2648
				F 772-283-8944
17.	Robyn Holder	City of PSL	rholder@cityofpsl.com	T 772-344-4293
				F 772-871-7337
18.				T
				F
19.				T
				F

Addendum #2
E-Bid #20110079 - EWIP Landscaping & Irrigation at Various EWIP Sites
July 7, 2011

Questions to date:

1. Question: Will the new pump stations require individual Fence Enclosures with associated rock perimeter? If so, please provide details.
   Answer: Yes

2. Question: Will the Landscape As-Builts need to be plotted on a GPS system an provided to the City the same as the Irrigation GPS As-Builts are?
   Answer: Yes

3. Question: Will the required "As-Builts" need to be generated in a CADD – compatible computer program?
   Answer: Yes. DWG.

Revisions to date:

1. Revised Construction Plan sheets are identified as follows and must be acknowledged on the E-Bid Reply Sheet #20110079.

   Addendum #2A dated 7/7/2011 is Loutus STA Irrigation Plan sheets 1 – 5.
   Addendum #2B dated 7/7/2011 is Leightgow Street STA Irrigation Plan sheets 1 – 4.
   Addendum #2C dated 7/7/2011 is Lennard SQ/Azzi STA Irrigation Plan sheets 1 – 4.
   Addendum #2D dated 7/7/2011 is Cane Slough/Elks Site (EWIP) Irrigation Plan sheets 1 – 5.
   Addendum #2E dated 7/7/2011 is Marry Terrace STA Irrigation Plan sheets 1 – 4.
   Addendum #2F dated 7/7/2011 is Tiffany Intake Channel (EWIP) Irrigation Plan sheets 1 – 8.

NOTE: The bid opening date has been changed to July 28, 2011 at 1:30PM.

Instructions to Bidder:
Each bidder must acknowledge receipt of any addenda on the Bid Reply Sheet in order to have his/her bid or proposal to be accepted

NATURE'S KEEPER

NK

Date: 7/5/2011

To: City of Pt St Lucie

Co: Robyn Holder

Re: RFI - EWIP Landscape & Irrigation at Various EWIP Sites

Dear Robyn,

1. Will the new pump stations require individual Fence Enclosures with the associated rock perimeter? If so please provide details. (YES.)

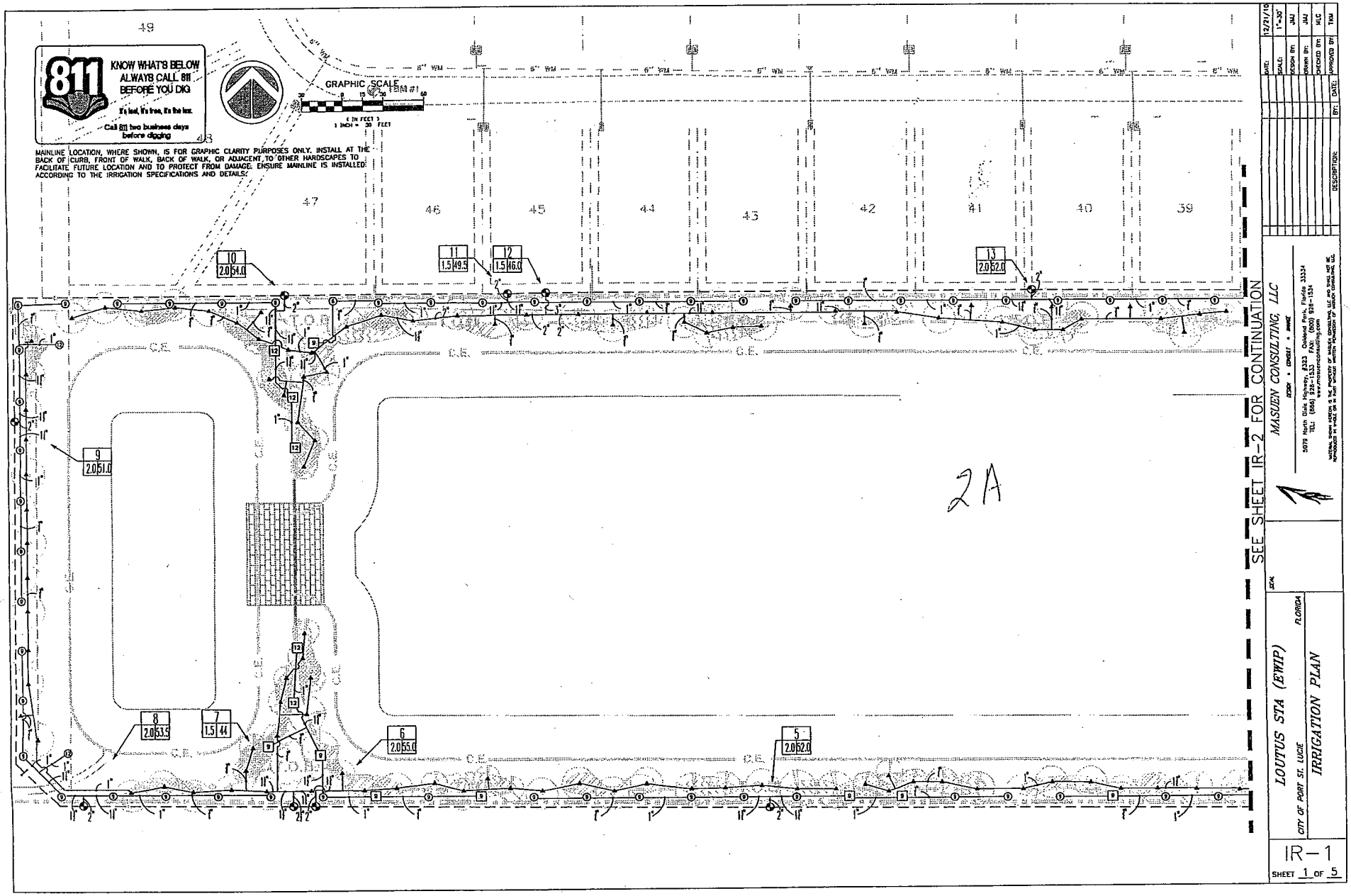
2. Will the Landscape As- Builts need to be plotted on a GPS system and provided to the City the same as the Irrigation GPS As-Builts are? (YES)

3. Will the required " As-Builts " need to be generated in a CADD – compatible computer program? (YES.) DWG.

Best regards,

Natures Keeper
772-467-1230

3795 SNEED RD / FT PIERCE , FL 34945
P: 772-467-1230 / F: 772-467-8923



SEE SHEET IR-2 FOR CONTINUATION

DATE:	12/21/10
SCALE:	1"=30'
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	TKM

DESCRIPTION:	BY:	DATE:

MASUEN CONSULTING, LLC
DESIGN • CONSULT • MANAGE
5079 North Dixie Highway, #323 Oakland Park, Florida 33334
TEL: (866) 928-1533 FAX: (800) 928-1534
www.masuenconsulting.com

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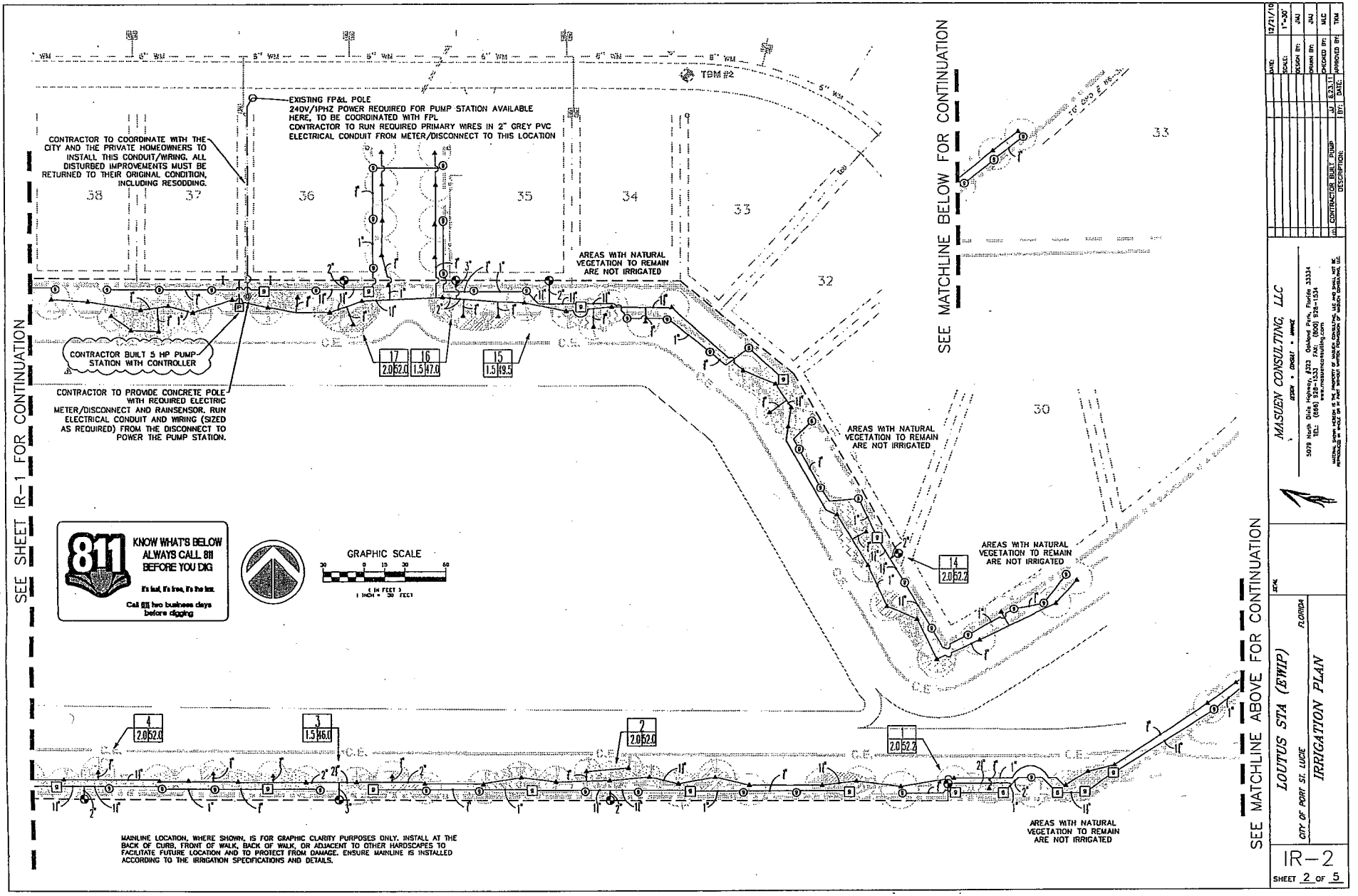
SEAL

LOUTUS STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN

IR-1
SHEET 1 OF 5



MASUEN CONSULTING, LLC

LOUTUS STA (EWIP)

CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION PLAN

IR-2

SHEET 2 OF 5

IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
3		STATION NUMBER	
1.5	49.5	GALLONS PER MINUTE–CATALOG FLOW	
		VALVE SIZE	
1	P	CONTRACTOR BUILT IN PLACE 5HP, CENTRIFUGAL PUMP STATION WITH FIBERGLASS ENCLOSURE AND FLOWMETER. POWER IS 240V/1 PHASE. WATER SOURCE IS A PROPOSED LAKE. STATION INCLUDES RAIN BIRD ESP–LXM MODULAR CONTROLLER WITH 24 STATIONS AND A BASELINE WATERTEC S100 SOIL MOISTURE SENSOR, INTERFACE MOUNTED WITH CONTROLLER. CONTRACTOR TO INSTALL SOIL MOISTURE FIELD SENSOR IN FIELD PER MANUFACTURER'S RECOMMENDATIONS.	A1 A2 A3
1		12' CONCRETE POLE WITH ELECTRICAL METER, MAIN DISCONNECT BOX, RAIN SENSOR AND GROUNDING	A3
17		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) OR A CARSON 1220 JUMBO VALVE BOX.	B
3		NIBCO TI–8 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		PRIMARY WIRE PATH IN 2" GREY PVC ELECTRICAL CONDUIT	L
		4" CLASS 200 GASKETED PVC MAINLINE WITH SCH 40 PVC GASKETED FITTINGS	L

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) – THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

IRRIGATION HEAD LEGEND

QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN (P.S.I.)	DESIGN (G.P.M)
184	▲	RAIN BIRD 1404 FLOOD BUBBLER ON POLY PIPE	O	30	1.00
6	⊕	HUNTER PGP–04–CV–06 NOZZLE (QUARTER CIRCLE)	V1	50	2.70
88	⊕	HUNTER PGP–04–CV–09 NOZZLE (HALF CIRCLE)	V1	50	5.20
2	⊕	HUNTER PGP–04–CV–12 NOZZLE (FULL CIRCLE)	V2	50	11.90
2	⊡	HUNTER PGP–12–CV–06 NOZZLE (QUARTER CIRCLE) ON SCH 40 RISER	V3	50	2.70
22	⊡	HUNTER PGP–12–CV–09 NOZZLE (HALF CIRCLE) ON SCH 40 RISER	V3,V5	50	5.20
5	⊡	HUNTER PGP–12–CV–12 NOZZLE (FULL CIRCLE) ON SCH 40 RISER	V3,V5	50	11.90

NOTES:

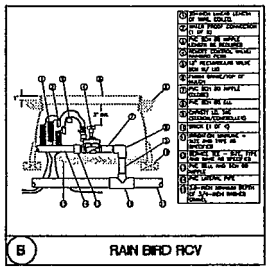
1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 3" HDPE PIPE FROM THE BOTTOM OF THE "Z" PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP–RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

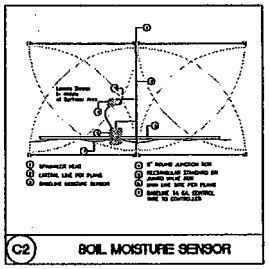
HDPE NOTE:

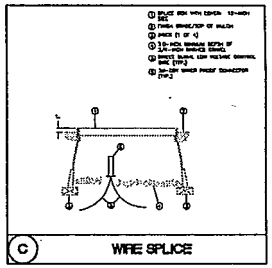
1. NO ELECTROFUSION/BUTT FUSION JOINTS MAY BE MADE WITHOUT PSL STAFF OR THEIR ASSIGNS ON SITE TO PHOTOGRAPH EACH JOINT.

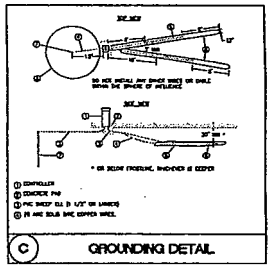
SOIL MOISTURE SENSOR NOTES:

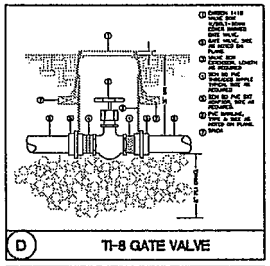
1. PLACE ALL SOIL MOISTURE SENSOR WIRING IN 1" SCH 40 PVC CONDUIT
2. SOIL MOISTURE SENSOR SHOULD BE PLACED IN THE MIDDLE OF A SPRAY OR DRIP AREA AS PER MANUFACTURER'S RECOMMENDATIONS.

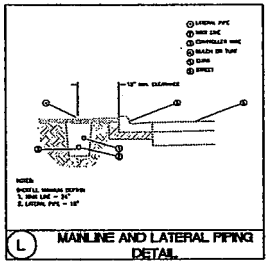

B RAIN BIRD RCV

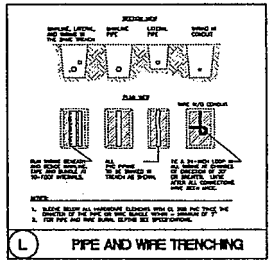

C2 SOIL MOISTURE SENSOR

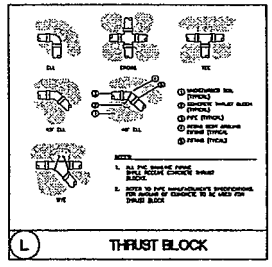

C WIRE SPLICE

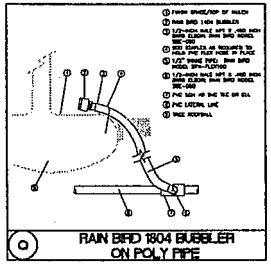

C GROUNDING DETAIL

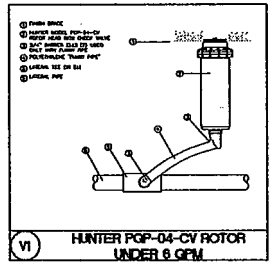

D TI-8 GATE VALVE

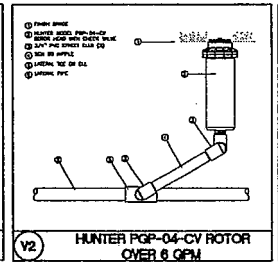

L MAINLINE AND LATERAL PIPING DETAIL

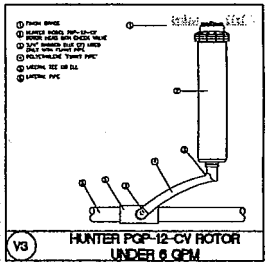

L PIPE AND WIRE TRENCHING

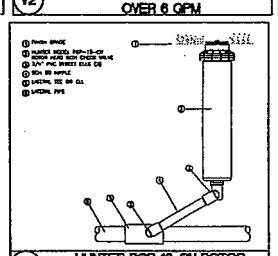

L THRUST BLOCK

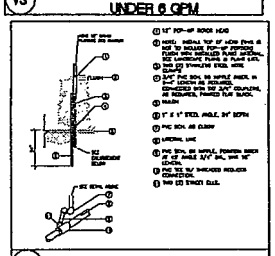

O RAIN BIRD 1804 BUBBLER ON POLY PIPE


V1 HUNTER PGP-04-CV ROTOR UNDER 6 GPM


V2 HUNTER PGP-04-CV ROTOR OVER 6 GPM


V3 HUNTER PGP-12-CV ROTOR UNDER 6 GPM


V4 HUNTER PGP-12-CV ROTOR OVER 6 GPM


V5 POP-UP ROTOR ON RISER

NO.	DESCRIPTION:	DATE:	BY:
1	CONTRACTOR BUILT PUMP	6.23.11	JJ

DATE: 12/21/10
SCALE: N.T.S.
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MJC
APPROVED BY: TKM

MASUEN CONSULTING, LLC
ECOSYSTEM • ECOLOGY • LANDSCAPE
5979 North Dixie Highway, #323 Oakland Park, Florida 33334
TEL: (866) 926-1533 FAX: (800) 926-1534
www.masuenconsulting.com

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LOUTUS STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION DETAILS

IR–3

SHEET 3 OF 5

ENCLOSED CLOCK START
SINGLE PUMP CENTRIFUGAL PUMP SYSTEM

PURPOSE:
TO PROVIDE A COMPLETE ENCLOSED CLOCK START PUMP SYSTEM AS SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO THE OWNER FOR APPROVAL, PRIOR TO PURCHASING SYSTEM COMPONENTS. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL MAJOR SYSTEM COMPONENTS.

ENCLOSURE:
THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE ALLIED FIBERGLASS INDUSTRIES MODEL AE100.

MOUNTING:
ALL EQUIPMENT SHALL BE SECURELY MOUNTED TO THE 6" THICK REINFORCED CONCRETE SLAB WITH GALVANIZED HARDWARE. 1-1/2" UNISTRUT EQUIPMENT RACK SHALL SUPPORT CONTROLLER, GFCI OULET, SOIL MOISTURE SENSOR INTERFACE STEPDOWN TRANSFORMER, AND ANY MISCELLNEOUS EQUIPMENT REQUIRED.

PUMP AND MOTOR:
THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH ITS LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR.

THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 230 VOLT, 1 PHASE, 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED, CONFIGURED TO ALLOW DIRECT MOUNTING OF THE PUMP'S LIQUID END.

THE CLOSE-COUPLED PUMP AND DRIVING MOTOR SHALL BE OBTAINED FROM A SINGLE SOURCE.
1. 5HP SYSTEM: THE MOTOR SHALL BE RATED AT 5 H.P. AT 230 VOLTS, 1 PHASE, 60 HZ. THE PUMP SHALL BE CAPABLE OF DELIVERING 55 GPM AT 67 PSI AT THE PUMP DISCHARGE.

OPERATION
THE STATION OPERATES AS A CLOCK START, CLOCK RETIREMENT SYSTEM.

CLOCK START
THE PUMP STARTS WHEN THE IRRIGATION CONTROLLER (CLOCK) BEGINS A WATERING SEQUENCE.

CLOCK RETIREMENT
THE PUMP SHUTS OFF WHEN THE CLOCK COMPLETES A WATERING SEQUENCE.

OVERHEAT PROTECTION
A "HOT STOP" WILL BE PROVIDED IN THE PUMP VOLUTE AND WIRED TO SHUT DOWN THE PUMP WHEN OVERHEAT CONDITIONS OCCUR

DISCHARGE PIPE MANIFOLD:
THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF 2" GALVANIZED STEEL PIPE AND FITTINGS. A PRESSURE RELIEF VALVE, PRESSURE GAUGE, MCPROPELLER FLOWMETER AND BRONZE BALL VALVE WILL BE PROVIDED ON THE STATION DISCHARGE.

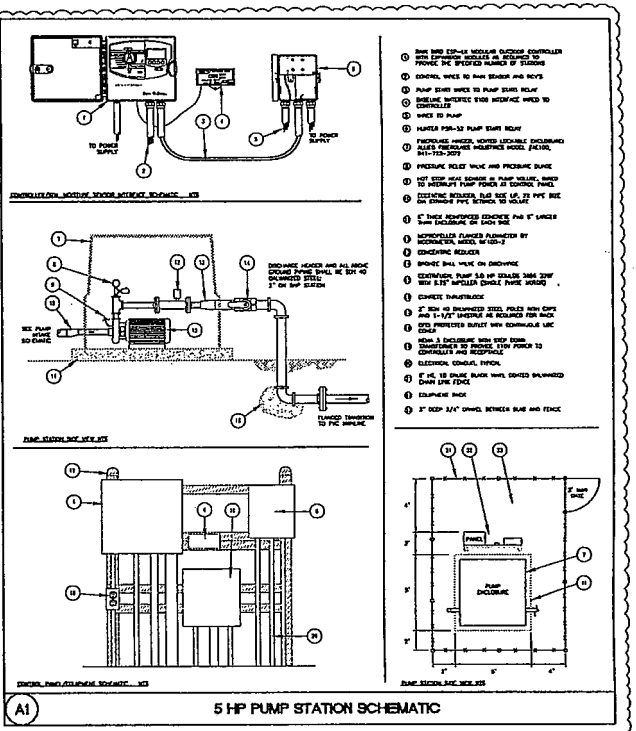
IRRIGATION CONTROLLER:
RAIN BIRD MODEL ESP-LXM WITH EXPANSION MODULES AS REQUIRED FOR THE TOTAL NUMBER OF SPECIFIED STATIONS, THE CONTROLLER SHALL ACTIVATE THE PUMP VIA THE PUMP START RELAY.

SUCTION LINE:
THE SUCTION LINE SHALL BE SCH 40 GALVANIZED STEEL WITH ECCENTRIC REDUCER AS REQUIRED, TO BELOW GRADE. TRANSITION TO HDPE SUCTION LINE AT A FLANGED FITTING AND CONTINUE PER DETAILS TO A SWING CHECK VALVE AND 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.

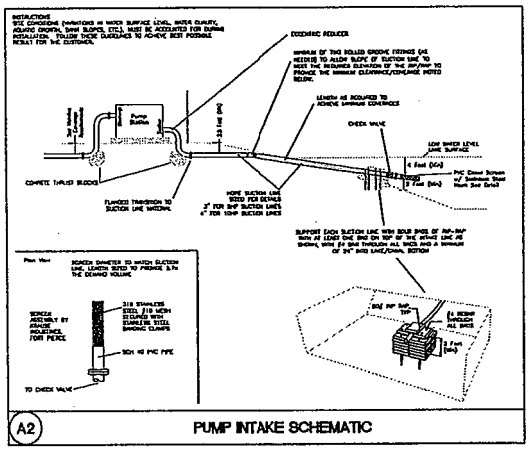
WARRANTIES:
THE CONTRACTOR SHALL WARRANT THE PUMP SYSTEM FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE SITE BY THE OWNER, NOT TO EXCEED 18 MONTHS FROM INSTALLATION.

NOTES:

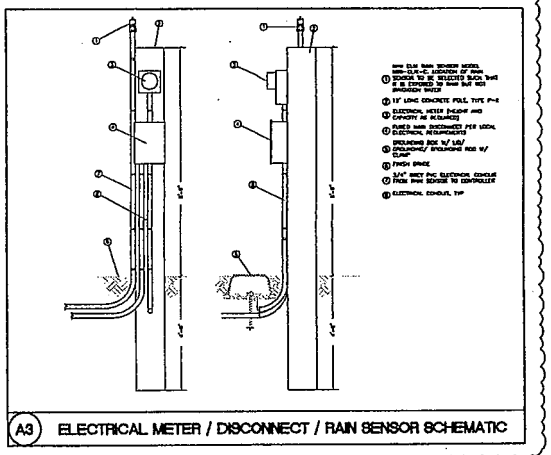
1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 3" HDPE PIPE FROM THE BOTTOM OF THE "Z" PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY THE PUMP SYSTEM MANUFACTURER.



A1 5 HP PUMP STATION SCHEMATIC



A2 PUMP INTAKE SCHEMATIC



A3 ELECTRICAL METER / DISCONNECT / RAIN SENSOR SCHEMATIC

NO.	DESCRIPTION:	DATE:	BY:
1	CONTRACTOR BUILT PUMP	5/23/11	JJ

DATE: 12/21/10
SCALE: N.T.S.
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MLC
APPROVED BY: TNM

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LOUTUS STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PUMP

IR-4
SHEET 4 OF 5

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 11/01/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

△1 The P.O.C. is a proposed contractor built centrifugal pump station using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 55 gpm at 65 PSI downstream of the pump.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with CL 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be 4" CL 200 gasketed PVC with Sch 40 PVC gasketed fittings and thrust blocks as required.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (gray, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3M DBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run three spare wires in both directions (six spare wires total). Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Controller to utilize 4"X8"X5/8" copper grounding plates, 5/8"X10' copper clad grounding rods, 'One Strike' CAD wells at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe is't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully sealed into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
24" minimum with a 30" minimum at vehicular crossings;
Lateral line depths measured to top of pipe shall be:
18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing –Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

After project completion:

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2ml pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items, as determined by owner, shall be completed within 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of 'as-built' drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED
IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

A. Turn on each zone from the controller to verify automatic operation.
B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
C. Check remote control valve to ensure proper operation.
D. Check setting on pressure regulator to verify proper setting, if present.
E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
F. Check for leaks – mainline, lateral lines, valves, heads, etc.
G. Check all heads as follows:

1. Proper set height (top of sprinkler is 1" below mow height)
2. Verify need pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
3. Check wiper seal for leaks – if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

DATE:	12/21/10		
SCALE:	N.T.S.		
DESIGN BY:	JMJ		
DRAWN BY:	JMJ		
CHECKED BY:	MLC		
APPROVED BY:	TKM		
△1	CONTRACTOR BUILT PUMP	JJ	8.23.11
	DESCRIPTION:	BY:	DATE:

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SEAL

LOUTUS STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION NOTES

IR–5
SHEET 5 OF 5

IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
5 / 1.5 | 44.3		STATION NUMBER / GALLONS PER MINUTE-CATALOG FLOW / VALVE SIZE	
1	P	CONTRACTOR BUILT IN PLACE SHP, CENTRIFUGAL PUMP STATION WITH FIBERGLASS ENCLOSURE AND FLOWMETER. POWER IS 240V/1 PHASE. WATER SOURCE IS A PROPOSED LAKE. STATION INCLUDES RAIN BIRD ESP-LXM MODULAR CONTROLLER WITH 8 STATIONS AND A BASELINE WATERTEC S100 SOIL MOISTURE SENSOR. INTERFACE MOUNTED WITH CONTROLLER CONTRACTOR TO INSTALL SOIL MOISTURE FIELD SENSOR IN FIELD PER MANUFACTURER'S RECOMMENDATIONS.	A1 A2 A3
1		12' CONCRETE POLE WITH ELECTRICAL METER, MAIN DISCONNECT BOX, RAIN SENSOR AND GROUNDING	A3
8		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) IN A CARSON 1220 JUMBO VALVE BOX.	B
2		NIBCO T-113 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		PRIMARY WIRE PATH IN 2" GREY PVC ELECTRICAL CONDUIT	L
		3" CLASS 200 PVC MAINLINE WITH SCH 40 PVC SOLVENT WELD FITTINGS	L

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) — THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

IRRIGATION HEAD LEGEND

QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN (P.S.I.)	DESIGN (G.P.M)
98	▲	RAIN BIRD 1404 FLOOD BUBBLER ON POLY PIPE	Q	30	1.00
1	Q	HUNTER PGP-04-CV-06 NOZZLE (QUARTER CIRCLE)	V1	50	2.70
44	Q	HUNTER PGP-04-CV-09 NOZZLE (HALF CIRCLE)	V1	50	5.20
3	4	HUNTER PGP-12-CV-06 NOZZLE (QUARTER CIRCLE) ON SCH 40 RISER	V3 V5	50	2.70
4	9	HUNTER PGP-12-CV-09 NOZZLE (HALF CIRCLE) ON SCH 40 RISER	V3 V5	50	5.20

NOTES: ⚠

1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 3" HDPE PIPE FROM THE BOTTOM OF THE "Z" PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

HDPE NOTE:

1. NO ELECTROFUSION/BUTT FUSION JOINTS MAY BE MADE WITHOUT PSL STAFF OR THEIR ASSIGNS ON SITE TO PHOTOGRAPH EACH JOINT.

SOIL MOISTURE SENSOR NOTES:

1. PLACE ALL SOIL MOISTURE SENSOR WIRING IN 1" SCH 40 PVC CONDUIT
2. SOIL MOISTURE SENSOR SHOULD BE PLACED IN THE MIDDLE OF A SPRAY OR DRIP AREA AS PER MANUFACTURER'S RECOMMENDATIONS.

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

It's fast, It's free, It's the law.

Call 811 two business days before digging

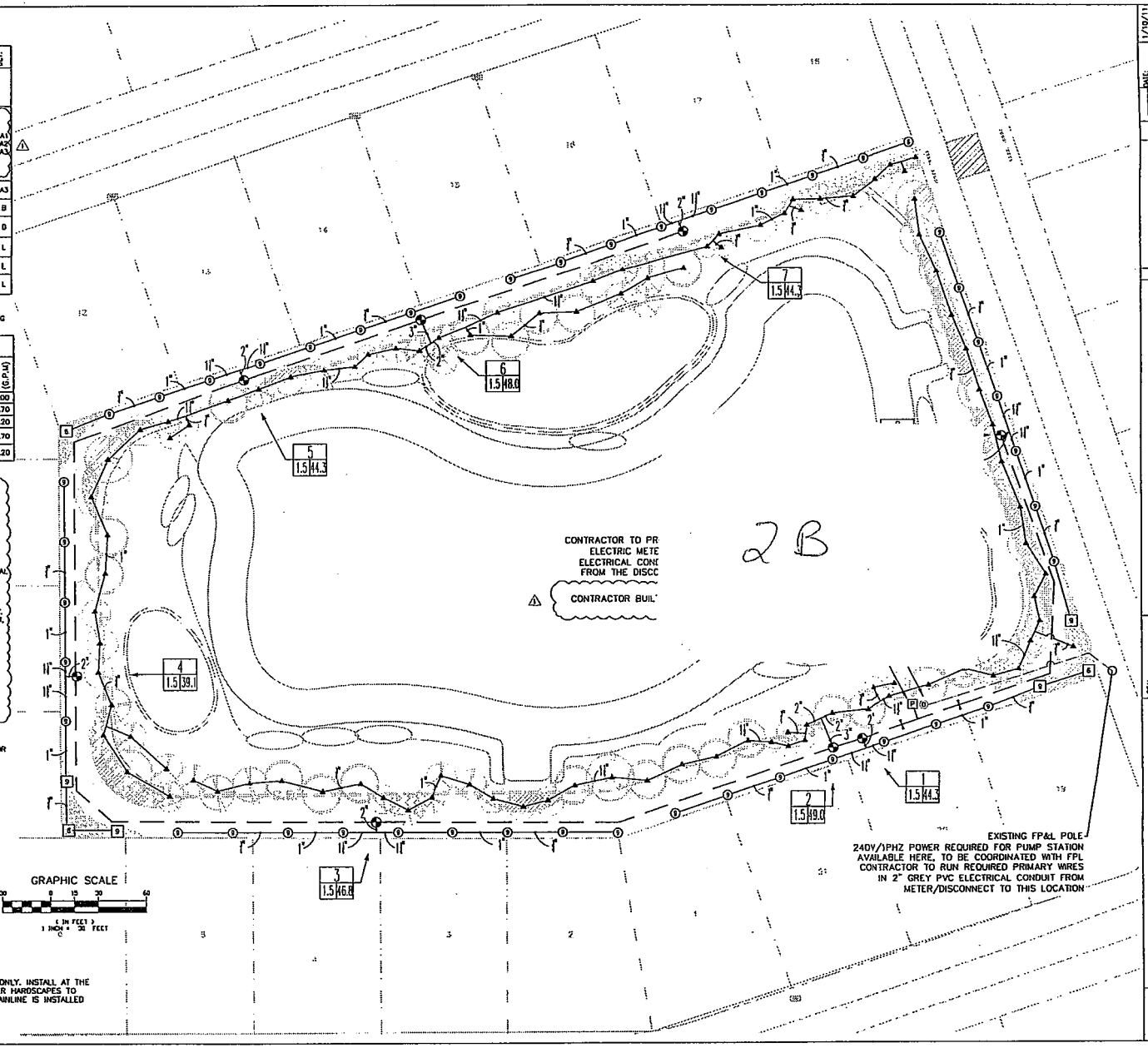
GRAPHIC SCALE

30 0 15 30 60

(IN FEET)

1 INCH = 30 FEET

MAINLINE LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING TO THE IRRIGATION SPECIFICATIONS AND DETAILS.



DATE:	1/10/11
SCALE:	1"=30'
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MJC
APPROVED BY:	TKM

⚠	CONTRACTOR BUILT PUMP	JJ	6-23-11
	DESCRIPTION:	BY:	DATE:

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SEAL

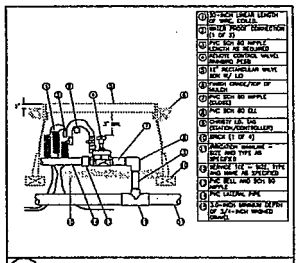
LEITHGOW STREET STA (EWIP)

CITY OF PORT ST. LUCIE FLORIDA

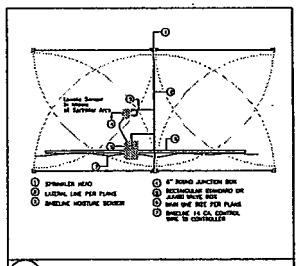
IRRIGATION PLAN

IR-1

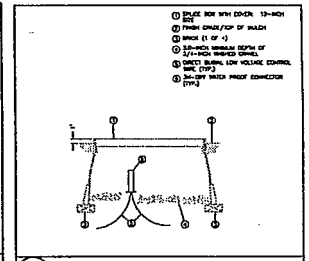
SHEET 1 OF 4



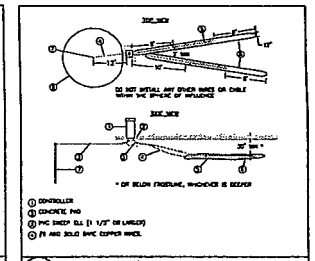
B RAIN BIRD RCV



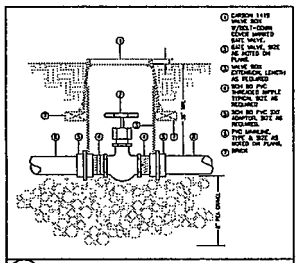
C2 SOIL MOISTURE SENSOR



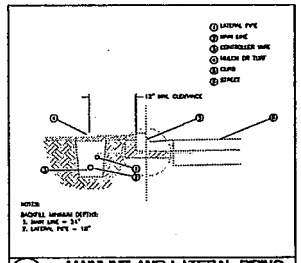
C WIRE SPLICE



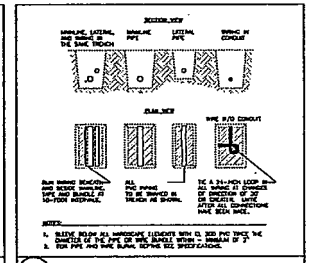
C GROUNDING DETAIL



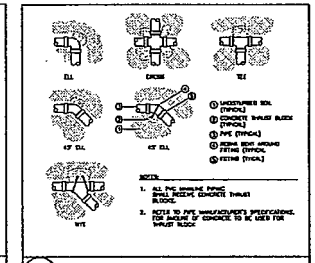
D T-113 GATE VALVE



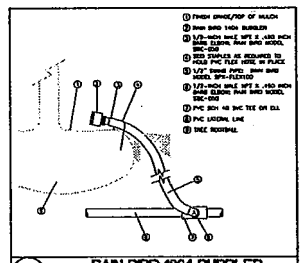
L MAINLINE AND LATERAL PIPING DETAIL



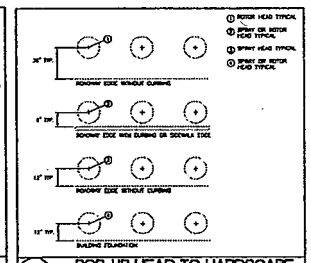
L PIPE AND WIRE TRENCHING



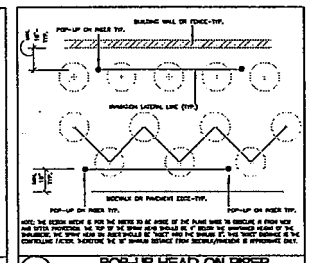
L THRUST BLOCK



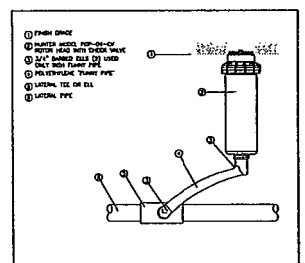
Q RAIN BIRD 1804 BUBBLER ON POLY PIPE



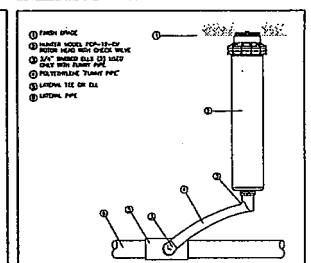
T POP-UP HEAD TO HARDSCAPE LOCATION DETAIL-A



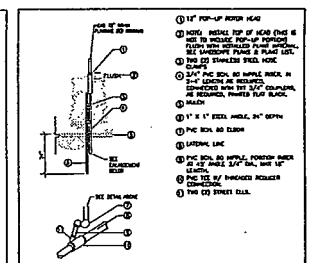
T POP-UP HEAD ON RISER LOCATION DETAIL-B



V1 HUNTER PGP-04-CV ROTOR UNDER 6 GPM



V3 HUNTER PGP-12-CV ROTOR UNDER 6 GPM



V5 POP-UP ROTOR ON RISER

DATE:	1/10/11
SCALE:	N.T.S.
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	TKM

DESCRIPTION:	BY:	DATE:

MASUEN CONSULTING, LLC
DESIGN • CONSULT • MANAGE
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SEAL

LEITHGOW STREET STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION DETAILS

IR-2

SHEET 2 OF 4

ENCLOSED CLOCK START
SINGLE PUMP CENTRIFUGAL PUMP SYSTEM

PURPOSE:
TO PROVIDE A COMPLETE ENCLOSED CLOCK START PUMP SYSTEM AS SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO THE OWNER FOR APPROVAL, PRIOR TO PURCHASING SYSTEM COMPONENTS. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL MAJOR SYSTEM COMPONENTS.

ENCLOSURE:
THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE ALLIED FIBERGLASS INDUSTRIES MODEL AE100.

MOUNTING:
ALL EQUIPMENT SHALL BE SECURELY MOUNTED TO THE 6" THICK REINFORCED CONCRETE SLAB WITH GALVANIZED HARDWARE. 1-1/2" UNISTRUT EQUIPMENT RACK SHALL SUPPORT CONTROLLER, GFCI OUTLET, SOIL MOISTURE SENSOR INTERFACE, STEPDOWN TRANSFORMER AND ANY MISCELLANEOUS EQUIPMENT REQUIRED.

PUMP AND MOTOR:
THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH ITS LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR.

THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 230 VOLT, 1 PHASE, 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED, CONFIGURED TO ALLOW DIRECT MOUNTING OF THE PUMP'S LIQUID END.

THE CLOSE-COUPLED PUMP AND DRIVING MOTOR SHALL BE OBTAINED FROM A SINGLE SOURCE.
1. 5HP SYSTEM: THE MOTOR SHALL BE RATED AT 5 H.P. AT 230 VOLTS, 1 PHASE, 60 HZ. THE PUMP SHALL BE CAPABLE OF DELIVERING 55 GPM AT 67 PSI AT THE PUMP DISCHARGE.

OPERATION
THE STATION OPERATES AS A CLOCK START, CLOCK RETIREMENT SYSTEM.

CLOCK START
THE PUMP STARTS WHEN THE IRRIGATION CONTROLLER (CLOCK) BEGINS A WATERING SEQUENCE.

CLOCK RETIREMENT
THE PUMP SHUTS OFF WHEN THE CLOCK COMPLETES A WATERING SEQUENCE.

OVERHEAT PROTECTION
A 'HOT STOP' WILL BE PROVIDED IN THE PUMP VOLUTE AND WIRED TO SHUT DOWN THE PUMP WHEN OVERHEAT CONDITIONS OCCUR

DISCHARGE PIPE MANIFOLD:
THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF 2" GALVANIZED STEEL PIPE AND FITTINGS. A PRESSURE RELIEF VALVE, PRESSURE GAUGE, MCPROPELLER FLOWMETER AND BRONZE BALL VALVE WILL BE PROVIDED ON THE STATION DISCHARGE.

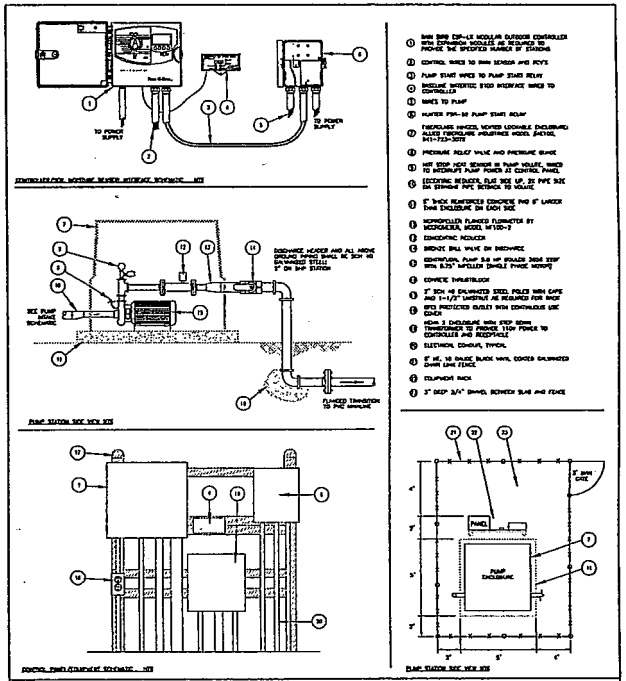
IRRIGATION CONTROLLER:
RAIN BIRD MODEL ESP-LXM WITH EXPANSION MODULES AS REQUIRED FOR THE TOTAL NUMBER OF SPECIFIED STATIONS. THE CONTROLLER SHALL ACTIVATE THE PUMP VIA THE PUMP START RELAY.

SUCTION LINE:
THE SUCTION LINE SHALL BE SCH 40 GALVANIZED STEEL WITH ECCENTRIC REDUCER AS REQUIRED, TO BELOW GRADE. TRANSITION TO HDPE SUCTION LINE AT A FLANGED FITTING AND CONTINUE PER DETAILS TO A SWING CHECK VALVE AND 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.

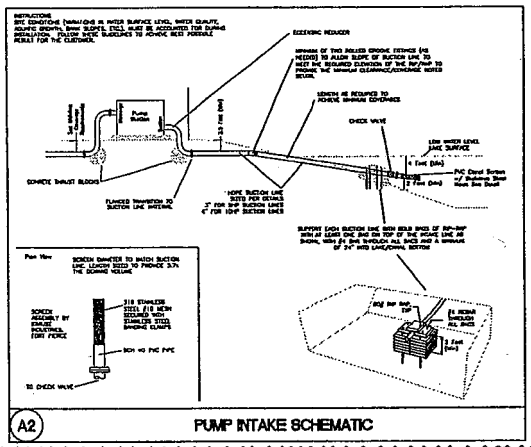
WARRANTIES:
THE CONTRACTOR SHALL WARRANT THE PUMP SYSTEM FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE SITE BY THE OWNER, NOT TO EXCEED 18 MONTHS FROM INSTALLATION.

NOTES:

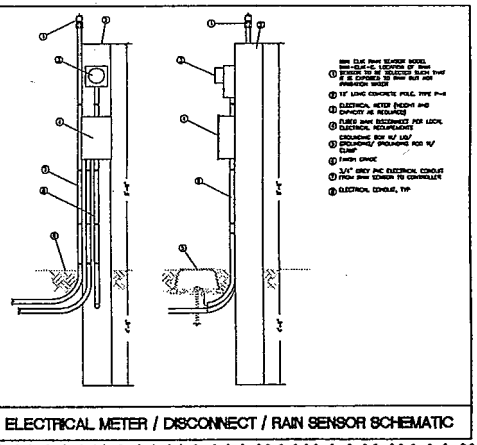
1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 3" HDPE PIPE FROM THE BOTTOM OF THE '2' PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.



A1 5 HP PUMP STATION SCHEMATIC



A2 PUMP INTAKE SCHEMATIC



A3 ELECTRICAL METER / DISCONNECT / RAIN SENSOR SCHEMATIC

NO.	BY:	DATE:	DESCRIPTION:
1	JJ	6.23.11	CONTRACTOR BUILT PUMP

DATE: 1/10/11
SCALE: N.T.S.
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MLC
APPROVED BY: TKM

MASUEN CONSULTING, LLC
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JOB #:

LEITHGOW STREET STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PUMP

IR-3
SHEET 3 OF 4

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 11/1/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

⚠ The P.O.C. is a proposed contractor built 5 hp centrifugal pump station using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 55 gpm at 65 PSI downstream of the pump.

Contractor to verify these minimum conditions can be met prior to ordering all materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with Cl. 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be 3" Cl. 200 PVC with Sch 40 PVC solvent weld fittings and thrust blocks as required.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run one spare wire in both directions (two spare wires total). Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Contractor to utilize 4"x4"x3/8" copper grounding plates, 5/8"x10' copper clad grounding rods, "One Strike" CAD wells at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
- 24" minimum with a 30" minimum at vehicular crossings;

Lateral line depths measured to top of pipe shall be:
- 18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours. For gasketed pipe, testing requires measurement of the water pumped into the mainline system, using a hydrostatic pump, to maintain 125 PSI – this water volume shall be no more than the result of the following formula:

$$L=(ND\sqrt{P})/7400$$

where L=Allowable leakage in gallons per hour
N=Number of joints in pipe tested
D=Nominal diameter of pipe (in inches)
P=Average Test Pressure (in PSI)

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing –Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

After project completion:

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller, indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermatically sealed inside two 2mil pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items shall be completed with 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of "as-built" drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED
IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:
   - A. Turn on each zone from the controller to verify automatic operation.
   - B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
   - C. Check remote control valve to ensure proper operation.
   - D. Check valve setting on pressure regulator to verify proper setting, if present.
   - E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
   - F. Check for leaks – mainline, lateral lines, valves, heads, etc.
   - G. Check all heads as follows:
     1. Proper set height (top of sprinkler is 1" below mow height)
     2. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
     3. Check wiper seal for leaks – if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
     4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
     5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
     6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
     7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.
2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.
3. Check rain shut-off device monthly to ensure it functions properly.
4. Inspect all filters monthly and clean/repair/replace as needed.
5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.
6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.
7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.
8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.
9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

NO.	DESCRIPTION:	BY:	DATE:	APPROVED BY:
1	CONTRACTOR BUILT PUMP	JW	6.23.11	TRM

DATE: 1/10/11
SCALE: N.T.S.
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MJC

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SEAL

LEITHGOW STREET STA (EWTP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION NOTES

IR-4
SHEET 4 OF 4

IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
21 / 20		STATION NUMBER / GALLONS PER MINUTE–CATALOG FLOW / VALVE SIZE	
1	P	EXISTING CONTRACTOR BUILT CENTRIFUGAL PRESSURE DEMAND PUMP STATION, EXISTING RAIN BIRD ESP-LXM MODULAR CONTROLLER WITH 32 STATIONS, EXISTING RAIN SENSOR AND SOIL MOISTURE SENSOR ALL LOCATED ON THE CANE SLOUGH/ELKS SITE (NOT SHOWN).	
9		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) IN A CARSON 1220 JUMBO VALVE BOX.	B
3		NIBCO T-113 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		3" CLASS 200 PVC MAINLINE WITH SCH 40 PVC SOLVENT WELD FITTINGS	L
		EXISTING IPS HDPE	
		CLASS 200 PVC SLEEVES (SIZE PER PLAN) VIA OPEN TRENCH OR DR11-3608 IPS HDPE DIRECTIONAL BORE WHERE SHOWN ON PLANS	D

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) – THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

IRRIGATION HEAD LEGEND

QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN (P.S.I)	DESIGN (G.P.M)
143	▲	RAIN BIRD 1404 FLOOD BUBBLER ON POLY PIPE	Q	30	1.00
32		RAIN BIRD 1806-SAM-PRS-45 W/ HUNTER MP1000 NOZZLE MAROON ADJ ARC 90-210	R	45	VAR
8		RAIN BIRD 1812-SAM-PRS-45 W/ HUNTER MP1000 NOZZLE MAROON ADJ ARC 90-210	S	45	VAR
33		RAIN BIRD 1806-SAM-PRS-45 W/ HUNTER MP2000 NOZZLE BLACK ADJ ARC 90-210	R	45	VAR
4		RAIN BIRD 1812-SAM-PRS-45 W/ HUNTER MP2000 NOZZLE BLACK ADJ ARC 90-210	S	45	VAR
8		RAIN BIRD 1806-SAM-PRS-45 W/ HUNTER MP3000 NOZZLE BLUE ADJ ARC 90-210	R	45	VAR
4		RAIN BIRD 1812-SAM-PRS-45 W/ HUNTER MP3000 NOZZLE BLUE ADJ ARC 90-210	S	45	VAR
18		RAIN BIRD 1806-SAM-PRS-45 W/ HUNTER MPCORNER NOZZLE SST	R	45	VAR
3		HUNTER PGP-04-CV-06 NOZZLE (QUARTER CIRCLE)	V1	50	2.70
9		HUNTER PGP-04-CV-09 NOZZLE (HALF CIRCLE)	V1	50	5.20
4		HUNTER PGP-12-CV-06 NOZZLE (QUARTER CIRCLE) ON SCH 40 RISER	V3 V5	50	2.70
59		HUNTER PGP-12-CV-09 NOZZLE (HALF CIRCLE) ON SCH 40 RISER	V3 V5	50	5.20
10		HUNTER PGP-12-CV-12 NOZZLE (FULL CIRCLE) ON SCH 40 RISER	V3 V5	50	11.90

HDPE NOTE:

1. NO ELECTROFUSION/BUTT FUSION JOINTS MAY BE MADE WITHOUT PSL STAFF OR THEIR ASSIGNS ON SITE TO PHOTOGRAPH EACH JOINT.

GRAPHIC SCALE

30 0 15 30 60

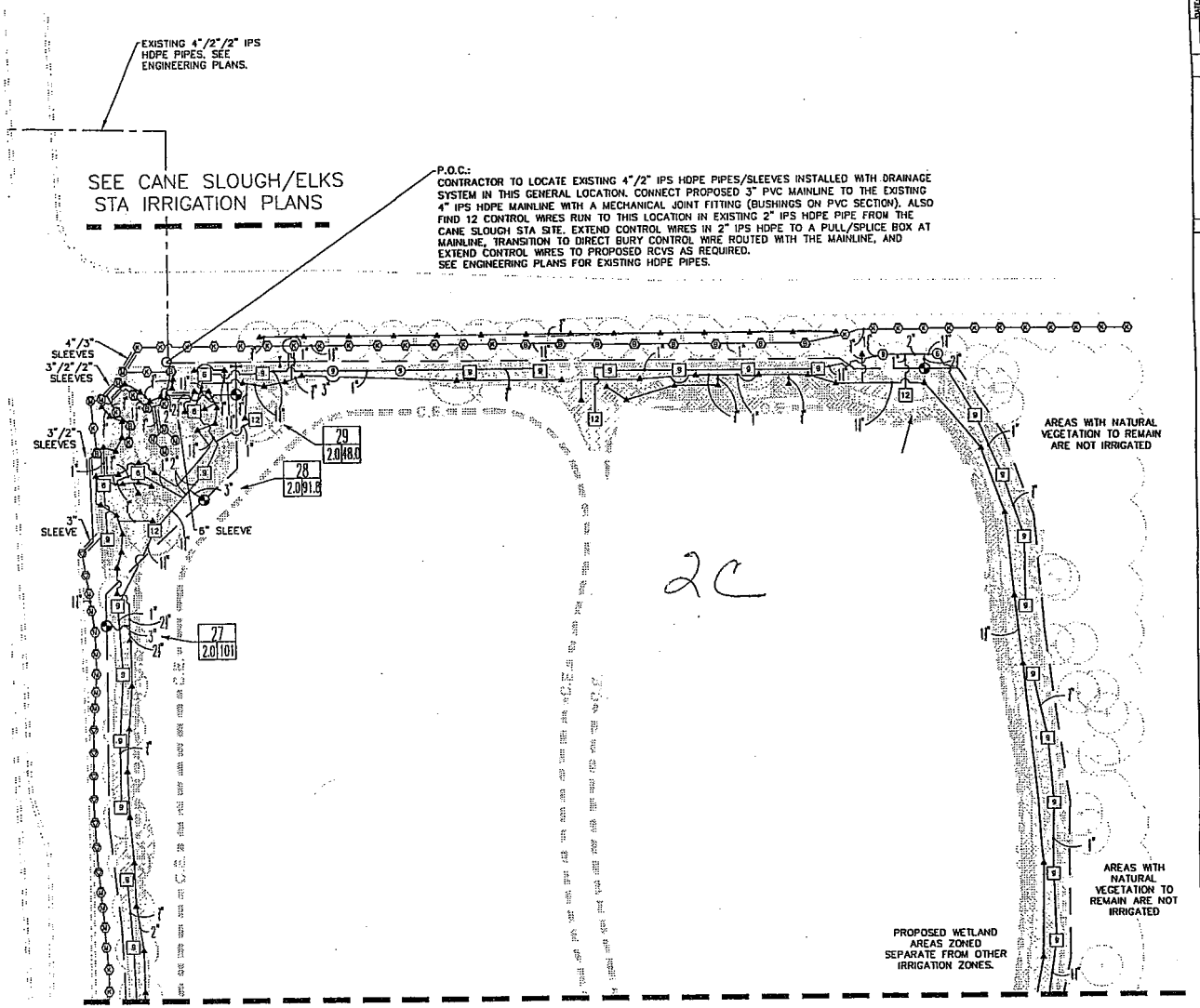
(IN FEET)
1 INCH = 30 FEET

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

It's fast, It's free, It's the law.

Call 811 two business days before digging

MAINLINE LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING TO THE IRRIGATION SPECIFICATIONS AND DETAILS.



DATE:	3/15/11
SCALE:	1"=30'
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	TMJ

BY:	DATE:	DESCRIPTION:
JJ	6.23.11	CONTRACTOR BUILT PUMP

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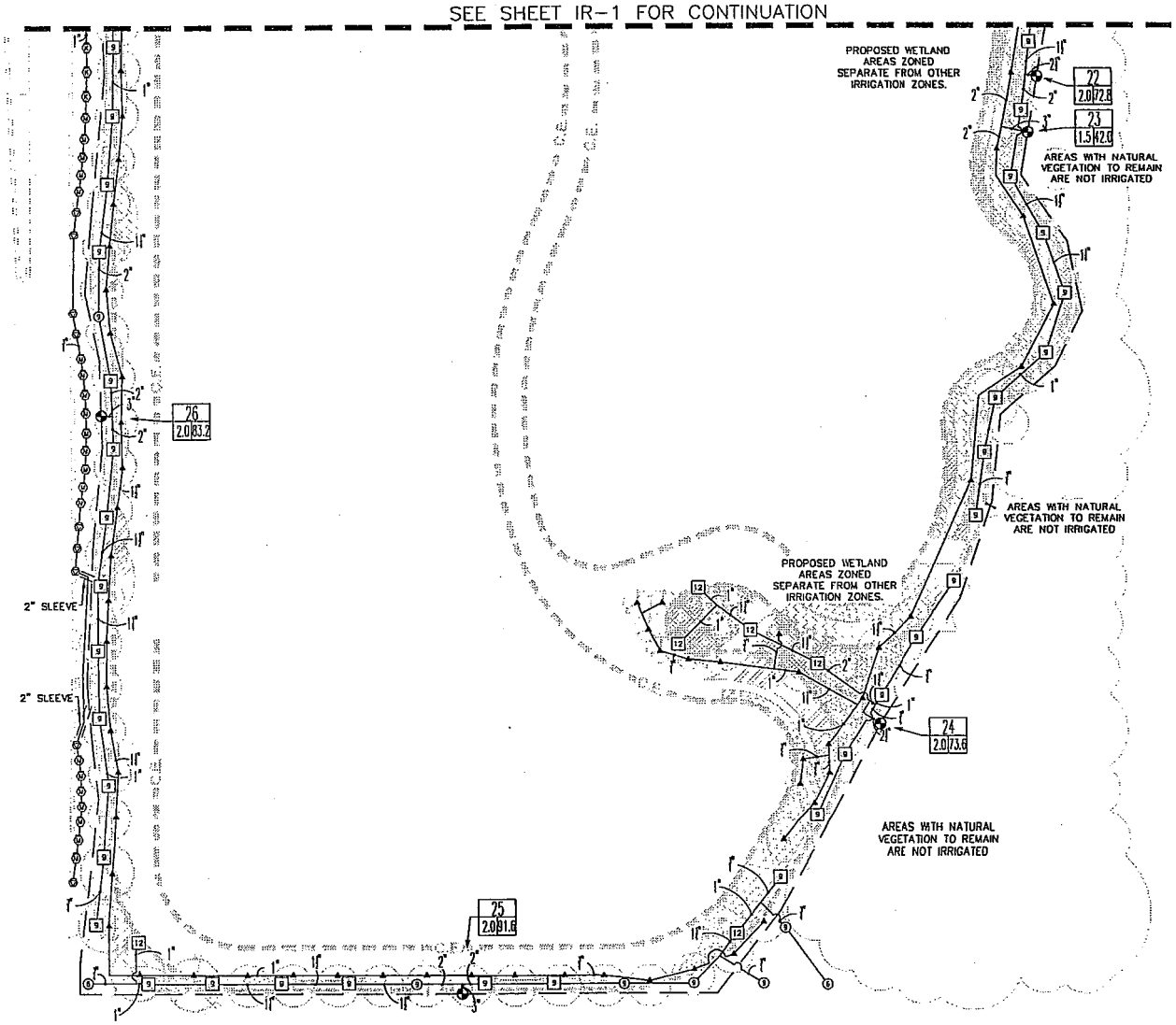
SEAL

LENNARD SQ/AZZI STA (BWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION PLAN

IR–1

SHEET 1 OF 4



GRAPHIC SCALE

(IN FEET)
1 INCH = 30 FEET

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DESCRIPTION:	BY:	DATE:
		DATE: 3/15/11
		SCALE: 1"=30'
		DESIGN BY: JMJ
		DRAWN BY: JMJ
		CHECKED BY: MJC
		APPROVED BY: TKM

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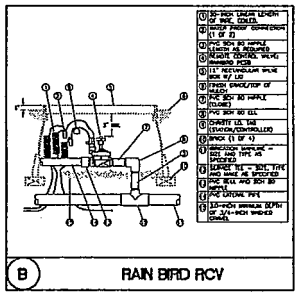
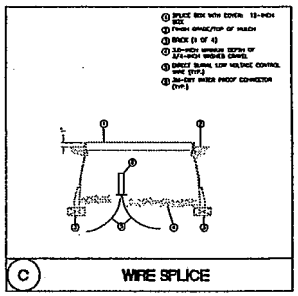
SEAL

LENNARD SQ/AZZI STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN

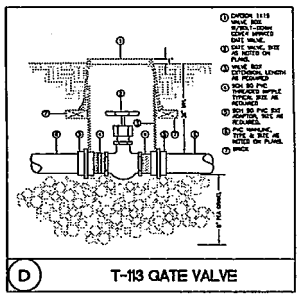
IR-2
SHEET 2 OF 4



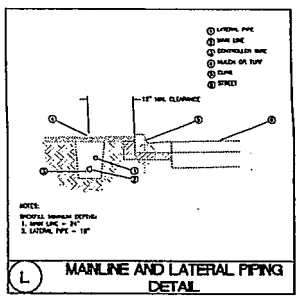
B RAIN BIRD RCV



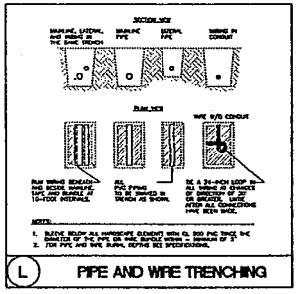
C WIRE SPLICE



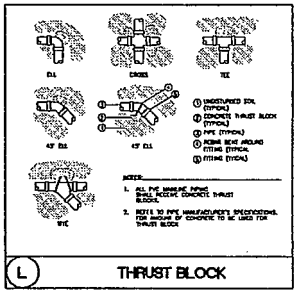
D T-113 GATE VALVE



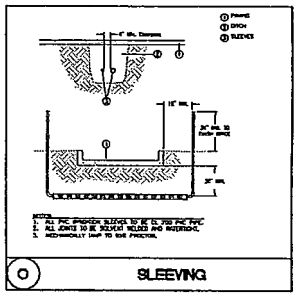
L MAINLINE AND LATERAL PIPING DETAIL



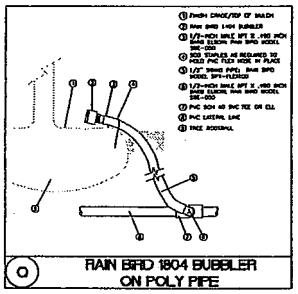
L PIPE AND WIRE TRENCHING



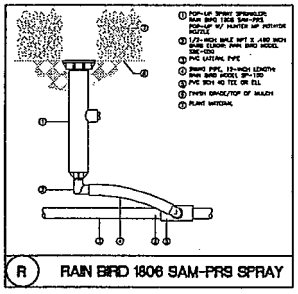
L THRUST BLOCK



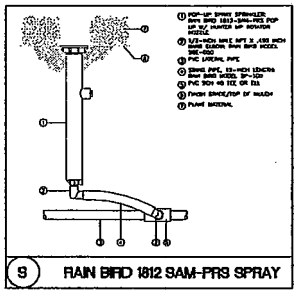
O SLEEVING



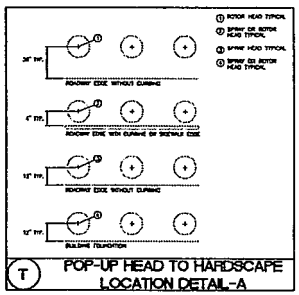
O RAIN BIRD 1804 BUBBLER ON POLY PIPE



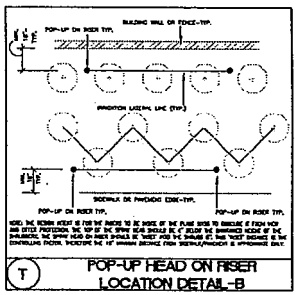
R RAIN BIRD 1806 SAM-PRS SPRAY



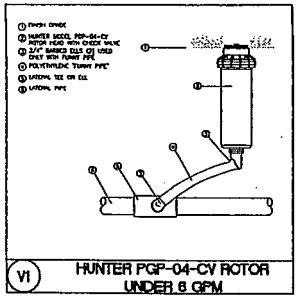
S RAIN BIRD 1812 SAM-PRS SPRAY



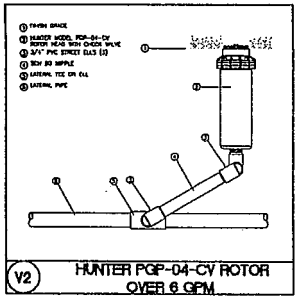
T POP-UP HEAD TO HARDSCAPE LOCATION DETAIL-A



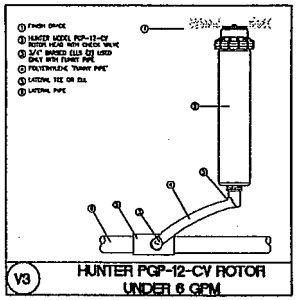
T POP-UP HEAD ON RISER LOCATION DETAIL-B



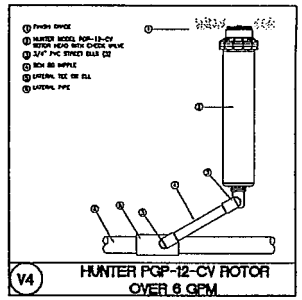
V1 HUNTER PGP-04-CV ROTOR UNDER 6 GPM



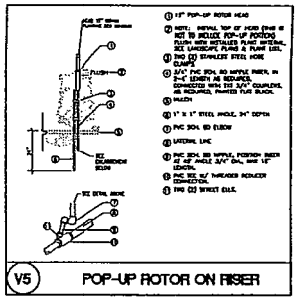
V2 HUNTER PGP-04-CV ROTOR OVER 6 GPM



V3 HUNTER PGP-12-CV ROTOR UNDER 6 GPM



V4 HUNTER PGP-12-CV ROTOR OVER 6 GPM



V5 POP-UP ROTOR ON RISER

DATE:	3/15/11
SCALE:	NTS
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MJC
APPROVED BY:	TKH

DESCRIPTION: | DATE: | BY:

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LENNARD SQ/AZZI STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION DETAILS

IR-3

SHEET 3 OF 4

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 11/11/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage leads to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

⚠ The P.O.C. is a 6" IPS HDPE pipe supplied by an existing contractor built centrifugal pump using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 100 gpm at 62 PSI downstream of the pipe connection.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with CL 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be 2 1/2" CL 200 PVC with Sch 40 PVC solvent weld fittings and thrust blocks as required.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (gray, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run three spare wire in both directions (six spare wires total). Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Contractor to utilize 4"x8"x5/8" copper grounding plates, 5/8"x10' copper clad grounding rods, "One Strike" CAD wells at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pips or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe. If not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell and of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
24" minimum with a 30" minimum at vehicular crossings;
Lateral line depths measured to top of pipe shall be:
18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (ball fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed the appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing –Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

After project completion:

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wets and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at all points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller, indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mil pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items, as determined by owner, shall be completed within 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of "as-built" drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED
IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

A. Turn on each zone from the controller to verify automatic operation.
B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
C. Check remote control valve to ensure proper operation.
D. Check setting on pressure regulator to verify proper setting, if present.
E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
F. Check for leaks – mainline, lateral lines, valves, heads, etc.
G. Check all heads as follows:

1. Proper set height (top of sprinkler is 1" below mow height)
2. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
3. Check wiper seal for leaks – if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

DESCRIPTION:	BY:	DATE:
CONTRACTOR BUILT PUMP	JJ	5.23.11

DATE: 3/15/11
SCALE: NTS
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MLC
APPROVED BY: TKM

MASUEN CONSULTING, LLC
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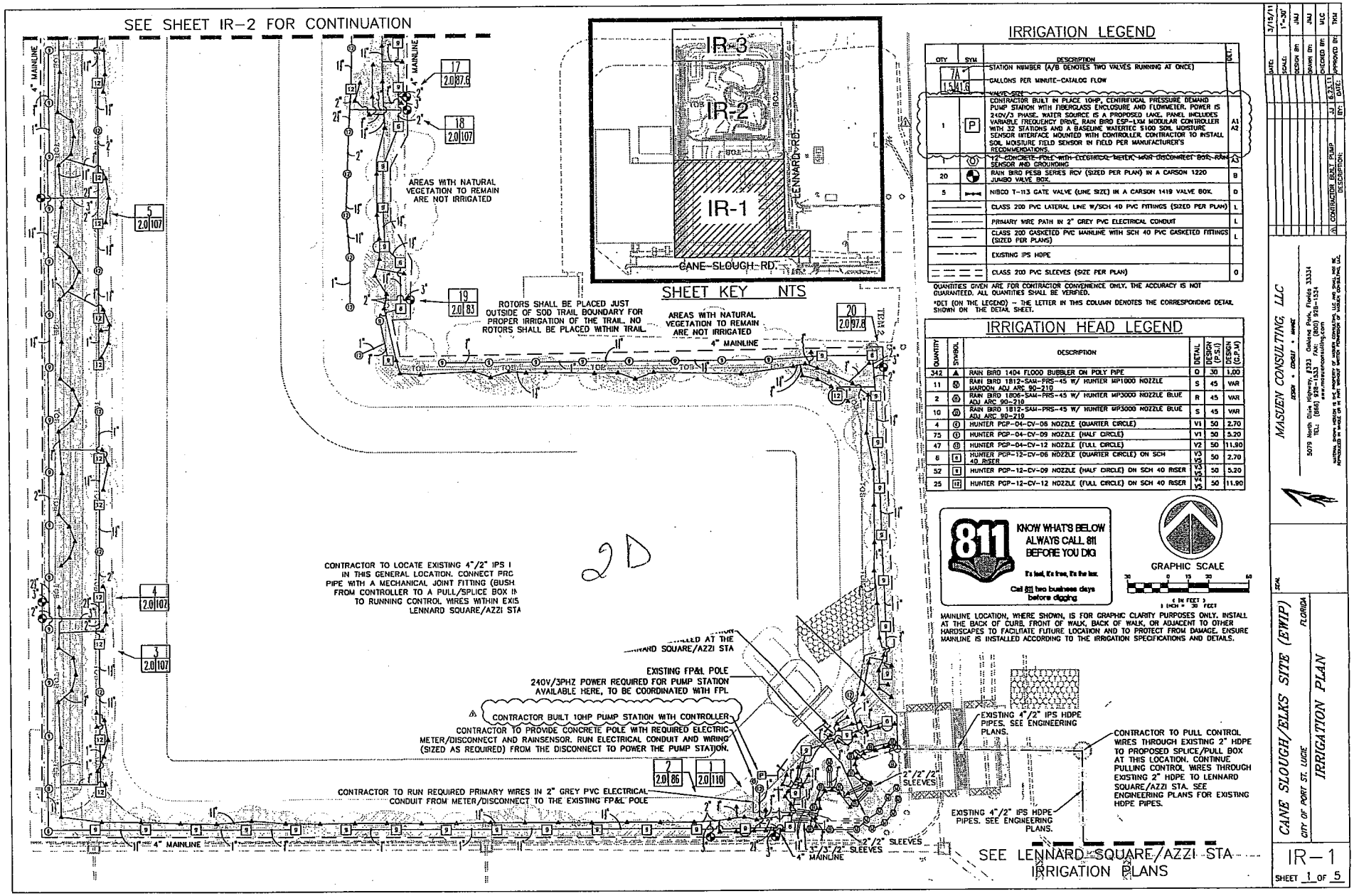
LENNARD SQ/AZZI STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION NOTES

IR-4
SHEET 4 OF 4



IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
7A / 1.5/41.6		STATION NUMBER (A/B DENOTES TWO VALVES RUNNING AT ONCE) / GALLONS PER MINUTE–CATALOG FLOW / VALVE SIZE	
1	P	CONTRACTOR BUILT IN PLACE 10HP, CENTRIFUGAL PRESSURE DEMAND PUMP STATION WITH FIBERGLASS ENCLOSURE AND FLOWMETER. POWER IS 240V/3 PHASE. WATER SOURCE IS A PROPOSED LMS. PANEL INCLUDES VARIABLE FREQUENCY DRIVE, RAIN BIRD ESP-LXM MODULAR CONTROLLER WITH 32 STATIONS AND A BASELINE WATERTEC S100 SOIL MOISTURE SENSOR INTERFACE MOUNTED WITH CONTROLLER. CONTRACTOR TO INSTALL SOIL MOISTURE FIELD SENSOR IN FIELD PER MANUFACTURER'S RECOMMENDATIONS.	A1 A2
		12' CONCRETE POLE WITH ELECTRICAL METER MAIN DISCONNECT BOX, RAIN SENSOR AND GROUNDING	A
20		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) IN A CARSON 1220 JUMBO VALVE BOX.	B
5		NIBCO T-113 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		PRIMARY WIRE PATH IN 2" GREY PVC ELECTRICAL CONDUIT	L
		CLASS 200 GASKETED PVC MAINLINE WITH SCH 40 PVC GASKETED FITTINGS (SIZED PER PLANS)	L
		EXISTING IPS HDPE	
		CLASS 200 PVC SLEEVES (SIZE PER PLAN)	D

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) – THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

IRRIGATION HEAD LEGEND

QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN (P.S.I)	DESIGN (G.P.M)
342	▲	RAIN BIRD 1404 FLOOD BUBBLER ON POLY PIPE	Q	30	1.00
11	M	RAIN BRD 1812-SAM-PRS-45 W/ HUNTER MP1000 NOZZLE MAROON ADJ ARC 90-210	S	45	VAR
2	M	RAIN BRD 1806-SAM-PRS-45 W/ HUNTER MP3000 NOZZLE BLUE ADJ ARC 90-210	R	45	VAR
10	M	RAIN BRD 1812-SAM-PRS-45 W/ HUNTER MP3000 NOZZLE BLUE ADJ ARC 90-219	S	45	VAR
4	Q	HUNTER PGP-04-CV-06 NOZZLE (QUARTER CIRCLE)	V1	50	2.70
75	H	HUNTER PGP-04-CV-09 NOZZLE (HALF CIRCLE)	V1	50	5.20
47	F	HUNTER PGP-04-CV-12 NOZZLE (FULL CIRCLE)	V2	50	11.90
6	Q	HUNTER PGP-12-CV-06 NOZZLE (QUARTER CIRCLE) ON SCH 40 RISER	V3 V4	50	2.70
52	H	HUNTER PGP-12-CV-09 NOZZLE (HALF CIRCLE) ON SCH 40 RISER	V3 V4	50	5.20
25	F	HUNTER PGP-12-CV-12 NOZZLE (FULL CIRCLE) ON SCH 40 RISER	V3 V4	50	11.90

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GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FEET

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DATE:	3/15/11
SCALE:	1"=30'
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	WLC
APPROVED BY:	TKM
1 CONTRACTOR BUILT PUMP DESCRIPTION:	5.23.11 JMJ DATE: BY:

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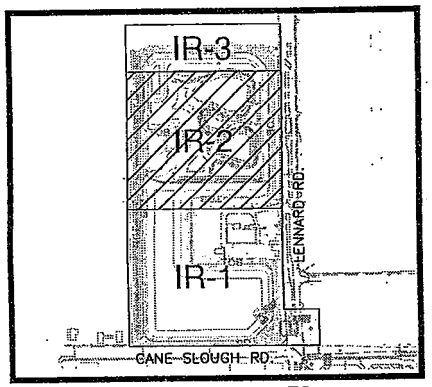
SEAL

CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN

IR – 1
SHEET 1 OF 5



SHEET KEY NTS

NOTES:

1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 4" HDPE PIPE FROM THE BOTTOM OF THE 'Z' PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

HDPE NOTE:

1. NO ELECTROFUSION/BUTT FUSION JOINTS MAY BE MADE WITHOUT PSL STAFF OR THEIR ASSIGNS ON SITE TO PHOTOGRAPH EACH JOINT.

SOIL MOISTURE SENSOR NOTES:

1. PLACE ALL SOIL MOISTURE SENSOR WIRING IN 1" SCH 40 PVC CONDUIT
2. SOIL MOISTURE SENSOR SHOULD BE PLACED IN THE MIDDLE OF A SPRAY OR DRIP AREA AS PER MANUFACTURER'S RECOMMENDATIONS.

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GRAPHIC SCALE
20 0 15 30 60
(IN FEET)
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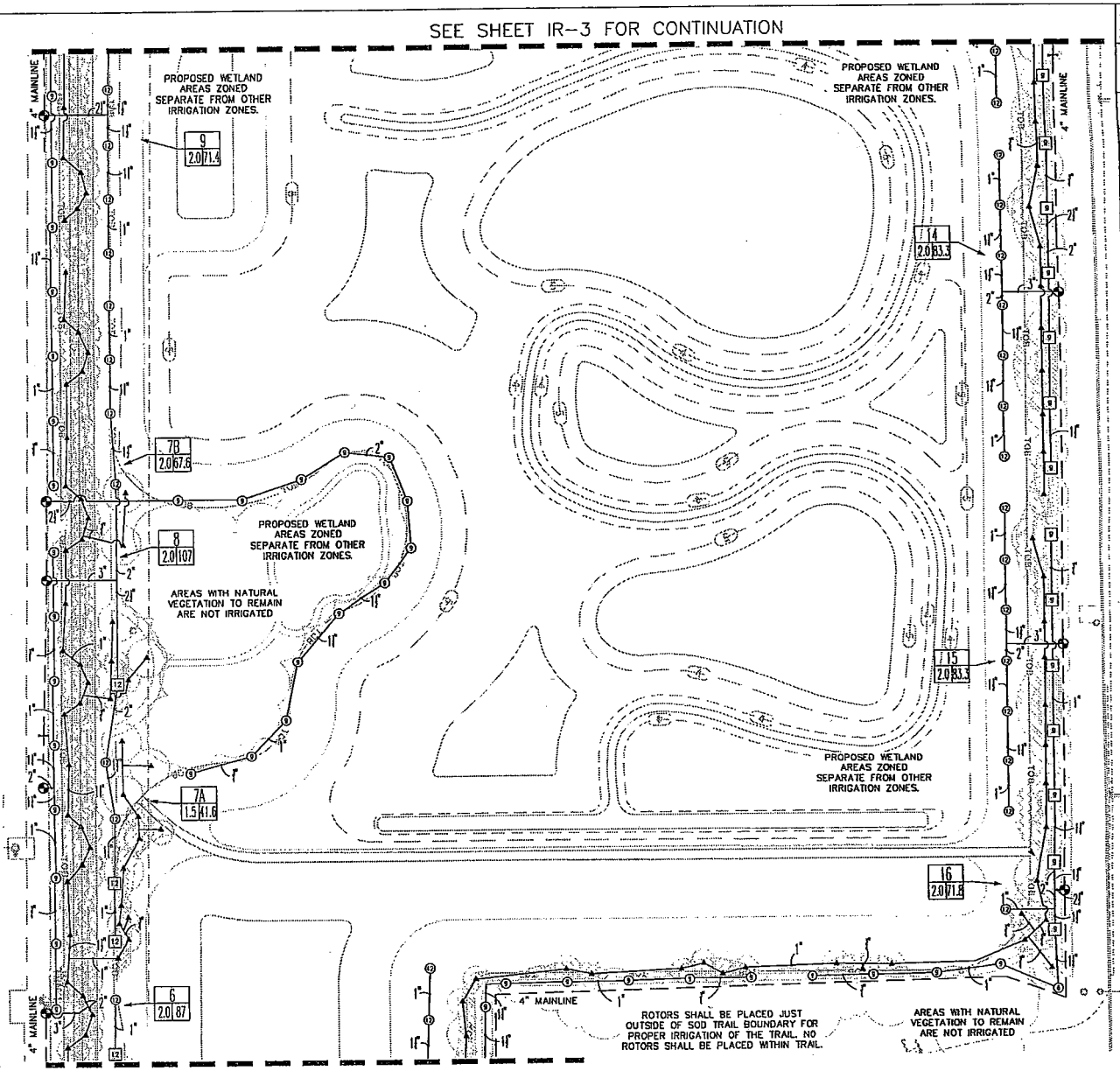

DATE:	3/19/11
SCALE:	1"=30'
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	TKM
1 CONTRACTOR BUILT PUMP	JJ 6.23.11
DESCRIPTION:	BY: DATE:

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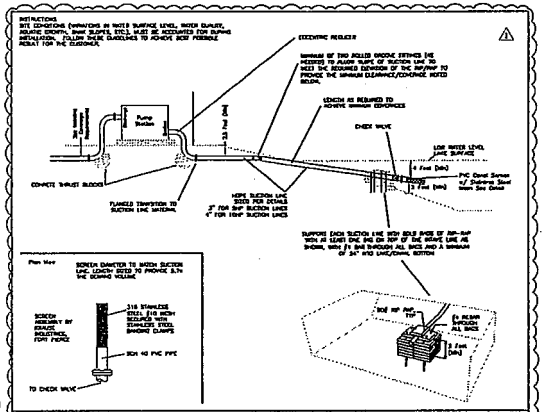
SEAL

CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN

IR-2
SHEET 2 OF 5



A2 PUMP INTAKE SCHEMATIC

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GRAPHIC SCALE

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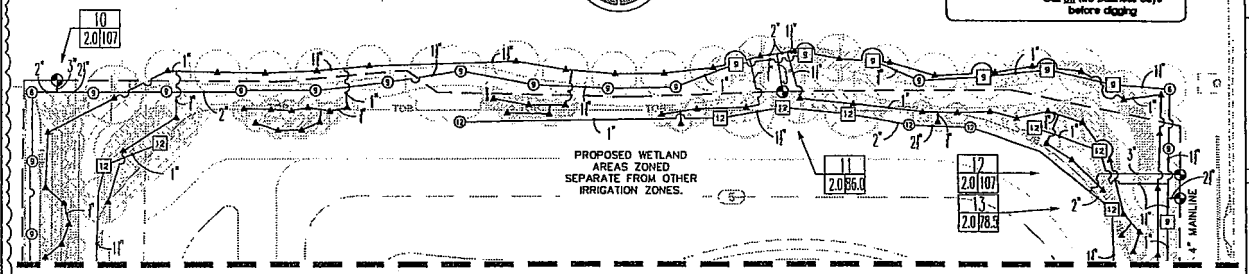
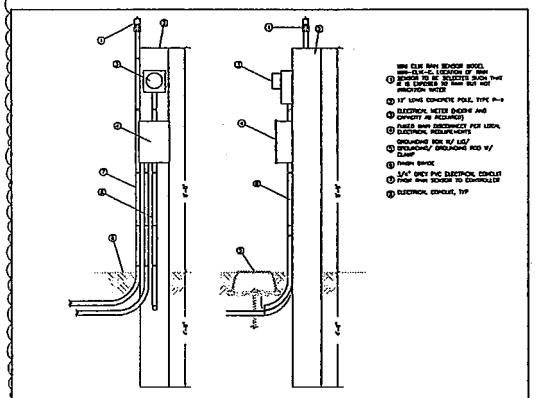
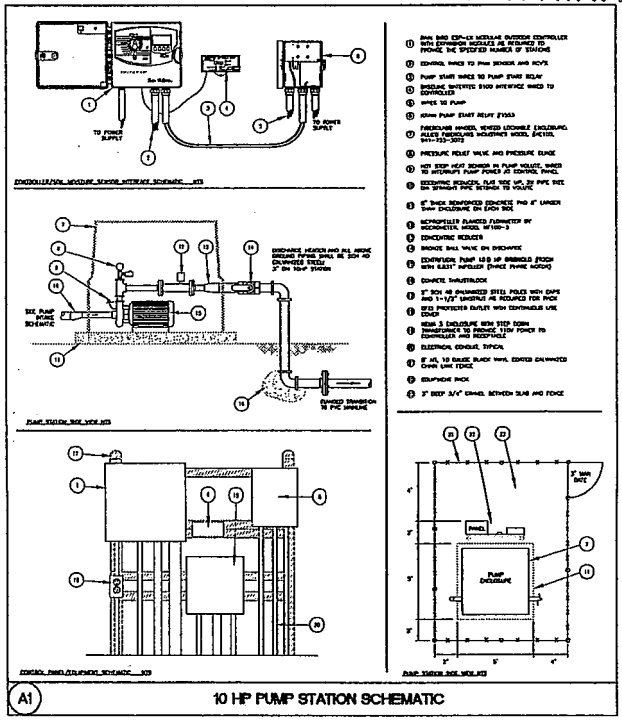


SEE SHEET IR-2 FOR CONTINUATION



A3 ELECTRICAL METER / DISCONNECT / RAIN SENSOR SCHEMATIC



A1 10 HP PUMP STATION SCHEMATIC

NOTES:

1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 4" HDPE PIPE FROM THE BOTTOM OF THE "Z" PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

ENCLOSED PRESSURE DEMAND
SINGLE PUMP CENTRIFUGAL PUMP SYSTEM

PURPOSE:
TO PROVIDE A COMPLETE, ENCLOSED PRESSURE DEMAND PUMP SYSTEM AS SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO THE OWNER FOR APPROVAL, PRIOR TO PURCHASING SYSTEM COMPONENTS. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL MAJOR SYSTEM COMPONENTS.

ENCLOSURE:
THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE ALLIED FIBERGLASS INDUSTRIES MODEL AE100.

MOUNTING:
ALL EQUIPMENT SHALL BE SECURELY MOUNTED TO THE 6" THICK REINFORCED CONCRETE SLAB WITH GALVANIZED HARDWARE. 1-1/2" UNISTRUT EQUIPMENT RACK SHALL SUPPORT CONTROLLER, PUMP CONTROLLER, GFCI OUTLET, SOIL MOISTURE SENSOR INTERFACE, STEPDOWN TRANSFORMER AND ANY MISCELLANEOUS EQUIPMENT REQUIRED.

PUMP AND MOTOR:
THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH ITS LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR.

THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 230 VOLT, 3 PHASE, 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED, CONFIGURED TO ALLOW DIRECT MOUNTING OF THE PUMP'S LIQUID END.

THE CLOSE-COUPLED PUMP AND DRIVING MOTOR SHALL BE OBTAINED FROM A SINGLE SOURCE.

1. 10HP SYSTEM: THE MOTOR SHALL BE RATED AT 10 H.P. AT 230 VOLTS, 3 PHASE, 60 HZ. THE PUMP SYSTEM SHALL UTILIZE A VARIABLE FREQUENCY DRIVE SET FOR SLOW START (0% TO 100% OVER 5 SECONDS) WITH 100% OPERATION AT 3450 RPM. THE PUMP SHALL BE CAPABLE OF DELIVERING 110 GPM AT 75 PSI AT THE PUMP DISCHARGE

OPERATION
THE STATION OPERATES AS A LOW PRESSURE START, HIGH PRESSURE RETIRE SYSTEM ENABLED THROUGH THE CONTROL PANEL.

OVERHEAT PROTECTION
A 'HOT STOP' WILL BE PROVIDED IN THE PUMP VOLUTE AND WIRED TO SHUT DOWN THE PUMP WHEN OVERHEAT CONDITIONS OCCUR.

DISCHARGE PIPE MANIFOLD:
THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF 3" GALVANIZED STEEL PIPE AND FITTINGS. A PRESSURE RELIEF VALVE, PRESSURE GAUGE, MCPROPELLER FLOWMETER, CONNECTION TO PRESSURE TANK, AND BRONZE BALL VALVE WILL BE PROVIDED ON THE STATION DISCHARGE.

PRESSURE TANK:
A WELLMATE CAPTIVE AIR TANK #WM-6 (20 GAL, 125PSI RATED) WITH A PRESSURE TRANSDUCER (INCLUDED WITH CONTROL PANEL) WILL BE PLUMBED INTO THE DISCHARGE HEADER, ISOLATED BY A GALVANIZED UNION. THE PRESSURE TRANSDUCER WILL BE WIRED TO THE CONTROL PANEL.

IRRIGATION CONTROLLER:
RAIN BIRD MODEL ESP-LXM WITH EXPANSION MODULES AS REQUIRED FOR THE TOTAL NUMBER OF SPECIFIED STATIONS.

SUCTION LINE:
THE SUCTION LINE SHALL BE SCH 40 GALVANIZED STEEL WITH ECCENTRIC REDUCER AS REQUIRED UNTIL TO BELOW GRADE. TRANSITION TO HDPE SUCTION LINE AT A FLANGED FITTING AND CONTINUE PER DETAILS TO A SWING CHECK VALVE AND 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.

WARRANTIES:
THE CONTRACTOR SHALL WARRANT THE PUMP SYSTEM FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE SITE BY THE OWNER, NOT TO EXCEED 18 MONTHS FROM INSTALLATION.

DESCRIPTION:	DATE:	BY:
A1 CONTRACTOR BUILT PUMP	6.23.11	JJ

DATE: 3/15/11
SCALE: 1"=30'
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MJC
APPROVED BY: TRM

MASUEN CONSULTING, LLC
DESIGN • CONSULT • MANAGE
5079 North Dixie Highway, #123 • Oakland Park, Florida 33334
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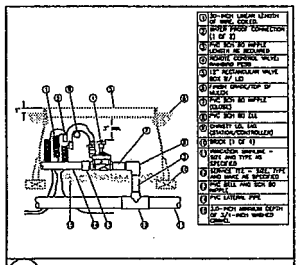
JOB #

CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

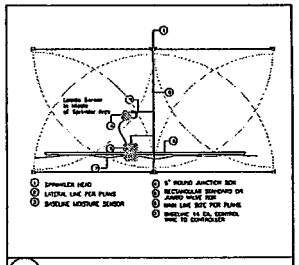
IRRIGATION PLAN & PUMP

IR-3

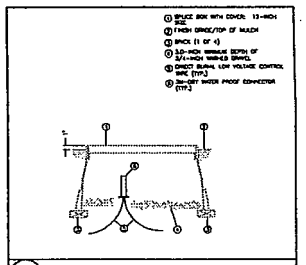
SHEET 3 OF 5



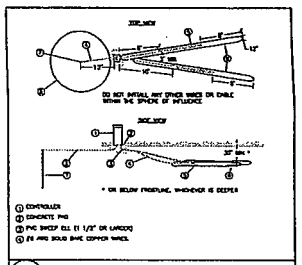
B RAIN BIRD RCV



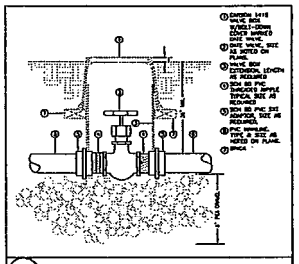
C2 SOIL MOISTURE SENSOR



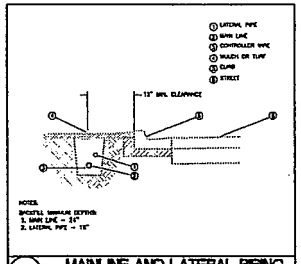
C WIRE SPLICE



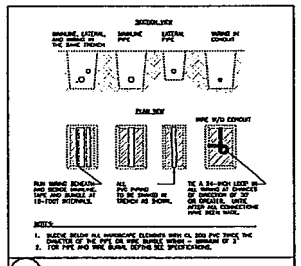
C GROUNDING DETAIL



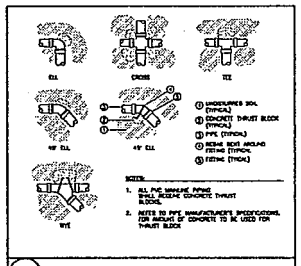
D T-113 GATE VALVE



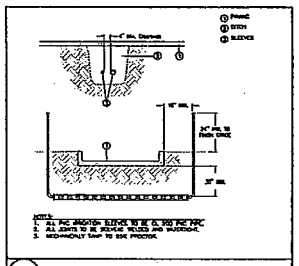
L MAINLINE AND LATERAL PIPING DETAIL



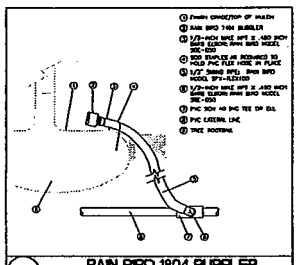
L PIPE AND WIRE TRENCHING



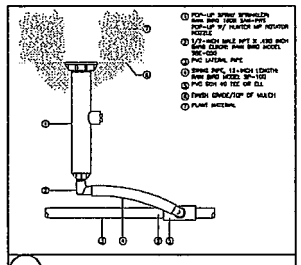
L THRUST BLOCK



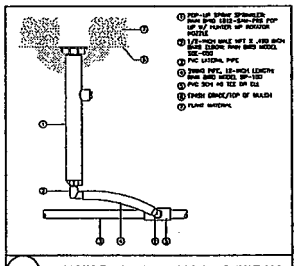
O SLEEVING



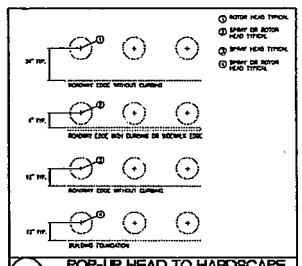
O RAIN BIRD 1804 BUBBLER ON POLY PIPE



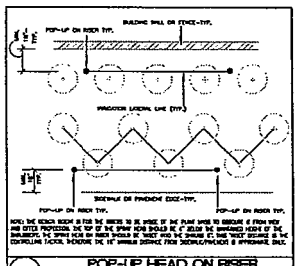
R RAIN BIRD 1806 SAM-PRS SPRAY



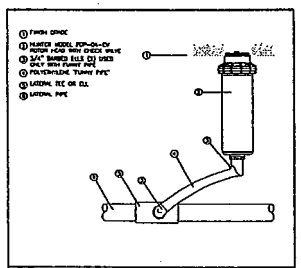
S RAIN BIRD 1812 SAM-PRS SPRAY



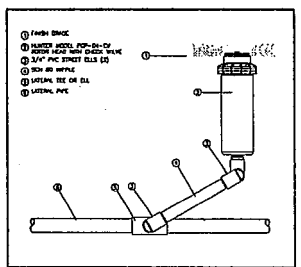
T POP-UP HEAD TO HARDSCAPE LOCATION DETAIL-A



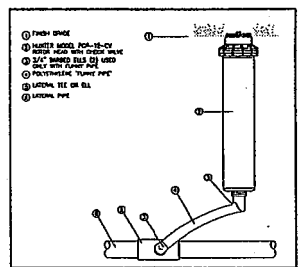
T POP-UP HEAD ON RISER LOCATION DETAIL-B



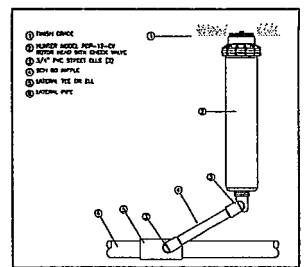
V1 HUNTER PGP-04-CV ROTOR UNDER 6 GPM



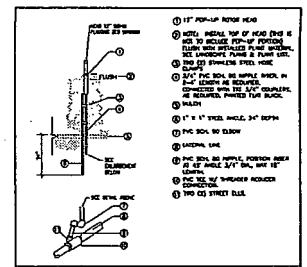
V2 HUNTER PGP-04-CV ROTOR OVER 6 GPM



V3 HUNTER PGP-12-CV ROTOR UNDER 6 GPM



V4 HUNTER PGP-12-CV ROTOR OVER 6 GPM



V5 POP-UP ROTOR ON RISER

DATE:	3/15/11
SCALE:	NTS
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	TKM
DESCRIPTION:	BY: DATE:

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SEAL

CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION DETAILS

IR-4

SHEET 4 OF 5

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 11/08/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

<u>The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.</u>

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

⚠1 The P.O.C. is a proposed contractor built centrifugal pump station using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 110 gpm at 65 PSI downstream of the pump.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with CL 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be CL 200 gasketed PVC with Sch 40 PVC gasketed fittings and thrust blocks as required (sized per plan).

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run three spare wire in both directions (six spare wires total). Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Contractor to utilize 4"x8"x5/8" copper grounding plates, 5/8"x10' copper clad grounding rods, "One Strike" CAD welds at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

<u>Solvent Weld Pipe:</u> Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

<u>Gasketed Pipe:</u> With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully sealed into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
24" minimum with a 30" minimum at vehicular crossings;
Lateral line depths measured to top of pipe shall be:
18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

<u>Mainline:</u> Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

<u>Lateral Lines:</u> The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing –Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

<u>After project completion:</u>

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mil pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items, as determined by owner, shall be completed within 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of "as-built" drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

A. Turn on each zone from the controller to verify automatic operation.
B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
C. Check remote control valve to ensure proper operation.
D. Check setting on pressure regulator to verify proper setting, if present.
E. Check flow control and adjust as needed; ensure valve closure within 10–15 seconds after deactivation by controller.
F. Check for leaks – mainline, lateral lines, valves, heads, etc.
G. Check all heads as follows:

1. Proper set height (top of sprinkler is 1" below mow height)
2. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
3. Check wiper seal for leaks – If leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

DATE:	3/15/11
SCALE:	NTS
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	TKM

	DESCRIPTION:	BY:	DATE:
1	CONTRACTOR BUILT PUMP	JJ	6.23.11

MASUEN CONSULTING, LLC
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SEAL

CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION NOTES

IR-5
SHEET 5 OF 5

IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
6 / 1.5 / 43.0		STATION NUMBER / GALLONS PER MINUTE–CATALOG FLOW / VALVE SIZE	
1	P	CONTRACTOR BUILT IN PLACE SHP, CENTRIFUGAL PUMP STATION WITH FIBERGLASS ENCLOSURE AND FLOWMETER. POWER IS 240V/1 PHASE. WATER SOURCE IS A PROPOSED LAKE. STATION INCLUDES RAIN BIRD ESP-LXM MODULAR CONTROLLER WITH 8 STATIONS AND A BASELINE WATERTEC ST100 SOIL MOISTURE SENSOR. INTERFACE MOUNTED WITH CONTROLLER. CONTRACTOR TO INSTALL SOIL MOISTURE FIELD SENSOR IN FIELD PER MANUFACTURER'S RECOMMENDATIONS.	A1 A2 A3
1	ⓞ	12' CONCRETE POLE WITH ELECTRICAL METER, MAIN DISCONNECT BOX, RAIN SENSOR AND GROUNDING	A3
7		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) IN A CARSON 1220 JUMBO VALVE BOX.	B
1		NIBCO T-113 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		PRIMARY WIRE PATH IN 2" GREY PVC ELECTRICAL CONDUIT	L
		2-1/2" CLASS 200 PVC MAINLINE WITH SCH 40 PVC SOLVENT WELD FITTINGS	L

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) – THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

IRRIGATION HEAD LEGEND

QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN (P.S.I)	DESIGN (G.P.M)
129	▲	RAIN BIRD 1404 FLOOD BUBBLER ON POLY PIPE	D	30	1.00
30	ⓢ	HUNTER PGP-04-CV-09 NOZZLE (HALF CIRCLE)	V1	50	5.20
3	ⓢ	HUNTER PGP-12-CV-06 NOZZLE (QUARTER CIRCLE) ON SCH 40 RISER	V3 V5	50	2.70
6	ⓢ	HUNTER PGP-12-CV-09 NOZZLE (HALF CIRCLE) ON SCH 40 RISER	V3 V5	50	5.20

NOTES:

1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 3" HDPE PIPE FROM THE BOTTOM OF THE "Z" PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

HDPE NOTE:

1. NO ELECTROFUSION/BUTT FUSION JOINTS MAY BE MADE WITHOUT PSL STAFF OR THEIR ASSIGNS ON SITE TO PHOTOGRAPH EACH JOINT.

SOIL MOISTURE SENSOR NOTES:

1. PLACE ALL SOIL MOISTURE SENSOR WIRING IN 1" SCH 40 PVC CONDUIT
2. SOIL MOISTURE SENSOR SHOULD BE PLACED IN THE MIDDLE OF A SPRAY OR DRIP AREA AS PER MANUFACTURER'S RECOMMENDATIONS.

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

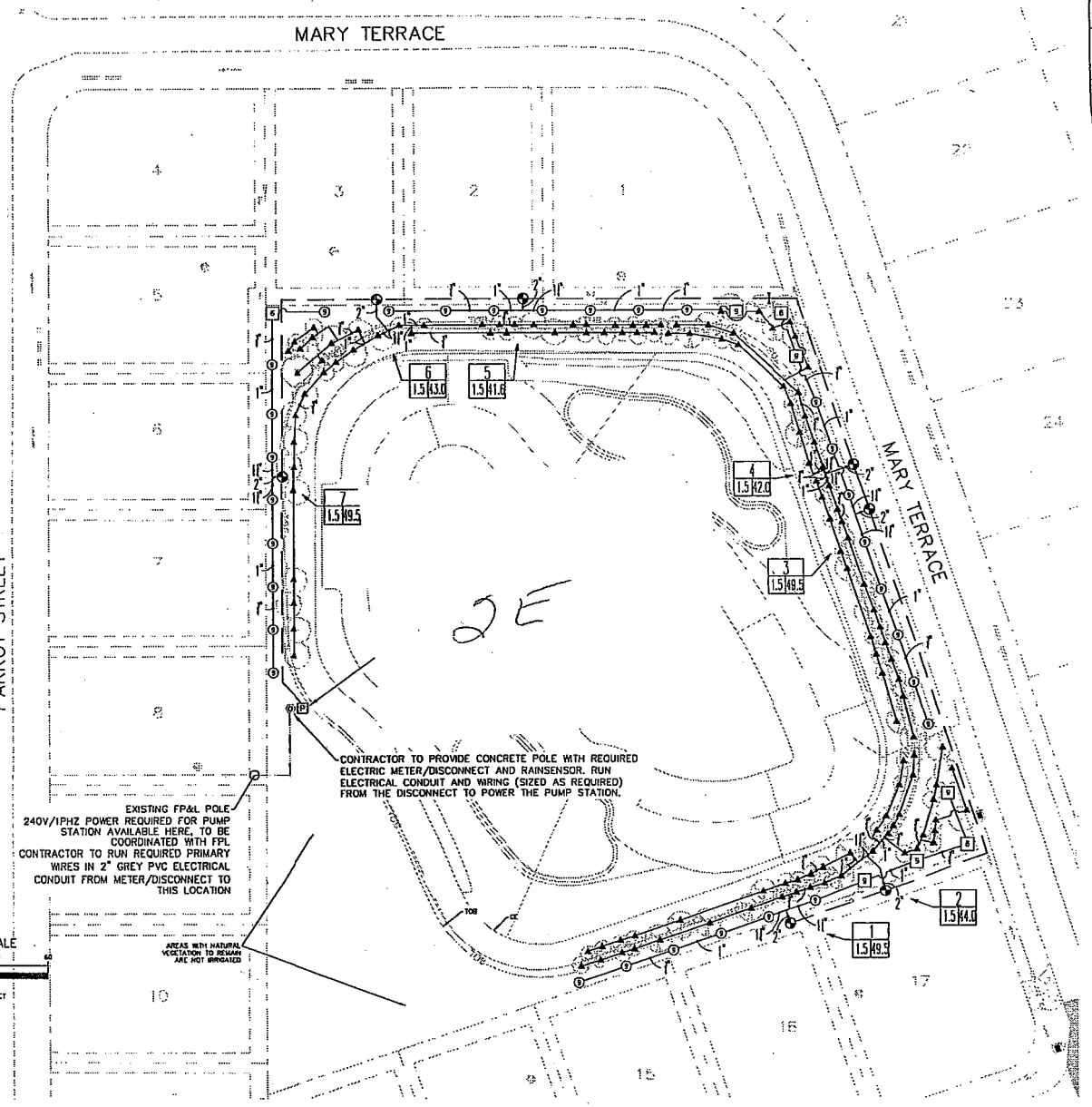
It's fast, It's free, It's the law.

Call 811 two business days before digging

GRAPHIC SCALE

(IN FEET)
1 INCH = 30 FEET

MAINLINE LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING TO THE IRRIGATION SPECIFICATIONS AND DETAILS.



DATE:	1/13/11
SCALE:	1"=30'
DESIGN BY:	MLC
DRAWN BY:	MLC
CHECKED BY:	JMJ
BY:	JJ
DATE:	6.23.11
DESCRIPTION:	CONTRACTOR BUILT PUMP
APPROVED BY:	TRM

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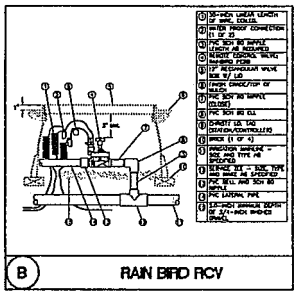
ETAL

MARY TERRACE STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

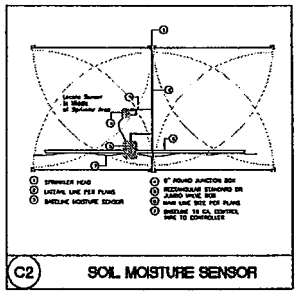
IRRIGATION PLAN

IR–1

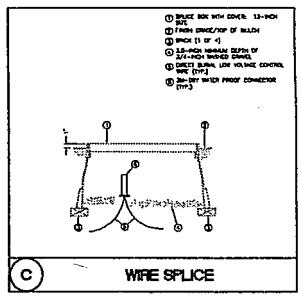
SHEET 1 OF 4



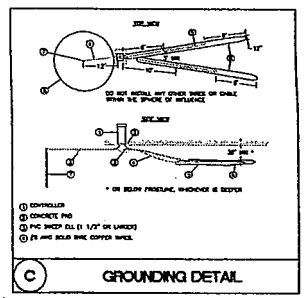
B RAIN BIRD RCV



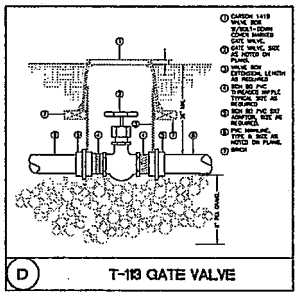
C2 SOIL MOISTURE SENSOR



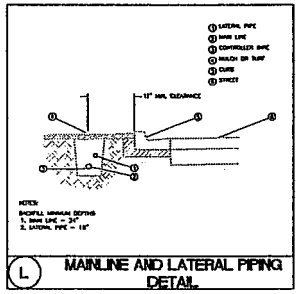
C WIRE SPLICE



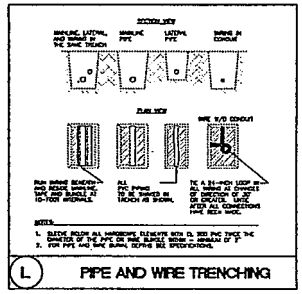
C GROUNDING DETAIL



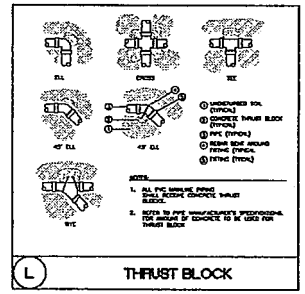
D T-113 GATE VALVE



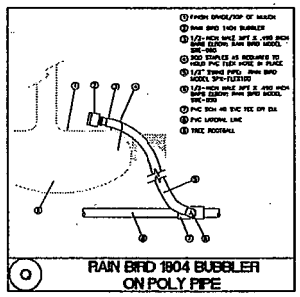
L MAINLINE AND LATERAL PIPING DETAIL



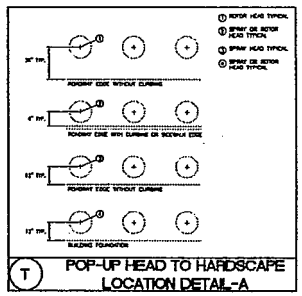
L PIPE AND WIRE TRENCHING



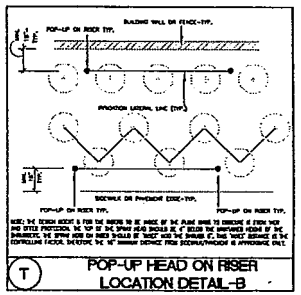
L THRUST BLOCK



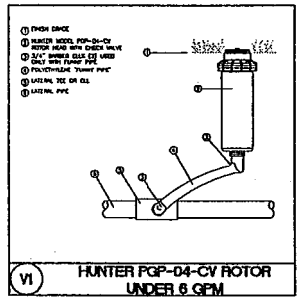
O RAIN BIRD 1804 BUBBLER ON POLY PIPE



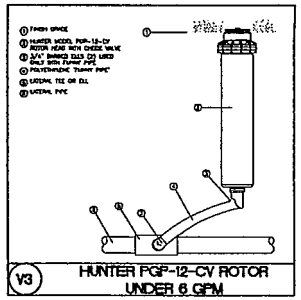
T POP-UP HEAD TO HARDSCAPE LOCATION DETAIL-A



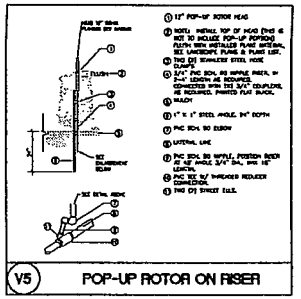
T POP-UP HEAD ON RISER LOCATION DETAIL-B



V1 HUNTER PGP-04-CV ROTOR UNDER 6 GPM



V3 HUNTER PGP-12-CV ROTOR UNDER 6 GPM



V5 POP-UP ROTOR ON RISER

DESCRIPTION:	BY:	DATE:	APPROVED BY:
		1/13/11	TKM
		N.T.S.	JMJ
		MLC	MLC
		MLC	

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SCALE:

MARY TERRACE STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION DETAILS

IR-2

SHEET 2 OF 4

ENCLOSED CLOCK START
SINGLE PUMP CENTRIFUGAL PUMP SYSTEM

PURPOSE:
TO PROVIDE A COMPLETE ENCLOSED CLOCK START PUMP SYSTEM AS SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO THE OWNER FOR APPROVAL, PRIOR TO PURCHASING SYSTEM COMPONENTS. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL MAJOR SYSTEM COMPONENTS.

ENCLOSURE:
THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE ALLIED FIBERGLASS INDUSTRIES MODEL AE100.

MOUNTING:
ALL EQUIPMENT SHALL BE SECURELY MOUNTED TO THE 6" THICK REINFORCED CONCRETE SLAB WITH GALVANIZED HARDWARE. 1-1/2" UNISTRUT EQUIPMENT RACK SHALL SUPPORT CONTROLLER, GFCI OUTLET, SOIL MOISTURE SENSOR INTERFACE, STEPDOWN TRANSFORMER AND ANY MISCELLANEOUS EQUIPMENT REQUIRED.

PUMP AND MOTOR:
THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH ITS LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR.

THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 230 VOLT, 1 PHASE, 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED, CONFIGURED TO ALLOW DIRECT MOUNTING OF THE PUMP'S LIQUID END.

THE CLOSE-COUPLED PUMP AND DRIVING MOTOR SHALL BE OBTAINED FROM A SINGLE SOURCE.

1. SHP SYSTEM: THE MOTOR SHALL BE RATED AT 5 H.P. AT 230 VOLTS, 1 PHASE, 60 HZ. THE PUMP SHALL BE CAPABLE OF DELIVERING 55 GPM AT 67 PSI AT THE PUMP DISCHARGE.

OPERATION
THE STATION OPERATES AS A CLOCK START, CLOCK RETIREMENT SYSTEM.

CLOCK START
THE PUMP STARTS WHEN THE IRRIGATION CONTROLLER (CLOCK) BEGINS A WATERING SEQUENCE.

CLOCK RETIREMENT
THE PUMP SHUTS OFF WHEN THE CLOCK COMPLETES A WATERING SEQUENCE.

OVERHEAT PROTECTION
A 'HOT STOP' WILL BE PROVIDED IN THE PUMP VOLUTE AND WIRED TO SHUT DOWN THE PUMP WHEN OVERHEAT CONDITIONS OCCUR

DISCHARGE PIPE MANIFOLD:
THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF 2" GALVANIZED STEEL PIPE AND FITTINGS. A PRESSURE RELIEF VALVE, PRESSURE GAUGE, MCPROPELLER FLOWMETER AND BRONZE BALL VALVE WILL BE PROVIDED ON THE STATION DISCHARGE.

IRRIGATION CONTROLLER:
RAIN BIRD MODEL ESP-LXM WITH EXPANSION MODULES AS REQUIRED FOR THE TOTAL NUMBER OF SPECIFIED STATIONS. THE CONTROLLER SHALL ACTIVATE THE PUMP VIA THE PUMP START RELAY.

SUCTION LINE:
THE SUCTION LINE SHALL BE SCH 40 GALVANIZED STEEL WITH ECCENTRIC REDUCER AS REQUIRED, TO BELOW GRADE. TRANSITION TO HDPE SUCTION LINE AT A FLANGED FITTING AND CONTINUE PER DETAILS TO A SWING CHECK VALVE AND 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.

WARRANTIES:
THE CONTRACTOR SHALL WARRANT THE PUMP SYSTEM FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE SITE BY THE OWNER, NOT TO EXCEED 18 MONTHS FROM INSTALLATION.

NOTES:

1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 3" HDPE PIPE FROM THE BOTTOM OF THE 'Z' PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
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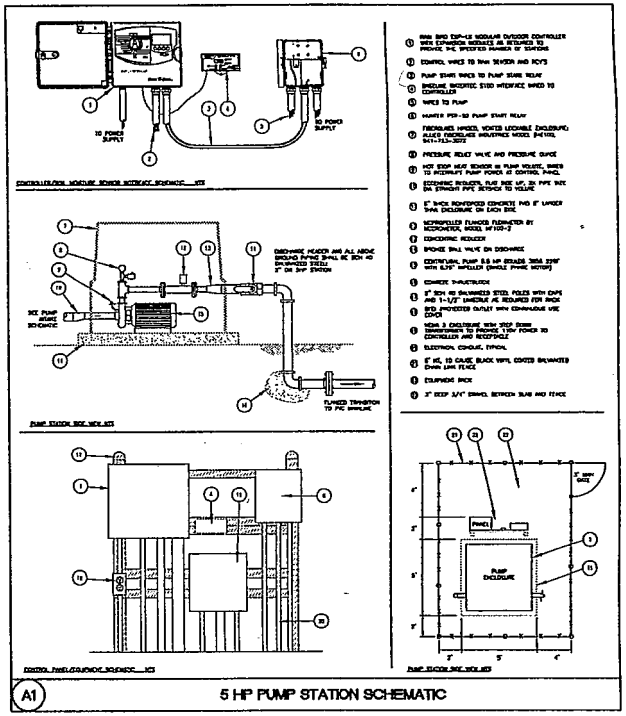
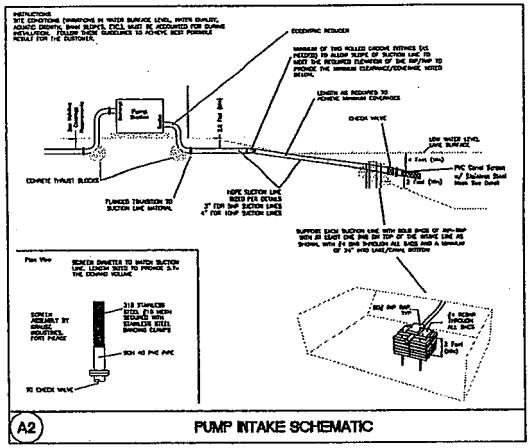
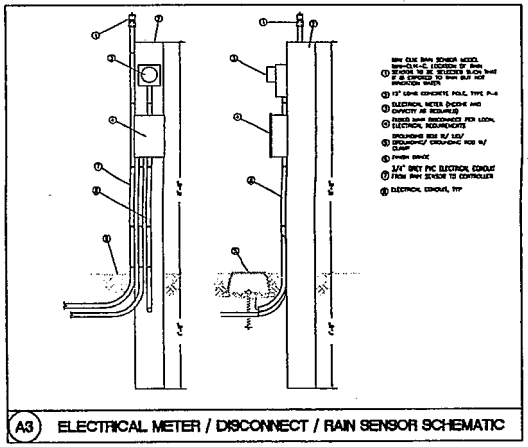


A1 5 HP PUMP STATION SCHEMATIC



A2 PUMP INTAKE SCHEMATIC



A3 ELECTRICAL METER / DISCONNECT / RAIN SENSOR SCHEMATIC

DATE:	1/13/11
SCALE:	N.T.S.
DESIGN BY:	MJC
DRAWN BY:	MJC
CHECKED BY:	JMJ
APPROVED BY:	TKM
6 6.23.11 AJ CONTRACTOR BUILT PUMP	
BY: DATE: DESCRIPTION:	

MASUEN CONSULTING, LLC
DESIGN, CONSULT, MANAGE
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MARY TERRACE STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PUMP

IR-3
SHEET 3 OF 4

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 5/26/10 with latest revision dated 8/3/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

△1 The P.O.C. is a proposed contractor built centrifugal 5HP pump station using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 55 gpm at 85 PSI downstream of the pump.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with CL 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be 2-1/2" CL 200 PVC with Sch 40 PVC solvent weld fittings and thrust blocks as required.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3M-DBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run two spare wires. Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Contractor to utilize 4"X8'X5/8" copper grounding plates, 5/8"X10' copper clad grounding rods, 'One Strike' CAD welds at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe. If not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
24" minimum with a 30" minimum at vehicular crossings;
Lateral line depths measured to top of pipe shall be:
18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours. For gasketed pipe, testing requires measurement of the water pumped into the mainline system, using a hydrostatic pump, to maintain 125 PSI – this water volume shall be no more than the result of the following formula:

$L=(ND\sqrt{P})/7400$

where L=Allowable leakage in gallons per hour
N=Number of joints in pipe tested
D=Nominal diameter of pipe (in inches)
P=Average Test Pressure (in PSI)

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing – Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In line sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

After project completion:

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mil pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items shall be completed with 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of 'as-built' drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED
IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

A. Turn on each zone from the controller to verify automatic operation.
B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
C. Check remote control valve to ensure proper operation.
D. Check setting on pressure regulator to verify proper setting, if present.
E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
F. Check for leaks – mainline, lateral lines, valves, heads, etc.
G. Check all heads as follows:

1. Proper set height (top of sprinkler is 1" below mow height)
2. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
3. Check wiper seal for leaks – if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

△1	CONTRACTOR BUILT PUMP	JJ	6.23.11
	DESCRIPTION:	BY:	DATE:

DATE:	1/13/11
SCALE:	N.T.S.
DESIGN BY:	MLC
DRAWN BY:	MLC
CHECKED BY:	JMJ
APPROVED BY:	TKM

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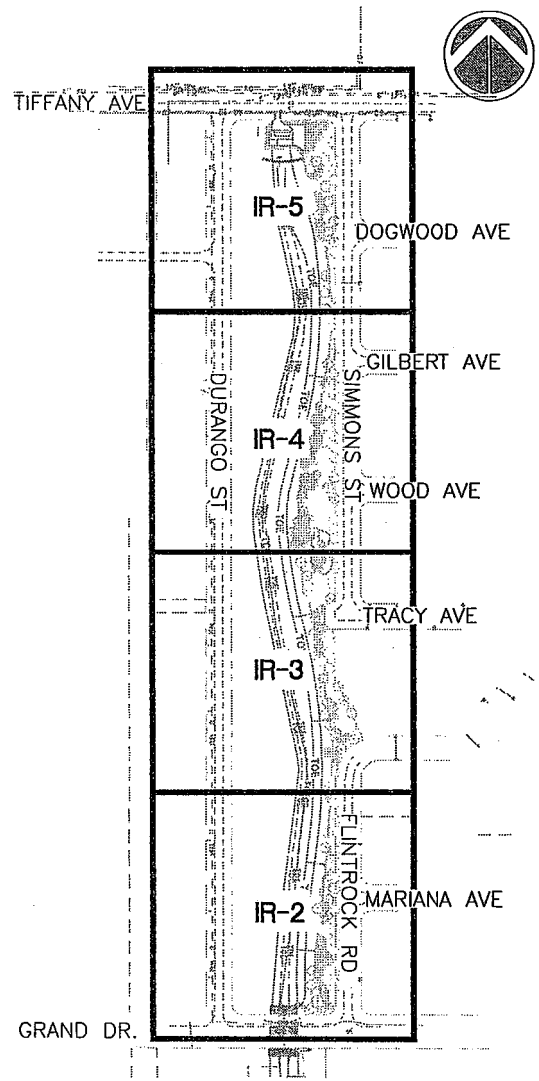
MARY TERRACE STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION NOTES

IR-4
SHEET 4 OF 4



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IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
3 / 20.00		STATION NUMBER / GALLONS PER MINUTE-CATALOG FLOW / VALVE SIZE	
1	P	CONTRACTOR BUILT IN PLACE 10HP, CENTRIFUGAL PUMP STATION WITH FIBERGLASS ENCLOSURE AND FLOWMETER. POWER IS 240V/3 PHASE. WATER SOURCE IS A PROPOSED LAKE. STATION INCLUDES RAIN BIRD ESP-LXM MODULAR CONTROLLER WITH 16 STATIONS AND A BASELINE WATERTEC S100 SOIL MOISTURE SENSOR. INTERFACE MOUNTED WITH CONTROLLER. CONTRACTOR TO INSTALL SOIL MOISTURE FIELD SENSOR IN FIELD PER MANUFACTURER'S RECOMMENDATIONS.	A1 A2 A3
1		12' CONCRETE POLE WITH ELECTRICAL METER, MAIN DISCONNECT BOX, RAIN SENSOR AND GROUNDING	A3
13		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) IN A CARSON 1220 JUMBO VALVE BOX.	B
1		NIBCO T-18 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		PRIMARY WIRE PATH IN 2" GREY PVC ELECTRICAL CONDUIT	L
		4" CLASS 200 GASKETED PVC MAINLINE WITH SCH 40 GASKETED FITTINGS	L
		CLASS 200 PVC SLEEVES (SIZE PER PLAN)	D

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) = THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

IRRIGATION HEAD LEGEND

QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN (P.S.I.)	DESIGN (G.P.M.)
244		RAIN BIRD 1404 FLOOD BUBBLER ON POLY PIPE	D	30	1.00
7		RAIN BIRD 1812-SAM-PRS-45 W/ HUNTER MPCORNER NOZZLE RST	H	45	VAR
10		RAIN BIRD 1812-SAM-PRS-45 W/ HUNTER MPCORNER NOZZLE LST	H	45	VAR
9		RAIN			
5		HUNTE			
56		HUNTE			
31		HUNTE			
2		HUNTE 40 RP			
10		HUNTE			
18		HUNTE			

NOTES:

1. CONTRACTOR TO DURING PUMP S
2. STATIC SUCTION EXCEEDED, DO I REPRESENTATIVE
3. THE SUCTION LI SWING CHECK V. SUPPORT THE S
4. CHECK THE WAT SERVICES OF A INCLUDE pH, CO BICARBONATE, C MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

2F

HDPE NOTE:

1. NO ELECTROFUSION/BUTT FUSION JOINTS MAY BE MADE WITHOUT PSL STAFF OR THEIR ASSIGNS ON SITE TO PHOTOGRAPH EACH JOINT.

SOIL MOISTURE SENSOR NOTES:

1. PLACE ALL SOIL MOISTURE SENSOR WIRING IN 1" SCH 40 PVC CONDUIT
2. SOIL MOISTURE SENSOR SHOULD BE PLACED IN THE MIDDLE OF A SPRAY OR DRIP AREA AS PER MANUFACTURER'S RECOMMENDATIONS.

DATE:	2/4/11
SCALE:	N.T.S.
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	JMJ

DATE	BY	DESCRIPTION:
6.23.11	JJ	CONTRACTOR BUILT PUMP

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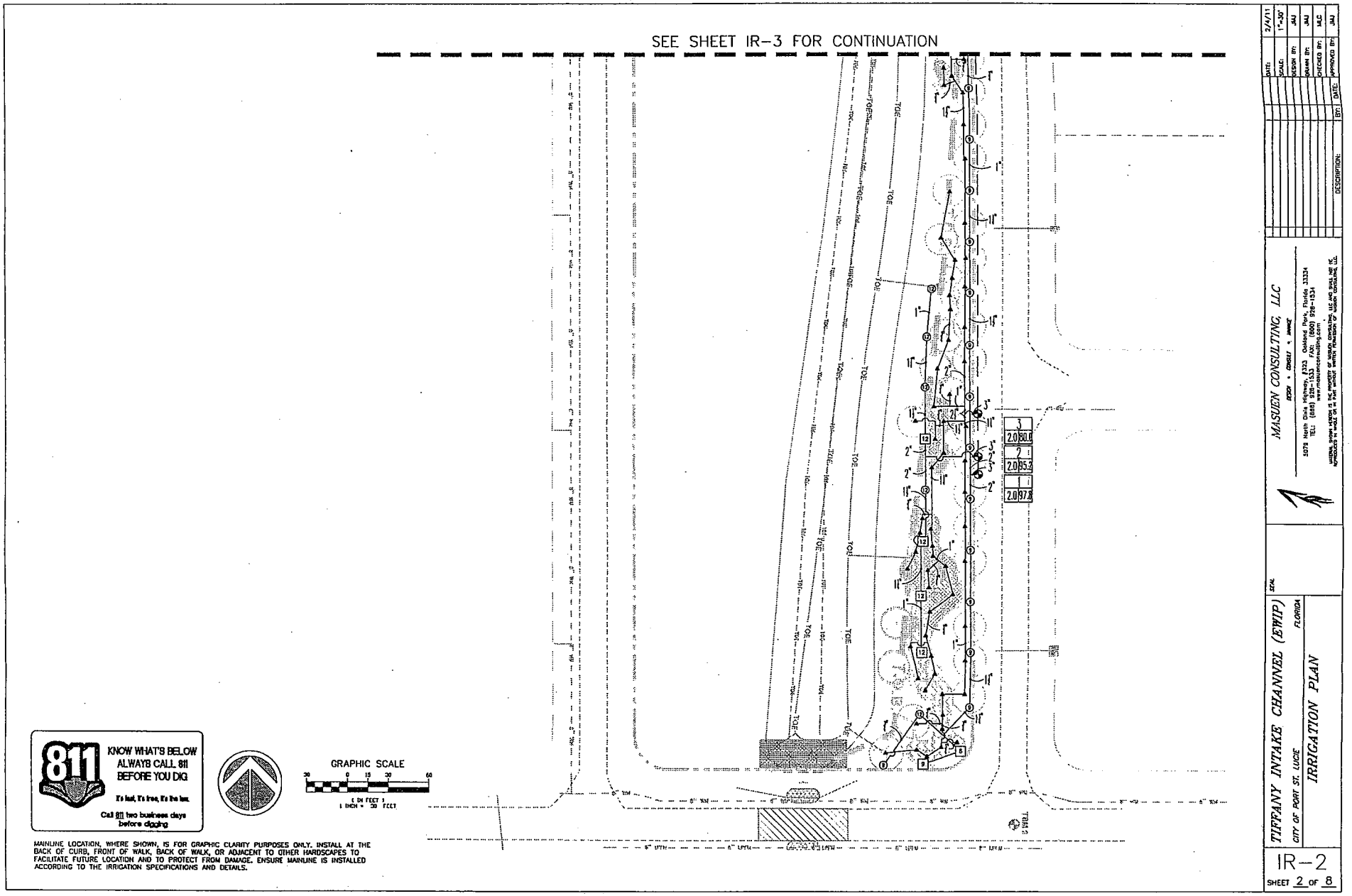
TIFFANY INTAKE CHANNEL (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN

IR-1
SHEET 1 OF 8


SEE SHEET IR-3 FOR CONTINUATION
TOE
TOP
GRAPHIC SCALE
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(IN FEET)
1 INCH = 30 FEET
811
KNOW WHAT'S BELOW
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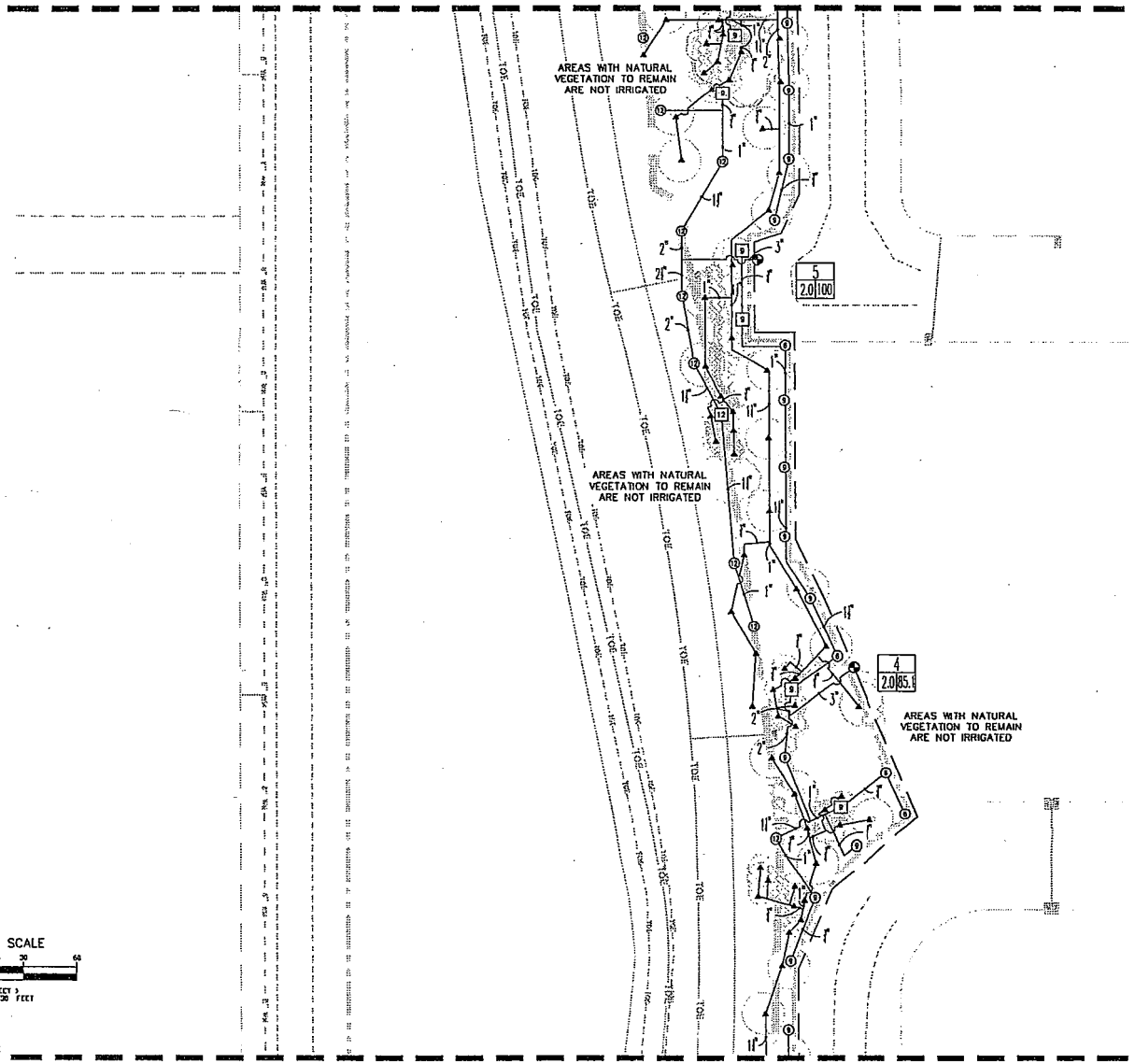
TIFFANY INTAKE CHANNEL (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN
IR-2
SHEET 2 OF 8



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DESCRIPTION:	BY:	DATE:	APPROVED BY:	JMJ
			DRAWN BY:	JMJ
			CHECKED BY:	MLC
			DESIGN BY:	JMJ
			SCALE:	1"=30'
			DATE:	2/4/11

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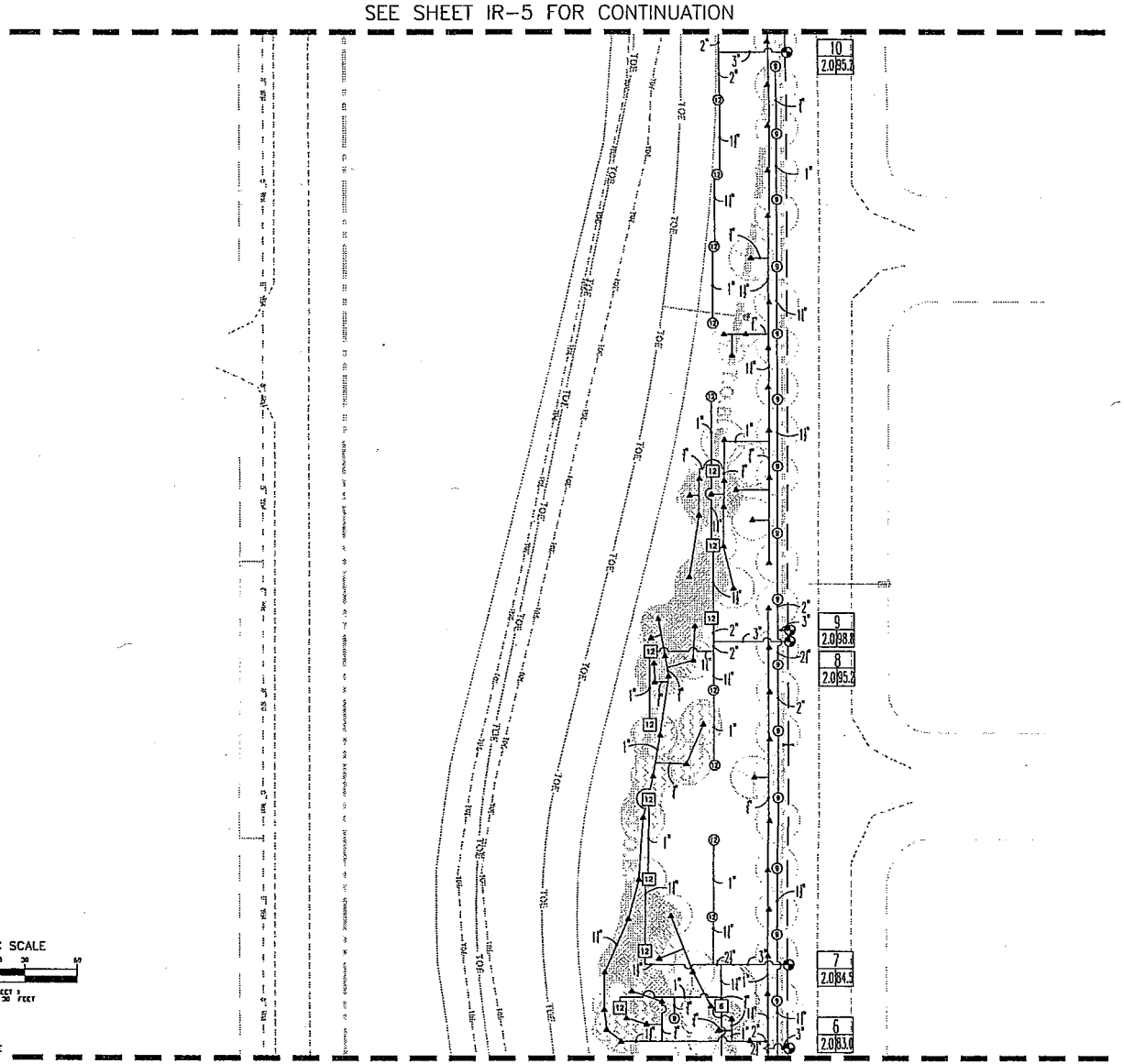
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION PLAN

IR-3

SHEET 3 OF 8



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BY:	DATE:	DESCRIPTION:

DATE: 2/4/11
SCALE: 1"=30'
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MJC
APPROVED BY: JMJ

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TIFFANY INTAKE CHANNEL (EWIP)

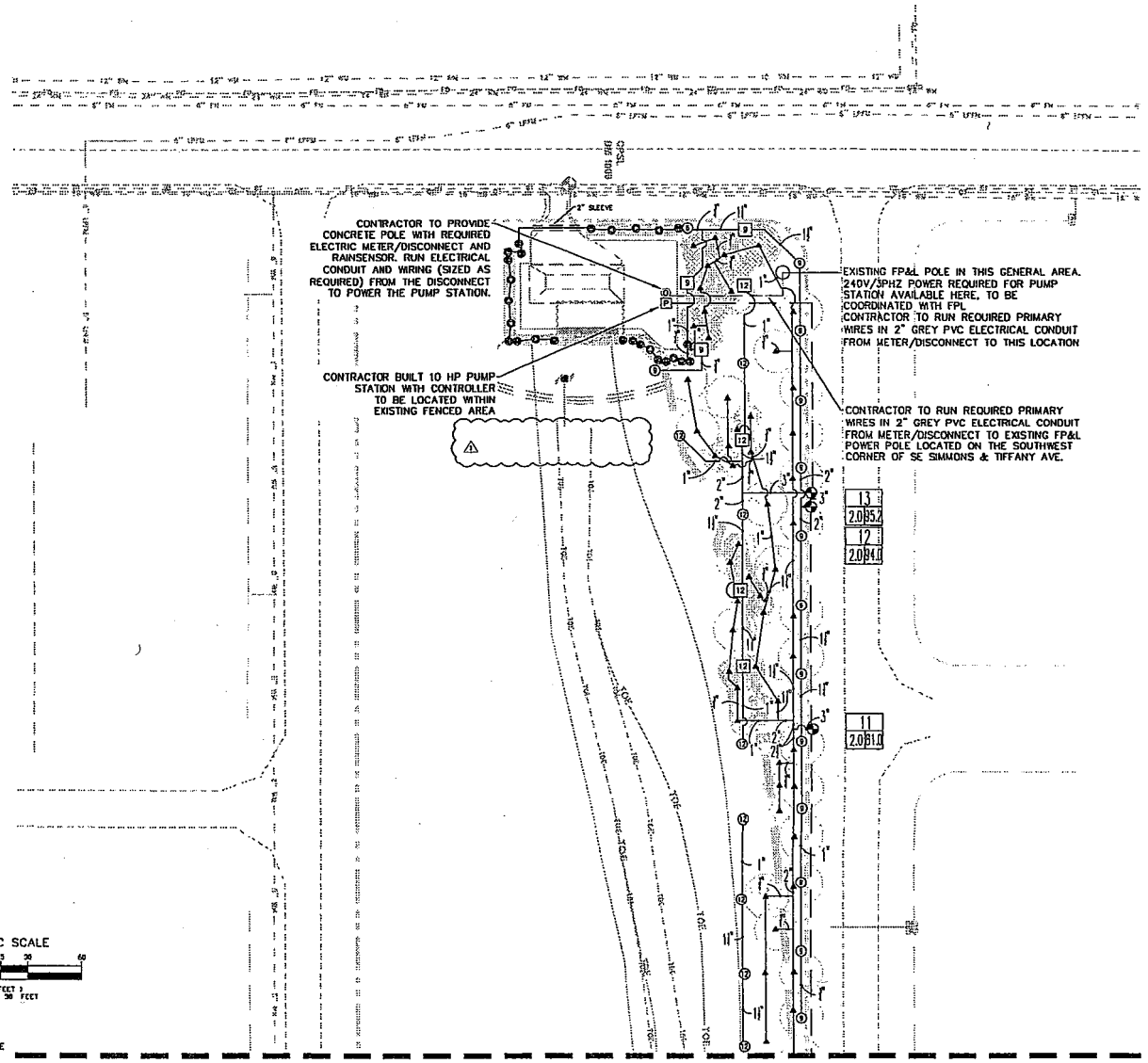
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION PLAN

SEAL

IR-4

SHEET 4 OF 8



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SEE SHEET IR-4 FOR CONTINUATION

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SCALE:	1"=30'		
DESIGN BY:	JAJ		
DRAWN BY:	JAJ		
CHECKED BY:	MLC		
APPROVED BY:	JAJ		
△ CONTRACTOR BUILT PUMP	JJ	6.23.11	
DESCRIPTION:	BY:	DATE:	

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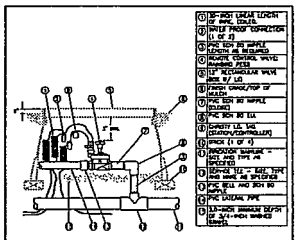
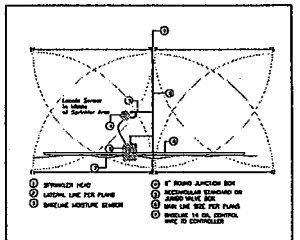
IRRIGATION PLAN

IR-5

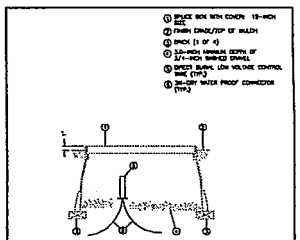
SHEET 5 OF 8



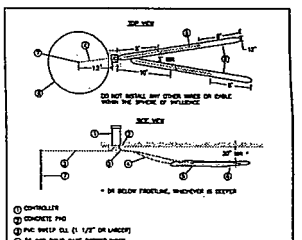
B RAIN BIRD RCV



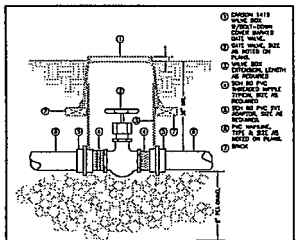
C2 SOIL MOISTURE SENSOR



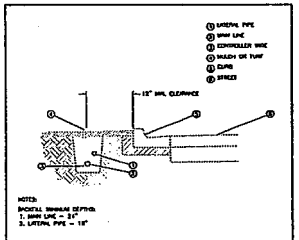
C WIRE SPLICE



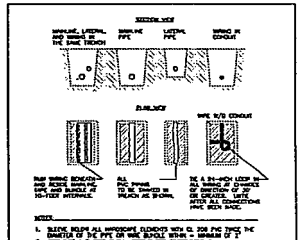
C GROUNDING DETAIL



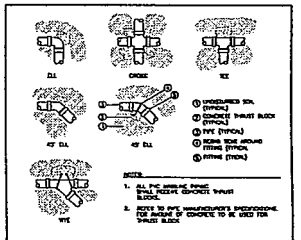
D T-18 GATE VALVE



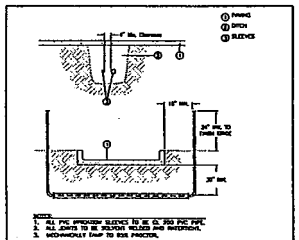
L MAINLINE AND LATERAL PIPING DETAIL



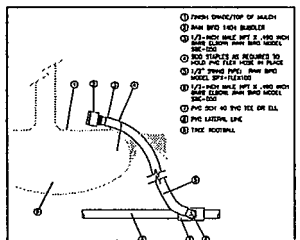
L PIPE AND WIRE TRENCHING



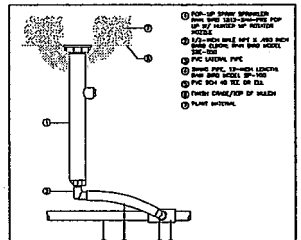
L THRUST BLOCK



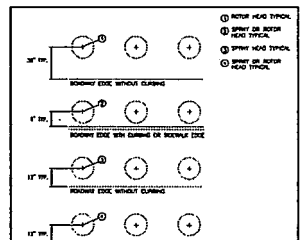
O SLEEVING



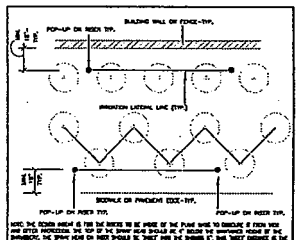
O RAIN BIRD 1804 BUBBLER ON POLY PIPE



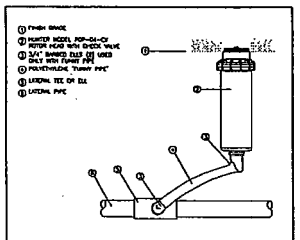
S RAIN BIRD 1812 SAM-PRS SPRAY



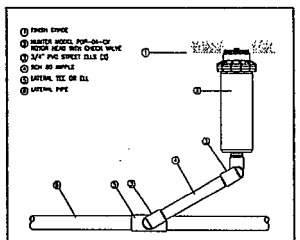
T POP-UP HEAD TO HARDSCAPE LOCATION DETAIL-A



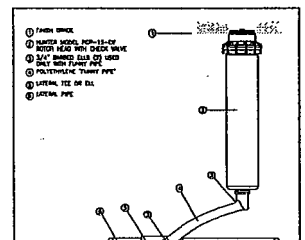
T POP-UP HEAD ON RISER LOCATION DETAIL-B



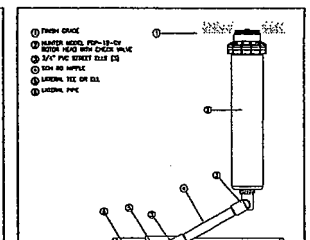
V1 HUNTER PGP-04-CV ROTOR UNDER 6 GPM



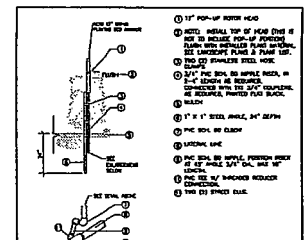
V2 HUNTER PGP-04-CV ROTOR OVER 6 GPM



V3 HUNTER PGP-12-CV ROTOR UNDER 6 GPM



V4 HUNTER PGP-12-CV ROTOR OVER 6 GPM



V5 POP-UP ROTOR ON RISER

DESCRIPTION:	DATE:	APPROVED BY:
	2/14/11	JMJ
	N.T.S.	
	JMJ	
	JMJ	
	MLG	
	JMJ	

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TIFFANY INTAKE CHANNEL (EWIP)

CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION DETAILS

IR-6

SHEET 6 OF 8

ENCLOSED CLOCK START
SINGLE PUMP CENTRIFUGAL PUMP SYSTEM

PURPOSE:
TO PROVIDE A COMPLETE ENCLOSED CLOCK START PUMP SYSTEM AS SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO THE OWNER FOR APPROVAL, PRIOR TO PURCHASING SYSTEM COMPONENTS. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL MAJOR SYSTEM COMPONENTS.

ENCLOSURE:
THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE ALLIED FIBERGLASS INDUSTRIES MODEL AE100.

MOUNTING:
EQUIPMENT SHALL BE SECURELY MOUNTED TO THE 6" THICK REINFORCED CONCRETE SLAB WITH GALVANIZED HARDWARE. 1-1/2" UNISTRUT EQUIPMENT RACK SHALL SUPPORT CONTROLLER, PUMP CONTROLLER, GFCI OUTLET, SOIL MOISTURE SENSOR INTERFACE, PUMP RELAY, STEPDOWN TRANSFORMER AND ANY MISCELLANEOUS EQUIPMENT REQUIRED.

PUMP AND MOTOR:
THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH ITS LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR.

THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 230 VOLT, 1 PHASE, 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED, CONFIGURED TO ALLOW DIRECT MOUNTING OF THE PUMP'S LIQUID END.

THE CLOSE-COUPLED PUMP AND DRIVING MOTOR SHALL BE OBTAINED FROM A SINGLE SOURCE.
1. 10HP SYSTEM: THE MOTOR SHALL BE RATED AT 10 H.P. AT 230 VOLTS, 3 PHASE, 60 HZ. THE PUMP SHALL BE CAPABLE OF DELIVERING 110 GPM AT 75 PSI AT THE PUMP DISCHARGE

OPERATION
THE STATION OPERATES AS A CLOCK START, CLOCK RETIREMENT SYSTEM.

CLOCK START
THE PUMP STARTS WHEN THE IRRIGATION CONTROLLER (CLOCK) BEGINS A WATERING SEQUENCE.

CLOCK RETIREMENT
THE PUMP SHUTS OFF WHEN THE CLOCK COMPLETES A WATERING SEQUENCE.

OVERHEAT PROTECTION
A 'HOT STOP' WILL BE PROVIDED IN THE PUMP VOLUTE AND WIRED TO SHUT DOWN THE PUMP WHEN OVERHEAT CONDITIONS OCCUR

DISCHARGE PIPE MANIFOLD:
THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF 3" GALVANIZED STEEL PIPE AND FITTINGS. A PRESSURE RELIEF VALVE, PRESSURE GAUGE, MCPROPELLER FLOWMETER AND BRONZE BALL VALVE WILL BE PROVIDED ON THE STATION DISCHARGE.

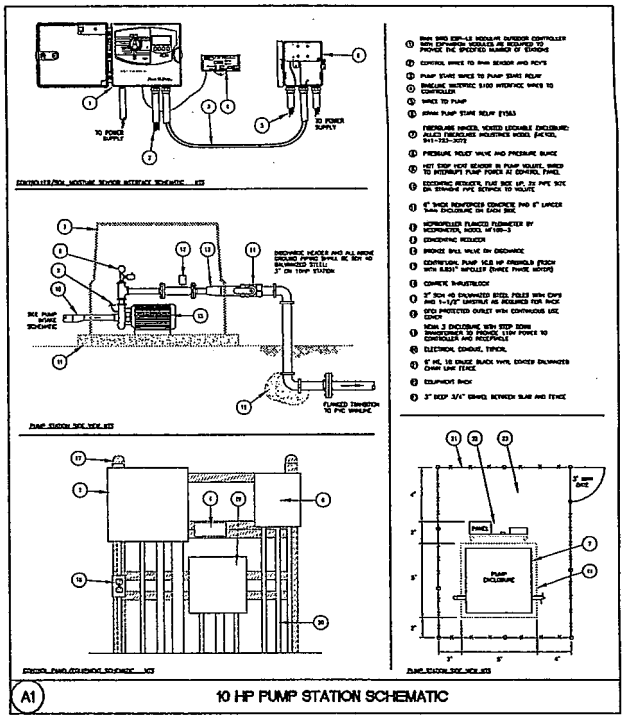
IRRIGATION CONTROLLER:
RAIN BIRD MODEL ESP-LXM WITH EXPANSION MODULES AS REQUIRED FOR THE TOTAL NUMBER OF SPECIFIED STATIONS, THE CONTROLLER SHALL ACTIVATE THE PUMP VIA THE PUMP START RELAY.

SUCTION LINE:
THE SUCTION LINE SHALL BE SCH 40 GALVANIZED STEEL WITH ECCENTRIC REDUCER AS REQUIRED, TO BELOW GRADE. TRANSITION TO HDPE SUCTION LINE AT A FLANGED FITTING AND CONTINUE PER DETAILS TO A SWING CHECK VALVE AND 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.

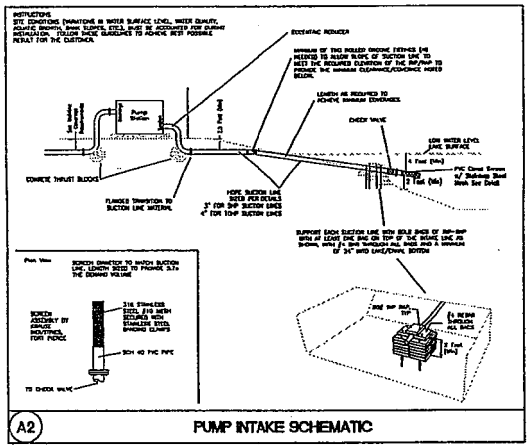
WARRANTIES:
THE CONTRACTOR SHALL WARRANT THE PUMP SYSTEM FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE SITE BY THE OWNER, NOT TO EXCEED 18 MONTHS FROM INSTALLATION.

NOTES:

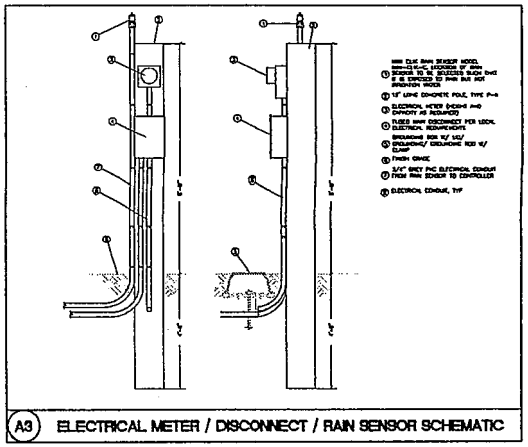
1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 4" HDPE PIPE FROM THE BOTTOM OF THE '2' PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.



A1 10 HP PUMP STATION SCHEMATIC



A2 PUMP INTAKE SCHEMATIC



A3 ELECTRICAL METER / DISCONNECT / RAIN SENSOR SCHEMATIC

	DATE:	2/4/11
	SCALE:	N.T.S.
	DESIGN BY:	JMJ
	DRAWN BY:	JMJ
	CHECKED BY:	MJC
1	DATE:	5.23.11
	APPROVED BY:	JMJ
	DESCRIPTION:	CONTRACTOR PART PUMP

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www.masdenconsulting.com

TIFFANY INTAKE CHANNEL (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PUMP

IR-7
SHEET 7 OF 8

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 11/01/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

⚠ The P.O.C. is a proposed contractor built centrifugal pump station using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 110 gpm at 85 PSI downstream of the pump.

Contractor to verify these minimum conditions can be met prior to ordering all materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with CL 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be 4" CL 200 gasketed PVC with Sch 40 gasketed PVC fittings and thrust blocks as required.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (gray, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run three spare wire in both directions (six spare wires total). Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Contractor to utilize 4"x8"x5/8" copper grounding plates, 5/8"x10' copper clad grounding rods, 'One Strike' CAD weld at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from unturbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from unturbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height at flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Ensure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe. If not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
- 24" minimum with a 30" minimum at vehicular crossings;

Lateral line depths measured to top of pipe shall be:
- 18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (tee fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing –Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/ post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

After project completion:

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in PDNT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at ends and points and every 20' of length. All underground items shall include depth in inch format. These PDN15 once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller, indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mil pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items, as determined by owner, shall be completed within 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of 'as-built' drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

A. Turn on each zone from the controller to verify automatic operation.
B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
C. Check remote control valve to ensure proper operation.
D. Check setting on pressure regulator to verify proper setting, if present.
E. Check flow control and adjust as needed; ensure valve closure within 10–15 seconds after deactivation by controller.
F. Check for leaks – mainline, lateral lines, valves, heads, etc.
G. Check all heads as follows:

1. Proper set height (top of sprinkler is 1" below mow height)
2. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
3. Check wiper seal for leaks – if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
7. Verify the pop-up riser retracts after operation, if not, repair/replace as needed.

2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

NO.	DESCRIPTION:	BY:	DATE:
A	CONTRACTOR BUILT PUMP	JJ	6/23/11

DATE: 2/4/11
SCALE: N.T.S.
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MLC
APPROVED BY: JMJ

MASUEN CONSULTING, LLC
DESIGN • CONSULT • MANAGE
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TIFFANY INTAKE CHANNEL (EWIP)

CITY OF PORT ST. LUCIE — FLORIDA

IRRIGATION NOTES

IR–8

SHEET 8 OF 8

ADDENDUM #3 - July 12, 2011

"REVISED" E-BID REPLY EXCEL SPREADSHEET

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

SCHEDULE 1 - CANE SLOUGH / ELKS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	200		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	7500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	7500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS (LA/IRR)	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	EA	5343		$ -
15	4" Nibco TI-8 Gate Valve	EA	5		$ -
16	Carson 1419 Valve Box with Lid	LF	5		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	20		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	19		$ -
19	Class 200 PVC Lateral with Schedule 40 PVC fittings (size per plan)	EA	15150		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	342		$ -
21	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	2		$ -
22	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	21		$ -
23	Hunter PGP-04-CV with #6 Nozzle	EA	4		$ -
24	Hunter PGP-04-CV with #9 Nozzle	EA	75		$ -
25	Hunter PGP-04-CV with #12 Nozzle	EA	47		$ -
26	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	6		$ -
27	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	52		$ -
28	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	25		$ -
29	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
30	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	3,380		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	4,790		$ -
32	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	-	155		$ -
33	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	-	129		$ -
34	Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	-	348		$ -
35	Green Island Ficus	*FICUS MICROCARPA*	1 GAL	-	70		$ -
36	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	154		$ -
37	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	1,030		$ -
38	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	1,280		$ -
39	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	210		$ -
40	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	7,730		$ -
41	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	9,910		$ -
42	Maidencane	*PANICUM HEMITOMON*	BR	-	4,570		$ -
43	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	3,160		$ -
44	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	4,030		$ -
45	Soft Rush	*JUNCUS EFFUSUS*	BR	-	760		$ -
46	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	2,720		$ -
47	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	16,946		$ -
48	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	2,119		$ -
49		Total for Shrubs and Groundcover	--	--	--	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

TREES							
LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
50	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	203		$ -
51	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	203		$ -
52	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14' OA	205		$ -
53	Royal Palm	*ROYSTONEA REGIA*	-	10-12'	40		$ -
54	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA	85		$ -
55	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8'	109		$ -
56	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10'	109		$ -
57	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12'	109		$ -
58	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16' OA	12		$ -
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	24		$ -
60	Dahoon Holly	*ILEX CASSINE*	30 GAL	10'-12' OA	73		$ -
61	Cabbage Palm	*SABAL PALMETTO*	65 GAL	12'-18' CT	12		$ -
62	Simpson's Stopper	*MYRCIANTHES FRAGRANS*	30 GAL	8'-9'	30		$ -
63	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	36		$ -
64	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7-9'	13		$ -
65	Sea Grape	*COCCOLOBA UVIFERA*	15 GAL	8'-10'	254		$ -
66	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14' OA	16		$ -
67		Total for Trees	--	--	--	--	$0.00

SCHEDULE 1 - CANE SLOUGH / ELKS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 2 - LENNARD SQUARE / AZZI STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	150		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
8	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
9	3" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	3207		$ -
10	3" Nibco T-113 Gate Valve	EA	3		$ -
11	Carson 1419 Valve Box with Lid	EA	3		$ -
12	2" Rain Bird PESB Series Remote Control Valve	EA	10		$ -
13	Carson 1220 Jumbo Valve Box with Lid	EA	8		$ -
14	Class 200 PVC Lateral Line with Schedule 40 PVC gasketed Fittings (size	LF	8100		$ -
15	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	143		$ -
16	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	91		$ -
17	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	16		$ -
18	Hunter PGP-04-CV with #6 Nozzle	EA	3		$ -
19	Hunter PGP-04-CV with #9 Nozzle	EA	9		$ -
20	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	4		$ -
21	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	59		$ -
22	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	10		$ -
23	Total for Irrigation Items	--	--	--	$ -

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
24	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,960		$ -
25	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	73		$ -
26	Wild Coffee	*PSYCHOTRIA NERVOSA*	3 GAL	-	293		$ -
27	Saw Palmetto	*SERENOA REPENS*	1 GAL	-	600		$ -
28	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	2,180		$ -
29	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,810		$ -
30	Maidencane	*PANICUM HEMITOMON*	BR	-	6,750		$ -
31	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	1,630		$ -
32	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	1,742		$ -
33	Soft Rush	*JUNCUS EFFUSUS*	BR	-	2,510		$ -
34	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,465		$ -
35	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	17,624		$ -
36	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	12"	582		$ -
37	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	482		$ -
38	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	-	122		$ -
39	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	360		$ -
40	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	146		$ -
41	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	451		$ -
42	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	1,954		$ -
43		**Total for Shrubs and Groundcover**	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
44	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7'-9' OA	10		$ -
45	Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'+2" OA	60		$ -
46	Cypress	*TAXODIUM DISTICHUM*	45 GAL	12'+3" OA	60		$ -
47	Cypress	*TAXODIUM DISTICHUM*	100 GAL	4" C	60		$ -
48	Green Buttonwood	*CONOCARPUS ERECTUS*	30 GAL	14' OA	9		$ -
49	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4" CAL	71		$ -
50	Red Bay	*PERSEA BORBONIA*	3 GAL	2'-4' OA	28		$ -
51	Red Bay	*PERSEA BORBONIA*	15 GAL	6'-8' OA	28		$ -
52	Red Bay	*PERSEA BORBONIA*	25 GAL	6'-14' OA	29		$ -
53	Royal Poinciana	*DELONIX REGIA*	45 GAL	12'-14' OA	7		$ -
54	Royal Palm	*ROYSTONEA REGIA*		10'-12' OA	28		$ -
55	Red Maple	*ACER RUBRUM*	10 GAL	8' OA	64		$ -
56	Red Maple	*ACER RUBRUM*	25 GAL	8'-10' OA	63		$ -
57	Red Maple	*ACER RUBRUM*	45 GAL	12'-14' OA	63		$ -
58	Red Maple	*ACER RUBRUM*	65 GAL	14'-16' OA	11		$ -
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	4		$ -
60	Cabbage Palm	*SABAL PALMETTO*	45 GAL	12'-14' OA	124		$ -
61		**Total for Trees**	--	--	--	--	$0.00

SCHEDULE 2 - LENNARD SQ / AZZI STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

SCHEDULE 3 - TIFFANY CHANNEL STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
13	4" Class 200 PVC Mainline/Fittings	LF	2276		$ -
14	4" Nibco T-8 Gate Valve	EA	1		$ -
15	Carson 1419 Valve Box with Lid	EA	1		$ -
16	2" Rain Bird PESB Series Remote Control Valve	EA	12		$ -
17	Carson 1220 Jumbo Valve Box with Lid	EA	13		$ -
18	Class 200 PVC Lateral Line/Fittings (size per plan)	LF	10800		$ -
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	244		$ -
20	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	28		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	5		$ -
22	Hunter PGP-04-CV with #9 Nozzle	EA	56		$ -
23	Hunter PGP-04-CV with #12 Nozzle	EA	31		$ -
24	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2		$ -
25	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	10		$ -
26	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	18		$ -
27	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
28	Red Tip Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	24"	140		$ -
29	Saw Palmetto	*SERENOA REPENS*	1 GAL	-	831		$ -
30	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	700		$ -
31	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	944		$ -
32		*Total for Shrubs and Groundcover*	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
33	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16' OA	14		$ -
34	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4" CAL	66		$ -
35	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21		$ -
36	Slash Pine	*PINUS ELLIOTII*	45 GAL	10'-12' OA	118		$ -
37	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	26		$ -
38		Total for Trees	--	--	--	--	$0.00

SCHEDULE 3 - TIFFANY CHANNEL STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 4 - LEITHGOW STREET STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	50		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	1250		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	1250		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	3" Class 200 PVC Mainline/Fittings	LF	1660		$ -
15	3" Nibco T-113 Gate Valve	EA	2		$ -
16	Carson 1419 Valve Box with Lid	EA	2		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	8		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	8		$ -
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	1640		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	98		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	1		$ -
22	Hunter PGP-04-CV with #9 Nozzle	EA	44		$ -
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3		$ -
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	4		$ -
25	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
26	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,740		$ -
27	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,420		$ -
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,270		$ -
29	Maidencane	*PANICUM HEMITOMON*	BR	-	1,740		$ -
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	2,500		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	2,180		$ -
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,790		$ -
33	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	517		$ -
34	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	22		$ -
35	Fire Flag	*THALIA GENICULATA*	BR	-	1,420		$ -
36	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	269		$ -
37	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	BR	-	1,310		$ -
38	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	383		$ -
39	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	326		$ -
40		Total for Shrubs and Groundcover	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
41	Laurel Oak	*QUERCUS LAURIFOLIA*	100 GAL	14'-16' OA	13		$ -
42	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	37		$ -
43	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	37		$ -
44	Bald Cypress	*TAXODIUM DISTICHUM*	65 GAL	14' OA	39		$ -
45	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	4		$ -
46	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	28		$ -
47	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	28		$ -
48	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	29		$ -
49	Royal Poinciana	*DELONIX REGIA*	60 GAL	12'-14' OA	2		$ -
50	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	15		$ -
51	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	6		$ -
52	Cabbage Palm	*SABAL PALMETTO*	-	12'-18' OA	17		$ -
53	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14' OA	3		$ -
54		Total for Trees	--	--	--	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

SCHEDULE 4 - LEITHGOW STREET STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 5 - LOUTUS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	5000		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	5000		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
13	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	4229		$ -
14	4" Nibco T-8 Gate Valve	EA	3		$ -
15	Carson 1419 Valve Box with Lid	EA	3		$ -
16	2" Rain Bird PESB Series Remote Control Valve	EA	17		$ -
17	Carson 1220 Jumbo Valve Box with Lid	EA	17		$ -
18	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	10060		$ -
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	184		$ -
20	Hunter PGP-04-CV with #6 Nozzle	EA	6		$ -
21	Hunter PGP-04-CV with #9 Nozzle	EA	88		$ -
22	Hunter PGP-04-CV with #12 Nozzle	EA	2		$ -
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2		$ -
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	22		$ -
25	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	5		$ -
25	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
26	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	1,196		$ -
27	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	687		$ -
28	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	855		$ -
29	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	952		$ -
30		***Total for Shrubs and Groundcover***	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
31	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	75		$ -
32	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21		$ -
33	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16' OA	8		$ -
34	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	40		$ -
35	Sycamore	*PLANTANUS*	65 GAL	16'-18' OA	10		$ -
36	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	10		$ -
37	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14' OA	13		$ -
38		Total for Trees	--	--	--	--	$0.00

SCHEDULE 5 - LOUTUS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

SCHEDULE 6 - MARY TERRACE STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	2 1/2" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	1160		$ -
15	2 1/2" Nibco T-113 Gate Valve	EA	1		$ -
16	Carson 1419 Valve Box with Lid	EA	1		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	7		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	7		$ -
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	2960		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	129		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	30		$ -
22	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3		$ -
23	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	6		$ -
24	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
25	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	2,070		$ -
26	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,200		$ -
27	Fire Flag	*THALIA GENICULATA*	BR	-	440		$ -
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	1,850		$ -
29	Maidencane	*PANICUM HEMITOMON*	BR	-	110		$ -
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	870		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	440		$ -
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	3,050		$ -
33	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	LN	-	650		$ -
34	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	355		$ -
35	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	-	359		$ -
36	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	348		$ -
37	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30"-36"	272		$ -
38		Total for Shrubs and Groundcover	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
39	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	38		$ -
40	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	38		$ -
41	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14' OA	38		$ -
42	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	4"C	11		$ -
43	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	2		$ -
44	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	18		$ -
45	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	18		$ -
46	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	18		$ -
47	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16' OA	2		$ -
48	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	20		$ -
49	Sycamore	*PLANTANUS*	65 GAL	16'-18' OA	2		$ -
50	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	2		$ -
51	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14' OA	8		$ -
52		Total for Trees	--	--	--	--	$0.00

SCHEDULE 6 - MARY TERRACE STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

BID SUMMARY:

SCHEDULE 1 SUB TOTAL:	$0.00
SCHEDULE 2 SUB TOTAL:	$0.00
SCHEDULE 3 SUB TOTAL:	$0.00
SCHEDULE 4 SUB TOTAL:	$0.00
SCHEDULE 5 SUB TOTAL:	$0.00
SCHEDULE 6 SUB TOTAL:	$0.00
INDEMNIFICATION FEE:	$10.00

SCHEDULES 1 - 6 BID TOTAL	--	$10.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION

E-BID #20110079

Company Name: _____

ADDENDUM #4 - July 21, 2011

"REVISED" E-BID REPLY EXCEL SPREADSHEET

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: _____

SCHEDULE 1 - CANE SLOUGH / ELKS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	200		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	7500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	7500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS (LA/IRR)	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	EA	5343		$ -
15	4" Nibco TI-8 Gate Valve	EA	5		$ -
16	Carson 1419 Valve Box with Lid	LF	5		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	20		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	19		$ -
19	Class 200 PVC Lateral with Schedule 40 PVC fittings (size per plan)	EA	15150		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	342		$ -
21	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	2		$ -
22	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	21		$ -
23	Hunter PGP-04-CV with #6 Nozzle	EA	4		$ -
24	Hunter PGP-04-CV with #9 Nozzle	EA	75		$ -
25	Hunter PGP-04-CV with #12 Nozzle	EA	47		$ -
26	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	6		$ -
27	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	52		$ -
28	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	25		$ -
29	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
30	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	3,380		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	4,790		$ -
32	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	-	155		$ -
33	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	129		$ -
34	Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	18" FULL	348		$ -
35	Green Island Ficus	*FICUS MICROCARPA*	1 GAL	-	70		$ -
36	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	154		$ -
37	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	1,030		$ -
38	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	FULL	1,280		$ -
39	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	210		$ -
40	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	7,730		$ -
41	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	9,910		$ -
42	Maidencane	*PANICUM HEMITOMON*	BR	-	4,570		$ -
43	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	3,160		$ -
44	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	4,030		$ -
45	Soft Rush	*JUNCUS EFFUSUS*	BR	-	760		$ -
46	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	2,720		$ -
47	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	16,946		$ -
48	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" full	2,119		$ -
49		Total for Shrubs and Groundcover	--	--	--	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: _____

TREES							
LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
50	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	203		$ -
51	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	203		$ -
52	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'-4"Cal OA	205		$ -
53	Royal Palm	*ROYSTONEA REGIA*	-	10-12'	40		$ -
54	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	85		$ -
55	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8'	109		$ -
56	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10'	109		$ -
57	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12'	109		$ -
58	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16',8'SPR	12		$ -
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	24		$ -
60	Dahoon Holly	*IILEX CASSINE*	30 GAL	10'-12'x2"OA	73		$ -
61	Cabbage Palm	*SABAL PALMETTO*	FG	12'-18' STG	12		$ -
62	Simpson's Stopper	*MYRCIANTHES FRAGRANS*	30 GAL	8'-9'(B)	30		$ -
63	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	36		$ -
64	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7-9'	13		$ -
65	Sea Grape	*COCCOLOBA UVIFERA*	15 GAL	8'-10' ML	254		$ -
66	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	16		$ -
67		Total for Trees	--	--	--	--	$0.00

SCHEDULE 1 - CANE SLOUGH / ELKS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 2 - LENNARD SQUARE / AZZI STA				
GENERAL ITEMS				
LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	150		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
8	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS					
LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
9	3" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	3207		$ -
10	3" Nibco T-113 Gate Valve	EA	3		$ -
11	Carson 1419 Valve Box with Lid	EA	3		$ -
12	2" Rain Bird PESB Series Remote Control Valve	EA	10		$ -
13	Carson 1220 Jumbo Valve Box with Lid	EA	8		$ -
14	Class 200 PVC Lateral Line with Schedule 40 PVC gasketed Fittings (size	LF	8100		$ -
15	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	143		$ -
16	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	91		$ -
17	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	16		$ -
18	Hunter PGP-04-CV with #6 Nozzle	EA	3		$ -
19	Hunter PGP-04-CV with #9 Nozzle	EA	9		$ -
20	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	4		$ -
21	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	59		$ -
22	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	10		$ -
23	Total for Irrigation Items	--	--	--	$ -

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: _____

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	(Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
24	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,960		$ -
25	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	73		$ -
26	Wild Coffee	*PSYCHOTRIA NERVOSA*	3 GAL	-	293		$ -
27	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	600		$ -
28	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	2,180		$ -
29	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,810		$ -
30	Maidencane	*PANICUM HEMITOMON*	BR	-	6,750		$ -
31	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	1,630		$ -
32	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	1,742		$ -
33	Soft Rush	*JUNCUS EFFUSUS*	BR	-	2,510		$ -
34	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,465		$ -
35	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	17,624		$ -
36	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	12"	582		$ -
37	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	482		$ -
38	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	122		$ -
39	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	360		$ -
40	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	146		$ -
41	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	451		$ -
42	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	1,954		$ -
43		**Total for Shrubs and Groundcover**	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION (Common Name)	(Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
44	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7'-9' OA	10		$ -
45	Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'+2" OA	60		$ -
46	Cypress	*TAXODIUM DISTICHUM*	45 GAL	12'+3" OA	60		$ -
47	Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" C	60		$ -
48	Green Buttonwood	*CONOCARPUS ERECTUS*	30 GAL	14'(B)OA	9		$ -
49	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	71		$ -
50	Red Bay	*PERSEA BORBONIA*	3 GAL	2'-4' OA	28		$ -
51	Red Bay	*PERSEA BORBONIA*	15 GAL	6'-8' OA	28		$ -
52	Red Bay	*PERSEA BORBONIA*	25 GAL	8'-10' OA	29		$ -
53	Royal Poinciana	*DELONIX REGIA*	45 GAL	12'-14'x8'SPR OA	7		$ -
54	Royal Palm	*ROYSTONEA REGIA*		10'-12' OA	28		$ -
55	Red Maple	*ACER RUBRUM*	10 GAL	8' OA	64		$ -
56	Red Maple	*ACER RUBRUM*	25 GAL	8'-10' OA	63		$ -
57	Red Maple	*ACER RUBRUM*	45 GAL	12'-14' OA	63		$ -
58	Red Maple	*ACER RUBRUM*	65 GAL	14'-16'x4"Cal OA	11		$ -
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	4		$ -
60	Cabbage Palm	*SABAL PALMETTO*	FG	12'-14' OA	124		$ -
61		**Total for Trees**	--	--	--	--	$0.00

SCHEDULE 2 - LENNARD SQ / AZZI STA LANDSCAPING/IRRIGATION BID TOTAL	--	**$0.00**

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: _____

SCHEDULE 3 - TIFFANY CHANNEL STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
13	4" Class 200 PVC Mainline/Fittings	LF	2276		$ -
14	4" Nibco T-8 Gate Valve	EA	1		$ -
15	Carson 1419 Valve Box with Lid	EA	1		$ -
16	2" Rain Bird PESB Series Remote Control Valve	EA	12		$ -
17	Carson 1220 Jumbo Valve Box with Lid	EA	13		$ -
18	Class 200 PVC Lateral Line/Fittings (size per plan)	LF	10800		$ -
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	244		$ -
20	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	28		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	5		$ -
22	Hunter PGP-04-CV with #9 Nozzle	EA	56		$ -
23	Hunter PGP-04-CV with #12 Nozzle	EA	31		$ -
24	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2		$ -
25	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	10		$ -
26	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	18		$ -
27	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
28	Red Tip Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	24"	140		$ -
29	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	831		$ -
30	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	Full	700		$ -
31	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	944		$ -
32		*Total for Shrubs and Groundcover*	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
33	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	14		$ -
34	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"CAL OA	66		$ -
35	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21		$ -
36	Slash Pine	*PINUS ELLIOTII(South Florida Densa)*	45 GAL	10'-12' OA	118		$ -
37	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	26		$ -
38		Total for Trees	--	--	--	--	$0.00

SCHEDULE 3 - TIFFANY CHANNEL STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 4 - LEITHGOW STREET STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	50		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	1250		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	1250		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: _____

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	3" Class 200 PVC Mainline/Fittings	LF	1660		$ -
15	3" Nibco T-113 Gate Valve	EA	2		$ -
16	Carson 1419 Valve Box with Lid	EA	2		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	8		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	8		$ -
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	1640		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	98		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	1		$ -
22	Hunter PGP-04-CV with #9 Nozzle	EA	44		$ -
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3		$ -
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	4		$ -
25	**Total for Irrigation Items**	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
26	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,740		$ -
27	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,420		$ -
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,270		$ -
29	Maidencane	*PANICUM HEMITOMON*	BR	-	1,740		$ -
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	2,500		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	2,180		$ -
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,790		$ -
33	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	517		$ -
34	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	22		$ -
35	Fire Flag	*THALIA GENICULATA*	BR	-	1,420		$ -
36	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	269		$ -
37	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	BR	-	1,310		$ -
38	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	383		$ -
39	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	326		$ -
40		**Total for Shrubs and Groundcover**	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
41	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	13		$ -
42	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	37		$ -
43	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	37		$ -
44	Bald Cypress	*TAXODIUM DISTICHUM*	65 GAL	14' OA	39		$ -
45	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	4		$ -
46	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	28		$ -
47	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	28		$ -
48	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	29		$ -
49	Royal Poinciana	*DELONIX REGIA*	60 GAL	14'-16'x8"SPR OA	2		$ -
50	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	15		$ -
51	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'x2"Cal	6		$ -
52	Cabbage Palm	*SABAL PALMETTO*	-	12'-18' STG	17		$ -
53	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	3		$ -
54		**Total for Trees**	--	--	--	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: _____

SCHEDULE 4 - LEITHGOW STREET STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

SCHEDULE 5 - LOUTUS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	5000		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	5000		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
13	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	4229		$ -
14	4" Nibco T-8 Gate Valve	EA	3		$ -
15	Carson 1419 Valve Box with Lid	EA	3		$ -
16	2" Rain Bird PESB Series Remote Control Valve	EA	17		$ -
17	Carson 1220 Jumbo Valve Box with Lid	EA	17		$ -
18	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	10060		$ -
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	184		$ -
20	Hunter PGP-04-CV with #6 Nozzle	EA	6		$ -
21	Hunter PGP-04-CV with #9 Nozzle	EA	88		$ -
22	Hunter PGP-04-CV with #12 Nozzle	EA	2		$ -
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2		$ -
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	22		$ -
25	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	5		$ -
25	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
26	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	1,196		$ -
27	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	687		$ -
28	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	855		$ -
29	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	952		$ -
30		***Total for Shrubs and Groundcover***	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
31	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	75		$ -
32	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21		$ -
33	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8'SPR OA	8		$ -
34	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	40		$ -
35	Sycamore	*PLANTANUS*	65 GAL	14'-16'x4"Cal OA	10		$ -
36	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	10		$ -
37	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	13		$ -
38		Total for Trees	--	--	--	--	$0.00

SCHEDULE 5 - LOUTUS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: _____

SCHEDULE 6 - MARY TERRACE STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1		$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50		$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100		$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500		$ -
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500		$ -
6	SITE ACCESS RESTORATION	LS	1		$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1		$ -
8	SITE MOWING (POST COMPLETION)	EA	12		$ -
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12		$ -
10	Total for General Items	--	--	--	$ -

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1		$ -
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1		$ -
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1		$ -
14	2 1/2" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	1160		$ -
15	2 1/2" Nibco T-113 Gate Valve	EA	1		$ -
16	Carson 1419 Valve Box with Lid	EA	1		$ -
17	2" Rain Bird PESB Series Remote Control Valve	EA	7		$ -
18	Carson 1220 Jumbo Valve Box with Lid	EA	7		$ -
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	2960		$ -
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	129		$ -
21	Hunter PGP-04-CV with #6 Nozzle	EA	30		$ -
22	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3		$ -
23	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	6		$ -
24	Total for Irrigation Items	--	--	--	$ -

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
25	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	2,070		$ -
26	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,200		$ -
27	Fire Flag	*THALIA GENICULATA*	BR	-	440		$ -
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	1,850		$ -
29	Maidencane	*PANICUM HEMITOMON*	BR	-	110		$ -
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	870		$ -
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	440		$ -
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	3,050		$ -
33	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	LN	-	650		$ -
34	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	355		$ -
35	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	359		$ -
36	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	348		$ -
37	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	272		$ -
38		Total for Shrubs and Groundcover	--	--	--	--	$0.00

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
39	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	38		$ -
40	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	38		$ -
41	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" Cal OA	38		$ -
42	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"Cal	11		$ -
43	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	2		$ -
44	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	18		$ -
45	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	18		$ -
46	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	18		$ -
47	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8"Spr OA	2		$ -
48	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	20		$ -
49	Sycamore	*PLANTANUS*	65 GAL	14'-16x4"' OA	2		$ -
50	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	2		$ -
51	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	8		$ -
52		Total for Trees	--	--	--	--	$0.00

SCHEDULE 6 - MARY TERRACE STA LANDSCAPING/IRRIGATION BID TOTAL	--	$0.00

BID SUMMARY:

SCHEDULE 1 SUB TOTAL:	$0.00
SCHEDULE 2 SUB TOTAL:	$0.00
SCHEDULE 3 SUB TOTAL:	$0.00
SCHEDULE 4 SUB TOTAL:	$0.00
SCHEDULE 5 SUB TOTAL:	$0.00
SCHEDULE 6 SUB TOTAL:	$0.00
INDEMNIFICATION FEE:	$10.00

SCHEDULES 1 - 6 BID TOTAL	--	$10.00

Addendum #5
E-Bid #20110079 - EWIP Landscaping & Irrigation at Various EWIP Sites
July 21, 2011

Questions to date:

1. Question: The bid calls out for the 4" SCH 40 PVC gasketed mainline fittings on one of the projects. This fitting does not exist in SCH 40. Please clarify.

   Answer: This should have been specified as CL200 SDR 21 PVC gasketed mainline fittings in 4".

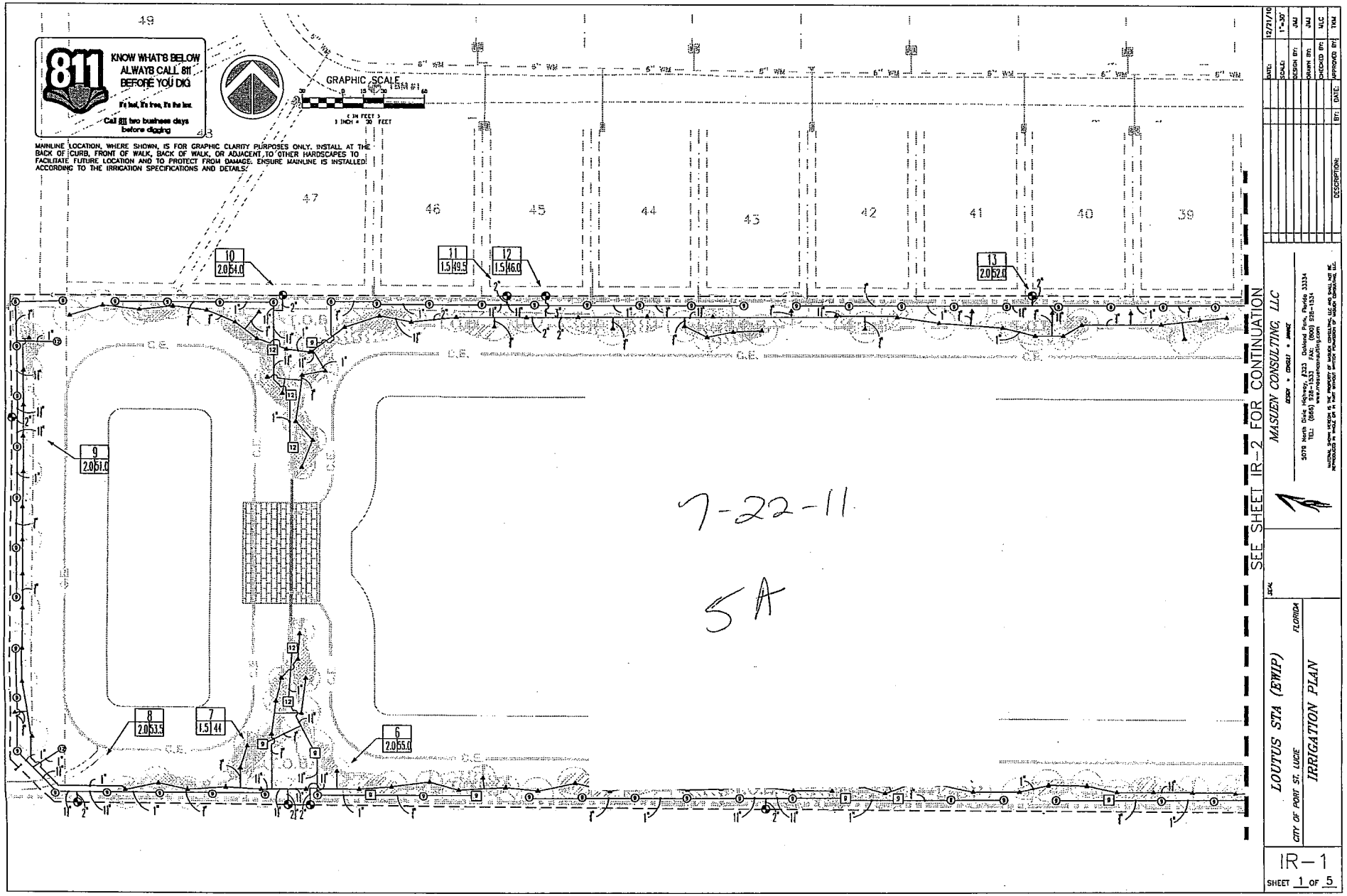
Revisions to date:

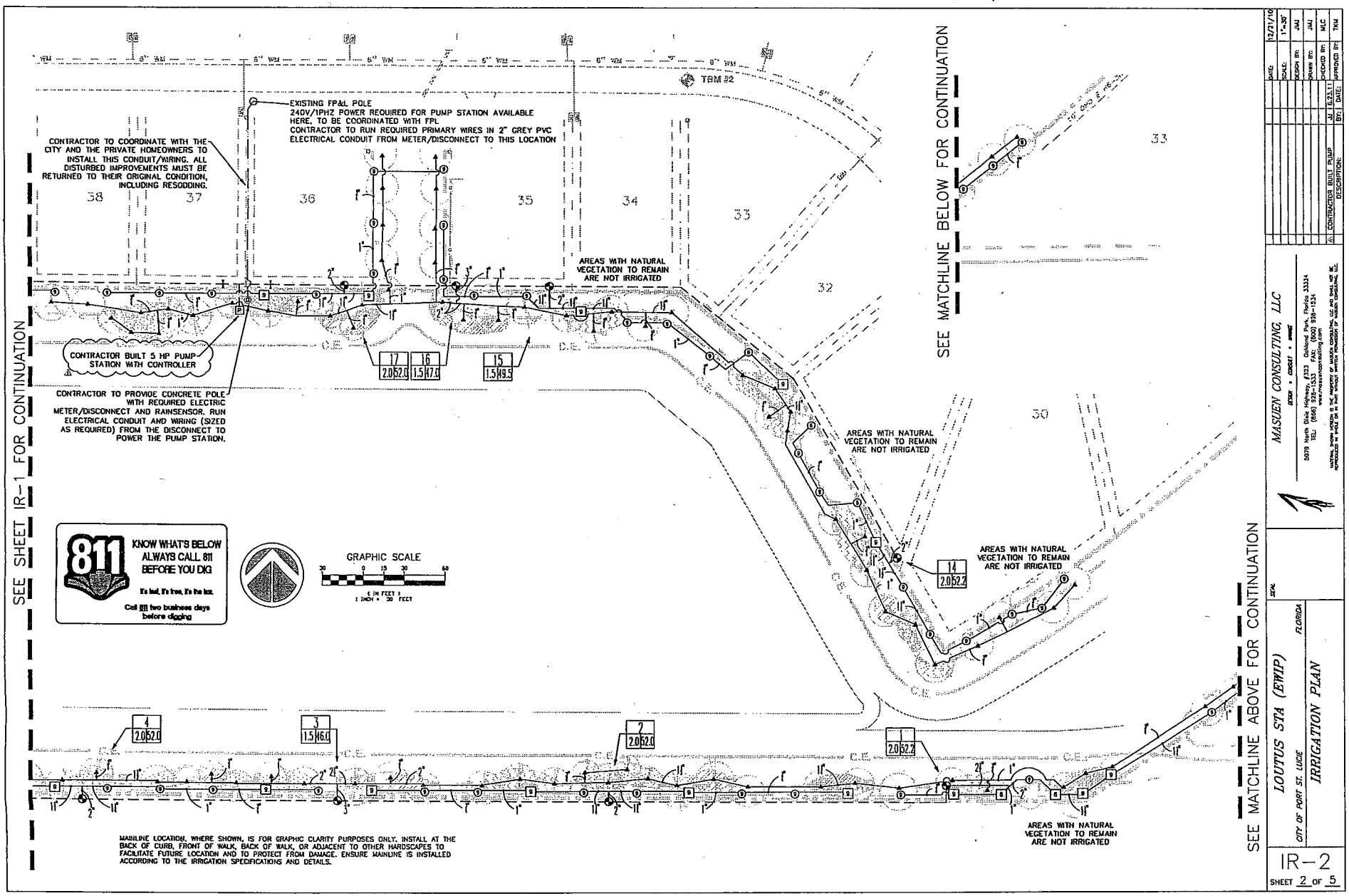
1. Revised Construction Plan sheets are identified as follows and must be acknowledged on the E-Bid Reply Sheet #20110079.

   Addendum #5A dated 7/21/2011 is Loutus STA Irrigation Plan sheets 1 – 5.
   Addendum #5B dated 7/21/2011 is Cane Slough/Elks Site Irrigation Plan sheets 1 – 5.
   Addendum #5C dated 7/21/2011 is Tiffany Intake Channel (EWIP) Irrigation Plan sheets 1 – 8.

NOTE: The bid opening date has not been changed.

Instructions to Bidder:
Each bidder must acknowledge receipt of any addenda on the Bid Reply Sheet in order to have his/her bid or proposal to be accepted


811
KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG
It's fast, It's free, It's the law.
Call 811 two business days before digging
GRAPHIC SCALE
1 INCH = 30 FEET
MAINLINE LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING TO THE IRRIGATION SPECIFICATIONS AND DETAILS.
49
47
46
45
44
43
42
41
40
39
10 2.0 64.0
11 1.5 49.5
12 1.5 46.0
13 2.0 52.0
9 2.0 51.0
8 2.0 53.5
7 1.5 44
6 2.0 55.0
SEE SHEET IR-2 FOR CONTINUATION
7-22-11
5A
DATE: 12/21/10
SCALE: 1"=30'
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MJC
APPROVED BY: TKM
DESCRIPTION:
BY:
DATE:
MASUEN CONSULTING, LLC
5078 North Dixie Highway, #323 Oakland Park, Florida 33334
TEL: (866) 328-1333 FAX: (800) 328-1334
www.masuenconsulting.com
LOUTUS STA (EWIP)
CITY OF PORT ST. LUCIE
FLORIDA
IRRIGATION PLAN
IR-1
SHEET 1 OF 5



MASUEN CONSULTING, LLC
LANDSCAPE ARCHITECTURE • PLANNING
5079 North Dixie Highway, #323 Oakland Park, Florida 33334
TEL: (866) 928-1533 FAX: (800) 928-1534
www.masuenconsulting.com

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DESCRIPTION:	BY:	DATE:	APPROVED BY:
CONTRACTOR BUILT PUMP	JM	6.23.11	TKM

DATE: 12/21/10
SCALE: 1"=30'
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MLC

LOUTUS STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN

IR-2
SHEET 2 OF 5

IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
3		STATION NUMBER	
15.4095		GALLONS PER MINUTE-CATALOG FLOW	
		VALVE SIZE	
1	P	CONTRACTOR BUILT IN PLACE 5HP, CENTRIFUGAL PUMP STATION WITH FIBERGLASS ENCLOSURE AND FLOWMETER. POWER IS 240V/1 PHASE. WATER SOURCE IS A PROPOSED LAKE. STATION INCLUDES RAIN BIRD ESP-LXM MODULAR CONTROLLER WITH 24 STATIONS AND A BASELINE WATERTEC 5100 SOIL MOISTURE SENSOR, INTERFACE MOUNTED WITH CONTROLLER. CONTRACTOR TO INSTALL SOIL MOISTURE FIELD SENSOR IN FIELD PER MANUFACTURER'S RECOMMENDATIONS.	A1 A2 A3
1	⓪	12' CONCRETE POLE WITH ELECTRICAL METER, MAIN DISCONNECT BOX, RAIN SENSOR AND GROUNDING	A3
17		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) IN A CARSON 1220 JUMBO VALVE BOX.	B
3		MBCO 11-8 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		PRIMARY WIRE PATH IN 2" GREY PVC ELECTRICAL CONDUIT	L
		4" CLASS 200 GASKETED PVC MAINLINE WITH CL 200 PVC GASKETED FITTINGS	L

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) -- THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

IRRIGATION HEAD LEGEND

QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN (P.S.I)	DESIGN (G.P.M)
184	▲	RAIN BIRD 1404 FLOOD BUBBLER ON POLY PIPE	Q	30	1.00
6	①	HUNTER PGP-04-CV-06 NOZZLE (QUARTER CIRCLE)	V1	50	2.70
88	①	HUNTER PGP-04-CV-09 NOZZLE (HALF CIRCLE)	V1	50	5.20
2	①	HUNTER PGP-04-CV-12 NOZZLE (FULL CIRCLE)	V2	50	11.90
2	①	HUNTER PGP-12-CV-06 NOZZLE (QUARTER CIRCLE) ON SCH 40 RISER	V3 V5	50	2.70
22	①	HUNTER PGP-12-CV-09 NOZZLE (HALF CIRCLE) ON SCH 40 RISER	V3 V5	50	5.20
5	⑫	HUNTER PGP-12-CV-12 NOZZLE (FULL CIRCLE) ON SCH 40 RISER	V4 V5	50	11.90

NOTES:

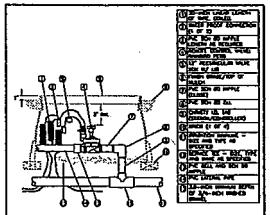
1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 3" HDPE PIPE FROM THE BOTTOM OF THE "Z" PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

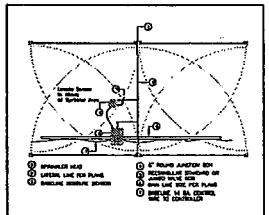
HDPE NOTE:

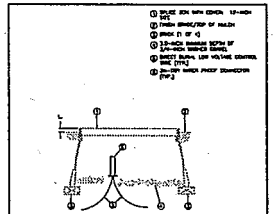
1. NO ELECTROFUSION/BUTT FUSION JOINTS MAY BE MADE WITHOUT PSL STAFF OR THEIR ASSIGNS ON SITE TO PHOTOGRAPH EACH JOINT.

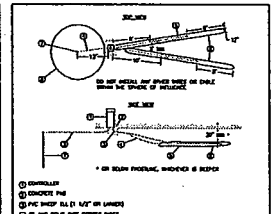
SOIL MOISTURE SENSOR NOTES:

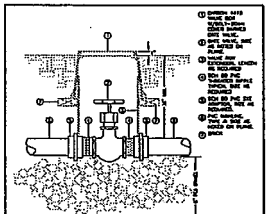
1. PLACE ALL SOIL MOISTURE SENSOR WIRING IN 1" SCH 40 PVC CONDUIT
2. SOIL MOISTURE SENSOR SHOULD BE PLACED IN THE MIDDLE OF A SPRAY OR DRIP AREA AS PER MANUFACTURER'S RECOMMENDATIONS.

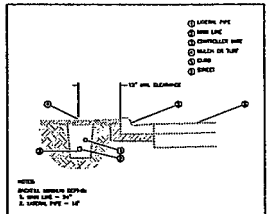

B — RAIN BIRD RCV

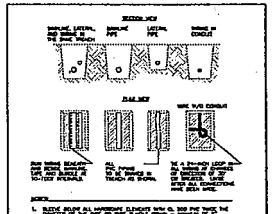

C2 — SOIL MOISTURE SENSOR

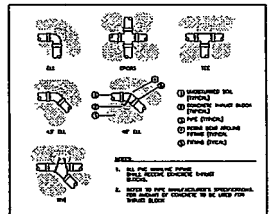

C — WIRE SPLICE

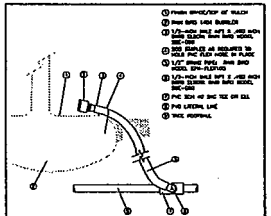

C — GROUNDING DETAIL

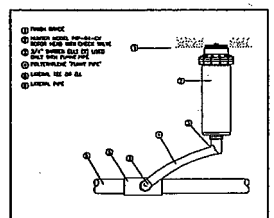

D — TI-8 GATE VALVE

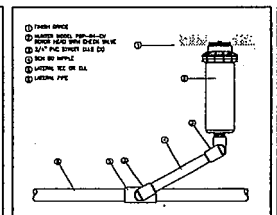

L — MAINLINE AND LATERAL PIPING DETAIL

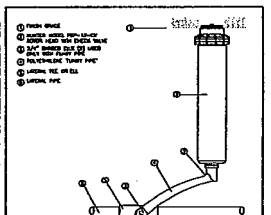

L — PIPE AND WIRE TRENCHING

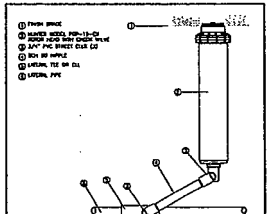

L — THRUST BLOCK

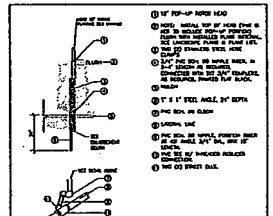

Q — RAIN BIRD 1804 BUBBLER ON POLY PIPE


V1 — HUNTER PGP-04-CV ROTOR UNDER 6 GPM


V2 — HUNTER PGP-04-CV ROTOR OVER 6 GPM


V3 — HUNTER PGP-12-CV ROTOR UNDER 6 GPM


V4 — HUNTER PGP-12-CV ROTOR OVER 6 GPM


V5 — POP-UP ROTOR ON RISER

	DATE:	12/21/10
	SCALE:	N.T.S.
	DESIGN BY:	JMJ
	DRAWN BY:	JMJ
A	MAINLINE FITTINGS	7.21.11 MLC
⚠	CONTRACTOR BUILT PUMP	8.24.11 TRM
	DESCRIPTION:	BY: DATE: CHECKED BY: APPROVED BY:

MASUEN CONSULTING, LLC
DESIGN • CONSULT • MANAGE
5078 North Dixie Highway, #323 Oakland Park, Florida 33334
TEL: (866) 928-1533 FAX: (800) 928-1534
www.masuenconsulting.com

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LOUTUS STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION DETAILS

IR-3
SHEET 3 OF 5

ENCLOSED CLOCK START
SINGLE PUMP CENTRIFUGAL PUMP SYSTEM

PURPOSE:
TO PROVIDE A COMPLETE ENCLOSED CLOCK START PUMP SYSTEM AS SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO THE OWNER FOR APPROVAL, PRIOR TO PURCHASING SYSTEM COMPONENTS. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL MAJOR SYSTEM COMPONENTS.

ENCLOSURE:
THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE ALLIED FIBERGLASS INDUSTRIES MODEL AE100.

MOUNTING:
ALL EQUIPMENT SHALL BE SECURELY MOUNTED TO THE 6" THICK REINFORCED CONCRETE SLAB WITH GALVANIZED HARDWARE. 1-1/2" UNISTRUT EQUIPMENT RACK SHALL SUPPORT CONTROLLER, GFCI OULET, SOIL MOISTURE SENSOR INTERFACE STEPDOWN TRANSFORMER, AND ANY MISCELLANEOUS EQUIPMENT REQUIRED.

PUMP AND MOTOR:
THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH ITS LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR.

THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 230 VOLT, 1 PHASE, 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED, CONFIGURED TO ALLOW DIRECT MOUNTING OF THE PUMP'S LIQUID END.

THE CLOSE-COUPLED PUMP AND DRIVING MOTOR SHALL BE OBTAINED FROM A SINGLE SOURCE.
1. 5HP SYSTEM: THE MOTOR SHALL BE RATED AT 5 H.P. AT 230 VOLTS, 1 PHASE, 60 HZ. THE PUMP SHALL BE CAPABLE OF DELIVERING 55 GPM AT 67 PSI AT THE PUMP DISCHARGE.

OPERATION
THE STATION OPERATES AS A CLOCK START, CLOCK RETIREMENT SYSTEM.

CLOCK START
THE PUMP STARTS WHEN THE IRRIGATION CONTROLLER (CLOCK) BEGINS A WATERING SEQUENCE.

CLOCK RETIREMENT
THE PUMP SHUTS OFF WHEN THE CLOCK COMPLETES A WATERING SEQUENCE.

OVERHEAT PROTECTION
A 'HOT STOP' WILL BE PROVIDED IN THE PUMP VOLUTE AND WIRED TO SHUT DOWN THE PUMP WHEN OVERHEAT CONDITIONS OCCUR

DISCHARGE PIPE MANIFOLD:
THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF 2" GALVANIZED STEEL PIPE AND FITTINGS. A PRESSURE RELIEF VALVE, PRESSURE GAUGE, MCPROPELLER FLOWMETER AND BRONZE BALL VALVE WILL BE PROVIDED ON THE STATION DISCHARGE.

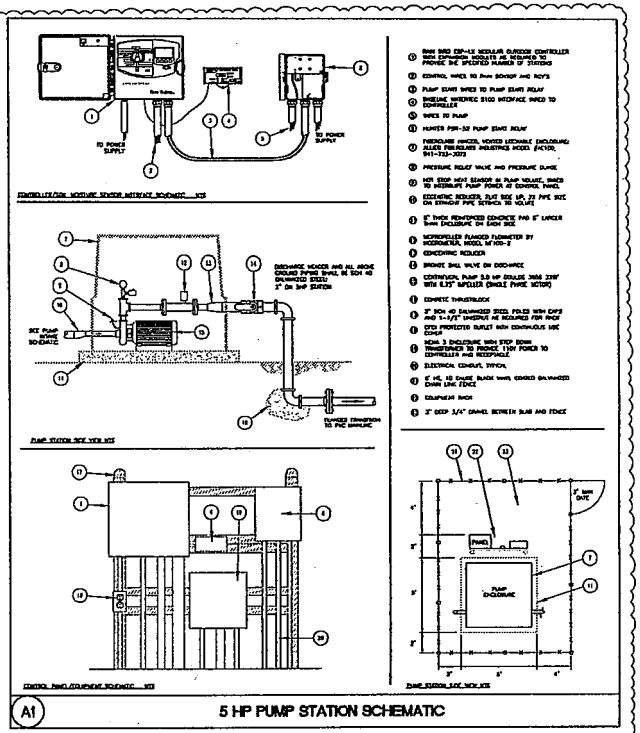
IRRIGATION CONTROLLER:
RAIN BIRD MODEL ESP-LXM WITH EXPANSION MODULES AS REQUIRED FOR THE TOTAL NUMBER OF SPECIFIED STATIONS, THE CONTROLLER SHALL ACTIVATE THE PUMP VIA THE PUMP START RELAY.

SUCTION LINE:
THE SUCTION LINE SHALL BE SCH 40 GALVANIZED STEEL WITH ECCENTRIC REDUCER AS REQUIRED, TO BELOW GRADE. TRANSITION TO HDPE SUCTION LINE AT A FLANGED FITTING AND CONTINUE PER DETAILS TO A SWING CHECK VALVE AND 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.

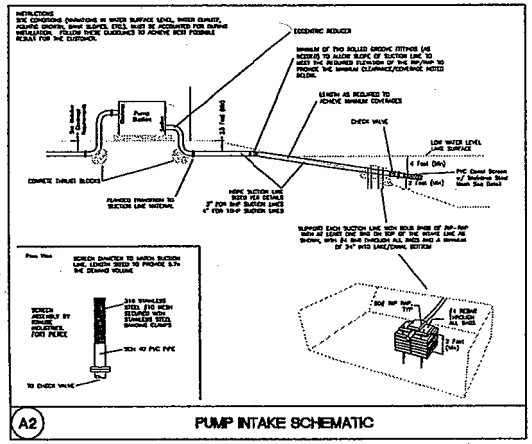
WARRANTIES:
THE CONTRACTOR SHALL WARRANT THE PUMP SYSTEM FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE STE BY THE OWNER, NOT TO EXCEED 18 MONTHS FROM INSTALLATION.

NOTES:

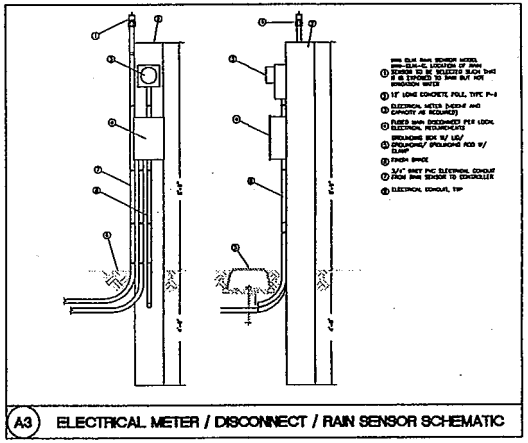
1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 3" HDPE PIPE FROM THE BOTTOM OF THE 'Z' PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY THE PUMP SYSTEM MANUFACTURER.



A1 5 HP PUMP STATION SCHEMATIC



A2 PUMP INTAKE SCHEMATIC



A3 ELECTRICAL METER / DISCONNECT / RAIN SENSOR SCHEMATIC

NO.	DESCRIPTION	DATE	BY
1	CONTRACTOR BUILT PUMP	6.23.11	JM

DATE: 12/31/10
SCALE: N.T.S.
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MJC
APPROVED BY: TRM

MASUEN CONSULTING, LLC
LANDSCAPE • CONSULT • MANAGE
5079 North Dixie Highway, #323 Oakland Park, Florida 33334
TEL: (866) 328-1533 FAX: (800) 328-1534
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SEAL

LOUTUS STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PUMP

IR-4
SHEET 4 OF 5

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 11/01/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

<u>The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.</u>

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

The P.O.C. is a proposed contractor built centrifugal pump station using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 55 gpm at 65 PSI downstream of the pump.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with CL 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be 4" CL 200 gasketed PVC with CL 200 PVC gasketed fittings and thrust blocks as required.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (gray, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run three spare wires in both directions (six spare wires total). Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 6" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Contractor to utilize 4"X8'X5/8" copper grounding plates, 5/8"X10' copper clad grounding rods, 'One Strike' CAD wells at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Point all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

<u>Solvent Weld Pipe:</u> Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

<u>Gasketed Pipe:</u> With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
- 24" minimum with a 30" minimum at vehicular crossings;

Lateral line depths measured to top of pipe shall be:
- 18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (ball fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

<u>Mainline:</u> Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

<u>Lateral Lines:</u> The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing –Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The Irrigation Contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

<u>After project completion:</u>

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts: one per controller, indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mil pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainlines shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items, as determined by owner, shall be completed within 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of 'as-built' drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have been made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

A. Turn on each zone from the controller to verify automatic operation.
B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an E.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
C. Check remote control valve to ensure proper operation.
D. Check setting on pressure regulator to verify proper setting, if present.
E. Check flow control and adjust as needed; ensure valve closure within 10–15 seconds after deactivation by controller.
F. Check for leaks – mainline, lateral lines, valves, heads, etc.
G. Check all heads as follows:

1. Proper set height (top of sprinkler is 1" below mow height)
2. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
3. Check riser seal for leaks – if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

	DATE:	12/21/10
	SCALE:	N.T.S.
	DESIGN BY:	JMJ
	DRAWN BY:	JMJ
A	MAINLINE FITTINGS	JJ 7.21.11 CHECKED BY: MJC
A	CONTRACTOR BURST PUMP	JJ 8.23.11 APPROVED BY: TKM
	DESCRIPTION:	BY: DATE:

MASUEN CONSULTING, LLC
LANDSCAPE • CONSULT • MANAGE
5979 North Dixie Highway, #323 Oakland Park, Florida 33334
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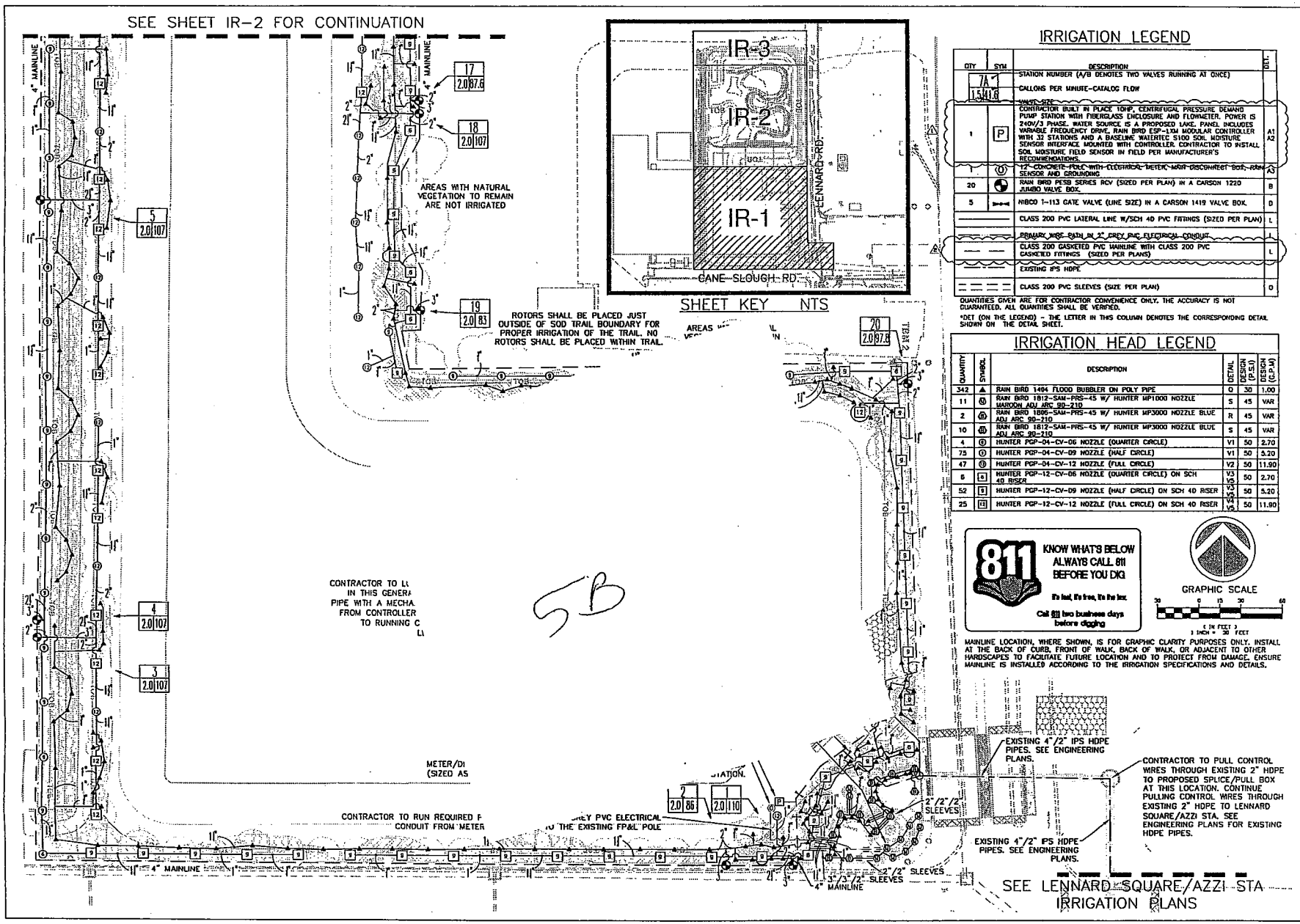
LOVITUS STA (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION NOTES

IR–5
SHEET 5 OF 5



IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
7A / 1.5/41.6		STATION NUMBER (A/B DENOTES TWO VALVES RUNNING AT ONCE) / GALLONS PER MINUTE-CATALOG FLOW / VALVE SIZE	
1	P	CONTRACTOR BUILT IN PLACE 10HP, CENTRIFUGAL PRESSURE DEMAND PUMP STATION WITH FIBERGLASS ENCLOSURE AND FLOWMETER. POWER IS 240V/3 PHASE. WATER SOURCE IS A PROPOSED LAKE. PANEL INCLUDES VARIABLE FREQUENCY DRIVE, RAIN BIRD ESP-LXM MODULAR CONTROLLER WITH 32 STATIONS AND A BASELINE WATERTEC 5100 SOIL MOISTURE SENSOR INTERFACE MOUNTED WITH CONTROLLER. CONTRACTOR TO INSTALL SOIL MOISTURE FIELD SENSOR IN FIELD PER MANUFACTURER'S RECOMMENDATIONS.	A1 A2
1		~~24" CONCRETE POLE WITH ELECTRICAL METER, MAIN DISCONNECT BOX, RAIN SENSOR AND GROUNDING~~	~~A3~~
20		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) IN A CARSON 1220 JUMBO VALVE BOX.	B
5		NIBCO T-113 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		PRIMARY WIRE PATH IN 2" GREY PVC ELECTRICAL CONDUIT	J
		CLASS 200 GASKETED PVC MAINLINE WITH CLASS 200 PVC GASKETED FITTINGS (SIZED PER PLANS)	L
		EXISTING IPS HDPE	
		CLASS 200 PVC SLEEVES (SIZE PER PLAN)	D

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) - THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

IRRIGATION HEAD LEGEND

QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN (P.S.I)	DESIGN (G.P.M)
342	▲	RAIN BIRD 1404 FLOOD BUBBLER ON POLY PIPE	Q	30	1.00
11	M	RAIN BIRD 1812-SAM-PRS-45 W/ HUNTER MP1000 NOZZLE MAROON ADJ ARC 90-210	S	45	VAR
2	M	RAIN BIRD 1806-SAM-PRS-45 W/ HUNTER MP3000 NOZZLE BLUE ADJ ARC 90-210	R	45	VAR
10	M	RAIN BIRD 1812-SAM-PRS-45 W/ HUNTER MP3000 NOZZLE BLUE ADJ ARC 90-210	S	45	VAR
4	5	HUNTER PGP-04-CV-06 NOZZLE (QUARTER CIRCLE)	V1	50	2.70
75	5	HUNTER PGP-04-CV-09 NOZZLE (HALF CIRCLE)	V1	50	5.20
47	5	HUNTER PGP-04-CV-12 NOZZLE (FULL CIRCLE)	V2	50	11.90
5	5	HUNTER PGP-12-CV-06 NOZZLE (QUARTER CIRCLE) ON SCH 40 RISER	V3	50	2.70
52	5	HUNTER PGP-12-CV-09 NOZZLE (HALF CIRCLE) ON SCH 40 RISER	V3	50	5.20
25	12	HUNTER PGP-12-CV-12 NOZZLE (FULL CIRCLE) ON SCH 40 RISER	V3	50	11.90

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Call 811 two business days before digging

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FEET

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NO.	DESCRIPTION	BY:	DATE:
7A	CONTRACTOR BUILT IN PLACE PUMP	JJ	7.21.11

DATE: 3/15/11
SCALE: 1"=30'
DESIGN BY: JMJ
DRAWN BY: JMJ
CHECKED BY: MJC
APPROVED BY: TKM

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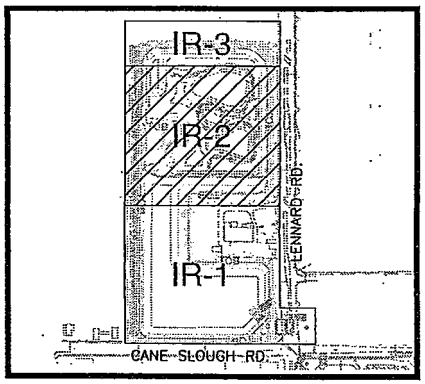
SEAL

CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN

IR-1
SHEET 1 OF 5



SHEET KEY NTS

NOTES:

1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 4" HDPE PIPE FROM THE BOTTOM OF THE "Z" PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

HDPE NOTE:

1. NO ELECTROFUSION/BUTT FUSION JOINTS MAY BE MADE WITHOUT PSL STAFF OR THEIR ASSIGNS ON SITE TO PHOTOGRAPH EACH JOINT.

SOIL MOISTURE SENSOR NOTES:

1. PLACE ALL SOIL MOISTURE SENSOR WIRING IN 1" SCH 40 PVC CONDUIT
2. SOIL MOISTURE SENSOR SHOULD BE PLACED IN THE MIDDLE OF A SPRAY OR DRIP AREA AS PER MANUFACTURER'S RECOMMENDATIONS.

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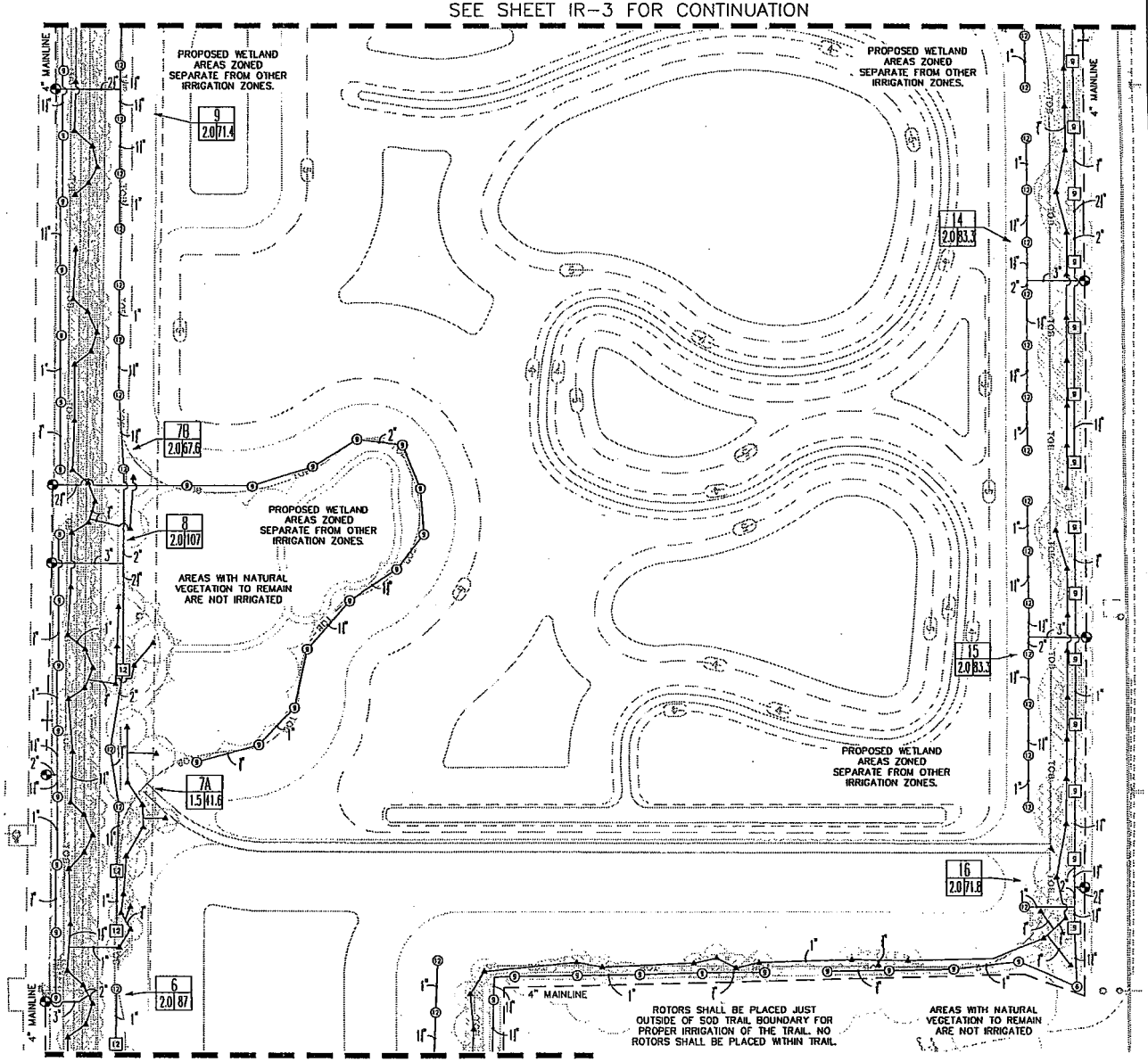
SEE SHEET IR-3 FOR CONTINUATION



SEE SHEET IR-1 FOR CONTINUATION

DATE:	3/15/11
SCALE:	1"=30'
DESIGN BY:	JAJ
DRAWN BY:	JAJ
CHECKED BY:	WLC
APPROVED BY:	TKM

BY:	DATE:	DESCRIPTION:
JAJ	5.23.11	CONTRACTOR BUILT PUMP

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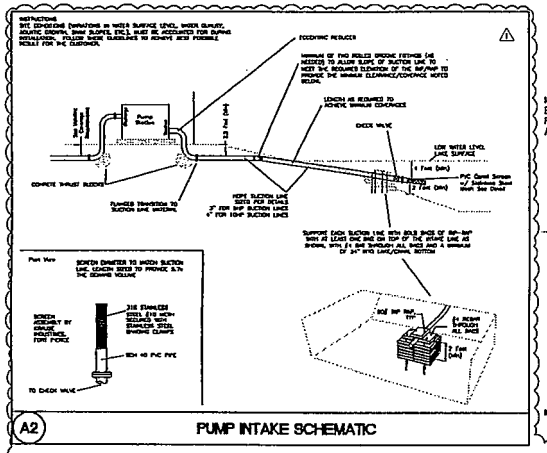
CANE SLOUGH/ELKS SITE (EWIP)

CITY OF PORT ST. LUCIE FLORIDA

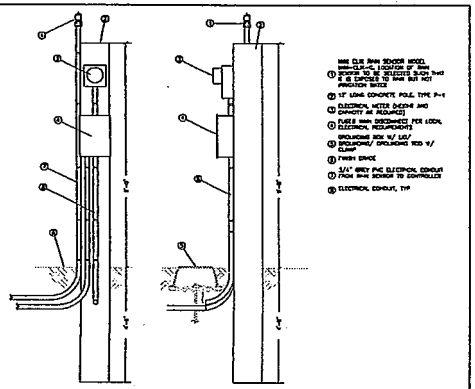
IRRIGATION PLAN

IR-2

SHEET 2 OF 5



A2 PUMP INTAKE SCHEMATIC



A3 ELECTRICAL METER / DISCONNECT / RAIN SENSOR SCHEMATIC

NOTES:

1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 4" HDPE PIPE FROM THE BOTTOM OF THE '2' PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.

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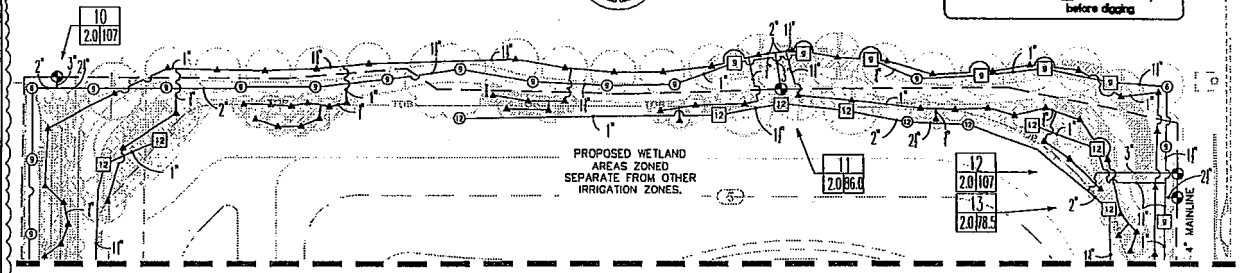
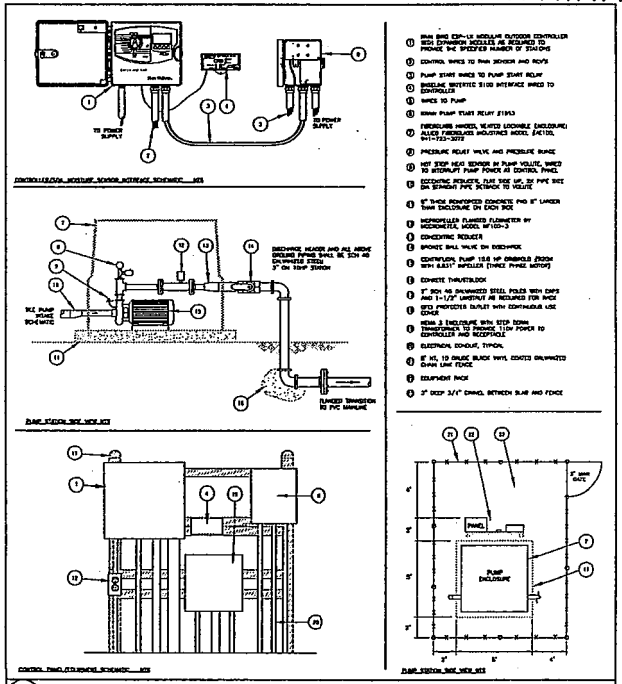


SEE SHEET IR-2 FOR CONTINUATION



A1 10 HP PUMP STATION SCHEMATIC

ENCLOSED PRESSURE DEMAND
SINGLE PUMP CENTRIFUGAL PUMP SYSTEM

PURPOSE:
TO PROVIDE A COMPLETE, ENCLOSED PRESSURE DEMAND PUMP SYSTEM AS SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO THE OWNER FOR APPROVAL, PRIOR TO PURCHASING SYSTEM COMPONENTS. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL MAJOR SYSTEM COMPONENTS.

ENCLOSURE:
THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE ALLIED FIBERGLASS INDUSTRIES MODEL AE100.

MOUNTING:
ALL EQUIPMENT SHALL BE SECURELY MOUNTED TO THE 6" THICK REINFORCED CONCRETE SLAB WITH GALVANIZED HARDWARE. 1-1/2" UNISTRUT EQUIPMENT RACK SHALL SUPPORT CONTROLLER, PUMP CONTROLLER, GFCI OUTLET, SOIL MOISTURE SENSOR INTERFACE, STEPDOWN TRANSFORMER AND ANY MISCELLANEOUS EQUIPMENT REQUIRED.

PUMP AND MOTOR:
THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH ITS LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR.

THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 230 VOLT, 3 PHASE, 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED, CONFIGURED TO ALLOW DIRECT MOUNTING OF THE PUMP'S LIQUID END.

THE CLOSE-COUPLED PUMP AND DRIVING MOTOR SHALL BE OBTAINED FROM A SINGLE SOURCE.
1. 10HP SYSTEM: THE MOTOR SHALL BE RATED AT 10 H.P. AT 230 VOLTS, 3 PHASE, 60 HZ. THE PUMP SYSTEM SHALL UTILIZE A VARIABLE FREQUENCY DRIVE SET FOR SLOW START (0% TO 100% OVER 5 SECONDS) WITH 100% OPERATION AT 3450 RPM. THE PUMP SHALL BE CAPABLE OF DELIVERING 110 GPM AT 75 PSI AT THE PUMP DISCHARGE

OPERATION
THE STATION OPERATES AS A LOW PRESSURE START, HIGH PRESSURE RETIRE SYSTEM ENABLED THROUGH THE CONTROL PANEL.

OVERHEAT PROTECTION
A 'HOT STOP' WILL BE PROVIDED IN THE PUMP VOLUTE AND WIRED TO SHUT DOWN THE PUMP WHEN OVERHEAT CONDITIONS OCCUR.

DISCHARGE PIPE MANIFOLD:
THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF 3" GALVANIZED STEEL PIPE AND FITTINGS. A PRESSURE RELIEF VALVE, PRESSURE GAUGE, MCPROPELLER FLOWMETER, CONNECTION TO PRESSURE TANK, AND BRONZE BALL VALVE WILL BE PROVIDED ON THE STATION DISCHARGE.

PRESSURE TANK:
A WELLMATE CAPTIVE AIR TANK #WM-6 (20 GAL, 125PSI RATED) WITH A PRESSURE TRANSDUCER (INCLUDED WITH CONTROL PANEL) WILL BE PLUMBED INTO THE DISCHARGE HEADER, ISOLATED BY A GALVANIZED UNION. THE PRESSURE TRANSDUCER WILL BE WIRED TO THE CONTROL PANEL.

IRRIGATION CONTROLLER:
RAIN BIRD MODEL ESP-LXM WITH EXPANSION MODULES AS REQUIRED FOR THE TOTAL NUMBER OF SPECIFIED STATIONS.

SUCTION LINE:
THE SUCTION LINE SHALL BE SCH 40 GALVANIZED STEEL WITH ECCENTRIC REDUCER AS REQUIRED UNTIL TO BELOW GRADE. TRANSITION TO HDPE SUCTION LINE AT A FLANGED FITTING AND CONTINUE PER DETAILS TO A SWING CHECK VALVE AND 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.

WARRANTIES:
THE CONTRACTOR SHALL WARRANT THE PUMP SYSTEM FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE SITE BY THE OWNER, NOT TO EXCEED 18 MONTHS FROM INSTALLATION.

DATE:	3/15/11
SCALE:	1"=30'
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MJC
APPROVED BY:	TKM
1 6.23.11	CONTRACTOR BUILT PUMP
NO. DATE	DESCRIPTION

MASUEN CONSULTING, LLC
DESIGN • CONSULT • MANAGE
5079 North Dixie Highway, #223 Oakland Park, Florida 33334
TEL: (866) 938-1533 FAX: (800) 938-1534
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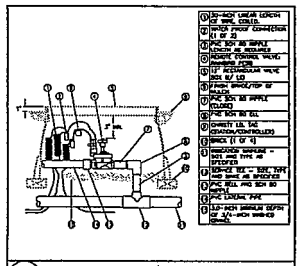
SEAL

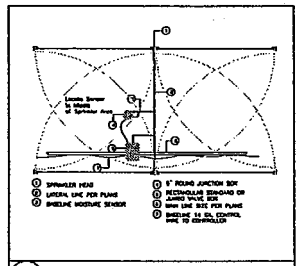
CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION PLAN & PUMP

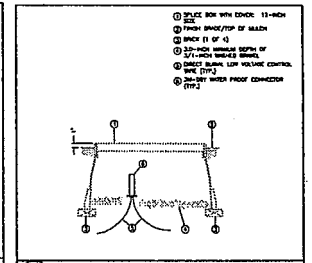
IR-3
SHEET 3 OF 5



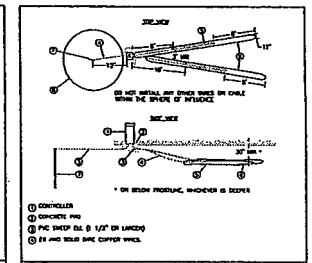
B RAIN BIRD RCV



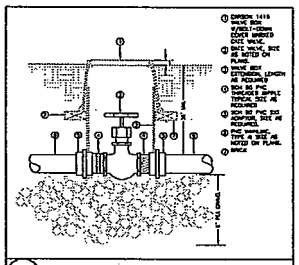
C2 SOIL MOISTURE SENSOR



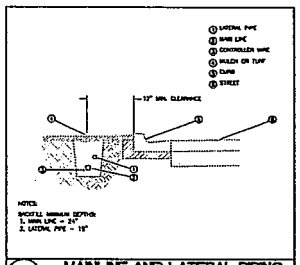
C WIRE SPLICE



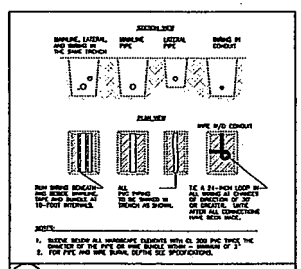
C GROUNDING DETAIL



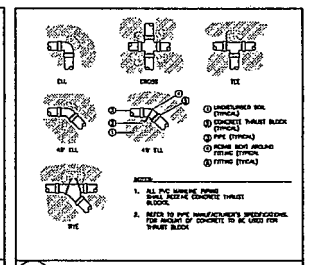
D T-113 GATE VALVE



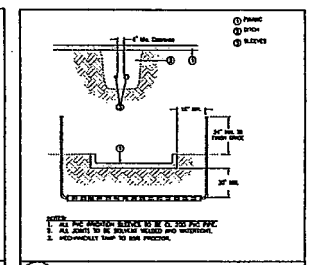
L MAINLINE AND LATERAL PIPING DETAIL



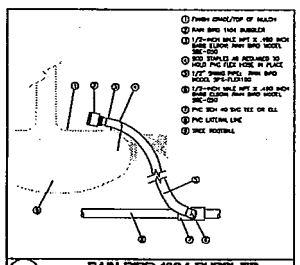
L PIPE AND WIRE TRENCHING



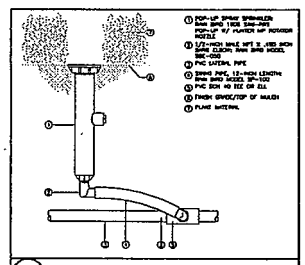
L THRUST BLOCK



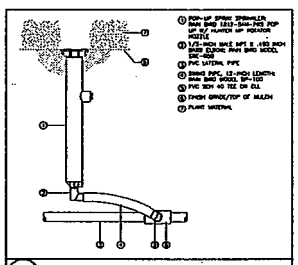
O SLEEVING



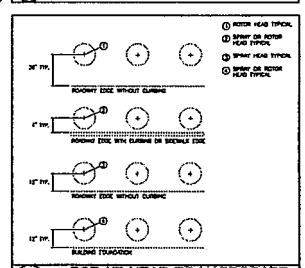
Q RAIN BIRD 1804 BUBBLER ON POLY PIPE



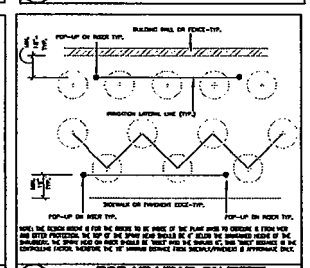
R RAIN BIRD 1806 SAM-PRS SPRAY



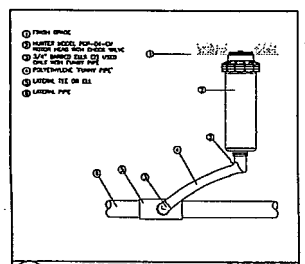
S RAIN BIRD 1812 SAM-PRS SPRAY



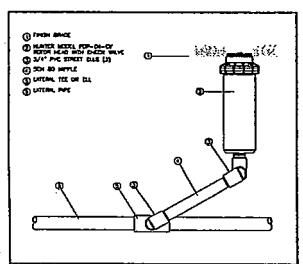
T POP-UP HEAD TO HARDSCAPE LOCATION DETAIL-A



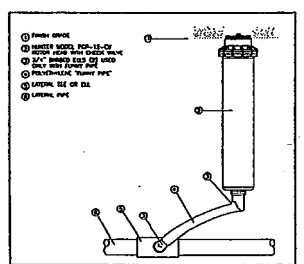
T POP-UP HEAD ON RISER LOCATION DETAIL-B



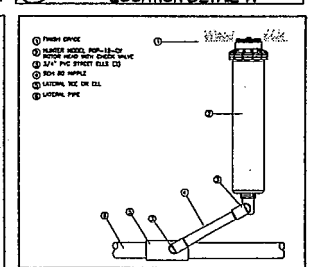
V1 HUNTER PGP-04-CV ROTOR UNDER 6 GPM



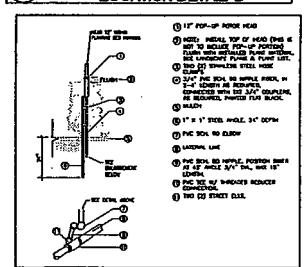
V2 HUNTER PGP-04-CV ROTOR OVER 6 GPM



V3 HUNTER PGP-12-CV ROTOR UNDER 6 GPM



V4 HUNTER PGP-12-CV ROTOR OVER 6 GPM



V5 POP-UP ROTOR ON RISER

DATE:	3/15/11
SCALE:	NTS
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	TKM

DESCRIPTION: BY: DATE:

MASUEN CONSULTING, LLC
DESIGN • CONSULT • MANAGE
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SEAL

CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION DETAILS

IR-4

SHEET 4 OF 5

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 11/08/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

(1) The P.O.C. is a proposed contractor built centrifugal pump station using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 110 gpm at 65 PSI downstream of the pump.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with CL 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

(2) Mainline shall be CL 200 gasketed PVC with CL 200 PVC gasketed fittings and thrust blocks as required (sized per plan).

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2" coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3M DBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:

- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run three spare wire in both directions (six spare wires total). Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Contractor to utilize 4"X8'X5/8" copper grounding plates, 5/8"X10' copper clad grounding rods, 'One Strike' CAD wells at all connection points, #6 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from uncurbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully sealed into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
24" minimum with a 30" minimum at vehicular crossings;
Lateral line depths measured to top of pipe shall be:
18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at two gauge locations: the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing – Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

After project completion:

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mil pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items, as determined by owner, shall be completed within 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of 'as-built' drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:

   A. Turn on each zone from the controller to verify automatic operation.
   B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
   C. Check remote control valve to ensure proper operation.
   D. Check setting on pressure regulator to verify proper setting, if present.
   E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
   F. Check for leaks – mainline, lateral lines, valves, heads, etc.
   G. Check all heads as follows:

      1. Proper set height (top of sprinkler is 1" below mow height)
      2. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
      3. Check wiper seal for leaks – if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
      4. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
      5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
      6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
      7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

DATE:	3/15/11
SCALE:	NTS
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	TKM

	DESCRIPTION:	BY:	DATE:
2	MAINLINE FITTINGS	JJ	7.21.11
1	CONTRACTOR BUILT PUMP	JJ	6.23.11

MASUEN CONSULTING, LLC
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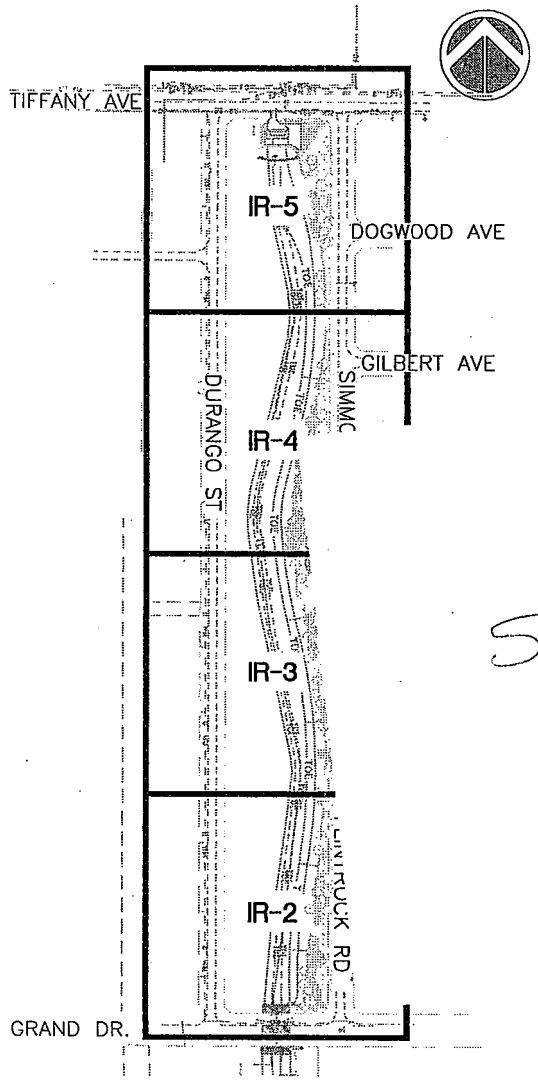
SEAL

CANE SLOUGH/ELKS SITE (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION NOTES



IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
3 / 2,080.0		STATION NUMBER / GALLONS PER MINUTE–CATALOG FLOW / VALVE SIZE	
1	P	CONTRACTOR BUILT IN PLACE 10HP, CENTRIFUGAL PUMP STATION WITH FIBERGLASS ENCLOSURE AND FLOWMETER. POWER IS 240V/3 PHASE. WATER SOURCE IS A PROPOSED LAKE. STATION INCLUDES RAIN BIRD ESP-LXM MODULAR CONTROLLER WITH 16 STATIONS AND A BASELINE WATERTEC 5100 SOIL MOISTURE SENSOR, INTERFACE MOUNTED WITH CONTROLLER. CONTRACTOR TO INSTALL SOIL MOISTURE FIELD SENSOR IN FIELD PER MANUFACTURER'S RECOMMENDATIONS.	A1 A2 A3
1		12' CONCRETE POLE WITH ELECTRICAL METER, MAIN DISCONNECT BOX, RAIN SENSOR AND GROUNDING	A3
13		RAIN BIRD PESB SERIES RCV (SIZED PER PLAN) IN A CARSON 1220 JUMBO VALVE BOX.	B
1		NIBCO T-18 GATE VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
		CLASS 200 PVC LATERAL LINE W/SCH 40 PVC FITTINGS (SIZED PER PLAN)	L
		PRIMARY WIRE PATH IN 2" GREY PVC ELECTRICAL CONDUIT	L
		4" CLASS 200 GASKETED PVC MAINLINE WITH CL 200 GASKETED FITTINGS	L
		CLASS 200 PVC SLEEVES (SIZE PER PLAN)	D

QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.

*DET (ON THE LEGEND) – THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.

ON HEAD LEGEND

DESCRIPTION	DETAIL	DESIGN (P.S.I.)	DESIGN (G.P.M.)
UBBLER ON POLY PIPE	D	30	1.00
-45 W/ HUNTER MPCORNER NOZZLE RST	S	45	VAR
-45 W/ HUNTER MPCORNER NOZZLE LST	S	45	VAR
-45 W/ HUNTER MPSTRIP NOZZLE SST	S	45	VAR
OZZLE (QUARTER CIRCLE)	V1	50	2.70
ZZLE (HALF CIRCLE)	V1	50	5.20
ZZLE (FULL CIRCLE)	V2	50	11.90
ZZLE (QUARTER CIRCLE) ON SCH	V3 V5	50	2.70
2LE (HALF CIRCLE) ON SCH 40 RISER	V3 V5	50	5.20
ZLE (FULL CIRCLE) ON SCH 40 RISER	V4 V5	50	11.90

: OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND

'ATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS WRITTEN PERMISSION FROM THE OWNER/OWNER'S

PIPE FROM THE BOTTOM OF THE 'Z' PIPE TO A 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. E BOTTOM WITH RIP-RAP.

T IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE ORATORY ONLY. WATER QUALITY TESTING MUST SSIUM, CALCIUM, MAGNESIUM, CARBONATE, NITRATE NO3, SULFATE SO4, BORON, IRON, DIUM ABSORPTION RATIO, AND HARDNESS. IF THE IRRIGATION INSTALLATION. IF THE WATER QUALITY WRITTEN DIRECTION FROM THE OWNER/OWNER'S

PRODUCING COMPOUND) IS DETECTED, ADVISE NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A Y THE OWNER, IT MUST BE DIRECTED BY THE OVED PROVIDER.

Y BE MADE WITHOUT PSL STAFF OR THEIR TEN.

NOTES:

1. PLACE ALL SOIL MOISTURE SENSOR WIRING IN 1" SCH 40 PVC CONDUIT
2. SOIL MOISTURE SENSOR SHOULD BE PLACED IN THE MIDDLE OF A SPRAY OR DRIP AREA AS PER MANUFACTURER'S RECOMMENDATIONS.

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It's fast, It's free, It's the law.
Call 811 two business days before digging

MAINLINE LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING TO THE IRRIGATION SPECIFICATIONS AND DETAILS.

DATE:	2/4/11
SCALE:	N.T.S.
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	JMJ

BY:	DATE:	DESCRIPTION:
JJ	6.23.11	CONTRACTOR BUILT PUMP
JJ	7.21.11	MAINLINE FITTINGS

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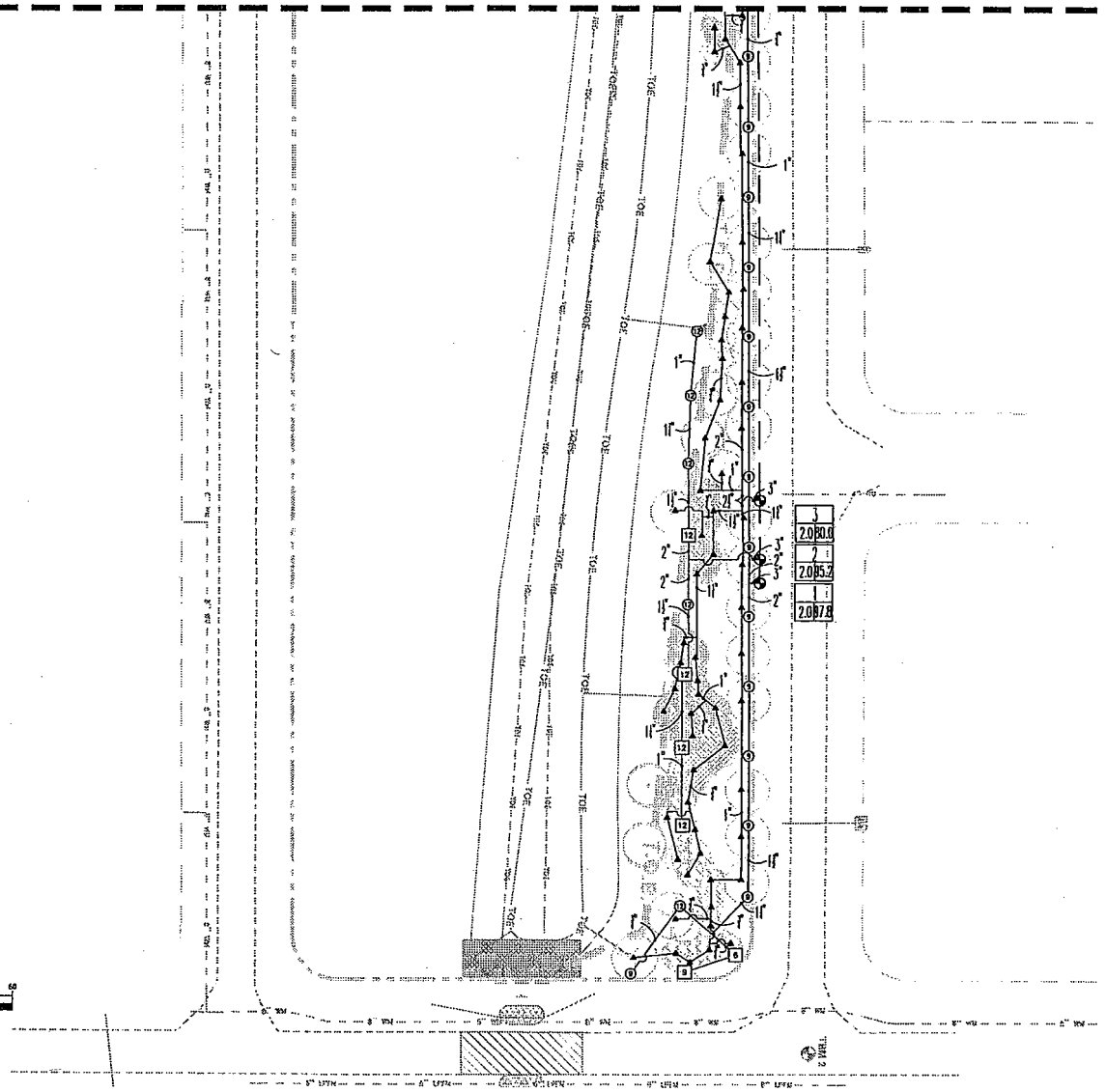
TIFFANY INTAKE CHANNEL (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PLAN

IR-1

SHEET 1 OF 8



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GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 INCH = 30 FEET

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DESCRIPTION:	BY:	DATE:

DATE: 2/4/11
SCALE: 1"=30'
DESIGN BY: JAJ
DRAWN BY: JAJ
CHECKED BY: MLC
APPROVED BY: JAJ

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SEAL

TIFFANY INTAKE CHANNEL (EWIP)
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION PLAN

IR-2

SHEET 2 OF 8

SEE SHEET IR-4 FOR CONTINUATION

SEE SHEET IR-2 FOR CONTINUATION

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30 0 15 30 60

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DATE:	2/4/11
SCALE:	1"=30'
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MLC
APPROVED BY:	JMJ

DESCRIPTION:	BY:	DATE:

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TIFFANY INTAKE CHANNEL (EWIP)

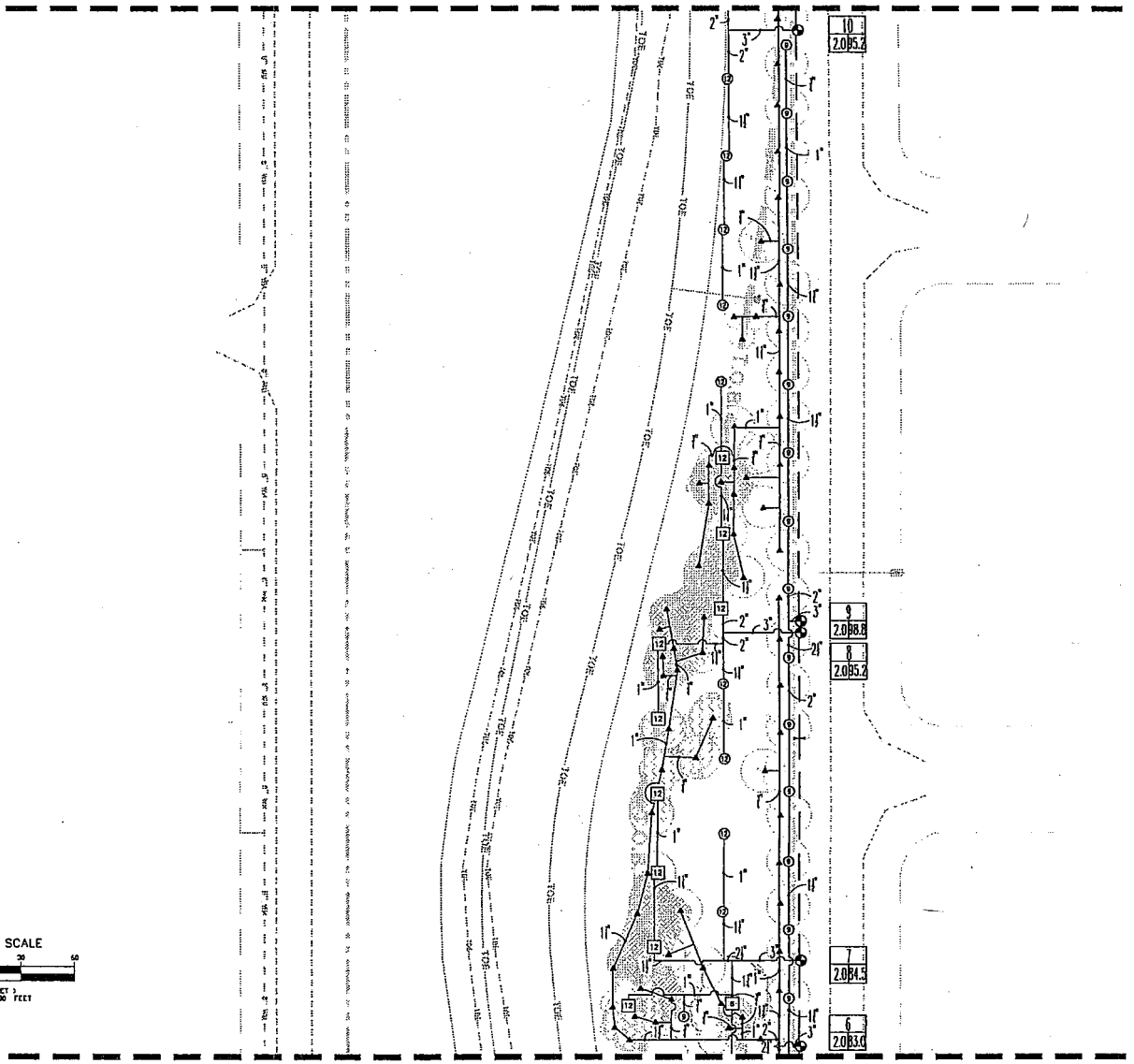
CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION PLAN

IR-3

SHEET 3 OF 8

SEE SHEET IR-5 FOR CONTINUATION



SEE SHEET IR-3 FOR CONTINUATION

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DESCRIPTION:	BY:	DATE:	APPROVED BY:
		DATE:	2/4/11
		SCALE:	1"=30'
		DESIGN BY:	JMJ
		DRAWN BY:	JMJ
		CHECKED BY:	MJC
			JMJ

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SEAL

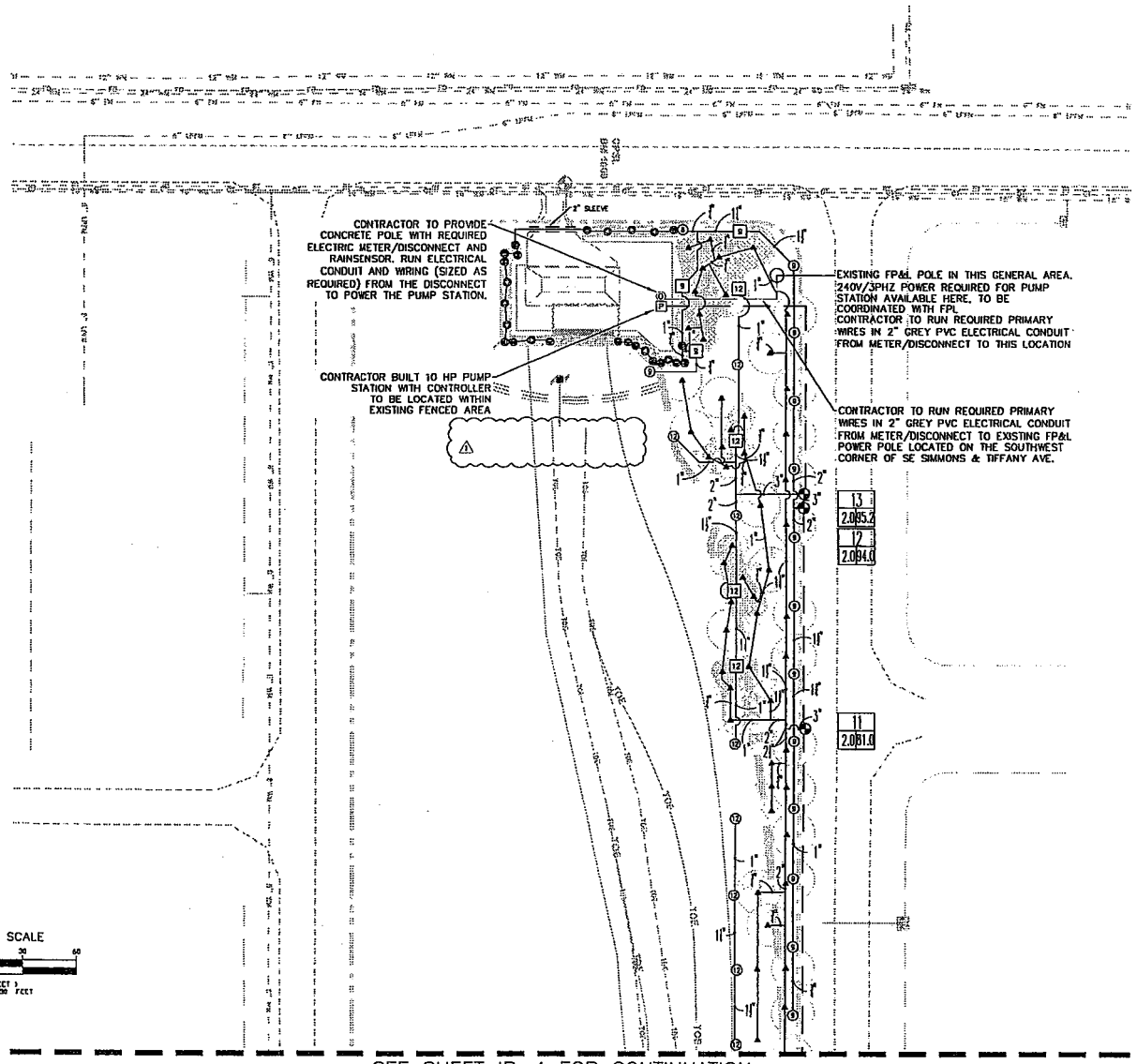
TIFFANY INTAKE CHANNEL (EWIP)

CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION PLAN

IR-4

SHEET 4 OF 8



SEE SHEET IR-4 FOR CONTINUATION

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DESIGN BY:	JAJ		
DRAWN BY:	JAJ		
CHECKED BY:	MLC		
APPROVED BY:	JAJ		
A CONTRACTOR BUILT PUMP	JJ	6.23.11	
DESCRIPTION:	BY:	DATE:	

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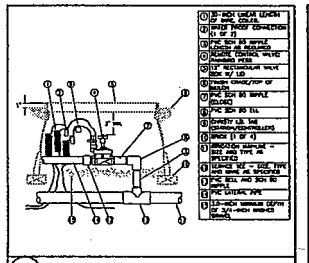
CITY OF PORT ST. LUCIE FLORIDA

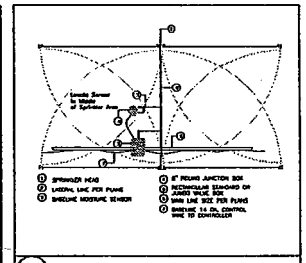
IRRIGATION PLAN

IR-5

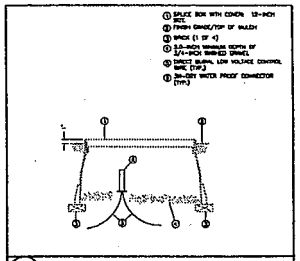
SHEET 5 OF 8



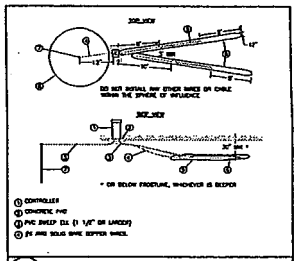
B RAIN BIRD RCV



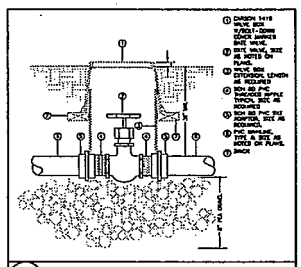
C2 SOIL MOISTURE SENSOR



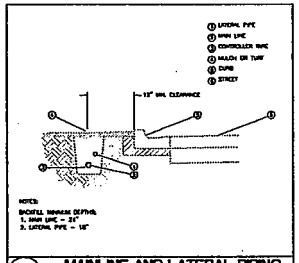
C WIRE SPLICE



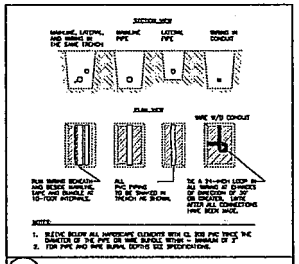
C GROUNDING DETAIL



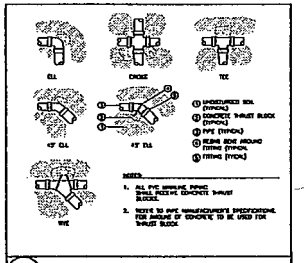
D T-18 GATE VALVE



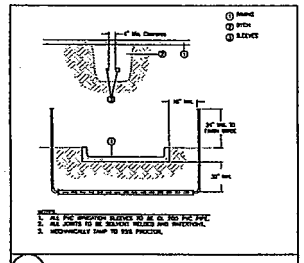
L MAINLINE AND LATERAL PIPING DETAIL



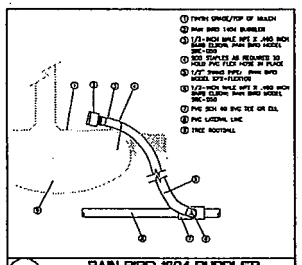
L PIPE AND WIRE TRENCHING



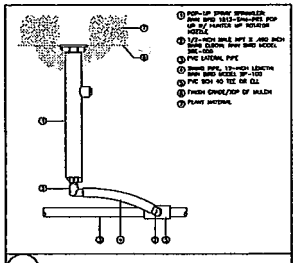
L THRUST BLOCK



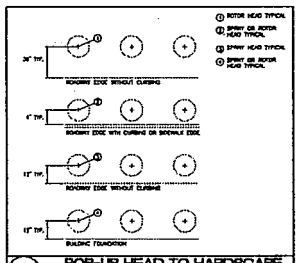
O SLEEVING



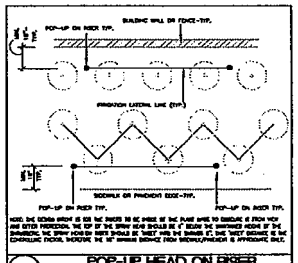
O RAIN BIRD 1804 BUBBLER ON POLY PIPE



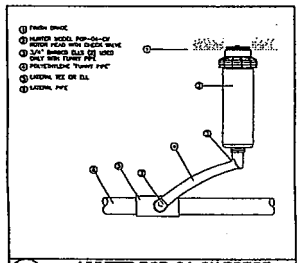
S RAIN BIRD 1812 SAM-PRS SPRAY



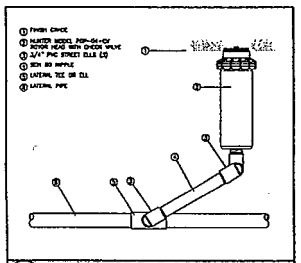
T POP-UP HEAD TO HARDSCAPE LOCATION DETAIL-A



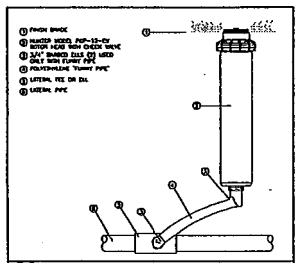
T POP-UP HEAD ON RISER LOCATION DETAIL-B



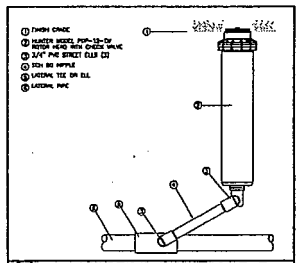
V1 HUNTER PGP-04-CV ROTOR UNDER 6 GPM



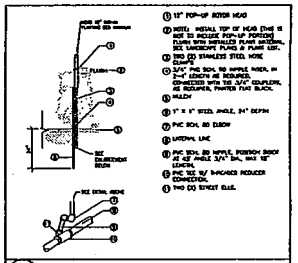
V2 HUNTER PGP-04-CV ROTOR OVER 6 GPM



V3 HUNTER PGP-12-CV ROTOR UNDER 6 GPM



V4 HUNTER PGP-12-CV ROTOR OVER 6 GPM



V5 POP-UP ROTOR ON RISER

DATE:	2/4/11
SCALE:	N.T.S.
DESIGN BY:	JMJ
DRAWN BY:	JMJ
CHECKED BY:	MJC
APPROVED BY:	JMJ

DESCRIPTION:	BY:	DATE:

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SEAL

TIFFANY INTAKE CHANNEL (EWIP)

CITY OF PORT ST. LUCIE FLORIDA

IRRIGATION DETAILS

IR-6

SHEET 6 OF 8

ENCLOSED CLOCK START
SINGLE PUMP CENTRIFUGAL PUMP SYSTEM

PURPOSE:
TO PROVIDE A COMPLETE ENCLOSED CLOCK START PUMP SYSTEM AS SPECIFIED BELOW AND SHOWN ON THE PLAN DETAILS. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO THE OWNER FOR APPROVAL, PRIOR TO PURCHASING SYSTEM COMPONENTS. THE SUBMITTAL SHALL CONTAIN CUT SHEETS FOR ALL MAJOR SYSTEM COMPONENTS.

ENCLOSURE:
THE PUMP STATION SHALL BE PROTECTED BY A FIBERGLASS ENCLOSURE ALLIED FIBERGLASS INDUSTRIES MODEL AE100.

MOUNTING:
EQUIPMENT SHALL BE SECURELY MOUNTED TO THE 6" THICK REINFORCED CONCRETE SLAB WITH GALVANIZED HARDWARE. 1-1/2" UNISTRUT EQUIPMENT RACK SHALL SUPPORT CONTROLLER, PUMP CONTROLLER, GFCI OUTLET, SOIL MOISTURE SENSOR INTERFACE, PUMP RELAY, STEPDOWN TRANSFORMER AND ANY MISCELLANEOUS EQUIPMENT REQUIRED.

PUMP AND MOTOR:
THE PUMP SHALL BE A SINGLE-STAGE END-SUCTION CENTRIFUGAL TYPE, WITH ITS LIQUID END MOUNTED DIRECTLY TO THE MOTOR ENCLOSURE TO ALLOW REAR PULL OUT OF THE ENTIRE MOTOR.

THE PUMP DRIVING MOTOR SHALL BE OF THE SQUIRREL CAGE INDUCTION TYPE. THE MOTOR SHALL BE SUITABLE FOR FULL VOLTAGE STARTING AT 230 VOLT, 1 PHASE, 60 HZ. THE MOTOR ENCLOSURE SHALL BE TOTALLY ENCLOSED FAN COOLED, CONFIGURED TO ALLOW DIRECT MOUNTING OF THE PUMP'S LIQUID END.

THE CLOSE-COUPLED PUMP AND DRIVING MOTOR SHALL BE OBTAINED FROM A SINGLE SOURCE.
1. 10HP SYSTEM: THE MOTOR SHALL BE RATED AT 10 H.P. AT 230 VOLTS, 3 PHASE, 60 HZ. THE PUMP SHALL BE CAPABLE OF DELIVERING 110 GPM AT 75 PSI AT THE PUMP DISCHARGE

OPERATION
THE STATION OPERATES AS A CLOCK START, CLOCK RETIREMENT SYSTEM.

CLOCK START
THE PUMP STARTS WHEN THE IRRIGATION CONTROLLER (CLOCK) BEGINS A WATERING SEQUENCE.

CLOCK RETIREMENT
THE PUMP SHUTS OFF WHEN THE CLOCK COMPLETES A WATERING SEQUENCE.

OVERHEAT PROTECTION
A 'HOT STOP' WILL BE PROVIDED IN THE PUMP VOLUTE AND WIRED TO SHUT DOWN THE PUMP WHEN OVERHEAT CONDITIONS OCCUR

DISCHARGE PIPE MANIFOLD:
THE PIPE DISCHARGE MANIFOLD SHALL BE CONSTRUCTED OF 3" GALVANIZED STEEL PIPE AND FITTINGS. A PRESSURE RELIEF VALVE, PRESSURE GAUGE, MCPROPELLER FLOWMETER AND BRONZE BALL VALVE WILL BE PROVIDED ON THE STATION DISCHARGE.

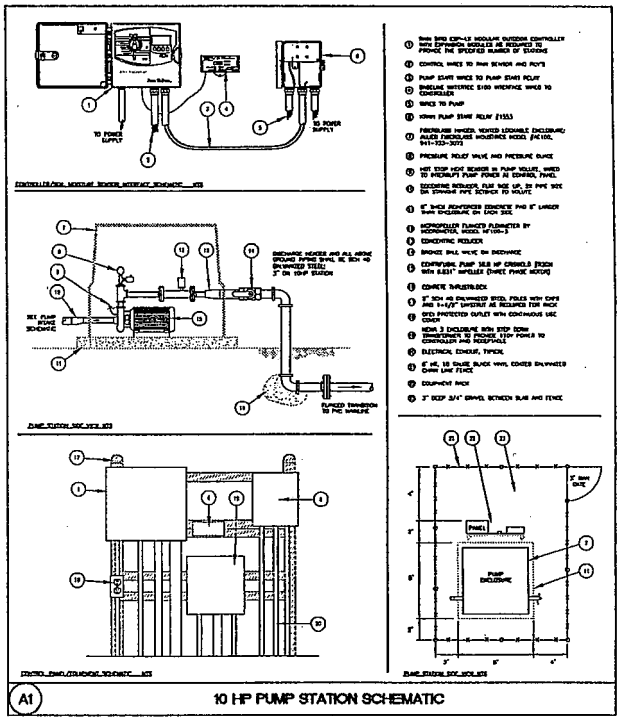
IRRIGATION CONTROLLER:
RAIN BIRD MODEL ESP-LXM WITH EXPANSION MODULES AS REQUIRED FOR THE TOTAL NUMBER OF SPECIFIED STATIONS, THE CONTROLLER SHALL ACTIVATE THE PUMP VIA THE PUMP START RELAY.

SUCTION LINE:
THE SUCTION LINE SHALL BE SCH 40 GALVANIZED STEEL WITH ECCENTRIC REDUCER AS REQUIRED, TO BELOW GRADE. TRANSITION TO HDPE SUCTION LINE AT A FLANGED FITTING AND CONTINUE PER DETAILS TO A SWING CHECK VALVE AND 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.

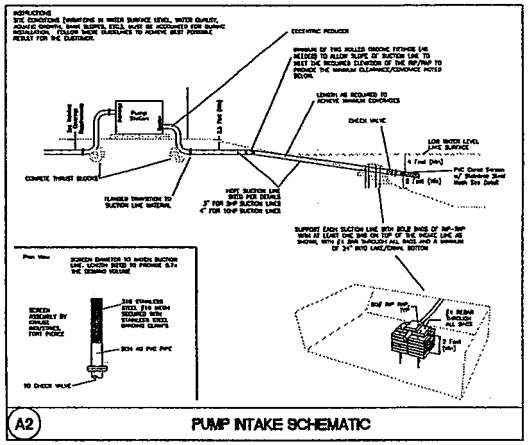
WARRANTIES:
THE CONTRACTOR SHALL WARRANT THE PUMP SYSTEM FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE OF THE SITE BY THE OWNER, NOT TO EXCEED 18 MONTHS FROM INSTALLATION.

NOTES:

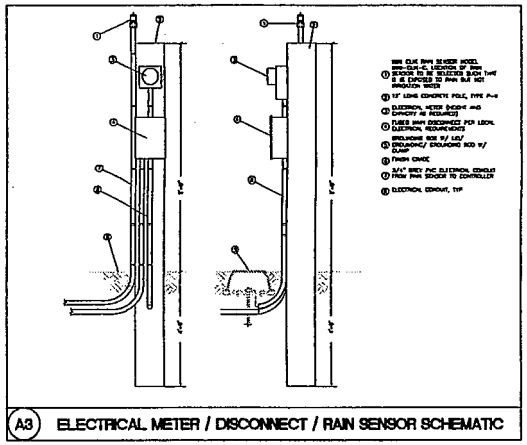
1. CONTRACTOR TO COORDINATE WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO AND DURING PUMP STATION INSTALLATION.
2. STATIC SUCTION LIFT FOR THE PUMP STATION CAN NOT EXCEED 10'. IF THIS MAXIMUM IS EXCEEDED, DO NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE OWNER/OWNER'S REPRESENTATIVE.
3. THE SUCTION LINE SHALL BE A 4" HDPE PIPE FROM THE BOTTOM OF THE 'Z' PIPE TO A SWING CHECK VALVE INSTALLED AT THE 316 STAINLESS STEEL CANAL SCREEN ASSEMBLY. SUPPORT THE SUCTION LINE AT THE LAKE BOTTOM WITH RIP-RAP.
4. CHECK THE WATER QUALITY TO ENSURE IT IS SUITABLE FOR LANDSCAPE PLANTINGS. USE THE SERVICES OF A REPUTABLE, LICENSED LABORATORY ONLY. WATER QUALITY TESTING MUST INCLUDE pH, CONDUCTIVITY, SODIUM, POTASSIUM, CALCIUM, MAGNESIUM, CARBONATE, BICARBONATE, CHLORIDE, PHOSPHOROUS, NITRATE NO3, SULFATE SO4, BORON, IRON, MANGANESE, TOTAL DISSOLVED SOLIDS, SODIUM ABSORPTION RATIO, AND HARDNESS. IF THE WATER IS DETERMINED SUITABLE CONTINUE IRRIGATION INSTALLATION. IF THE WATER QUALITY IS UNSUITABLE, DO NOT PROCEED WITHOUT WRITTEN DIRECTION FROM THE OWNER/OWNER'S REPRESENTATIVE.
5. IF A HIGH IRON CONTENT (OR OTHER STAIN PRODUCING COMPOUND) IS DETECTED, ADVISE THE OWNER/OWNER'S REPRESENTATIVE. DO NOT PROCEED WITHOUT WRITTEN PERMISSION. IF A CHEMICAL INJECTION SYSTEM IS REQUIRED BY THE OWNER, IT MUST BE DIRECTED BY THE OWNER AND INSTALLED BY AN OWNER APPROVED PROVIDER.



A1 10 HP PUMP STATION SCHEMATIC



A2 PUMP INTAKE SCHEMATIC



A3 ELECTRICAL METER / DISCONNECT / RAIN SENSOR SCHEMATIC

	DATE:	2/4/11
	SCALE:	N.T.S.
	DESIGN BY:	JMJ
	DRAWN BY:	JMJ
	CHECKED BY:	MLC
⚠	CONTRACTOR BUILT PUMP	JJ 6.23.11
	DESCRIPTION:	BY: DATE: APPROVED BY: JMJ

MASUEN CONSULTING, LLC
DESIGN • CONSULT • MANAGE
5079 North Dixie Highway, #223, Oakland Park, Florida 33334
TELE (888) 627-1133 FAX (800) 928-1454
www.masuenconsulting.com
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SEAL

TIFFANY INTAKE CHANNEL (EWIP)
CITY OF PORT ST. LUCIE FLORIDA
IRRIGATION PUMP

IR-7
SHEET 7 OF 8

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the HJA landscape plan dated 11/01/10. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed as a TEMPORARY irrigation system, to be utilized for establishment of the plant material for approximately 1 calendar year.

The system has also been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material (pump, pipes, valves, fittings, controller, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, back filling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain shut off device. If the rain shut off device is a rain sensor, it shall be installed to prevent activation by adjacent heads. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walks, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions, or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

⚠1 The P.O.C. is a proposed contractor built centrifugal pump station using a proposed lake as the water source. The P.O.C. must be capable of delivering a minimum of 110 gpm at 65 PSI downstream of the pump.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a maximum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings wherever possible to allow space for plant root balls. Always install piping inside project property's boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved with CL 200 PVC sleeves at least twice the diameter of the pipe they are carrying with a minimum sleeve size of 2".

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

⚠2 Mainline shall be 4" CL 200 gasketed PVC with CL 200 gasketed PVC fittings and thrust blocks as required.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple listed, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for pumps and controllers to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supply's for required electrical components as set forth in the irrigation plans.

All electrical to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for the controller shall be 120 volt, 20 amp. Power for pumps to be according to pump specifications indicated in these plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2' coil of wire. At all valve boxes coil wire around a 3/4" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3MDBY/R connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:
- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

Spare wires
Leaving each controller, run three spare wire in both directions (six spare wires total). Loop these wires into each RCV along their path and terminate in the last valve box. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

Controller and Pump station Control Panel grounding – Contractor to utilize 4'X8'X5/8" copper grounding plates, 5/8"X10' copper clad grounding rods, "One Strike" CAD welds at all connection points, #8 bare copper wire, and earth contact material. Install these and other required components as outlined in the detail. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller/pump location, and test results. Each controller/pump shall be so grounded and tested. Each component must have its own separate grounding grid, unless they are sitting side by side, in which case up to two controllers can share a common grounding grid.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account on site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from unturbed roadways and building foundations. Rotors shall be installed 4" from sidewalks or curbed roadways and 36" from unturbed roadways.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of flush with the top of the installed height of plants and shall be installed a minimum of 12" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black paint.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

EQUIPMENT

All part circle rotors shall be mounted on flex-type swing joints. All full circle rotors shall be installed with PVC triple swing joints unless otherwise detailed.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

Gasketed Pipe: With pipe in the trench, cut pipe square, deburr, and place beveled edge on male portion of pipe, if not using a piece with a factory bevel. Clean pipe and fittings of foreign material; then apply a small amount of pipe grease to the rubber gasket on the female end. Fully insert the male end of the pipe into the bell end of adjacent pipe until the bevel is fully seated into the bell. Restrain pipe as required.

BACK FILL

The Back fill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter.

Main line pipe depth measured to the top of pipe shall be:
24" minimum with a 30" minimum at vehicular crossings;
Lateral line depths measured to top of pipe shall be:
18" minimum with a 30" minimum at vehicular crossings;

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2" on each side of every joint (ball fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walls, walks and paving.

TESTING

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Fill mainline with water and pressurize the system to 125 PSI. Monitor the system pressure at the two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing –Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

The contractor must provide written and digital submittals for pre-construction/post-construction submittal requirements and copies of the manufacturer's cut sheets/specifications for all components to be used in the irrigation system. Digital submittals shall be in .PDF or .DOC format and delivered on a compact disc.

Contractor shall be required to have the requisite material, labor, and equipment required to repair any mainline break within 72 hours.

After project completion:

1. Irrigation As-builts – shall be provided utilizing a sub-foot Global Positioning System (GPS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves all be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the City of PSL Public Works on a compact disk (CD).

2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mil pieces of clear plastic.

3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Contractor to review entire install process and schedule with Owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this designs requirements
4. Coverage and operational test
5. Final inspection
6. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. All substantive items (as determined by the owner) listed on the non-compliance/punchlist report shall be completed before project acceptance. All non-substantive items, as determined by owner, shall be completed within 10 (ten) days of project acceptance. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of "as-built" drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. Acceptance of grounding certification on electrician's letterhead.
5. All other submittals have be made to the satisfaction of the owner.

GUARANTEE: The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:
   - A. Turn on each zone from the controller to verify automatic operation.
   - B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
   - C. Check remote control valve to ensure proper operation.
   - D. Check setting on pressure regulator to verify proper setting, if present.
   - E. Check flow control and adjust as needed; ensure valve closure within 10–15 seconds after deactivation by controller.
   - F. Check for leaks – mainline, lateral lines, valves, heads, etc.
   - G. Check all heads as follows:
     1. Proper set height (top of sprinkler is 1" below mow height)
     2. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
     3. Check wiper seal for leaks – if leaking, clean head and re-inspect. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
     4. All nozzles checked for proper pattern, dripping, leaks, correct make & model, etc. – replace as needed
     5. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
     6. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
     7. verify the pop-up riser retracts after operation. If not, repair/replace as needed.

2. Check controller ground for resistance (10 ohms or less) once per year. Submit written reports.

3. Check rain shut-off device monthly to ensure it functions properly.

4. Inspect all filters monthly and clean/repair/replace as needed.

5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.

6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.

7. Check pump stations for proper operation, pressures, filtration, settings, etc. – refer to pump station operations manual.

8. Check and clean intake screens on all suction lines quarterly, at minimum. Clean and/or repair, as needed.

9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

	DATE:	2/4/11
	SCALE:	N.T.S.
	DESIGN BY:	JMJ
	DRAWN BY:	JMJ
	CHECKED BY:	MJC
	APPROVED BY:	JMJ
⚠2 MAINLINE FITTINGS	JJ	7.29.11
⚠1 CONTRACTOR BUILT PUMP	JJ	6.23.11
DESCRIPTION:	BY:	DATE:

MASUEN CONSULTING, LLC
LANDSCAPE ARCHITECTURE • PLANNING
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TIFFANY INTAKE CHANNEL (EWIP)

CITY OF PORT ST. LUCIE — FLORIDA

IRRIGATION NOTES

SEAL

IR–8

SHEET 8 OF 8

User: Lawrence, Lisa Organization: City of Port St. Lucie - Office of Management and Budget Logout | Help

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LIVE EXPERT

My DemandStar Buyers Account Info

Log Bid [View Bids] Log Quote View Quotes Supplier Search Build Broadcast List

Bid Details

Bid Information

EDIT

Agency	City of Port St. Lucie - Office of Management and Budget
Bid Type	Sealed Request for Proposal
Bid Number	SRFP-20110075-LL-0-2011/lla
Fiscal Year	2011
Bid Writer	Lisa Lawrence
Bid Name	Concessionaire at the Saints Golf Course
Bid Status	Under Evaluation
Bid Status Text	None
Award To	
Due Date/Time	6/24/2011 1:30 PM Eastern
Broadcast Date	5/13/2011
Bid Bond	No
Project Estimated Budget	$0.00
Plan (blueprint) Distribution Options	None
Distribution Method	Download and Mail
Distributed By	Onvia DemandStar
Distribution Notes	None
Scope of Work	Enter into an agreement with a qualified Concessionaire to provide a "Golf Friendly" place to eat
E-Bidding	No

Legal Ad

VIEW

Please select either the View or Edit button to manage legal ad.

Pre-Bid Conference

NON-MANDATORY
May 25, 2011
11:00 AM
The Saints Golf Course
2601 SE Morningside Boulevard
Port St. Lucie, Florida

Publications

St. Lucie News Tribune 5/16/2011

Documents

EDIT

Bid Package	**Concessionaire at the Saints Golf Course** (46 Pages, Complete) **Addendum #1** (1 Page, Complete)

Addendum #2 (6 Pages, Complete)
Addendum #3 (1 Page, Complete)

Award **Bid Tabulation** (1 Page, Complete)

Commodity Codes

SRV-961-07 - Beverage Processing Services (All Types)
SRV-961-15 - Concessions, Catering, Vending: Mobile and Stationary
SRV-961-36 - Food Administrative Services (Incl. Policy, Standards, Evaluation, etc.)
SRV-961-38 - Food Preparation Services (Including Food Canning Services)

Statistics

Planholders	There are 12 planholders for this bid
Broadcast List	140 suppliers have been notified
Supplemental Suppliers	16 Supplemental Suppliers
Filtered	No
Post-Bid Viewers	5 viewer(s)

<< Return

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July 20, 2011

Masuen Consulting LLC

Robyn Holder, CPPB
Contract Specialist
Office of Management & Budget
City of Port St. Lucie

Ms. Holder,

Masuen Consulting, LLC provided Irrigation Design Plans for the five EWIP STA's currently out to bid. We need to make a very minor change to three of the STA's (Cane Slough STA, Loutus STA & Tiffany Channel STA). The required change is in two places of each plan set (Legend and Notes).

The required change is as follows:

Current requirement:
Mainline shall be ... with Sch 40 gasketed PVC fittings and thrust blocks as required.
Updated requirement:
Mainline shall be ... with Class 200 gasketed PVC fittings and thrust blocks as required

We will revise the irrigation plans and have them available for your use tomorrow, July 21, 2011. Please advise if you need anything additional to address this item.

Regards,

Todd Mohler, RLA, CID

Masuen Consulting, LLC **Design • Consult • Manage**
5079 North Dixie Highway, #323 Oakland Park, FL 33334
FL #LC000346 TX #2474 WA #1092
866-928-1533 tel 800-928-1534 fax

Robyn Holder

From: Matt Osep
Sent: Tuesday, July 19, 2011 2:43 PM
To: Robyn Holder; Steve Jungjohan
Cc: James Angstadt; John Dunton
Subject: FW: EWIP contractor question

Robyn,

We will have to make an addendum for this issue. Thanks

From: Todd Mohler [mailto:tmohler@masuenconsulting.com]
Sent: Tuesday, July 19, 2011 2:11 PM
To: Matt Osep
Cc: 'Judy Jensen'
Subject: EWIP contractor question

Matt,

I received a call from a contractor a few minutes ago regarding the 4" SCH 40 PVC gasketed mainline fittings on one of the projects. This fitting should have been specified as CL200 SDR21 PVC gasketed mainline fittings in 4". (This fitting in Sch 40 doesn't exist.)

Who should I follow up with at the City to address this item?

Regards,

Todd Mohler, RLA, CID
EPA Water Sense Partner
Director of Design | **Masuen Consulting, LLC**
Water Resource Professionals - Design.Consult.Manage
5079 N Dixie Hwy, Suite 323, Oakland Park, FL 33334
Desk: 866.928.1533 x114 | Fax: 800.928.1534 |
tmohler@masuenconsulting.com
www.masuenconsulting.com

E-Bid #20110079

- E-Bid Tabulation Report
- Sign In Sheet from the Opening
- Bid Replies:
  1. Sunshine Land Design
  2. Natures Keeper
  3. Arazoza Brothers Corp.

Tabulation Sheet

Agency Name	City of Port St. Lucie - Office of Management and Budget
Bid Number	EBID-20110079-0-2011/RH
Bid Name	EWIP Landscaping & Irrigation at Various EWIP Sites
Bid Due Date	7/28/2011 1:30:00 PM Eastern time
Bid Opening	**Closed**

3 total responses found. ✓ online, ▤ offline, • not submitting, ◆ not received

	Company ▲	Responded	Address	Bid Amt	Alt Bid Amt	Documents	Sent	Notes	Actions
Complete									
1.	ARAZOZA BROTHERS CORP	7/28/2011 12:00:23 PM	P O BOX 924890 15901 SW 242nd Street HOMESTEAD, FL 33031	$2,213,364.35		Bid Reply Checklist Subcontractor List Questionnaire Five Reference Check Forms Debarment Form Drug Free Workplace Form Current Certificate of Insurance Florida Trench Safety Compliance Sheet Non-collusion Affidavit Form Buy America Certificate of Compliance License/Certification to do Described Work E-Bid Reply Excel Spreadsheet E-Bid Bond - 5% Certification Regarding Lobbying	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓		Details, Documents, History
2.	NATURE'S KEEPER INC	7/27/2011 10:24:28 AM	3795 SNEED ROAD FORT PIERCE, FL 34945	$987,084.59		Bid Reply Checklist Subcontractor List Questionnaire Five Reference Check Forms Debarment Form Drug Free Workplace Form Current Certificate of Insurance Florida Trench Safety Compliance Sheet Non-collusion Affidavit Form Buy America Certificate of Compliance License/Certification to do Described Work E-Bid Reply Excel Spreadsheet E-Bid Bond - 5% Certification Regarding Lobbying	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓		Details, Documents, History
3.	Sunshine Land Design Inc.	7/28/2011 11:36:29 AM	P.O. Box 559 Port Salerno, FL 34992	$1,953,669.37		Bid Reply Checklist Subcontractor List Questionnaire Five Reference Check Forms Debarment Form Drug Free Workplace Form Current Certificate of Insurance Florida Trench Safety Compliance Sheet Non-collusion Affidavit Form Buy America Certificate of Compliance	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓		Details, Documents, History

						License/Certification to do Described Work	✓		
						E-Bid Reply Excel Spreadsheet	✓		
						E-Bid Bond - 5%	✓		
						Certification Regarding Lobbying	✓		

<< Return

Manage Bid Tabulation

Planholder Responses

When adding a manual response, you can select a vendor off the Planholders List or add a new vendor.

(Select a Planholder) Add a Planholder Edit Planholders...

Publish Tabulation Sheet

Once you have reviewed the tabulation sheet details, you may create a downloadable PDF version.

☐ Include Non-Compliant Supplier details

Publish as PDF Bid Documents...

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E-Bid Opening
E-BID #20110079
EWIP Landscaping & Irrigation at Various EWIP Sites
July 28, 2011 @ 1:30 pm

	Name (Please PRINT legibly)	Company Name	E-Mail Address	Telephone # & FAX #
1.	Stewart Feketa	Natures Keeper	StewartaNaturesKeeper .COM	T 467-1230
				F 4678923
2.	Dale Majewski	PSL PW	DMAJEWSKI@CITYOFPSL.COM	T 344-4128
				F 871-7640
3.	Steve Jungjohan	PSL Eng/PW	SJungjohan@CityofPSL.com	T
				F
4.	JIM ANGSTADT	PSL ENG/PW	jangstadt@cityofpsl.com	T
				F
5.				T
				F
6.				T
				F
7.				T
				F
8.				T

E-Bid Opening
E-BID #20110079
EWIP Landscaping & Irrigation at Various EWIP Sites
July 28, 2011 @ 1:30 pm

	Name (Please PRINT legibly)	Company Name	E-Mail Address	Telephone # & FAX #
				F
9.				T
				F
10.				T
				F
11.				T
				F
12.				T
				F

E-Bid Opening
E-BID #20110079
EWIP Landscaping & Irrigation at Various EWIP Sites
July 28, 2011 @ 1:30 pm

	Name (Please PRINT legibly)	Company Name	E-Mail Address	Telephone # & FAX #
13.				T
				F
14.				T
				F
15.				T
				F
16.				T
				F
17.				T
				F
18.				T
				F
19.				T
				F

ADDENDUM #4 - July 21, 2011

"REVISED" E-BID REPLY EXCEL SPREADSHEET

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: NATURES KEEPER

SCHEDULE 1 - CANE SLOUGH / ELKS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	200	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	7500	$ 2.95	$ 22,125.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	7500	$ 1.40	$ 10,500.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS (LA/IRR)	LS	1	$ 16,317.00	$ 16,317.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 787.50	$ 9,450.00
10	Total for General Items	--	--	--	$ 64,392.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 3,286.80	$ 3,286.80
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 12,985.00	$ 12,985.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
14	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	EA	5343	$ 5.63	$ 30,081.09
15	4" Nibco TI-8 Gate Valve	EA	5	$ 450.00	$ 2,250.00
16	Carson 1419 Valve Box with Lid	LF	5	$ 50.00	$ 250.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	20	$ 325.00	$ 6,500.00
18	Carson 1220 Jumbo Valve Box with Lid	EA	19	$ 62.00	$ 1,178.00
19	Class 200 PVC Lateral with Schedule 40 PVC fittings (size per plan)	EA	15150	$ 1.05	$ 15,907.50
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	342	$ 18.50	$ 6,327.00
21	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	2	$ 28.00	$ 56.00
22	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	21	$ 28.00	$ 588.00
23	Hunter PGP-04-CV with #6 Nozzle	EA	4	$ 32.00	$ 128.00
24	Hunter PGP-04-CV with #9 Nozzle	EA	75	$ 32.00	$ 2,400.00
25	Hunter PGP-04-CV with #12 Nozzle	EA	47	$ 32.00	$ 1,504.00
26	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	6	$ 45.00	$ 270.00
27	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	52	$ 45.00	$ 2,340.00
28	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	25	$ 45.00	$ 1,125.00
29	Total for Irrigation Items	--	--	--	$ 87,776.39

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
30	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	3,380	$ 0.42	$ 1,419.60
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	4,790	$ 0.63	$ 3,017.70
32	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	-	155	$ 3.96	$ 613.80
33	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	129	$ 8.60	$ 1,109.40
34	Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	18" FULL	348	$ 6.09	$ 2,119.32
35	Green Island Ficus	*FICUS MICROCARPA*	1 GAL	-	70	$ 3.01	$ 210.70
36	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	154	$ 2.70	$ 415.80
37	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	1,030	$ 2.91	$ 2,997.30
38	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	FULL	1,280	$ 2.91	$ 3,724.80
39	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	210	$ 3.01	$ 632.10
40	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	7,730	$ 0.63	$ 4,869.90
41	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	9,910	$ 0.42	$ 4,162.20
42	Maidencane	*PANICUM HEMITOMON*	BR	-	4,570	$ 0.42	$ 1,919.40
43	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	3,160	$ 0.42	$ 1,327.20
44	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	4,030	$ 0.63	$ 2,538.90
45	Soft Rush	*JUNCUS EFFUSUS*	BR	-	760	$ 0.42	$ 319.20
46	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	2,720	$ 0.74	$ 2,012.80
47	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	16,946	$ 0.68	$ 11,523.28
48	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" full	2,119	$ 4.20	$ 8,899.80
49		Total for Shrubs and Groundcover	--	--	--	--	$53,833.20

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: NATURES KEEPER

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
50	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	203	$ 53.24	$ 10,807.72
51	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	203	$ 74.60	$ 15,143.80
52	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'-4"Cal OA	205	$ 148.37	$ 30,415.85
53	Royal Palm	*ROYSTONEA REGIA*	-	10-12'	40	$ 347.05	$ 13,882.00
54	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	85	$ 148.54	$ 12,625.90
55	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8'	109	$ 21.65	$ 2,359.85
56	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10'	109	$ 33.44	$ 3,644.96
57	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12'	109	$ 78.22	$ 8,525.98
58	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16',8'SPR	12	$ 247.52	$ 2,970.24
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	24	$ 146.98	$ 3,527.52
60	Dahoon Holly	*ILEX CASSINE*	30 GAL	10'-12'x2"OA	73	$ 96.61	$ 7,052.53
61	Cabbage Palm	*SABAL PALMETTO*	FG	12'-18' STG	12	$ 144.27	$ 1,731.24
62	Simpson's Stopper	*MYRCIANTHES FRAGRANS*	30 GAL	8'-9'(B)	30	$ 141.46	$ 4,243.80
63	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	36	$ 146.98	$ 5,291.28
64	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7-9'	13	$ 99.12	$ 1,288.56
65	Sea Grape	*COCCOLOBA UVIFERA*	15 GAL	8'-10' ML	254	$ 101.40	$ 25,755.60
66	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	16	$ 129.28	$ 2,068.48
67		Total for Trees	--	--	--	--	$151,335.31

SCHEDULE 1 - CANE SLOUGH / ELKS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$357,336.90

SCHEDULE 2 - LENNARD SQUARE / AZZI STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	150	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.95	$ 7,375.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 1.40	$ 3,500.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 16,317.00	$ 16,317.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 367.50	$ 4,410.00
8	Total for General Items	--	--	--	$ 37,602.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
9	3" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	3207	$ 5.60	$ 17,959.20
10	3" Nibco T-113 Gate Valve	EA	3	$ 339.00	$ 1,017.00
11	Carson 1419 Valve Box with Lid	EA	3	$ 50.00	$ 150.00
12	2" Rain Bird PESB Series Remote Control Valve	EA	10	$ 325.00	$ 3,250.00
13	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 62.00	$ 496.00
14	Class 200 PVC Lateral Line with Schedule 40 PVC gasketed Fittings (size	LF	8100	$ 1.25	$ 10,125.00
15	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	143	$ 18.50	$ 2,645.50
16	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	91	$ 28.00	$ 2,548.00
17	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	16	$ 28.00	$ 448.00
18	Hunter PGP-04-CV with #6 Nozzle	EA	3	$ 32.00	$ 96.00
19	Hunter PGP-04-CV with #9 Nozzle	EA	9	$ 32.00	$ 288.00
20	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	4	$ 45.00	$ 180.00
21	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	59	$ 45.00	$ 2,655.00
22	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	10	$ 45.00	$ 450.00
23	Total for Irrigation Items	--	--	--	$ 42,307.70

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: NATURES KEEPER

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	(Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
24	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,960	$ 0.42	$ 823.20
25	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	73	$ 6.09	$ 444.57
26	Wild Coffee	*PSYCHOTRIA NERVOSA*	3 GAL	-	293	$ 6.71	$ 1,966.03
27	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	600	$ 3.33	$ 1,998.00
28	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	2,180	$ 0.63	$ 1,373.40
29	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,810	$ 0.42	$ 1,600.20
30	Maidencane	*PANICUM HEMITOMON*	BR	-	6,750	$ 0.42	$ 2,835.00
31	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	1,630	$ 0.42	$ 684.60
32	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	1,742	$ 0.63	$ 1,097.46
33	Soft Rush	*JUNCUS EFFUSUS*	BR	-	2,510	$ 0.42	$ 1,054.20
34	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,465	$ 0.74	$ 3,304.10
35	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	17,624	$ 0.68	$ 11,984.32
36	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	12"	582	$ 3.96	$ 2,304.72
37	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	482	$ 2.91	$ 1,402.62
38	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	122	$ 8.60	$ 1,049.20
39	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	360	$ 2.70	$ 972.00
40	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	146	$ 3.01	$ 439.46
41	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	451	$ 2.91	$ 1,312.41
42	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	1,954	$ 4.20	$ 8,206.80
43		Total for Shrubs and Groundcover	--	--	--	--	$44,852.29

TREES

LINE NO	DESCRIPTION (Common Name)	(Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
44	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7'-9' OA	10	$ 99.12	$ 991.20
45	Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'+2" OA	60	$ 53.24	$ 3,194.40
46	Cypress	*TAXODIUM DISTICHUM*	45 GAL	12'+3" OA	60	$ 74.60	$ 4,476.00
47	Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" C	60	$ 148.37	$ 8,902.20
48	Green Buttonwood	*CONOCARPUS ERECTUS*	30 GAL	14'(B)OA	9	$ 140.70	$ 1,266.30
49	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	71	$ 148.54	$ 10,546.34
50	Red Bay	*PERSEA BORBONIA*	3 GAL	2'-4' OA	28	$ 82.40	$ 2,307.20
51	Red Bay	*PERSEA BORBONIA*	15 GAL	6'-8' OA	28	$ 39.81	$ 1,114.68
52	Red Bay	*PERSEA BORBONIA*	25 GAL	8'-10' OA	29	$ 82.40	$ 2,389.60
53	Royal Poinciana	*DELONIX REGIA*	45 GAL	12'-14'x8'SPR OA	7	$ 247.52	$ 1,732.64
54	Royal Palm	*ROYSTONEA REGIA*		10'-12' OA	28	$ 347.05	$ 9,717.40
55	Red Maple	*ACER RUBRUM*	10 GAL	8' OA	64	$ 36.58	$ 2,341.12
56	Red Maple	*ACER RUBRUM*	25 GAL	8'-10' OA	63	$ 79.01	$ 4,977.63
57	Red Maple	*ACER RUBRUM*	45 GAL	12'-14' OA	63	$ 91.58	$ 5,769.54
58	Red Maple	*ACER RUBRUM*	65 GAL	14'-16'x4"Cal OA	11	$ 124.18	$ 1,365.98
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	4	$ 146.98	$ 587.92
60	Cabbage Palm	*SABAL PALMETTO*	FG	12'-14' OA	124	$ 144.27	$ 17,889.48
61		Total for Trees	--	--	--	--	$79,569.63

SCHEDULE 2 - LENNARD SQ / AZZI STA LANDSCAPING/IRRIGATION BID TOTAL	--	$204,331.62

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: NATURES KEEPER

SCHEDULE 3 - TIFFANY CHANNEL STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.95	$ 7,375.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 1.40	$ 3,500.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,292.00	$ 5,292.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	Total for General Items	--	--	--	$ 22,167.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 3,286.80	$ 3,286.80
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 12,985.00	$ 12,985.00
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
13	4" Class 200 PVC Mainline/Fittings	LF	2276	$ 5.63	$ 12,813.88
14	4" Nibco T-8 Gate Valve	EA	1	$ 450.00	$ 450.00
15	Carson 1419 Valve Box with Lid	EA	1	$ 50.00	$ 50.00
16	2" Rain Bird PESB Series Remote Control Valve	EA	12	$ 325.00	$ 3,900.00
17	Carson 1220 Jumbo Valve Box with Lid	EA	13	$ 62.00	$ 806.00
18	Class 200 PVC Lateral Line/Fittings (size per plan)	LF	10800	$ 1.05	$ 11,340.00
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	244	$ 18.50	$ 4,514.00
20	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	28	$ 28.00	$ 784.00
21	Hunter PGP-04-CV with #6 Nozzle	EA	5	$ 32.00	$ 160.00
22	Hunter PGP-04-CV with #9 Nozzle	EA	56	$ 32.00	$ 1,792.00
23	Hunter PGP-04-CV with #12 Nozzle	EA	31	$ 32.00	$ 992.00
24	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 45.00	$ 90.00
25	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	10	$ 45.00	$ 450.00
26	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	18	$ 45.00	$ 810.00
27	Total for Irrigation Items	--	--	--	$ 55,823.68

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
28	Red Tip Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	24"	140	$ 6.09	$ 852.60
29	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	831	$ 3.33	$ 2,767.23
30	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	Full	700	$ 2.91	$ 2,037.00
31	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	944	$ 4.20	$ 3,964.80
32		*Total for Shrubs and Groundcover*	--	--	--	--	$9,621.63

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
33	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	14	$ 129.28	$ 1,809.92
34	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"CAL OA	66	$ 148.54	$ 9,803.64
35	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$ 153.65	$ 3,226.65
36	Slash Pine	*PINUS ELLIOTII(South Florida Densa)*	45 GAL	10'-12' OA	118	$ 91.58	$ 10,806.44
37	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	26	$ 146.98	$ 3,821.48
38		Total for Trees	--	--	--	--	$29,468.13

SCHEDULE 3 - TIFFANY CHANNEL STA LANDSCAPING/IRRIGATION BID TOTAL	--	$117,080.44

SCHEDULE 4 - LEITHGOW STREET STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	50	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	1250	$ 2.95	$ 3,687.50
5	BAHIA SOD (PLACE AS DIRECTED)	SY	1250	$ 1.40	$ 1,750.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 4,851.00	$ 4,851.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 210.00	$ 2,520.00
10	Total for General Items	--	--	--	$ 18,808.50

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: NATURES KEEPER

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 2,285.80	$ 2,285.80
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 10,895.00	$ 10,895.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
14	3" Class 200 PVC Mainline/Fittings	LF	1660	$ 5.60	$ 9,296.00
15	3" Nibco T-113 Gate Valve	EA	2	$ 339.00	$ 678.00
16	Carson 1419 Valve Box with Lid	EA	2	$ 50.00	$ 100.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	8	$ 325.00	$ 2,600.00
18	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 62.00	$ 496.00
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	1640	$ 1.60	$ 2,624.00
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	98	$ 18.50	$ 1,813.00
21	Hunter PGP-04-CV with #6 Nozzle	EA	1	$ 32.00	$ 32.00
22	Hunter PGP-04-CV with #9 Nozzle	EA	44	$ 32.00	$ 1,408.00
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 45.00	$ 135.00
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	4	$ 45.00	$ 180.00
25	Total for Irrigation Items	--	--	--	$ 33,142.80

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
26	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,740	$ 0.42	$ 730.80
27	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,420	$ 0.63	$ 894.60
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,270	$ 0.42	$ 1,373.40
29	Maidencane	*PANICUM HEMITOMON*	BR	-	1,740	$ 0.42	$ 730.80
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	2,500	$ 0.42	$ 1,050.00
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	2,180	$ 0.63	$ 1,373.40
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,790	$ 0.74	$ 3,544.60
33	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	517	$ 0.68	$ 351.56
34	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	22	$ 6.09	$ 133.98
35	Fire Flag	*THALIA GENICULATA*	BR	-	1,420	$ 0.53	$ 752.60
36	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	269	$ 2.91	$ 782.79
37	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	BR	-	1,310	$ 0.68	$ 890.80
38	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	383	$ 2.91	$ 1,114.53
39	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	326	$ 4.20	$ 1,369.20
40		Total for Shrubs and Groundcover	--	--	--	--	$15,093.06

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
41	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	13	$ 129.28	$ 1,680.64
42	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	37	$ 53.24	$ 1,969.88
43	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	37	$ 74.60	$ 2,760.20
44	Bald Cypress	*TAXODIUM DISTICHUM*	65 GAL	14' OA	39	$ 148.37	$ 5,786.43
45	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	4	$ 148.54	$ 594.16
46	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	28	$ 21.65	$ 606.20
47	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	28	$ 33.44	$ 936.32
48	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	29	$ 78.22	$ 2,268.38
49	Royal Poinciana	*DELONIX REGIA*	60 GAL	14'-16'x8"SPR OA	2	$ 247.52	$ 495.04
50	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	15	$ 124.18	$ 1,862.70
51	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'x2"Cal	6	$ 146.98	$ 881.88
52	Cabbage Palm	*SABAL PALMETTO*	-	12'-18' STG	17	$ 144.27	$ 2,452.59
53	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	3	$ 129.28	$ 387.84
54		Total for Trees	--	--	--	--	$22,682.26

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: NATURES KEEPER

SCHEDULE 4 - LEITHGOW STREET STA LANDSCAPING/IRRIGATION BID TOTAL	--	$89,726.62

SCHEDULE 5 - LOUTUS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	5000	$ 2.95	$ 14,750.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	5000	$ 1.40	$ 7,000.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,733.00	$ 5,733.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	Total for General Items	--	--	--	$ 33,483.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 2,285.80	$ 2,285.80
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 10,895.00	$ 10,895.00
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
13	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	4229	$ 5.63	$ 23,809.27
14	4" Nibco T-8 Gate Valve	EA	3	$ 450.00	$ 1,350.00
15	Carson 1419 Valve Box with Lid	EA	3	$ 50.00	$ 150.00
16	2" Rain Bird PESB Series Remote Control Valve	EA	17	$ 325.00	$ 5,525.00
17	Carson 1220 Jumbo Valve Box with Lid	EA	17	$ 62.00	$ 1,054.00
18	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	10060	$ 1.05	$ 10,563.00
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	184	$ 18.50	$ 3,404.00
20	Hunter PGP-04-CV with #6 Nozzle	EA	6	$ 32.00	$ 192.00
21	Hunter PGP-04-CV with #9 Nozzle	EA	88	$ 32.00	$ 2,816.00
22	Hunter PGP-04-CV with #12 Nozzle	EA	2	$ 32.00	$ 64.00
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 45.00	$ 90.00
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	22	$ 45.00	$ 990.00
25	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	5	$ 45.00	$ 225.00
25	Total for Irrigation Items	--	--	--	$ 64,013.07

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
26	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	1,196	$ 0.68	$ 813.28
27	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	687	$ 2.91	$ 1,999.17
28	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	855	$ 2.91	$ 2,488.05
29	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	952	$ 4.20	$ 3,998.40
30		*Total for Shrubs and Groundcover*	--	--	--	--	$9,298.90

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
31	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	75	$ 148.54	$ 11,140.50
32	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$ 153.65	$ 3,226.65
33	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8'SPR OA	8	$ 297.78	$ 2,382.24
34	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	40	$ 124.18	$ 4,967.20
35	Sycamore	*PLANTANUS*	65 GAL	14'-16'x4"Cal OA	10	$ 123.00	$ 1,230.00
36	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	10	$ 146.98	$ 1,469.80
37	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	13	$ 129.28	$ 1,680.64
38		Total for Trees	--	--	--	--	$26,097.03

SCHEDULE 5 - LOUTUS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$132,892.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: NATURES KEEPER

SCHEDULE 6 - MARY TERRACE STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ -	$ -
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ -	$ -
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ -	$ -
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.95	$ 7,375.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 1.40	$ 3,500.00
6	SITE ACCESS RESTORATION	LS	1	$ -	$ -
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,292.00	$ 5,292.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 500.00	$ 6,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 210.00	$ 2,520.00
10	Total for General Items	--	--	--	$ 24,687.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 2,285.80	$ 2,285.80
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 10,895.00	$ 10,895.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 600.00	$ 600.00
14	2 1/2" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	1160	$ 5.55	$ 6,438.00
15	2 1/2" Nibco T-113 Gate Valve	EA	1	$ 268.00	$ 268.00
16	Carson 1419 Valve Box with Lid	EA	1	$ 50.00	$ 50.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	7	$ 325.00	$ 2,275.00
18	Carson 1220 Jumbo Valve Box with Lid	EA	7	$ 62.00	$ 434.00
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	2960	$ 1.70	$ 5,032.00
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	129	$ 18.50	$ 2,386.50
21	Hunter PGP-04-CV with #6 Nozzle	EA	30	$ 32.00	$ 960.00
22	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 45.00	$ 135.00
23	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	6	$ 45.00	$ 270.00
24	Total for Irrigation Items	--	--	--	$ 32,029.30

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
25	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	2,070	$ 0.42	$ 869.40
26	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,200	$ 0.63	$ 756.00
27	Fire Flag	*THALIA GENICULATA*	BR	-	440	$ 0.53	$ 233.20
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	1,850	$ 0.42	$ 777.00
29	Maidencane	*PANICUM HEMITOMON*	BR	-	110	$ 0.42	$ 46.20
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	870	$ 0.42	$ 365.40
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	440	$ 0.63	$ 277.20
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	3,050	$ 0.74	$ 2,257.00
33	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	LN	-	650	$ 0.89	$ 578.50
34	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	355	$ 0.68	$ 241.40
35	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	359	$ 2.91	$ 1,044.69
36	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	348	$ 2.91	$ 1,012.68
37	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	272	$ 4.20	$ 1,142.40
38		Total for Shrubs and Groundcover	--	--	--	--	$9,601.07

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
39	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	38	$ 53.24	$ 2,023.12
40	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	38	$ 74.60	$ 2,834.80
41	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" Cal OA	38	$ 148.37	$ 5,638.06
42	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"Cal	11	$ 148.54	$ 1,633.94
43	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	2	$ 153.65	$ 307.30
44	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	18	$ 21.65	$ 389.70
45	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	18	$ 33.44	$ 601.92
46	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	18	$ 78.22	$ 1,407.96
47	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8"Spr OA	2	$ 247.52	$ 495.04
48	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	20	$ 124.18	$ 2,483.60
49	Sycamore	*PLANTANUS*	65 GAL	14'-16x4"' OA	2	$ 123.00	$ 246.00
50	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	2	$ 146.98	$ 293.96
51	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	8	$ 129.28	$ 1,034.24
52		Total for Trees	--	--	--	--	$19,389.64

SCHEDULE 6 - MARY TERRACE STA LANDSCAPING/IRRIGATION BID TOTAL	--	$85,707.01

BID SUMMARY:

SCHEDULE 1 SUB TOTAL:	$357,336.90
SCHEDULE 2 SUB TOTAL:	$204,331.62
SCHEDULE 3 SUB TOTAL:	$117,080.44
SCHEDULE 4 SUB TOTAL:	$89,726.62
SCHEDULE 5 SUB TOTAL:	$132,892.00
SCHEDULE 6 SUB TOTAL:	$85,707.01
INDEMNIFICATION FEE:	$10.00

SCHEDULES 1 - 6 BID TOTAL	--	$987,084.59

E-Bid Reply Sheet #20110079

EWIP Landscaping & Irrigation / Various EWIP Sites

1. **COMPANY NAME**: Natures Keeper Inc

DIVISION OF: N/A

PHYSICAL ADDRESS: 3795 Sneed Road

MAILING ADDRESS: As Above

CITY, STATE, ZIP CODE: Fort Pierce, FL 34945

TELEPHONE NUMBER: (772) 467-1230 FAX NO. (772) 467-8923

CONTACT PERSON: Stewart Feketa E-MAIL: Stewart@natures-keeper.com

2. **ORGANIZATIONAL PROFILE**: (complete all appropriate information)

Is the firm incorporated? (Yes) No If yes, in what state? FLORIDA

Roberta West
President

Stewart Feketa, Krysten Bieger, David Rowlands
Vice President

Krysten Bieger
Treasurer

How long in present business: 24 yrs How long at present location: 12 yrs

Is firm a minority business? Yes (No); Does firm have a drug-free workplace program: (Yes) No
If no, is your company planning to implement such a program? _____

3. **ADDENDUM ACKNOWLEDGMENT** - Bidder acknowledges that the following addenda have been received and are included in its proposal/bid:

Addendum Number	Date Issued
1	6/14/11
2	7/7/11
2A, 2B, 2C, 2D, 2E, 2F	7/7/11
3	7/12/11

4 - 7/21/11
5 - 7/22/11
5A, 5B, 5C - 7/22/11

4. **VENDOR'S LIST** – If your company offers commodities other than the one specified for this bid, and you wish to be put on the vendor's list, please contact Onvia.com at (800) 711-1712. Bid Tabulation Reports are advertised on the City's Web Site at www.Cityofpsl.com.

5. **BID RESPONSE:**

5.1 Bidder will / will not accept the Purchasing Card (Visa).
(please circle one)

5.2 Percentage of discount when payment is made with Visa: 0 %

5.3 Bid Reply Sheet Totals from Schedule "A": $ 987,084.59 .
(This figure must match the E-Bid Excel Reply Spreadsheet and the figure that is to be used on the Demandstar submittal page. Discrepancies between the E-Bid Excel Spreadsheet uploaded on Demandstar, the dollar amount listed on the web page at time of submittal and the E-Bid Reply Sheet #20110079 uploaded on Demandstar will be resolved in favor of the E-Bid Excel Spreadsheet that is uploaded at time of submittal.)

Bidders are cautioned that the anticipated quantities used for this computation will be estimates. The City makes no guarantee as to the actual quantity that will be utilized during the Contract period. A unit price for each item offered shall be shown, and such price shall include all labor, materials, equipment and warrantees unless otherwise specified. A total shall be entered in the "Total" column for each separate item. In case of discrepancy between the unit price and the extended price, the unit price will be presumed correct.

6. **INSURANCE CERTIFICATES LICENSE** - Bidders are required, in accordance with Section 5, to submit a copy of their Insurance Certificate for the type and dollar amount of insurance they currently maintain. Bidders are required to submit all licenses and certifications required to perform this project.

7. **COMPLETION OF FORM** - An authorized representative of the firm offering this Bid must complete this form in its entirety. Prices entered herein shall not be subject to withdrawal or escalation by Bidder. The City reserves the right to hold proposals and bid guarantees for a period not to exceed 90 days after the date of the bid opening stated in the Invitation to Bid before awarding the Contract. Contract award constitutes the date that City Council executes the motion to award the bid.

8. **CONTRACT** - Bidder agrees to comply with all requirements stated in the specifications for this bid.

9. **CERTIFICATION**

This bid is submitted by: Name (print) Roberto West who is an officer of the above firm duly authorized to sign bids and enter into Contracts. I certify that this bid is made without prior understanding, Contract, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of this bid.

Roberto West
Signature

July 25, 2011
Date

10. Bidder has read and accepts the terms and conditions of the City's standard Contract:

Roberta West — Signature

President/Secretary — Title

If a corporation renders this Bid, the corporate seal attested by the secretary shall be affixed below. Any agent signing this Bid shall attach to this form evidence of legal authority.

(seal)

Balance of page left intentionally blank

CHECKLIST
E-Bid #20110079
EWIP Landscaping & Irrigation / Various EWIP Sites

Name of Bidder: Natures Keeper Inc

This checklist is provided to assist Bidders in the preparation of their bid response. Included in this checklist are important requirements that are the responsibility of each Bidder to submit with their response in order to make their bid response fully compliant. This checklist is only a guideline -- it is the responsibility of each Bidder to read and comply with the Sealed E-Bid in its entirety.

- X E-Bid Reply Sheet #20110079 with proper signature uploaded to Demandstar.
- X E-Bid Reply Excel Spreadsheet uploaded to Demandstar.
- X Drug-Free Workplace Form uploaded to Demandstar.
- X 5% Bid Bond uploaded to Demandstar and mailed in immediately after opening.
- X All pricing has been mathematically reviewed and all corrections have been initialed.
- X All price extensions and totals have been thoroughly checked.
- X Each Bid Addendum (when issued) is acknowledged on the E-Bid Reply Sheet #20110079.
- X Required W-9 as per Section 1.24.1 uploaded to Demandstar.
- X Copy of Insurance Certificate in accordance with Section 5 of the E-Bid documents uploaded to Demandstar.
- X Copy of all required licenses and certifications to do work in the City of Port St. Lucie uploaded to Demandstar.
- X Have reviewed the Contract and accept all City Terms and Conditions.
- X Contractor's Questionnaire uploaded to Demandstar.
- X Required forms: Non-Collusion Affidavit of Prime Bidder; Buy America Certificate of Compliance; Certification Regarding Lobbying; Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions; and Contractor Verification Form. All forms are to be uploaded to Demandstar.
- N/A List of all sub-contractors with required forms for "Certification Regarding Lobbying" and Minority Status Statement. (Use the Questionnaire for the Minority Status providing all sub-contractors are listed). All requested information is to be uploaded to Demandstar.
- X 5 completed Reference Check Forms uploaded to Demandstar.
- X Copy of the Checklist uploaded to Demandstar.

THIS FORM SHOULD BE RETURNED WITH YOUR E-BID REPLY SHEET

CONTRACTOR'S QUESTIONNAIRE
E-BID #20110079
EWIP LANDSCAPING & IRRIGATION / VARIOUS EWIP SITES

It is understood and agreed that the following information is to be used by the City of Port St. Lucie to determine the qualifications of Bidders to perform the work required. The Bidder waives any claim against the City that might arise with respect to any decision concerning the qualifications of the Bidder.

The undersigned attests to the truth and accuracy of all statements made on this questionnaire. Also, the undersigned hereby authorizes any public official, Engineer, Surety, Bank, material or equipment manufacturer or distributor, or any person, firm or corporation to furnish the City of Port St. Lucie any pertinent information requested by the City deemed necessary to verify the information on this questionnaire.

Dated this 25 day of July, 2011.

Natures Keeper Inc.
Name of Organization / Proposer

Submitted by: Roberta West - President
Name and Title

(If more space is needed, please attach additional sheets.)

1. Type of Organization: (Corporation,) Partnership, Joint Venture, Individual or other?
(*circle one*)

2. If a Corporation answer the following:
When incorporated 1992
In what State FL
Name of Officers: President Roberta West
Vice President Stewart Feketa, Krysten Bieger, David Rowlands
Secretary Roberta West
Treasurer Krysten Bieger

3. If a Partnership, answer the following:
Date of organization —
General Limited Partnership —
Name and address of each partner:

(Attach additional pages if necessary)

4. Firm's name and main office address, telephone, fax number, and e-mail address, contact person:
Natures Keeper Inc. Ph- 772-467-1230 fax- 772-467-1923
3795 Sneed Road Stewart Feketa - Stewart@natures-Keeper.com
Fort Pierce, FL 34945

5. Firm's previous names (if any) N/A — What year(s)

6. Area of expertise: Landscape - Irrigation - Grassing

7. How many years has your organization been in business? 24

8. Describe organization profile, including the size, range of activities, licenses, etc.
See Attached

(Attached additional pages if necessary.)

9. Number of full time personnel:

	Current	Maximum	Minimum
a. Partners	4	4	4
b. Managers	2	2	2
c. Supervisors Senior Staff	4	4	4
d. Other Professional Staff	30	40	30
g. Total number of full time personnel	40	50	40

10. What is the drainage construction experience of the principals and supervisory personnel of your organization?
(Add resumes of person that will be assigned to this project – limit one page per person.)

Name	Title	Years of Experience	% of Time to be Spent on City Projects	In What Capacity and With Whom
Stewart FeKete	VP	20	95	Supervision / QC
David Rowlands	VP	17	95	Supervision / QC
Krysten Bieger	VP/T	12	20	Admin.
Roberta West	P/S	24	20	Admin.

11. Firm's experience with similar contracts. Indicate which team member(s) was part of similar contracts. Indicate specifically the nature and extent of the work performed by the individual(s) or firms on prior similar contracts.

Name	Work Performed
Stewart FeKete	Supervision + Management
David Rowlands	Supervision + Management

12. Provide an organizational chart identifying relationship of entity and sub-contractors (if any) and the role description of key personnel proposed.

13. State your firm's commitment to perform in a timely fashion:
Natures Keeper has never failed to complete a Contract within the specified time frame. We often completed projects with an accelerated schedule

14. Submit the current and projected workloads of identified key personnel to be assigned to this contract.

Name	Current and Projected Workloads
Stewart Feketa	Management & Supervision of City of PSL projects
David Rowlands	Management & Supervision of City of PSL projects.

15. State your firm's ability to meet budget and schedule:
Natures Keeper has historically met budget amounts. In many instances we have completed project under the budget amount. We have always met deadlines, even when the schedule had been accellerated

16. Provide information regarding any favorable cost containment approaches or ideas that have been successful for you:
Organization. Completing one task before moving on to another. Doing a professional quality job to avoid returning to correct deficiencies. Ability to foresee a potential problem and make corrections.

17. Identify any sub-contractor(s) that will be involved, including address(s) and a description of qualification(s). **The "Certification Regarding Lobbying" form must be submitted with each subcontractor listed.**

Name	Address	Qualifications
N/A		

18. Has the Bidder or any principals of the applicant organization failed to qualify as a responsible Contractor; refused to enter into a contract after an award has been made; failed to complete a contract during the past five (5) years; or been declared to be in default in any contract or been assessed liquidated damages in the last five (5) years? If yes, please explain:
NO.

NO

(Attached additional pages if necessary.)

19. Has the Bidder or any of its principals ever been declared bankrupt or reorganized under Chapter 11 or put into receivership?

Yes ( ) No (✓)

If yes, please explain:

20. List any lawsuits pending or completed involving the corporation, partnership or individuals with more than ten percent (10 %) interest:

NONE

21. List any judgments from lawsuits in the last five (5) years:

NONE

22. List any criminal violations and/or convictions of the Bidder and/or any of its principals:

NONE

23. Is firm claiming to be a Certified Minority Business Enterprise as defined by the Florida Small and Minority Business Assistance Act of 1985, and in accordance with Florida State Statutes, #287.09451?

Yes (✓) No ( )

If "Yes" was checked, include a copy of certificate with proposal.

24. Has the Bidder obtained a Payment & Performance Bond within the last five (5) years?

Yes (✓) No ( )

If "Yes" was checked, state the bonding capacity of the firm. $ 5,000,000 / 25,000,000

25. Describe any significant or unique accomplishment in previous contracts. Include any additional data pertinent to firm's capabilities. (Please limit to two (2) pages) - Attached -

BALANCE OF PAGE INTENTIONALLY BLANK

NATURE'S KEEPER

NK

Total Erosion Control
Silt Fence
Turbidity Barrier
Mitigation Planting

Sod
Hydroseed
Seed & Mulch
Landscape

FDEP Qualified
DBE Certified

Nature's Keeper was established in 1987 as a residential maintenance company. Over the years we have evolved into a minority owned, full Landscape, Irrigation and Sod Company servicing the tri-county area. We are located on 40 acres of land North of SR 70, on Sneed Road, in Fort Pierce. Situated in Fort Pierce, we are readily available for any work to be performed.

Nature's Keeper is a well-staffed firm, and gives personal commitments from our ownership to our clients. We currently employ a staff of 40 full time employees. Approximately 80% of our work force resides in Fort Pierce.

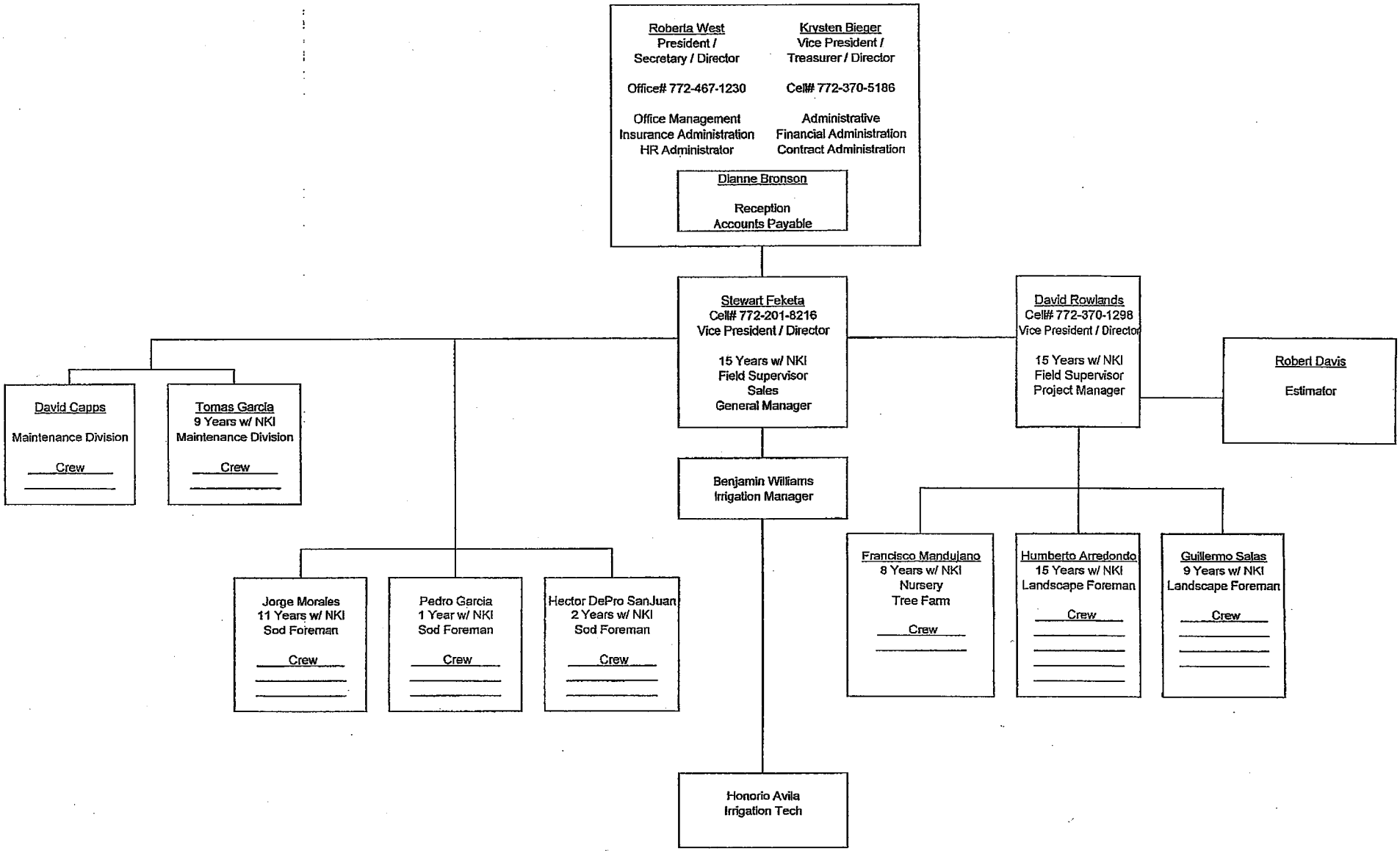
The amount of acreage we own provides us the opportunity to procure plant material and trees early on in a contract. If time allows we have the capability to step the material up in containers to ensure availability and reduce costs. This also ensures us of the ability to maintain quality material.

Nature's Keeper, Inc. provides a wide range of services, including Landscape, Irrigation, and Sod installation. We also perform Hydro-seed and Seed & Mulch. In addition we install and maintain silt fence, turbidity barrier, and safety fence. We have also implemented a maintenance program, which consists of flat mowing, slope mowing, edging, weed control, and litter pick up.

We pride ourselves in being a proactive company. If you need our assistance on a project we strive to be there when you need us.

In the past twenty-two years, Nature's Keeper has successfully completed many projects for municipalities as well as FDOT. These contracts range from $50.00 to $5,000,000.00. We have never failed to meet contractual obligations, and have never failed to complete a contract on time.

Nature's Keeper Inc. entered into a Ten-year contract with the City of Port St. Lucie on September 22, 2005 for Landscaping and Irrigation Services. We have also successfully completed numerous projects for Port St. Lucie, including Crosstown Parkway Segments 2, 3, 4 & 5, Becker Road various phases, The PSL Civic Center, Village Parkway and I-95 Weigh in Motion Station. These projects were all finished within budget, and in a timely manner.


Roberta West
President /
Secretary / Director
Office# 772-467-1230
Office Management
Insurance Administration
HR Administrator
Krysten Bieger
Vice President /
Treasurer / Director
Cell# 772-370-5186
Administrative
Financial Administration
Contract Administration
Dianne Bronson
Reception
Accounts Payable
Stewart Feketa
Cell# 772-201-8216
Vice President / Director
15 Years w/ NKI
Field Supervisor
Sales
General Manager
David Rowlands
Cell# 772-370-1298
Vice President / Director
15 Years w/ NKI
Field Supervisor
Project Manager
Robert Davis
Estimator
David Capps
Maintenance Division
Crew
Tomas Garcia
9 Years w/ NKI
Maintenance Division
Crew
Benjamin Williams
Irrigation Manager
Jorge Morales
11 Years w/ NKI
Sod Foreman
Crew
Pedro Garcia
1 Year w/ NKI
Sod Foreman
Crew
Hector DePro SanJuan
2 Years w/ NKI
Sod Foreman
Crew
Francisco Mandujano
8 Years w/ NKI
Nursery
Tree Farm
Crew
Humberto Arredondo
15 Years w/ NKI
Landscape Foreman
Crew
Guillermo Salas
9 Years w/ NKI
Landscape Foreman
Crew
Honorio Avila
Irrigation Tech

KEY PERSONNEL

ROBERTA WEST: PRESIDENT/SECRETARY

- Office Management
- Human Resource Administrator
- Payroll Administration
- Landscape Division Administration
- Estimating
- Contract Administration

KRYSTEN BIEGER: VICE PRESIDENT/TREASURER

- Accounts Payable Administration
- Accounts Receivable Administrator
- Contract Administration
- Administration of Bonding and Insurance Issues

STEWART FEKETA: VICE PRESIDENT

- Sod and Landscaping Sales and Service
- Administration of Sod and Trucking
- Personnel Management
- Estimating

DAVID ROWLANDS VICE PRESIDENT

- Coordination of Landscape Installation
- Personnel management
- Estimating

Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE C. KOPELOUSOS
SECRETARY

January 31, 2008

Certified Mail – Return Receipt Requested

Nature's Keeper, Inc.
Ms. Roberta West
3795 Sneed Rd.
Fort Pierce FL 34945

ANIVERSARY DATE- Annually on January 21

Dear Ms. West:

The Florida Department of Transportation [FDOT] is pleased to announce that your firm is certified under the **Florida Unified Certification Program [UCP]** as a **Disadvantaged Business Enterprise [DBE]** in accordance with Part 49 Section 26, Code of Federal Regulations.

DBE certification is continuing, but is contingent upon the firm maintaining its eligibility annually through this office. You will be notified of your annual responsibilities in advance of the **Anniversary Date.** You must submit the annual **AFFIDAVIT FOR CONTINUING ELIGIBILITY** no later than the **Anniversary Date.** Failure to do so will result in immediate action to decertify the firm.

Only those firms listed in the UCP DBE Directory, are certified by Florida UCP Members. **Prime contractors and consultants should verify your firms DBE certification status, and identify the only work area(s) for which the firm is DBE eligible, through this Directory.**

Your firm will be listed in Florida's UCP DBE Directory which can be accessed via the internet, at http://www.bipincwebapps.com/biznetflorida/ or through The Department' website at www.dot.state.fl.us/equalopportunityoffice, then select "DBE Directory."

DBE certification is **NOT** a guarantee of work, but enables the firm to compete for, and perform, contract work on all USDOT Federal Aid (FAA, FTA and FHWA) projects in Florida as a DBE contractor, sub-contractor, consultant, sub-consultant or material supplier.

If, at any time, there is a material change in the firm, including, but not limited to, ownership, officers, Directors, scope of work being performed, daily operations, affiliations with other businesses or individuals or physical location of the firm, you must notify this office, in writing, within (30) days. Notification should include supporting documentation. You will receive timely instruction from this office as to how you should proceed, if necessary.

Your firm is eligible to compete for, and perform, work on all USDOT Federal Aid projects throughout Florida, and may earn DBE credit for work performed in the following areas:

NAICS:	FDOT Specialty Code & Description
561730	575-Sodding
561730	580-Landscaping
561730	570-Grassing
238990	104-Temporary Erosion Control
561730	MA2-Mowing

All questions or concerns should be directed to this office by mail or telephone. Our telephone number is (850) 414-4747. Our Fax number is (850) 414-4879.

Sincerely,

John Goodeman

John Goodeman
DBE Certification Manager

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

REGISTERED VENDOR NO. 114931

March 30, 2011

Ms. Roberta West, President
Nature's Keeper Inc.
3795 Sneed Road
Fort Pierce, FL 34945

Dear Ms. West:

The South Florida Water Management District (District) has certified your firm as a Small Business Enterprise (SBE). This certification is valid for three (3) years and may **only** be applied when business is conducted in the following area(s):

Landscaping & Nurseries Services

Your submittal of bids or proposals to supply other products or services outside of this specialty(s) will not count toward SBE participation. If you require certification in other areas of specialty, please contact the Procurement Department, SBE Section, for additional information.

Renewal is required every three (3) years and should be requested within 45 days prior to the above expiration date.

If any changes occur within your company during the certification period (such as ownership, affiliate company status, address, telephone number, licensing status, gross revenue, or any information that relates to your SBE Certification status), you must notify this office in writing immediately. It is imperative that we maintain current information on your company at all times. *FAILURE TO REPORT CHANGES MAY RESULT IN DECERTIFICATION.*

Certification is not a guarantee that your firm will receive work, nor an assurance that your firm will remain in the District's solicitation database. Upon requesting or downloading a bid or proposal package your firm must respond by submitting a bid or proposal or submit a *Statement of No Response* form. This is very important, for failure to respond to three (3) solicitations will result in your company being removed from the District's solicitation database.

Sincerely,

Colleen M. Robbs

Colleen M. Robbs
Sr. Compliance Specialist
Procurement Department

CR/jcs

NATURE'S KEEPER

Total Erosion Control
Silt Fence
Turbidity Barrier
Mitigation Planting
Irrigation

Sod
Hydroseed
Seed & Mulch
Landscape

FDEP Qualified
DBE Certified

Response to Question 25

Nature's Keeper Inc. has completed the Crosstown Parkway, Segments 2, 3, 4, and 5, Becker Road/I95 Interchange, Becker Segment 1, City Center and Becker East Segments in the City of Port St. Lucie after given an accelerated schedule of completion. We also were able to perform the same quality installation with adaptation of plan changes, at a reduction in the contract cost without sacrificing quality or integrity.

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Natures Keeper Inc

Reference: City of Fort Pierce Fax #: 772-489-3194
Email: _____ Telephone #: 772-460-2200
Person to contact: Jack Andrews

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Natures Keeper Inc.

Reference: Felix Associates Fax #: 772-220-2728
Email: _____ Telephone #: 772-220-2722
Person to contact: Vinny Amato

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Natures Keeper Inc

Reference: Johnson Brothers Fax #: 813-685-5939
Email: _____ Telephone #: 813-680-5101
Person to contact: Paul Johnson

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Nature's Keeper Inc

Reference: Ranger Construction Fax #: 561-790-4332
Email: _____ Telephone #: 561-793-9400
Person to contact: Bob Schafer

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM

Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Natures Keeper Inc

Reference: Community Asphalt Fax #: 305-829-8772
Email: Telephone #: 305-829-0700
Person to contact: John Morris

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

E-BID #20110079

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

The Contractor certifies that, the firm or any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of federal funds:

(a) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR s29.110(a), by any federal department or agency;

(b) have not within a three-year period preceding this certification been convicted of or had a civil judgment rendered against it for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state, or local government transaction or public contract; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property

(c) are not presently indicted for or otherwise criminally or civilly charged by a federal, state, or local governmental entity with commission of any of the offenses enumerated in paragraph (b) of this certification; and

(d) have not within a three-year period preceding this certification had one or more federal, state, or local government public transactions terminated for cause or default.

The Contractor certifies that it shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this project by any federal agency unless authorized by the Florida Department of Transportation."

Company Name: Natures Keeper-Inc

Authorized By: Roberto West (Sign) Roberto West (Print Name)

Title: President Date: June 29, 2011

DRUG-FREE WORKPLACE FORM

The undersigned vendor in accordance with Section 287.087, Florida Statutes hereby certifies that NATURES KEEPER INC does:
(Name of Business)

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

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

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

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

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

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

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

Roberta West
Bidder's Signature

June 29, 2011
Date

OP ID: LO

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 06/08/11

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER HARBOR INSURANCE - Br4 6645 S US Highway 1 Port St. Lucie, FL 34952-1426 David G. Willbur 772-335-3445 772-398-0674	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: NATUR-3
INSURED Nature's Keeper, Inc. 3795 Sneed Road Fort Pierce, FL 34945-4716	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : American Fire & Casualty Co. — 24066 INSURER B : West American Insurance Co. — 44393 INSURER C : Ohio Casualty Group INSURER D : Zenith Insurance Company INSURER E : INSURER F :

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR A X XCU Liability A X Contractual GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC	X	X	BLA53614414	04/26/11	04/26/12	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS X SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS	X	X	BAW53614414	04/26/11	04/26/12	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
C	UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE X RETENTION $ 10000			USO53614414	04/26/11	04/26/12	EACH OCCURRENCE AGGREGATE	$ 4,000,000 $ 4,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		Z069064905 NAIC13269/FL CO CODE02947	04/26/11	04/26/12	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
C	Ohio Casualty			BMO53614414	04/26/11	04/26/12	Equip Rtd	500,000
C	Contrs Equip Covg			EQUIP SCHD $883,756	04/26/11	04/26/12	Ded	1,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

City of Port St Lucie, a political subdivision of the State of Florida, its officers, employees & agents are included as Additional Insured with respect to General Liability for work being performed for them by the insured per General Liability MasterPak Plus form CG8416 (12/03), but only if required by written contract or agreement.

CERTIFICATE HOLDER

PORTS-4

City of Port St Lucie
c/o EBIX Services Group
Bid #20110079
P.O. Box 257
Portland, MI 48875-0257

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

David R. Willbur Jr.

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The ACORD name and logo are registered marks of ACORD

Also CG2026-Designated Person or Organization endorsement applies in favor of Certificate Holder. The Business Auto Policy porvides "insured" status to "anyone liable for the conduct of an "insured" described above but only to the extent of that liability", per form CA0001 (10/01) II.A.1.c.A, Certificate Holder is also included as Additional Insurend on the Business Auto policy per Master Pak for Auto form CA8514 07/04, but only if required by writter contract or agreement. Per Project Aggregate Applies regarding the General Liability coverage per General Liability Master Pak Plus form CG8416 (12/03). Waiver of Transfer of Rights to Recovery Against Others is included in the General Liability MasterPak Plus form CG8416 (12/03) and the Master Pak for Commercial Automobile form CA8514 (07/04). The General Liability coverage is primary and non-contributory per Master Pak Plus form CG8416 (12/03), if required by written contract. The General Liability policy does also provide Blanket Additional Insured Contractors Products-Completed Operations per form CG8583 10/05 but only if required by written contract

Waiver of Subrogation is included on the Workers Compensation Policy in Favor of The City of Port St Lucie. Executive Officers/Owners are Excluded from Workers Compensation Policy. RE: Eastern Water Shed Improvement Project Landscaping & Irrigation/Various EWIP Sites. *30 Days notice of cancellation, Except 10 days for non-payment.

TRENCH SAFETY ACT COMPLIANCE STATEMENT

Project Name: EWIP Landscaping & Irrigation / Various EWIP Sites

Project Location: Port St. Lucie, Florida

Project Number 20110079

Project Location (See Plans)

Instructions:

Chapter 90-96 of the Laws of Florida requires all Contractors' engaged by The City of Port St. Lucie, Florida to comply with Occupational Safety and Health Administration Standard 29 C.F.R. s. 1926.650 Subpart P. All prospective Contractor's are required to sign the compliance statement and provide compliance cost information where indicated below. The costs for complying with the Trench Safety Act must be incorporated into this project's base bid.
Certify this form in the presence of a notary public or other officer authorized to administer oaths.

Certification

1. I understand that Chapter 90-96 of the Laws of Florida (The Trench Safety Act) requires me to comply with OSHA Standard 29 C.F.R. s. 1926.650 Subpart P. I will comply with The Trench Safety Act and I will design and provide trench safety systems at all trench excavations in excess of five feet in depth for this project.

2. The estimated cost imposed by compliance with The Trench Safety Act will be:

   Zero Dollars (Written) 0 (Figures)

3. The amount listed above has been included within the Base Bid.

Certified: Natures Keeper Inc
(Company-Contractor)

By: Roberta West
(President's Signature) ROBERTA WEST - PRESIDENT
(President's Typed or Printed Name)

Sworn to and subscribed before me in St. Lucie County, Florida on the 27 day of July, 2011.

Courtney L. Brown
NOTARY PUBLIC

NOTARY PUBLIC-STATE OF FLORIDA
Courtney L. Brown
Commission #DD872093
Expires: MAR. 19, 2013
BONDED THRU ATLANTIC BONDING CO., INC.

EWIP Landscaping & Irrigation/ Various EWIP Sites

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

E-Bid #20110079

State of FLORIDA }

County of St. Lucie }

Roberta West, being first duly sworn, disposes and says that:
(Name/s)

1. They are President of Natures Keeper Inc the Bidder that
(Title) (Name of Company)

has submitted the attached bid/PROPOSAL;

2. He is fully informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such Bid/PROPOSAL;

3. Such Bid/Proposal is genuine and is not a collusive or sham Bid;

4. Neither the said Bidder/Proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Proposer, firm or person to submit a collusive or sham Bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such Contract or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Proposer, firm or person to fix the price or prices in the attached Proposal or of any other Proposer, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Port St. Lucie or any person interested in the proposed Contract; and

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

(Signed) Roberta West

(Title) President

STATE OF FLORIDA }
COUNTY OF ST. LUCIE }SS:

The foregoing instrument was acknowledged before me this 7/25/11
(Date)

by: Roberta West who is personally known to me or who has produced

_____ as identification and who did (did not) take an oath.

NOTARY PUBLIC-STATE OF FLORIDA
Courtney L. Brown
Commission #DD872093
Expires: MAR. 19, 2013
BONDED THRU ATLANTIC BONDING CO., INC.

Courtney L. Brown Courtney L. Brown
Notary (print & sign name)

Commission No. DD872093

E-Bid #20110079
BUY AMERICA CERTIFICATE OF COMPLIANCE

CERTIFICATE OF COMPLIANCE

COMPLIANCE

The Contractor hereby certifies that it will comply with the requirements of 23 C.F.R. 635.410, as amended, and utilize only iron or steel manufactured in the United States, or components made with iron or steel that meet the Buy America requirements. Contractor acknowledges that it will be required to produce Buy America certification(s) from the producer(s) of the steel or iron or components prior to incorporating any such materials into the work or project.

Company Name: Natures Keeper

Authorized By: Roberta West (Sign) ROBERTA WEST (Print Name)

Title: President Date: June 29, 2011

CITY OF PORT ST. LUCIE
E-BID # 20110079

PROJECT TITLE: EWIP Landscaping & Irrigation / Various EWIP Sites

CONTRACTOR VERIFICATION FORM

THE FOLLOWING IS TO COMPLETED BY PRIME BIDDER:

Name of Firm: Natures Keeper Inc.

Corporate Title: President

Address: 3795 Sneed Road

Fort Pierce, FL 34945
(Zip Code)

By: Roberta West President
(Print name) (Print title)

Roberta West
(Authorized Signature)

Telephone: (772) 467-1230

Fax: (772) 467-8923

State License # _____ (ATTACH COPY)

County License # 26485 (ATTACH COPY)

City License: (ATTACH PROOF OF REGISTRATION WITH THE CITY)

Type of License: Irrigation

Unlimited _____ (yes/no)

If "NO", Limited to what trade? IRRIGATION

CITY OF PORT ST. LUCIE
BUILDING DEPARTMENT
CERTIFICATE OF COMPETENCY
EXPIRE: SEPTEMBER 30, 2011

WILLIAMS, BENJAMIN B
NATURE'S KEEPER INC
3795 SNEED RD
FT PIERCE FL 34945

SIGNATURE _____

IRRIGATION SPRINKLER

FL# N/A PSL11-6512

St. Lucie County

County Certification Number: **26485**

Building & Code Regulation Division
2300 Virginia Avenue
Ft Pierce, FL 34982
Phone: (772) 462-1673 Fax: (772) 462-1148
http://www.stlucieco.org/public_works/contract_licen.htm
http://airs.slcfl.vetrol.com/AIRSweb.php

Issued To: **BENJAMIN WILLIAMS**
NATURE'S KEEPER INC

3795 SNEED RD
FORT PIERCE, FL 34945

Class Code: Irrigation Sprinkler

License Type: County Certificate

This Competency Card, issued by the St. Lucie County Contractor Certification Division, authorizes work for the Class Code stated, for the unicorporated areas of St. Lucie County. It does not authorize work for the City of Ft. Pierce, St. Lucie Village or the City of Port St. Lucie. It is the Contractor's responsibility to maintain this card in a current status by providing a Certificate of Insurance, current address and telephone information, and renewing this card annually as required.

Effective Date: 10/20/2010 **Expiration Date:** 9/30/2011

Wallet Contractor ID Card

✂ Cut on outside of line, then fold in half.

St. Lucie County
CONTRACTOR
IDENTIFICATION CARD

County Certification Number: 26485
Class Code: Irrigation Sprinkler
This is to certify that BENJAMIN WILLIAMS DBA NATURE'S KEEPER INC has been issued a County Certificate in St. Lucie County, beginning on 10/20/2010 and ending on 09/30/2011, unless license is revoked.

Authorized Licensing Official

St. Lucie County

Automated Inspection Line: (772) 462 - 1261
Inspection Line: (772) 462 - 2172
Contractor Licensing: (772) 462 - 1673

Contractor Fax Line: (772) 462 - 1148

Florida Department of Agriculture and Consumer Services

Division of Marketing and Development
Mayo Building M-38
Tallahassee, Florida 32308

68875

Business Mailing Address:
NATURE'S KEEPER, INC.
DBA: NATURE'S KEEPER, INC.
3795 SNEED RD
FORT PIERCE,FL34945-4716

Location Address:
NATURE'S KEEPER, INC.
3795 SNEED RD
FORT PIERCE,FL34945-4716

Your official license appears below. This license should be detached along the dotted line and posted in a conspicuous area at your place of business, along with any other permits issued by this department.

Cut Here

State of Florida
Department of Agriculture and Consumer Services

Division of Marketing and Development/Bureau of License and Bond
850-488-4101
Tallahassee, Florida

Issue Date: 10/08/2010
Fee Amt Paid: $300
FEIN: 65-0313390
Effective Date: 10/23/2010

POST LICENSE CONSPICUOUSLY

License as Dealer in Agriculture Products
GOOD FOR ONE LOCATION

This license is issued under authority of Section 604.15-604.34, Florida Statutes, to:

License # 68875 - 5
NATURE'S KEEPER, INC.
DBA: NATURE'S KEEPER, INC.
3795 SNEED RD
FORT PIERCE,FL34945-4716

Commodity Code: 1 11
Bonding Company: UNITED FIRE & CASUALTY CO.
Bond Amount: $75,000

Field Representatives: BRADFORD ROBSON

Charles H. Bronson

CHARLES H. BRONSON
COMMISSIONER OF AGRICULTURE

This is to certify that the dealer in agricultural products whose name and address are shown above, has paid the required fee and has made an approved surety bond to the Commissioner of Agriculture as required by Sections 604.15-604.34, Florida Statutes, and is hereby granted this license as Dealer in Agricultural Products as defined in Section 604.15, Florida Statutes. This license is for a one year period.

2010 / 2011

ST. LUCIE COUNTY LOCAL BUSINESS TAX RECEIPT

BOB DAVIS, CPA, CGFO, CFC, ST. LUCIE COUNTY TAX COLLECTOR

ACCOUNT 7299-00980440

EXPIRES September 30, 2011

FACILITIES OR MACHINES / ROOMS SEATS EMPLOYEES 8

TYPE OF BUSINESS 7299 MISC/PUBLIC SERVICE / SOD MULCH

BUSINESS NAME Natures's Keeper Inc

MAILING ADDRESS
Natures's Keeper Inc.
Roberta West
3795 Sneed Rd
Fort Pierce, FL 34945

BUSINESS LOCATION
3795 Sneed Rd
Fort Pierce, FL 34945
St Lucie County

x RENEWAL
NEW RECEIPT
TRANSFER-

ORIGINAL TAX	$27.55
AMOUNT	$27.55
PENALTY	
COLLECTION COST	
TOTAL	$27.55

V10029

07/28/2010 99-20100728-032321 27.55 Check

Law requires this Local Business Tax Receipt to be displayed conspicuously at the place of business in such a manner that it can be open to the view of the public and subject to inspection by all duly authorized officers of the county. Upon failure to do so, the Local Business Taxpayer shall be subject to the payment of another Local Business Tax for the same business, profession, or occupation.

Pursuant to State Law, all Local Business Tax Receipts shall be sold by the Tax Collector beginning July 1st of each year and shall expire on September 30th of the succeeding year. Those Local Business Tax Receipts renewed beginning October 1st shall be delinquent and subject to a delinquency penalty of 10% for the month of October, plus an additional 5% penalty for each month of delinquency thereafter until paid; provided that the total delinquency penalty shall not exceed 25% of the Local Business Tax for the delinquent establishment.

In addition to the penalty, the Tax Collector shall be entitled to a collection cost fee of from $1.00 to $5.00, based on the amount of the Local Business Tax, which shall be collected from delinquent taxpayers after September 30th, of the business year.

This receipt is a Local Business Tax only. It does not permit the Local Business Taxpayer to violate any existing regulatory or zoning laws of the state, county or cities. It also does not exempt the Local Business Taxpayer from any other taxes, licenses or permits that may be required by law.

Local Business Taxes are subject to change according to law.

Natures's Keeper Inc.
Roberta West
3795 Sneed Rd
Fort Pierce, FL 34945

RECEIVED AUG 02 2010

2010 / 2011

ST. LUCIE COUNTY LOCAL BUSINESS TAX RECEIPT

BOB DAVIS, CPA, CGFO, CFC, ST. LUCIE COUNTY TAX COLLECTOR

ACCOUNT 5261-00980002

EXPIRES September 30, 2011

FACILITIES OR MACHINES / ROOMS SEATS EMPLOYEES

TYPE OF BUSINESS 5261 NURSERIES RETAIL / NURSERIES

BUSINESS NAME Natures's Keeper Inc

MAILING ADDRESS
Natures's Keeper Inc.
Roberta West
3795 Sneed Rd
Fort Pierce, FL 34945

BUSINESS LOCATION
3795 Sneed Rd
Fort Pierce, FL 34945
St Lucie County

x RENEWAL
NEW RECEIPT
TRANSFER-

ORIGINAL TAX	$27.55
AMOUNT	$27.55
PENALTY	
COLLECTION COST	
TOTAL	$27.55

V10029

07/28/2010 99-20100728-032321 27.55 Check

Law requires this Local Business Tax Receipt to be displayed conspicuously at the place of business in such a manner that it can be open to the view of the public and subject to inspection by all duly authorized officers of the county. Upon failure to do so, the Local Business Taxpayer shall be subject to the payment of another Local Business Tax for the same business, profession, or occupation.

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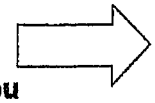
Local Business Taxes are subject to change according to law.

Natures's Keeper Inc.
Roberta West
3795 Sneed Rd
Fort Pierce, FL 34945

RECEIVED AUG 02 2010

Florida Department of Agriculture and Consumer Services **Pesticide Certification Office**

This card is your license. It authorizes you, the license holder, to purchase and apply Restricted Use Pesticides (RUPs). Please sign your card and keep it with you when applying or purchasing RUPs.



Florida Department of Agriculture and Consumer Services
Pesticide Certification Office
Commercial Applicator License
License #. CM20409

WEST, ROBERTA
3795 SNEED ROAD
FORT PIERCE, FL 34945

Categories
6

Issued: May 4, 2010 Expires: May 31, 2014

Signature of Licensee

CHARLES H. BRONSON, COMMISSIONER.

The above individual is licensed under the provisions of Chapter 487, F.S. to purchase and apply restricted use pesticides.

CITY OF PORT ST. LUCIE
BUILDING DEPARTMENT
CERTIFICATE OF COMPETENCY
EXPIRE: SEPTEMBER 30, 2011

WILLIAMS, BENJAMIN B
NATURE'S KEEPER INC
3795 SNEED RD
FT PIERCE FL 34945

SIGNATURE _____
IRRIGATION SPRINKLER
PSL11-6512

FL# N/A

PORT ST. LUCIE
INCORPORATED 1961
FLORIDA

wilson/ouse®

THE AMERICAN INSTITUTE OF ARCHITECTS

Executed in 1 Counterpart

AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we Nature's Keeper, Inc.
(Here insert full name and address or legal title of Contractor)
3795 Sneed Road, Fort Pierce, FL 34945
as Principal, hereinafter called the Principal, and United Fire & Casualty Company
(Here insert full name and address or legal title of Surety)
PO Box 73909, Cedar Rapids, IA 52407-3909
a corporation duly organized under the laws of the State of IOWA
as Surety, hereinafter called the Surety, are held and firmly bound unto City of Port St. Lucie
(Here insert full name and address or legal title of Owner)
121 SW Port St. Lucie Blvd., Port St. Lucie, FL 34984
as Obligee, hereinafter called the Obligee, in the sum of Five Percent of Amount Bid
Dollars ($ ---5%---),
for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for
(Here insert full name, address and description of project)
Bid No. 20110079, EWIP Landscaping and Irrigation /Various EWIP Sites,

NOW, THEREFORE, If the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 28th day of July 2011

(Witness)

Nature's Keeper, Inc.
(Principal) (Seal)
Roberta West
Roberta West (Title) PRESIDENT

(Witness)

United Fire & Casualty Company
(Surety) (Seal)
Leslie M. Donahue
(Title)
Leslie M. Donahue, Attorney-in-Fact
and Florida Licensed Resident Agent

UNITED FIRE & CASUALTY COMPANY
HOME OFFICE - CEDAR RAPIDS, IOWA
CERTIFIED COPY OF POWER OF ATTORNEY

(Original on file at Home Office of Company - See Certification)

KNOW ALL MEN BY THESE PRESENTS, That the UNITED FIRE & CASUALTY COMPANY, a corporation duly organized and existing under the laws of the State of Iowa, and having its principal office in Cedar Rapids, State of Iowa, does make, constitute and appoint LESLIE M DONAHUE, OR KIM E NIV OR JEFFREY W REICH, OR SUSAN L REICH, OR TERESA L DURHAM, OR PATRICIA L SLAUGHTER, OR J GREGORY MACKENZIE, OR GLORIA A RICHARDS, OR DON BRAMLAGE, OR LISA ROSELAND, CHERYL FOLEY, ALL INDIVIDUALLY of MAITLAND FL

its true and lawful Attorney(s)-In-Fact, with power and authority hereby conferred to sign, seal and execute in its behalf all lawful bonds, undertakings and other obligatory instruments of similar nature as follows: ALL bonds not to exceed $25,000,000.00 and to bind UNITED FIRE & CASUALTY COMPANY thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of UNITED FIRE & CASUALTY COMPANY and all the acts of said Attorney, pursuant to the authority hereby given are hereby ratified and confirmed.

The Authority hereby granted is continuous and shall remain in full force and effect until revoked by UNITED FIRE & CASUALTY COMPANY.

This power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by Board of Directors of the Company on April 18, 1973:

"Article V - Surety Bonds and Undertakings"

Section 2, Appointment of Attorney-in-Fact. "The President or any Vice President, or any other officer of the Company may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Company in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. The signature of any officer authorized hereby and the Corporate seal, may be affixed by facsimile to any power of attorney or special power of attorney or certification of either authorized hereby; such signature and seal, when so used, being adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed. Such attorneys-in fact, subject to the limitations set forth in their respective certificates of authority shall have full power to bind the Company by their signature and execution of any such instruments and to attach the seal of the Company thereto. The President or any Vice President, the Board of Directors or any other officer of the Company may at any time revoke all power and authority previously given to any attorney-in-fact."

IN WITNESS WHEREOF, the UNITED FIRE & CASUALTY COMPANY has caused these presents to be signed by its vice president and its corporate seal to be hereto affixed this 27th day of January, 2010

UNITED FIRE & CASUALTY COMPANY

By Dennis J. Richmann
Vice President

State of Iowa, County of Linn, ss:

On 27th day of January, 2010, before me personally came Dennis J. Richmann to me known, who being by me duly sworn, did depose and say; that he resides in Cedar Rapids, State of Iowa; that he is a Vice President of the UNITED FIRE & CASUALTY COMPANY, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

Mary A Jansen
Iowa Notarial Seal
Commission number 713273
My Commission Expires 10/26/13

Mary A Jansen
Notary Public

I, the undersigned officer of the UNITED FIRE & CASUALTY COMPANY, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the by-laws of said Company as set forth in said Power of Attorney, with the ORIGINALS ON FILE IN THE HOME OFFICE OF SAID COMPANY, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

In testimony whereof I have hereunto subscribed my name and affixed the corporate seal of the said Company this 27th day of July 20 11.

Secretary

BPOA00190705

E-BID #20110079
CERTIFICATION REGARDING LOBBYING

The undersigned Contractor certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying", 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the awards documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. 1352 (1)-(2)(A), any person who makes a prohibited expenditure of fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure]

The Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq., apply* to this certification and disclosure, if any.

Company Name: Natures Keeper Inc.

Authorized By: Roberta West (Sign) Roberta West (Print Name)

Title: President Date: June 29, 2011

(All Subcontractors are required to submit this form with the Prime Contractor's Bid)

Form **W-9**
(Rev. October 2007)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)
Natures Keeper Inc

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☒ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ .....
☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)
3795 Sneed Road

Requester's name and address (optional)

City, state, and ZIP code
Fort Pierce FL 34945

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number

or

Employer identification number
65 0313390

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here Signature of U.S. person ▶ Roberto West Date ▶ June 29, 2011

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

ADDENDUM #4 - July 21, 2011

"REVISED" E-BID REPLY EXCEL SPREADSHEET

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ___SUNSHINE LAND DESIGN, INC._____

SCHEDULE 1 - CANE SLOUGH / ELKS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 26,760.00	$ 26,760.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 14.40	$ 1,440.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	200	$ 3.60	$ 720.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	7500	$ 5.00	$ 37,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	7500	$ 4.12	$ 30,900.00
6	SITE ACCESS RESTORATION	LS	1	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS (LA/IRR)	LS	1	$ 15,000.00	$ 15,000.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 360.00	$ 4,320.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 780.00	$ 9,360.00
10	Total for General Items	--	--	--	$ 130,200.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 8,800.00	$ 8,800.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 21,780.00	$ 21,780.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 1,204.50	$ 1,204.50
14	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	EA	5343	$ 5.50	$ 29,386.50
15	4" Nibco TI-8 Gate Valve	EA	5	$ 253.00	$ 1,265.00
16	Carson 1419 Valve Box with Lid	LF	5	$ 70.40	$ 352.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	20	$ 952.60	$ 19,052.00
18	Carson 1220 Jumbo Valve Box with Lid	EA	19	$ 136.40	$ 2,591.60
19	Class 200 PVC Lateral with Schedule 40 PVC fittings (size per plan)	EA	15150	$ 0.83	$ 12,574.50
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	342	$ 13.48	$ 4,610.16
21	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	2	$ 23.93	$ 47.86
22	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	21	$ 34.93	$ 733.53
23	Hunter PGP-04-CV with #6 Nozzle	EA	4	$ 36.58	$ 146.32
24	Hunter PGP-04-CV with #9 Nozzle	EA	75	$ 36.58	$ 2,743.50
25	Hunter PGP-04-CV with #12 Nozzle	EA	47	$ 36.58	$ 1,719.26
26	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	6	$ 42.35	$ 254.10
27	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	52	$ 42.35	$ 2,202.20
28	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	25	$ 42.35	$ 1,058.75
29	Total for Irrigation Items	--	--	--	$ 110,521.78

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
30	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	3,380	$0.53	$ 1,791.40
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	4,790	$0.80	$ 3,832.00
32	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	-	155	$4.74	$ 734.70
33	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	129	$10.80	$ 1,393.20
34	Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	18" FULL	348	$7.80	$ 2,714.40
35	Green Island Ficus	*FICUS MICROCARPA*	1 GAL	-	70	$4.80	$ 336.00
36	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	154	$3.42	$ 526.68
37	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	1,030	$3.42	$ 3,522.60
38	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	FULL	1,280	$3.42	$ 4,377.60
39	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	210	$4.50	$ 945.00
40	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	7,730	$0.72	$ 5,565.60
41	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	9,910	$0.53	$ 5,252.30
42	Maidencane	*PANICUM HEMITOMON*	BR	-	4,570	$0.53	$ 2,422.10
43	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	3,160	$0.53	$ 1,674.80
44	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	4,030	$0.60	$ 2,418.00
45	Soft Rush	*JUNCUS EFFUSUS*	BR	-	760	$0.58	$ 440.80
46	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	2,720	$0.72	$ 1,958.40
47	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	16,946	$0.72	$ 12,201.12
48	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" full	2,119	$7.20	$ 15,256.80
49		Total for Shrubs and Groundcover	--	--	--	--	$67,363.50

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ___SUNSHINE LAND DESIGN, INC._____

TREES							
LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
50	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	203	$173.88	$ 35,297.64
51	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	203	$285.66	$ 57,988.98
52	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'-4"Cal OA	205	$558.90	$ 114,574.50
53	Royal Palm	*ROYSTONEA REGIA*	-	10-12'	40	$198.72	$ 7,948.80
54	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	85	$583.74	$ 49,617.90
55	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8'	109	$104.33	$ 11,371.97
56	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10'	109	$279.45	$ 30,460.05
57	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12'	109	$273.24	$ 29,783.16
58	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16',8'SPR	12	$409.86	$ 4,918.32
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	24	$397.44	$ 9,538.56
60	Dahoon Holly	*IILEX CASSINE*	30 GAL	10'-12'x2"OA	73	$186.30	$ 13,599.90
61	Cabbage Palm	*SABAL PALMETTO*	FG	12'-18' STG	12	$161.46	$ 1,937.52
62	Simpson's Stopper	*MYRCIANTHES FRAGRANS*	30 GAL	8'-9'(B)	30	$248.40	$ 7,452.00
63	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	36	$372.60	$ 13,413.60
64	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7-9'	13	$186.30	$ 2,421.90
65	Sea Grape	*COCCOLOBA UVIFERA*	15 GAL	8'-10' ML	254	$86.94	$ 22,082.76
66	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	16	$347.76	$ 5,564.16
67		Total for Trees	--	--	--	--	$417,971.72

SCHEDULE 1 - CANE SLOUGH / ELKS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$726,057.00

SCHEDULE 2 - LENNARD SQUARE / AZZI STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 19,680.00	$ 19,680.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	150	$ 14.40	$ 2,160.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ 3.60	$ 900.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 5.00	$ 12,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 4.12	$ 10,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 8,160.00	$ 8,160.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 360.00	$ 4,320.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 600.00	$ 7,200.00
8	Total for General Items	--	--	--	$ 69,420.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
9	3" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	3207	$ 4.40	$ 14,110.80
10	3" Nibco T-113 Gate Valve	EA	3	$ 627.00	$ 1,881.00
11	Carson 1419 Valve Box with Lid	EA	3	$ 70.40	$ 211.20
12	2" Rain Bird PESB Series Remote Control Valve	EA	10	$ 952.60	$ 9,526.00
13	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 136.40	$ 1,091.20
14	Class 200 PVC Lateral Line with Schedule 40 PVC gasketed Fittings (size	LF	8100	$ 0.83	$ 6,723.00
15	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	143	$ 13.48	$ 1,927.64
16	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	91	$ 23.93	$ 2,177.63
17	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	16	$ 34.93	$ 558.88
18	Hunter PGP-04-CV with #6 Nozzle	EA	3	$ 36.58	$ 109.74
19	Hunter PGP-04-CV with #9 Nozzle	EA	9	$ 36.58	$ 329.22
20	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	4	$ 42.35	$ 169.40
21	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	59	$ 42.35	$ 2,498.65
22	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	10	$ 42.35	$ 423.50
23	Total for Irrigation Items	--	--	--	$ 41,737.86

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ___SUNSHINE LAND DESIGN, INC._____

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
24	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,960	$0.53	$ 1,038.80
25	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	73	$7.80	$ 569.40
26	Wild Coffee	*PSYCHOTRIA NERVOSA*	3 GAL	-	293	$8.40	$ 2,461.20
27	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	600	$4.80	$ 2,880.00
28	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	2,180	$0.72	$ 1,569.60
29	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,810	$0.53	$ 2,019.30
30	Maidencane	*PANICUM HEMITOMON*	BR	-	6,750	$0.53	$ 3,577.50
31	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	1,630	$0.53	$ 863.90
32	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	1,742	$0.60	$ 1,045.20
33	Soft Rush	*JUNCUS EFFUSUS*	BR	-	2,510	$0.58	$ 1,455.80
34	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,465	$0.72	$ 3,214.80
35	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	17,624	$0.72	$ 12,689.28
36	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	12"	582	$4.80	$ 2,793.60
37	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	482	$3.42	$ 1,648.44
38	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	122	$10.80	$ 1,317.60
39	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	360	$3.42	$ 1,231.20
40	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	146	$4.50	$ 657.00
41	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	451	$3.42	$ 1,542.42
42	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	1,954	$7.20	$ 14,068.80
43		Total for Shrubs and Groundcover	--	--	--	--	$56,643.84

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
44	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7'-9' OA	10	$186.30	$ 1,863.00
45	Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'+2" OA	60	$173.88	$ 10,432.80
46	Cypress	*TAXODIUM DISTICHUM*	45 GAL	12'+3" OA	60	$285.66	$ 17,139.60
47	Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" C	60	$558.90	$ 33,534.00
48	Green Buttonwood	*CONOCARPUS ERECTUS*	30 GAL	14'(B)OA	9	$173.88	$ 1,564.92
49	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	71	$583.74	$ 41,445.54
50	Red Bay	*PERSEA BORBONIA*	3 GAL	2'-4' OA	28	$99.36	$ 2,782.08
51	Red Bay	*PERSEA BORBONIA*	15 GAL	6'-8' OA	28	$223.56	$ 6,259.68
52	Red Bay	*PERSEA BORBONIA*	25 GAL	8'-10' OA	29	$347.76	$ 10,085.04
53	Royal Poinciana	*DELONIX REGIA*	45 GAL	12'-14'x8'SPR OA	7	$409.86	$ 2,869.02
54	Royal Palm	*ROYSTONEA REGIA*		10'-12' OA	28	$198.72	$ 5,564.16
55	Red Maple	*ACER RUBRUM*	10 GAL	8' OA	64	$62.10	$ 3,974.40
56	Red Maple	*ACER RUBRUM*	25 GAL	8'-10' OA	63	$149.04	$ 9,389.52
57	Red Maple	*ACER RUBRUM*	45 GAL	12'-14' OA	63	$322.92	$ 20,343.96
58	Red Maple	*ACER RUBRUM*	65 GAL	14'-16'x4"Cal OA	11	$372.60	$ 4,098.60
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	4	$397.44	$ 1,589.76
60	Cabbage Palm	*SABAL PALMETTO*	FG	12'-14' OA	124	$172.64	$ 21,407.36
61		Total for Trees	--	--	--	--	$194,343.44

SCHEDULE 2 - LENNARD SQ / AZZI STA LANDSCAPING/IRRIGATION BID TOTAL	--	$362,145.14

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ___SUNSHINE LAND DESIGN, INC.___

SCHEDULE 3 - TIFFANY CHANNEL STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 15,960.00	$ 15,960.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 14.40	$ 1,440.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ 3.60	$ 360.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 5.00	$ 12,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 4.12	$ 10,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 4,200.00	$ 4,200.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 360.00	$ 4,320.00
9	Total for General Items	--	--	--	$ 53,280.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 11,000.00	$ 11,000.00
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 21,780.00	$ 21,780.00
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 1,204.50	$ 1,204.50
13	4" Class 200 PVC Mainline/Fittings	LF	2276	$ 5.50	$ 12,518.00
14	4" Nibco T-8 Gate Valve	EA	1	$ 253.00	$ 253.00
15	Carson 1419 Valve Box with Lid	EA	1	$ 70.40	$ 70.40
16	2" Rain Bird PESB Series Remote Control Valve	EA	12	$ 952.60	$ 11,431.20
17	Carson 1220 Jumbo Valve Box with Lid	EA	13	$ 136.40	$ 1,773.20
18	Class 200 PVC Lateral Line/Fittings (size per plan)	LF	10800	$ 0.83	$ 8,964.00
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	244	$ 13.48	$ 3,289.12
20	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	28	$ 34.93	$ 978.04
21	Hunter PGP-04-CV with #6 Nozzle	EA	5	$ 36.58	$ 182.90
22	Hunter PGP-04-CV with #9 Nozzle	EA	56	$ 36.58	$ 2,048.48
23	Hunter PGP-04-CV with #12 Nozzle	EA	31	$ 36.58	$ 1,133.98
24	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 42.35	$ 84.70
25	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	10	$ 42.35	$ 423.50
26	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	18	$ 42.35	$ 762.30
27	Total for Irrigation Items	--	--	--	$ 77,897.32

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
28	Red Tip Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	24"	140	$7.80	$ 1,092.00
29	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	831	$4.80	$ 3,988.80
30	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	Full	700	$3.42	$ 2,394.00
31	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	944	$7.20	$ 6,796.80
32		***Total for Shrubs and Groundcover***	--	--	--	--	$14,271.60

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
33	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	14	$347.76	$ 4,868.64
34	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"CAL OA	66	$745.20	$ 49,183.20
35	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$372.60	$ 7,824.60
36	Slash Pine	*PINUS ELLIOTII(South Florida Densa)*	45 GAL	10'-12' OA	118	$211.14	$ 24,914.52
37	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	26	$397.44	$ 10,333.44
38		Total for Trees	--	--	--	--	$97,124.40

SCHEDULE 3 - TIFFANY CHANNEL STA LANDSCAPING/IRRIGATION BID TOTAL	--	$242,573.32

SCHEDULE 4 - LEITHGOW STREET STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 15,120.00	$ 15,120.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ 14.40	$ 720.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	50	$ 3.60	$ 180.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	1250	$ 5.00	$ 6,250.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	1250	$ 4.12	$ 5,150.00
6	SITE ACCESS RESTORATION	LS	1	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 3,360.00	$ 3,360.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 360.00	$ 4,320.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 360.00	$ 4,320.00
10	Total for General Items	--	--	--	$ 43,620.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ___SUNSHINE LAND DESIGN, INC._____

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 8,800.00	$ 8,800.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 20,294.12	$ 20,294.12
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 1,204.50	$ 1,204.50
14	3" Class 200 PVC Mainline/Fittings	LF	1660	$ 4.40	$ 7,304.00
15	3" Nibco T-113 Gate Valve	EA	2	$ 627.00	$ 1,254.00
16	Carson 1419 Valve Box with Lid	EA	2	$ 70.40	$ 140.80
17	2" Rain Bird PESB Series Remote Control Valve	EA	8	$ 952.60	$ 7,620.80
18	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 136.40	$ 1,091.20
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	1640	$ 1.65	$ 2,706.00
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	98	$ 13.48	$ 1,321.04
21	Hunter PGP-04-CV with #6 Nozzle	EA	1	$ 36.58	$ 36.58
22	Hunter PGP-04-CV with #9 Nozzle	EA	44	$ 36.58	$ 1,609.52
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 42.35	$ 127.05
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	4	$ 42.35	$ 169.40
25	Total for Irrigation Items	--	--	--	$ 53,679.01

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
26	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,740	$0.53	$ 922.20
27	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,420	$0.72	$ 1,022.40
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,270	$0.53	$ 1,733.10
29	Maidencane	*PANICUM HEMITOMON*	BR	-	1,740	$0.53	$ 922.20
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	2,500	$0.53	$ 1,325.00
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	2,180	$0.80	$ 1,744.00
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,790	$0.72	$ 3,448.80
33	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	517	$0.72	$ 372.24
34	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	22	$7.80	$ 171.60
35	Fire Flag	*THALIA GENICULATA*	BR	-	1,420	$0.66	$ 937.20
36	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	269	$3.42	$ 919.98
37	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	BR	-	1,310	$0.84	$ 1,100.40
38	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	383	$3.42	$ 1,309.86
39	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	326	$7.20	$ 2,347.20
40		Total for Shrubs and Groundcover	--	--	--	--	$18,276.18

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
41	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	13	$496.80	$ 6,458.40
42	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	37	$173.88	$ 6,433.56
43	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	37	$285.66	$ 10,569.42
44	Bald Cypress	*TAXODIUM DISTICHUM*	65 GAL	14' OA	39	$409.86	$ 15,984.54
45	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	4	$583.74	$ 2,334.96
46	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	28	$104.33	$ 2,921.24
47	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	28	$279.45	$ 7,824.60
48	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	29	$273.24	$ 7,923.96
49	Royal Poinciana	*DELONIX REGIA*	60 GAL	14'-16'x8"SPR OA	2	$409.86	$ 819.72
50	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	15	$372.60	$ 5,589.00
51	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'x2"Cal	6	$372.60	$ 2,235.60
52	Cabbage Palm	*SABAL PALMETTO*	-	12'-18' STG	17	$161.46	$ 2,744.82
53	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	3	$347.76	$ 1,043.28
54		Total for Trees	--	--	--	--	$72,883.10

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ___SUNSHINE LAND DESIGN, INC._____

SCHEDULE 4 - LEITHGOW STREET STA LANDSCAPING/IRRIGATION BID TOTAL	--	$188,458.29

SCHEDULE 5 - LOUTUS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 15,840.00	$ 15,840.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 14.40	$ 1,440.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ 3.60	$ 900.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	5000	$ 5.00	$ 25,000.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	5000	$ 4.12	$ 20,600.00
6	SITE ACCESS RESTORATION	LS	1	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 4,080.00	$ 4,080.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 360.00	$ 4,320.00
9	Total for General Items	--	--	--	$ 76,380.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 8,800.00	$ 8,800.00
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 20,294.12	$ 20,294.12
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 1,204.50	$ 1,204.50
13	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	4229	$ 5.50	$ 23,259.50
14	4" Nibco T-8 Gate Valve	EA	3	$ 253.00	$ 759.00
15	Carson 1419 Valve Box with Lid	EA	3	$ 70.40	$ 211.20
16	2" Rain Bird PESB Series Remote Control Valve	EA	17	$ 952.60	$ 16,194.20
17	Carson 1220 Jumbo Valve Box with Lid	EA	17	$ 136.40	$ 2,318.80
18	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	10060	$ 0.83	$ 8,349.80
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	184	$ 13.48	$ 2,480.32
20	Hunter PGP-04-CV with #6 Nozzle	EA	6	$ 36.58	$ 219.48
21	Hunter PGP-04-CV with #9 Nozzle	EA	88	$ 36.58	$ 3,219.04
22	Hunter PGP-04-CV with #12 Nozzle	EA	2	$ 36.58	$ 73.16
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 42.35	$ 84.70
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	22	$ 42.35	$ 931.70
25	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	5	$ 42.35	$ 211.75
25	Total for Irrigation Items	--	--	--	$ 88,611.27

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
26	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	1,196	$0.72	$ 861.12
27	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	687	$3.42	$ 2,349.54
28	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	855	$3.42	$ 2,924.10
29	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	952	$7.20	$ 6,854.40
30		*Total for Shrubs and Groundcover*	--	--	--	--	$12,989.16

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
31	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	75	$583.74	$ 43,780.50
32	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$248.40	$ 5,216.40
33	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8'SPR OA	8	$409.86	$ 3,278.88
34	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	40	$372.60	$ 14,904.00
35	Sycamore	*PLANTANUS*	65 GAL	14'-16'x4"Cal OA	10	$385.02	$ 3,850.20
36	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	10	$397.44	$ 3,974.40
37	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	13	$347.76	$ 4,520.88
38		Total for Trees	--	--	--	--	$79,525.26

SCHEDULE 5 - LOUTUS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$257,505.69

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ___SUNSHINE LAND DESIGN, INC._____

SCHEDULE 6 - MARY TERRACE STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 15,120.00	$ 15,120.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ 14.40	$ 720.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ 3.60	$ 360.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 5.00	$ 12,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 4.12	$ 10,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 4,200.00	$ 4,200.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 3,240.00	$ 3,240.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 360.00	$ 4,320.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 360.00	$ 4,320.00
10	Total for General Items	--	--	--	$ 55,080.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,700.00	$ 7,700.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 20,294.12	$ 20,294.12
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 1,204.50	$ 1,204.50
14	2 1/2" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	1160	$ 3.85	$ 4,466.00
15	2 1/2" Nibco T-113 Gate Valve	EA	1	$ 495.00	$ 495.00
16	Carson 1419 Valve Box with Lid	EA	1	$ 70.40	$ 70.40
17	2" Rain Bird PESB Series Remote Control Valve	EA	7	$ 952.60	$ 6,668.20
18	Carson 1220 Jumbo Valve Box with Lid	EA	7	$ 136.40	$ 954.80
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	2960	$ 0.83	$ 2,456.80
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	129	$ 13.48	$ 1,738.92
21	Hunter PGP-04-CV with #6 Nozzle	EA	30	$ 36.58	$ 1,097.40
22	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 42.35	$ 127.05
23	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	6	$ 42.35	$ 254.10
24	Total for Irrigation Items	--	--	--	$ 47,527.29

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
25	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	2,070	$0.53	$ 1,097.10
26	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,200	$0.72	$ 864.00
27	Fire Flag	*THALIA GENICULATA*	BR	-	440	$0.66	$ 290.40
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	1,850	$0.53	$ 980.50
29	Maidencane	*PANICUM HEMITOMON*	BR	-	110	$0.53	$ 58.30
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	870	$0.53	$ 461.10
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	440	$0.80	$ 352.00
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	3,050	$0.72	$ 2,196.00
33	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	LN	-	650	$0.84	$ 546.00
34	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	355	$0.72	$ 255.60
35	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	359	$3.42	$ 1,227.78
36	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	348	$3.42	$ 1,190.16
37	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	272	$7.20	$ 1,958.40
38		Total for Shrubs and Groundcover	--	--	--	--	$11,477.34

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
39	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	38	$136.62	$ 5,191.56
40	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	38	$211.14	$ 8,023.32
41	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" Cal OA	38	$558.90	$ 21,238.20
42	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"Cal	11	$583.74	$ 6,421.14
43	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	2	$372.60	$ 745.20
44	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	18	$104.33	$ 1,877.94
45	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	18	$279.45	$ 5,030.10
46	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	18	$273.24	$ 4,918.32
47	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8"Spr OA	2	$409.86	$ 819.72
48	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	20	$211.14	$ 4,222.80
49	Sycamore	*PLANTANUS*	65 GAL	14'-16x4"' OA	2	$385.02	$ 770.04
50	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	2	$397.44	$ 794.88
51	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	8	$347.76	$ 2,782.08
52		Total for Trees	--	--	--	--	$62,835.30

SCHEDULE 6 - MARY TERRACE STA LANDSCAPING/IRRIGATION BID TOTAL	--	$176,919.93

BID SUMMARY:

SCHEDULE 1 SUB TOTAL:	$726,057.00
SCHEDULE 2 SUB TOTAL:	$362,145.14
SCHEDULE 3 SUB TOTAL:	$242,573.32
SCHEDULE 4 SUB TOTAL:	$188,458.29
SCHEDULE 5 SUB TOTAL:	$257,505.69
SCHEDULE 6 SUB TOTAL:	$176,919.93
INDEMNIFICATION FEE:	$10.00

SCHEDULES 1 - 6 BID TOTAL	--	$1,953,669.37

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD (850) 487-1395
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

FENTON, MARGARET HELEN
SUNSHINE LAND DESIGN, INC.
5441 SE MEADOW SPRINGS BLVD
STUART FL 34997

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto **www.myfloridalicense.com**. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!

AC# 5058305
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CERTIFIED GENERAL CONTRACTOR
FENTON, MARGARET HELEN
SUNSHINE LAND DESIGN, INC.
IS CERTIFIED under the provisions of Ch 489 FS
Expiration date: AUG 31, 2012 L10072900273

CGC1518885 07/29/10 09017500l

DETACH HERE

AC# 5058305 **STATE OF FLORIDA**
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD **SEQ#** L10072900273

DATE	BATCH NUMBER	LICENSE NBR
07/29/2010	09017500l	CGC1518885

The GENERAL CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS
Expiration date: AUG 31, 2012

FENTON, MARGARET HELEN
SUNSHINE LAND DESIGN, INC.
3291 SE LIONEL TERRACE
STUART FL 34997

CHARLIE CRIST
GOVERNOR

CHARLIE LIEM
SECRETARY

Department of
Environmental Protection
2600 Blair Stone Road, M.S. 3570
Tallahassee, Florida 32399-2400

June 6, 2008

Congratulations on successfully completing the Florida Stormwater Erosion and Sedimentation Control Inspector Training Program. I greatly appreciate your participation in and successful completion of this course. I hope that it has helped you to better understand Florida's stormwater problems and the importance of proper design, construction, and maintenance of erosion and sediment controls during construction, in order to assure the proper long-term operation and maintenance of stormwater systems after construction is completed.

Attached you will find your numbered certificate and wallet card. Please let me know if there are any errors in the certificate or card, or in the grading of your exam. If I can be of further assistance, please do not hesitate to contact me at 850/245-8294 or via email: heather.ritchie@dep.state.fl.us

Edelso Ortiz-Hernandez
Sunshine Land Design, Inc.
3291 S.E. Lionel Terrace
Stuart FL 34997

DEPARTMENT OF
ENVIRONMENTAL PROTECTION
STORMWATER EROSION AND SEDIMENTATION CONTROL
INSPECTOR TRAINING PROGRAM

Edelso Ortiz-Hernandez

5/22/2008 Inspector # 19489
QUALIFIED STORMWATER MANAGEMENT INSPECTOR

QUALIFIED
STORMWATER MANAGEMENT
INSPECTOR

The undersigned hereby acknowledges that

Edelso Ortiz-Hernandez

has successfully met all requirements necessary to be fully certified through the Florida Department of Environmental Protection Stormwater Erosion and Sedimentation Control Inspector Training Program

5/22/2008

Inspector #19489

Heather Ritchie

John Abendroth

Department of
Environmental Protection
2600 Blair Stone Road, M.S. 3570
Tallahassee, Florida 32399-2400

June 6, 2008

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Ryan Fenton
Sunshine Land Design, Inc.
3291 S.E. Lionel Terrace
Stuart FL 34997

DEPARTMENT OF
ENVIRONMENTAL PROTECTION
STORMWATER EROSION AND SEDIMENTATION CONTROL
INSPECTOR TRAINING PROGRAM

Ryan Fenton

5/22/2008 **Inspector # 19473**
QUALIFIED STORMWATER MANAGEMENT INSPECTOR

QUALIFIED STORMWATER MANAGEMENT INSPECTOR

The undersigned hereby acknowledges that

Ryan Fenton

has successfully met all requirements necessary to be fully certified through the Florida Department of Environmental Protection Stormwater Erosion and Sedimentation Control Inspector Training Program

5/22/2008

Inspector #19473

Heather Ritchie

John Abendroth

Department of
Environmental Protection
2600 Blair Stone Road, M.S. 3570
Tallahassee, Florida 32399-2400

June 6, 2008

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Timothy Taylor
Sunshine Land Design, Inc.
3291 S.E. Lionel Terrace
Stuart, FL 34997

DEPARTMENT OF
ENVIRONMENTAL PROTECTION
STORMWATER EROSION AND SEDIMENTATION CONTROL
INSPECTOR TRAINING PROGRAM

Timothy Taylor

5/22/2008 Inspector #19521
QUALIFIED STORMWATER MANAGEMENT INSPECTOR

QUALIFIED STORMWATER MANAGEMENT INSPECTOR

The undersigned hereby acknowledges that

Timothy Taylor

has successfully met all requirements necessary to be fully certified through the Florida Department of Environmental Protection Stormwater Erosion and Sedimentation Control Inspector Training Program

5/22/2008
Inspector #19521
8 CEUs Provider 004-0001229/Course 0002207

Heather Ritchie

John Abendroth

ACORD® CERTIFICATE OF LIABILITY INSURANCE

OP ID CR

DATE (MM/DD/YYYY) 07/21/10

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

R.V. Johnson Insurance
2041 SE Ocean Blvd
Stuart FL 34996
Phone:772-287-3366 Fax:772-287-4439

CONTACT NAME:
PHONE (A/C, No, Ext):
FAX (A/C, No):
E-MAIL ADDRESS:
PRODUCER CUSTOMER ID #: SUNSH-6

INSURED

Sunshine Land Design, Inc.
PO Box 559
Port Salerno FL 34992

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: National Trust Insurance Co	
INSURER B: FCCI Insurance Company	20141
INSURER C:	
INSURER D:	
INSURER E:	
INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X Contractual Liab GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC			GL00089072	07/30/10	07/30/11	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 200,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X PIP - $10,000			CA00140022	07/30/10	07/30/11	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE X RETENTION $ 10,000			UMB00092122	07/30/10	07/30/11	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			NOT COVERED WITH RVJ			WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $
B	Equipment Floater			CM00047392	07/30/10	07/30/11	Limit:	$1,837,094.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
The City of Port St Lucie, political Subdivision of the State of Florida, its officers, employees, and agents are listed as additional insured per Form CGL084. Waiver of Subrogation applies to general liability. 10 days notice of cancellation for non-payment of premium.

CERTIFICATE HOLDER

CITPO02

City of Port St Lucie
c/o Periculum Services Group
Ref #90-143440-20060038-0-0
P O Box 257
Portland MI 48875-0257

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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The ACORD name and logo are registered marks of ACORD

Client#: 119433 SUNSLAN1

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/27/2010

PRODUCER
Wells Fargo Ins Serv USA- TA,FL
2502 N. Rocky Point Dr., #400
P.O. Box 30001(Zip 33630-3001)
Tampa, FL 33607

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
Sunshine Land Design, Inc.
Frankie Taylor
3291 Lionel Terrace
Stuart, FL 34997

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: Employers Preferred Insurance Compan	10346
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
		GENERAL LIABILITY				EACH OCCURRENCE	$
		COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea occurrence)	$
		CLAIMS MADE OCCUR				MED EXP (Any one person)	$
						PERSONAL & ADV INJURY	$
						GENERAL AGGREGATE	$
		GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	$
		POLICY PRO-JECT LOC					
		AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Ea accident)	$
		ANY AUTO					
		ALL OWNED AUTOS				BODILY INJURY (Per person)	$
		SCHEDULED AUTOS					
		HIRED AUTOS				BODILY INJURY (Per accident)	$
		NON-OWNED AUTOS					
						PROPERTY DAMAGE (Per accident)	$
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
		ANY AUTO				OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
		EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	$
		OCCUR CLAIMS MADE				AGGREGATE	$
							$
		DEDUCTIBLE					$
		RETENTION $					$
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	WCV7047275	11/01/10	11/01/11	X WC STATU-TORY LIMITS OTH-ER	
		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?				E.L. EACH ACCIDENT	$100,000
		If yes, describe under SPECIAL PROVISIONS below				E.L. DISEASE - EA EMPLOYEE	$100,000
						E.L. DISEASE - POLICY LIMIT	$500,000
		OTHER					

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

CERTIFICATE HOLDER

City of Port Lucie
c/o Periculum Services Group
P.O. Box 257.Ref.
#90-143440-20060038-0-0
Portland, MI 48875-0257

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
Chris Water

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IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

Form **W-9**
(Rev. October 2007)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)
Sunshine Land Design, Inc.

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☑ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶
☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)
3291 SE Lionel Terrace

Requester's name and address (optional)

City, state, and ZIP code
Stuart, FL 34997

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number

or

Employer identification number
59 2712892

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here Signature of U.S. person ▶ [signature] Date ▶ 7/28/2011

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

CHECKLIST
E-Bid #20110079
EWIP Landscaping & Irrigation / Various EWIP Sites

Name of Bidder: SUNSHINE LAND DESIGN, INC.

This checklist is provided to assist Bidders in the preparation of their bid response. Included in this checklist are important requirements that are the responsibility of each Bidder to submit with their response in order to make their bid response fully compliant. This checklist is only a guideline -- it is the responsibility of each Bidder to read and comply with the Sealed E-Bid in its entirety.

- ✓ E-Bid Reply Sheet #20110079 with proper signature uploaded to Demandstar.
- ✓ E-Bid Reply Excel Spreadsheet uploaded to Demandstar.
- ✓ Drug-Free Workplace Form uploaded to Demandstar.
- ✓ 5% Bid Bond uploaded to Demandstar and mailed in immediately after opening.
- ✓ All pricing has been mathematically reviewed and all corrections have been initialed.
- ✓ All price extensions and totals have been thoroughly checked.
- ✓ Each Bid Addendum (when issued) is acknowledged on the E-Bid Reply Sheet #20110079.
- ✓ Required W-9 as per Section 1.24.1 uploaded to Demandstar.
- ✓ Copy of Insurance Certificate in accordance with Section 5 of the E-Bid documents uploaded to Demandstar.
- ✓ Copy of all required licenses and certifications to do work in the City of Port St. Lucie uploaded to Demandstar.
- ✓ Have reviewed the Contract and accept all City Terms and Conditions.
- ✓ Contractor's Questionnaire uploaded to Demandstar.
- ✓ Required forms: Non-Collusion Affidavit of Prime Bidder; Buy America Certificate of Compliance; Certification Regarding Lobbying; Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions; and Contractor Verification Form. All forms are to be uploaded to Demandstar.
- ✓ List of all sub-contractors with required forms for "Certification Regarding Lobbying" and Minority Status Statement. (Use the Questionnaire for the Minority Status providing all sub-contractors are listed). All requested information is to be uploaded to Demandstar.
- ✓ 5 completed Reference Check Forms uploaded to Demandstar.
- ✓ Copy of the Checklist uploaded to Demandstar.

THIS FORM SHOULD BE RETURNED WITH YOUR E-BID REPLY SHEET

E-Bid Reply Sheet #20110079

EWIP Landscaping & Irrigation / Various EWIP Sites

1. **COMPANY NAME**: SUNSHINE LAND DESIGN, INC.

DIVISION OF: _____

PHYSICAL ADDRESS: 3291 SE LIONEL TERRACE, STUART, FL 34997

MAILING ADDRESS: PO BOX 559

CITY, STATE, ZIP CODE: PORT SALERNO, FL 34997

TELEPHONE NUMBER: ( ) 772 283 2648 FAX NO. ( )772 283 8944

CONTACT PERSON: MARGARET FENTON E-MAIL: mfenton@sunshinelanddesign.com

2. **ORGANIZATIONAL PROFILE**: (complete all appropriate information)

Is the firm incorporated? (Yes)-No. If yes, in what state? FLORIDA

TIMOTHY R. TAYLOR
President
FRANKIE TAYLOR / MARGARET FENTON
Vice President
TIMOTHY R. TAYLOR
Treasurer

How long in present business: 27 YEARS How long at present location: 10 YEARS

Is firm a minority business: Yes-(No) Does firm have a drug-free workplace program: (Yes)-No
If no, is your company planning to implement such a program? _____

3. **ADDENDUM ACKNOWLEDGMENT** - Bidder acknowledges that the following addenda have been received and are included in its proposal/bid:

Addendum Number	Date Issued
01	06/22/11
02	07/08/11
03	07/12/11
04	07/22/11
05	07/22/11

4. **VENDOR'S LIST** – If your company offers commodities other than the one specified for this bid, and you wish to be put on the vendor's list, please contact Onvia.com at (800) 711-1712. Bid Tabulation Reports are advertised on the City's Web Site at www.Cityofpsl.com.

5. **BID RESPONSE:**

5.1 Bidder (will) will not accept the Purchasing Card (Visa).
(please circle one)

5.2 Percentage of discount when payment is made with Visa: ZERO %

5.3 Bid Reply Sheet Totals from Schedule "A": $ 1,953,669.37 .
(This figure must match the E-Bid Excel Reply Spreadsheet and the figure that is to be used on the Demandstar submittal page. Discrepancies between the E-Bid Excel Spreadsheet uploaded on Demandstar, the dollar amount listed on the web page at time of submittal and the E-Bid Reply Sheet #20110079 uploaded on Demandstar will be resolved in favor of the E-Bid Excel Spreadsheet that is uploaded at time of submittal.)

Bidders are cautioned that the anticipated quantities used for this computation will be estimates. The City makes no guarantee as to the actual quantity that will be utilized during the Contract period. A unit price for each item offered shall be shown, and such price shall include all labor, materials, equipment and warrantees unless otherwise specified. A total shall be entered in the "Total" column for each separate item. In case of discrepancy between the unit price and the extended price, the unit price will be presumed correct.

6. **INSURANCE CERTIFICATES LICENSE** - Bidders are required, in accordance with Section 5, to submit a copy of their Insurance Certificate for the type and dollar amount of insurance they currently maintain. Bidders are required to submit all licenses and certifications required to perform this project.

7. **COMPLETION OF FORM** - An authorized representative of the firm offering this Bid must complete this form in its entirety. Prices entered herein shall not be subject to withdrawal or escalation by Bidder. The City reserves the right to hold proposals and bid guarantees for a period not to exceed 90 days after the date of the bid opening stated in the Invitation to Bid before awarding the Contract. Contract award constitutes the date that City Council executes the motion to award the bid.

8. **CONTRACT** - Bidder agrees to comply with all requirements stated in the specifications for this bid.

9. **CERTIFICATION**

This bid is submitted by: Name (print) MARGARET FENTON who is an officer of the above firm duly authorized to sign bids and enter into Contracts. I certify that this bid is made without prior understanding, Contract, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of this bid.

Signature 07/28/2011
Date

10. Bidder has read and accepts the terms and conditions of the City's standard Contract:

Signature _____ VICE PRESIDENT
Title

If a corporation renders this Bid, the corporate seal attested by the secretary shall be affixed below. Any agent signing this Bid shall attach to this form evidence of legal authority.

(seal)

Balance of page left intentionally blank

FRANKIE TAYLOR, SECRETARY

CONTRACTOR'S QUESTIONNAIRE
E-BID #20110079
EWIP LANDSCAPING & IRRIGATION / VARIOUS EWIP SITES

It is understood and agreed that the following information is to be used by the City of Port St. Lucie to determine the qualifications of Bidders to perform the work required. The Bidder waives any claim against the City that might arise with respect to any decision concerning the qualifications of the Bidder.

The undersigned attests to the truth and accuracy of all statements made on this questionnaire. Also, the undersigned hereby authorizes any public official, Engineer, Surety, Bank, material or equipment manufacturer or distributor, or any person, firm or corporation to furnish the City of Port St. Lucie any pertinent information requested by the City deemed necessary to verify the information on this questionnaire.

Dated this 28 day of JULY, 2011.

SUNSHINE LAND DESIGN, INC.
Name of Organization / Proposer

Submitted by: MARGARET FENTON, VICE PRESIDENT
Name and Title

(If more space is needed, please attach additional sheets.)

1. Type of Organization (Corporation), Partnership, Joint Venture, Individual or other? (*circle one*)

2. If a Corporation answer the following:
   When incorporated JULY 1985
   In what State FLORIDA
   Name of Officers:
   President TIMOTHY R. TAYLOR
   Vice President FRANKIE TAYLOR / MARGARET FENTON
   Secretary FRANKIE TAYLOR
   Treasurer TIMOTHY R. TAYLOR

3. If a Partnership, answer the following:
   Date of organization _____
   General Limited Partnership _____
   Name and address of each partner:
   _____
   _____
   _____
   (Attach additional pages if necessary)

4. Firm's name and main office address, telephone, fax number, and e-mail address, contact person:
   SUNSHINE LAND DESIGN, INC.
   3291 SE LIONEL TERRACE
   STUART, FLORIDA 34997
   PHONE: 772 283 2648
   FAX: 772 283 8944
   CONTACT: MARGARET FENTON
   EMAIL: mfenton@sunshinelanddesign.com

5. Firm's previous names (if any) _____ What year(s) _____

6. Area of expertise: LANDSCAPE, IRRIGATION, SITEWORK, AND UTILITIES

7. How many years has your organization been in business? TWENTY SEVEN YEARS

8. Describe organization profile, including the size, range of activities, licenses, etc.
Our firm currently employs 96 people. We hold two State Certified General Contractor licenses, and numerous local municipal licenses. Our work ranges from environmental restorations to roadway improvements. We specialize in environmental, landscape, and infrastructure maintenance and improvements.
(Attached additional pages if necessary.)

9. Number of full time personnel:

	Current	Maximum	Minimum
a. Partners	No partners. We have 3 officers.		
b. Managers	5	6	5
c. Supervisors Senior Staff	5	7	5
d. Other Professional Staff	4	4	3
g. Total number of full time personnel	96	105	85

10. What is the drainage construction experience of the principals and supervisory personnel of your organization?
(Add resumes of person that will be assigned to this project – limit one page per person.)

Name	Title	Years of Experience	% of Time to be Spent on City Projects	In What Capacity and With Whom
Timothy R. Taylor, President		27	10	Esimating/Project Mgmt
Frankie Taylor, V.P. and Secretary		27	05	Administration/Accounting
Margaret Fenton, Vice President		10	15	Contracts Administration

11. Firm's experience with similar contracts. Indicate which team member(s) was part of similar contracts. Indicate specifically the nature and extent of the work performed by the individual(s) or firms on prior similar contracts.

Name	Work Performed
Mike Dexter: Performed layout & oversaw project excavation. Successful management of many road/drainage projects.	
Larry Kosakowski: Performed layout & oversaw STA Plantings. Successful management of many landscape & irrigation related projects.	
Ryan Fenton: Implementation of best management practices for erosion & sedimentation control.	

**The three individuals listed are certified in stormwater erosion & sedimentation control.

12. Provide an organizational chart identifying relationship of entity and sub-contractors (if any) and the role description of key personnel proposed.

13. State your firm's commitment to perform in a timely fashion:
We are highly committed to perform this project in a timely fashion. Our financial success & valued working relationship with the City is a direct reflection of the project completed in an opportune manner.

14. Submit the current and projected workloads of identified key personnel to be assigned to this contract.

Name	Current and Projected Workloads
Larry Kosakowski	Project Manager for three current projects. Two projects are scheduled for completion 08/30/11.
Ryan Fenton	Project Supervisor for one project. Project completion date is 08/30/11.

15. State your firm's ability to meet budget and schedule:
Our company is adequately outfitted with labor and equipment to successfully complete the project on time and under budget. We have several projects coming to a close; now is an opportune time to start this critical project for the City. Our staff is highly experienced in working on DBRA projects and knowledgeable regarding the many requirements necessary.

16. Provide information regarding any favorable cost containment approaches or ideas that have been successful for you:

Cost savings on past similar projects include:
-ability to find and use improved soils on site to eliminate costs associated with importing improved soils.
-relocated native palms to reduce clearing costs and future upland planting costs.

17. Identify any sub-contractor(s) that will be involved, including address(s) and a description of qualification(s). **The "Certification Regarding Lobbying" form must be submitted with each subcontractor listed.**

Name	Address	Qualifications
Superior Waterway Services, Inc.	3755 Fiscal Court Suite B Riviera Beach, FL	Aquatic Planting

18. Has the Bidder or any principals of the applicant organization failed to qualify as a responsible Contractor; refused to enter into a contract after an award has been made; failed to complete a contract during the past five (5) years; or been declared to be in default in any contract or been assessed liquidated damages in the last five (5) years? If yes, please explain:

No to all questions except for liquidated damages:
For a project completed in 2010, the City of Vero Beach assessed our firm 8 days of liquidated damages for exceeding the allowed contract time. No other exceptions have occurred during our company's twenty-six year history.

(Attached additional pages if necessary.)

19. Has the Bidder or any of its principals ever been declared bankrupt or reorganized under Chapter 11 or put into receivership?

Yes ( ) No (X)

If yes, please explain:

20. List any lawsuits pending or completed involving the corporation, partnership or individuals with more than ten percent (10 %) interest:

None

21. List any judgments from lawsuits in the last five (5) years:

None

22. List any criminal violations and/or convictions of the Bidder and/or any of its principals:

None

23. Is firm claiming to be a Certified Minority Business Enterprise as defined by the Florida Small and Minority Business Assistance Act of 1985, and in accordance with Florida State Statutes, #287.09451?

Yes ( ) No (X)

If "Yes" was checked, include a copy of certificate with proposal.

24. Has the Bidder obtained a Payment & Performance Bond within the last five (5) years?

Yes (X) No ( )

If "Yes" was checked, state the bonding capacity of the firm. $ 6,000,000.00 .

25. Describe any significant or unique accomplishment in previous contracts. Include any additional data pertinent to firm's capabilities. (Please limit to two (2) pages)

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CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: SUNSHINE LAND DESIGN, INC.

Reference: MARTIN COUNTY - WATER QUALITY Fax #: 772-288-5955
Email: scottw@martin.fl.us Telephone #: 772-288-5472
Person to contact: SCOTT WEBER

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: SUNSHINE LAND DESIGN, INC.

Reference: MARTIN COUNTY - ENGINEERING Fax #: 772-288-5955
Email: gnolte@martin.fl.us Telephone #: 772-221-2380
Person to contact: GREG NOLTE

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM

Bidder Instructions: Fill out top portion only. (Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: SUNSHINE LAND DESIGN, INC.

Reference: TOWN OF JUPITER Fax #: 561-741-2559
Email: russr@jupiter.fl.us Telephone #: 561-741-2334
Person to contact: RUSSEL RUSKAY

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM

Bidder Instructions: Fill out top portion only. (Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: SUNSHINE LAND DESIGN, INC.

Reference: ST LUCIE COUNTY Fax #: 772-462-2362
Email: richb@stlucieco.gov Telephone #: 772-462-1710
Person to contact: RICHARD BOUCHARD

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM

Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: SUNSHINE LAND DESIGN, INC.

Reference: CITY OF STUART Fax #: 772-288-5381
Email: breinert@ci.stuart.fl.us Telephone #: 772-288-2927
Person to contact: BILL REINERT

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____	Final Product _____
Qualifications _____	Cooperation _____
Budget Control _____	Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

E-Bid #20110079

State of FLORIDA }

County of MARTIN }

MARGARET FENTON, being first duly sworn, disposes and says that:
(Name/s)

1. They are VICE PRESIDENT of SUNSHINE LAND DESIGN, INC. the Bidder that
(Title) (Name of Company)

   has submitted the attached bid/PROPOSAL;

2. He is fully informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such Bid/PROPOSAL;

3. Such Bid/Proposal is genuine and is not a collusive or sham Bid;

4. Neither the said Bidder/Proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Proposer, firm or person to submit a collusive or sham Bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such Contract or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Proposer, firm or person to fix the price or prices in the attached Proposal or of any other Proposer, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Port St. Lucie or any person interested in the proposed Contract; and

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

(Signed) _____

(Title) VICE PRESIDENT

STATE OF FLORIDA }
COUNTY OF ST. LUCIE }SS:

The foregoing instrument was acknowledged before me this 07/28/2011
(Date)

by: MARGARET FENTON who is personally known to me or who has produced

_____ as identification and who did (did not) take an oath.

_____
Notary (print & sign name)

Commission No. _____

NOTARY PUBLIC-STATE OF FLORIDA
Sandra L. Rowell
Commission # DD727252
Expires: DEC. 07, 2011
BONDED THRU ATLANTIC BONDING CO., INC.

E-Bid #20110079
BUY AMERICA CERTIFICATE OF COMPLIANCE

CERTIFICATE OF COMPLIANCE

COMPLIANCE

The Contractor hereby certifies that it will comply with the requirements of 23 C.F.R. 635.410, as amended, and utilize only iron or steel manufactured in the United States, or components made with iron or steel that meet the Buy America requirements. Contractor acknowledges that it will be required to produce Buy America certification(s) from the producer(s) of the steel or iron or components prior to incorporating any such materials into the work or project.

Company Name: SUNSHINE LAND DESIGN, INC.

Authorized By: _____ MARGARET FENTON
(Sign) (Print Name)

Title: VICE PRESIDENT Date: 07/28/2011

E-BID #20110079
CERTIFICATION REGARDING LOBBYING

The undersigned Contractor certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying", 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the awards documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. 1352 (1)-(2)(A), any person who makes a prohibited expenditure of fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure]

The Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, *apply* to this certification and disclosure, if any.

Company Name: SUNSHINE LAND DESIGN, INC.

Authorized By: _____ MARGARET FENTON
(Sign) (Print Name)

Title: VICE PRESIDENT Date: 07/28/2011

(All Subcontractors are required to submit this form with the Prime Contractor's Bid)

E-BID #20110079

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

The Contractor certifies that, the firm or any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of federal funds:

(a) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR s29.110(a), by any federal department or agency;

(b) have not within a three-year period preceding this certification been convicted of or had a civil judgment rendered against it for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state, or local government transaction or public contract; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property

(c) are not presently indicted for or otherwise criminally or civilly charged by a federal, state, or local governmental entity with commission of any of the offenses enumerated in paragraph (b) of this certification; and

(d) have not within a three-year period preceding this certification had one or more federal, state, or local government public transactions terminated for cause or default.

The Contractor certifies that it shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this project by any federal agency unless authorized by the Florida Department of Transportation."

Company Name: SUNSHINE LAND DESIGN, INC.

Authorized By: _____ MARGARET FENTON
(Sign) (Print Name)

Title: VICE PRESIDENT Date: 07/28/2011

CITY OF PORT ST. LUCIE
E-BID # 20110079

PROJECT TITLE: EWIP Landscaping & Irrigation / Various EWIP Sites

CONTRACTOR VERIFICATION FORM

THE FOLLOWING IS TO COMPLETED BY PRIME BIDDER:

Name of Firm: SUNSHINE LAND DESIGN, INC.

Corporate Title: _____

Address: 3291 SE LIONEL TERRACE

STUART, FLORIDA 34997

(Zip Code)

By: MARGARET FENTON (Print name) VICE PRESIDENT (Print title)

(Authorized Signature)

Telephone: ( ) 772 283 2648

Fax: ( ) 772 283 8944

State License # CGC1518885 (ATTACH COPY)

County License # 2008-513-1200 (ATTACH COPY)

City License: **(ATTACH PROOF OF REGISTRATION WITH THE CITY)**

Type of License: GENERAL CONTRACTOR

Unlimited YES (yes/no)

If "NO", Limited to what trade? _____

TRENCH SAFETY ACT COMPLIANCE STATEMENT

Project Name: EWIP Landscaping & Irrigation / Various EWIP Sites

Project Location: Port St. Lucie, Florida

Project Number 20110079

Project Location (See Plans)

Instructions:

Chapter 90-96 of the Laws of Florida requires all Contractors' engaged by The City of Port St. Lucie, Florida to comply with Occupational Safety and Health Administration Standard 29 C.F.R. s. 1926.650 Subpart P. All prospective Contractor's are required to sign the compliance statement and provide compliance cost information where indicated below. The costs for complying with the Trench Safety Act must be incorporated into this project's base bid.
Certify this form in the presence of a notary public or other officer authorized to administer oaths.

Certification

1. I understand that Chapter 90-96 of the Laws of Florida (The Trench Safety Act) requires me to comply with OSHA Standard 29 C.F.R. s. 1926.650 Subpart P. I will comply with The Trench Safety Act and I will design and provide trench safety systems at all trench excavations in excess of five feet in depth for this project.

2. The estimated cost imposed by compliance with The Trench Safety Act will be:

FIVE THOUSAND Dollars (Written)	$5,000.00 (Figures)

3. The amount listed above has been included within the Base Bid.

Certified: SUNSHINE LAND DESIGN, INC.
(Company-Contractor)

By: _____ TIMOTHY R. TAYLOR, PRESIDENT
(President's Signature)
(President's Typed or Printed Name)

Sworn to and subscribed before me in MARTIN County, Florida on the 28 day of JULY, 2011.

_____
NOTARY PUBLIC

NOTARY PUBLIC-STATE OF FLORIDA
Sandra L. Rowell
Commission #DD727252
Expires: DEC. 07, 2011
BONDED THRU ATLANTIC BONDING CO., INC.

DRUG-FREE WORKPLACE FORM

The undersigned vendor in accordance with Section 287.087, Florida Statutes hereby certifies that SUNSHINE LAND DESIGN, INC. does:
(Name of Business)

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

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

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

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

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

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

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

Bidder's Signature

07/28/2011
Date

A. Request Bid Specifications, #20110079 from Onvia, via phone 800-711-1712 or via internet www.cityofpsl.com

B. Download the E-Bid Reply Excel Spreadsheet and save to your hard drive, program is in Excel Office 2003 Professional. Enter unit prices on the E-Bid Reply Excel Spreadsheet and save. The form will automatically total the unit prices.

C. Complete company information on E-Bid Reply Sheet #20110079.

D. Enter total price on E-Bid Reply Sheet #20110079. Totals shall agree with the E-Bid Reply Excel Spreadsheet that is to be uploaded at time of submittal. Discrepancies between the E-Bid Excel Spreadsheet uploaded on Demandstar, the dollar amount listed on the web page at time of submittal and the E-Bid Reply Sheet #20110079 uploaded on Demandstar will be resolved in favor of the E-Bid Excel Spreadsheet that is uploaded at time of submittal.

E. Electronically sign the E-Bid Reply Sheet #20110079 where indicated.

F. Upload and submit the E-Bid Reply Sheet #20110079, E-Bid Reply Excel Spreadsheet, Contractor's Questionnaire, Non-Collusion Affidavit of Prime Bidder, Buy America Certificate of Compliance, Certification Regarding Lobbying, Certification Regarding Debarment, Contractor Verification Form, Trench Safety Act Compliance form, 5% Bid Bond (MUST be received within 3 days after the opening or your bid will not be considered), Five (5) completed Reference Check Forms (top portion only), Insurance Certificate(s), Drug Free Workplace Form, W-9 Form and the Checklist onto Demandstar by the due date and time. Acknowledge all Addenda on the E-Bid Reply Sheet #20110079.

G. Upload and submit a copy of your license for this type of work; or in compliance with Florida Statute Chapter 489, a copy of the certificate issued by the State of Florida authorizing the Bidder(s) to transact business within the state.

**** Only electronic replies are required. No hard copies will be accepted.**

1.9.1 Bid Documents for the project include the following:

- Bid Specifications – Pages 1 – 55.
- Bid Reply Sheet #20110079.
- Contractor's Questionnaire.
- Reference Check Form (5 to be submitted with Bid).
- E-Bid Reply Excel Spreadsheet.
- Non-Collusion Affidavit of Prime Bidder.
- Buy America Certificate of Compliance.
- Certification Regarding Lobbying.
- Certification Regarding Debarment.
- Contractor Verification Form.
- Trench Safety Compliance Form.
- Drug Free Workplace Form.
- E-Bid Reply Excel Spreadsheet – Pages 1 - 7
- Attachments:

  Attachment A – Technical Specifications, Parts 1 & 2, pages 1 - 28.

Form **W-9**
(Rev. October 2007)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)
Sunshine Land Design, Inc.

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☑ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ►
☐ Other (see instructions) ►

☐ Exempt payee

Address (number, street, and apt. or suite no.)
3291 SE Lionel Terrace

Requester's name and address (optional)

City, state, and ZIP code
Stuart, FL 34997

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
: :

or

Employer identification number
59 : 2712892

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here Signature of U.S. person ► [signature] Date ► 7/22/2011

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

State of Florida

Department of State

I certify from the records of this office that SUNSHINE LAND DESIGN, INC. is a corporation organized under the laws of the State of Florida, filed on July 1, 1985.

The document number of this corporation is H64658.

I further certify that said corporation has paid all fees due this office through December 31, 2011, that its most recent annual report was filed on January 17, 2011, and its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of Florida, at Tallahassee, the Capital, this the Nineteenth day of January, 2011

Secretary of State

Authentication ID: 200191627082-011911-H64658

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.
https://efile.sunbiz.org/certauthver.html

SHAREHOLDER AND DIRECTOR ACTION TAKEN WITHOUT A MEETING

In accordance with Florida Statutes 607.394 and 607.134, the undersigned being all of the shareholders and directors of Sunshine Land Design, Inc., a Florida corporation, approve, authorize and ratify the following action having been taken:

1. That the corporate officers for the fiscal year from July 8, 2010 to December 31, 2010 are as follows.

a) President/Director	Timothy R Taylor
b) Vice President/Director	Frankie Taylor
c) Vice President/Director	Margaret Fenton
d) Secretary	Frankie Taylor
e) Treasurer	Timothy R Taylor

2. That the corporate officers for the fiscal year from January 01, 2011 to December 31, 2011 are as follows.

a) President/Director	Timothy R Taylor
b) Vice President/Director	Frankie Taylor
c) Vice President/Director	Margaret Fenton
d) Secretary	Frankie Taylor
e) Treasurer	Timothy R Taylor

3. That as of January 01, 2011 a total of 1875 shares of the stock of the corporation were issued and outstanding.
   a) Frankie D Taylor and Timothy R Taylor, Co-Trustees of the Frankie D Taylor Intervivos Declaration of Trust 938 shares (owning stock certificate #5 for 937.5 shares and stock certificate #7 for .5 shares)
   b) Timothy R Taylor and Frankie D Taylor, Co-Trustees of the Timothy R Taylor Intervivos Declaration of Trust 918 shares (owning stock certificate #9 for 918 shares.)
   c) Margaret H Taylor Fenton 19 shares (owning stock certificate #8 for 19 shares)

IN WITNESS WHEROF, the undersigned have set there hands and seal as follows:

(SEAL)

Effective date January 03, 2011

Timothy R Taylor

Margaret Fenton

Frankie Taylor

SUNSHINE LAND DESIGN, INC

By: Timothy R Taylor

Bond No. BID

BID BOND

The American Institute of Architects,
AIA Document No. A310 (February, 1970 Edition)

KNOW ALL MEN BY THESE PRESENTS, that we Sunshine Land Design, Inc.
3291 S.E. Lionel Terrace, Stuart, FL 34997

as Principal hereinafter called the Principal, and Old Republic Surety Company
a corporation duly organized under the laws of the state of Wisconsin as Surety, hereinafter called the Surety, are held and firmly bound unto The City of Port St. Lucie, FL

as Obligee, hereinafter called the Obligee, in the sum of Five Percent of Amount Bid

Dollars ($ 5% of Bid), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for E-Bid #20110079: Eastern Watershed Improvement Projects (EWIP) Landscaping and Irrigation / Various EWIP SITES

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 14 day of July 2011

Witness

Sunshine Land Design, Inc.
Principal (Seal)

By: Margaret Ferron, Vice President
Name/Title

Witness

Old Republic Surety Company
Surety (Seal)

By: James E. Dickmeyer
James E. Dickmeyer, Attorney-in-Fact

ORSC 21328 (5/97)

OLD REPUBLIC SURETY COMPANY

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That OLD REPUBLIC SURETY COMPANY, a Wisconsin stock insurance corporation, does make, constitute and appoint:

JAMES E. DICKMEYER, OF STUART, FL

its true and lawful Attorney(s)-in-Fact, with full power and authority, not exceeding $10,000,000, for and on behalf of the company as surety, to execute and deliver and affix the seal of the company thereto (if a seal is required), bonds, undertakings, recognizances or other written obligations in the nature thereof, (other than bail bonds, bank depository bonds, mortgage deficiency bonds, mortgage guaranty bonds, guarantees of installment paper and note guaranty bonds, self-insurance workers compensation bonds guaranteeing payment of benefits, asbestos abatement contract bonds, waste management bonds, hazardous waste remediation bonds or black lung bonds), as follows:

ALL WRITTEN INSTRUMENTS IN AN AMOUNT NOT TO EXCEED AN AGGREGATE OF SIX MILLION DOLLARS ($6,000,000) ---------- FOR ANY SINGLE OBLIGATION, REGARDLESS OF THE NUMBER OF INSTRUMENTS ISSUED FOR THE OBLIGATION.

and to bind OLD REPUBLIC SURETY COMPANY thereby, and all of the acts of said Attorneys-in-Fact, pursuant to these presents, are ratified and confirmed. This document is not valid unless printed on colored background and is multi-colored. This appointment is made under and by authority of the board of directors at a special meeting held on February 18, 1982. This Power of Attorney is signed and sealed by facsimile under and by the authority of the following resolutions adopted by the board of directors of the OLD REPUBLIC SURETY COMPANY on February 18, 1982.

RESOLVED that, the president, any vice-president, or assistant vice president in conjunction with the secretary or any assistant secretary, may appoint attorneys-in-fact or agents with authority as defined or limited in the instrument evidencing the appointment in each case, for and on behalf of the company to execute and deliver and affix the seal of the company to bonds, undertakings, recognizances, and suretyship obligations of all kinds; and said officers may remove any such attorney-in-fact or agent and revoke any Power of Attorney previously granted to such person.

RESOLVED FURTHER, that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the Company

(i) when signed by the president, any vice president or assistant vice president, and attested and sealed (if a seal be required) by any secretary or assistant secretary; or,

(ii) when signed by the president, any vice president or assistant vice president, secretary or assistant secretary, and countersigned and sealed (if a seal be required) by a duly authorized attorney-in-fact or agent; or

(iii) when duly executed and sealed (if a seal be required) by one or more attorneys-in-fact or agents pursuant to and within the limits of the authority evidenced by the Power of Attorney issued by the company to such person or persons.

RESOLVED FURTHER, that the signature of any authorized officer and the seal of the company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the company; and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, OLD REPUBLIC SURETY COMPANY has caused these presents to be signed by its proper officer, and its corporate seal to be affixed this 17TH day of AUGUST, 2010.

OLD REPUBLIC SURETY COMPANY

Assistant Secretary

President

STATE OF WISCONSIN, COUNTY OF WAUKESHA - SS

On this 17TH day of AUGUST, 2010, personally came before me, GERALD C. LEACH and RICK A. JOHNSON to me known to be the individuals and officers of the OLD REPUBLIC SURETY COMPANY who executed the above instrument, and they each acknowledged the execution of the same, and being by me duly sworn, did severally depose and say; that they are said officers of the corporation aforesaid, and that the seal affixed to the above instrument is the seal of the corporation, and that said corporate seal and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority of the board of directors of said corporation.

Notary Public

My commission expires: 12/02/2012

CERTIFICATE

I, the undersigned, assistant secretary of the OLD REPUBLIC SURETY COMPANY, a Wisconsin corporation, CERTIFY that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and furthermore, that the Resolutions of the board of directors set forth in the Power of Attorney, are now in force.

92-2465

Signed and sealed at the City of Brookfield, WI this 14 day of July, 2011.

THE DICKMEYER AGENCY

Assistant Secretary

THIS DOCUMENT HAS A COLORED BACKGROUND AND IS MULTI-COLORED ON THE FACE. THE COMPANY LOGO APPEARS ON THE BACK OF THIS DOCUMENT AS A WATERMARK. IF THESE FEATURES ARE ABSENT, THIS DOCUMENT IS VOID.

ADDENDUM #4 - July 21, 2011

"REVISED" E-BID REPLY EXCEL SPREADSHEET

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ARAZOZA BROTHERS CORP.

SCHEDULE 1 - CANE SLOUGH / ELKS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 55,000.00	$ 55,000.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 12.00	$ 1,200.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	200	$ 2.00	$ 400.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	7500	$ 2.50	$ 18,750.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	7500	$ 2.52	$ 18,900.00
6	SITE ACCESS RESTORATION	LS	1	$ 5,000.00	$ 5,000.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS (LA/IRR)	LS	1	$ 10,000.00	$ 10,000.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 3,000.00	$ 36,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 750.00	$ 9,000.00
10	Total for General Items	--	--	--	$ 154,250.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,875.00	$ 7,875.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 32,500.00	$ 32,500.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 400.00	$ 400.00
14	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	EA	5343	$ 8.00	$ 42,744.00
15	4" Nibco TI-8 Gate Valve	EA	5	$ 750.00	$ 3,750.00
16	Carson 1419 Valve Box with Lid	LF	5	$ 250.00	$ 1,250.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	20	$ 1,761.88	$ 35,237.60
18	Carson 1220 Jumbo Valve Box with Lid	EA	19	$ 250.00	$ 4,750.00
19	Class 200 PVC Lateral with Schedule 40 PVC fittings (size per plan)	EA	15150	$ 2.39	$ 36,208.50
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	342	$ 8.44	$ 2,886.48
21	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	2	$ 30.00	$ 60.00
22	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	21	$ 35.00	$ 735.00
23	Hunter PGP-04-CV with #6 Nozzle	EA	4	$ 31.50	$ 126.00
24	Hunter PGP-04-CV with #9 Nozzle	EA	75	$ 31.50	$ 2,362.50
25	Hunter PGP-04-CV with #12 Nozzle	EA	47	$ 31.50	$ 1,480.50
26	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	6	$ 33.50	$ 201.00
27	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	52	$ 33.50	$ 1,742.00
28	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	25	$ 33.50	$ 837.50
29	Total for Irrigation Items	--	--	--	$ 175,146.08

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
30	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	3,380	$0.60	$ 2,028.00
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	4,790	$0.90	$ 4,311.00
32	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	-	155	$7.00	$ 1,085.00
33	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON'*	3 GAL	18"x18"	129	$8.00	$ 1,032.00
34	Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	18" FULL	348	$8.00	$ 2,784.00
35	Green Island Ficus	*FICUS MICROCARPA*	1 GAL	-	70	$4.00	$ 280.00
36	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	154	$3.00	$ 462.00
37	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	1,030	$4.00	$ 4,120.00
38	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	FULL	1,280	$4.00	$ 5,120.00
39	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	210	$4.00	$ 840.00
40	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	7,730	$0.90	$ 6,957.00
41	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	9,910	$0.60	$ 5,946.00
42	Maidencane	*PANICUM HEMITOMON*	BR	-	4,570	$0.60	$ 2,742.00
43	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	3,160	$0.60	$ 1,896.00
44	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	4,030	$0.90	$ 3,627.00
45	Soft Rush	*JUNCUS EFFUSUS*	BR	-	760	$0.60	$ 456.00
46	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	2,720	$1.50	$ 4,080.00
47	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	16,946	$1.50	$ 25,419.00
48	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" full	2,119	$7.50	$ 15,892.50
49		Total for Shrubs and Groundcover	--	--	--	--	$89,077.50

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ARAZOZA BROTHERS CORP.

TREES

LINE NO	DESCRIPTION (Common Name)	DESCRIPTION (Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
50	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	203	$200.00	$ 40,600.00
51	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	203	$300.00	$ 60,900.00
52	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'-4"Cal OA	205	$600.00	$ 123,000.00
53	Royal Palm	*ROYSTONEA REGIA*	-	10-12'	40	$500.00	$ 20,000.00
54	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	85	$500.00	$ 42,500.00
55	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8'	109	$100.00	$ 10,900.00
56	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10'	109	$250.00	$ 27,250.00
57	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12'	109	$300.00	$ 32,700.00
58	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16',8'SPR	12	$300.00	$ 3,600.00
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	24	$400.00	$ 9,600.00
60	Dahoon Holly	*ILEX CASSINE*	30 GAL	10'-12'x2"OA	73	$200.00	$ 14,600.00
61	Cabbage Palm	*SABAL PALMETTO*	FG	12'-18' STG	12	$200.00	$ 2,400.00
62	Simpson's Stopper	*MYRCIANTHES FRAGRANS*	30 GAL	8'-9'(B)	30	$250.00	$ 7,500.00
63	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'	36	$300.00	$ 10,800.00
64	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7-9'	13	$200.00	$ 2,600.00
65	Sea Grape	*COCCOLOBA UVIFERA*	15 GAL	8'-10' ML	254	$135.00	$ 34,290.00
66	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	16	$300.00	$ 4,800.00
67		Total for Trees	--	--	--	--	$448,040.00

SCHEDULE 1 - CANE SLOUGH / ELKS STA LANDSCAPING/IRRIGATION BID TOTAL -- $866,513.58

SCHEDULE 2 - LENNARD SQUARE / AZZI STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 25,000.00	$ 25,000.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	150	$ 12.00	$ 1,800.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ 2.00	$ 500.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.50	$ 6,250.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 2.52	$ 6,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 1,500.00	$ 1,500.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,000.00	$ 12,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 750.00	$ 9,000.00
8	Total for General Items	--	--	--	$ 67,350.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
9	3" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	3207	$ 7.00	$ 22,449.00
10	3" Nibco T-113 Gate Valve	EA	3	$ 545.70	$ 1,637.10
11	Carson 1419 Valve Box with Lid	EA	3	$ 250.00	$ 750.00
12	2" Rain Bird PESB Series Remote Control Valve	EA	10	$ 1,570.08	$ 15,700.80
13	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 250.00	$ 2,000.00
14	Class 200 PVC Lateral Line with Schedule 40 PVC gasketed Fittings (size	LF	8100	$ 2.01	$ 16,281.00
15	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	143	$ 8.44	$ 1,206.92
16	Rain Bird 1806-SAM-PRS with Hunter MP Rotator Nozzle	EA	91	$ 31.50	$ 2,866.50
17	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	16	$ 32.70	$ 523.20
18	Hunter PGP-04-CV with #6 Nozzle	EA	3	$ 31.50	$ 94.50
19	Hunter PGP-04-CV with #9 Nozzle	EA	9	$ 31.50	$ 283.50
20	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	4	$ 33.50	$ 134.00
21	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	59	$ 33.50	$ 1,976.50
22	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	10	$ 33.50	$ 335.00
23	Total for Irrigation Items	--	--	--	$ 66,238.02

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ARAZOZA BROTHERS CORP.

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION (Common Name)	(Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
24	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,960	$0.60	$ 1,176.00
25	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	73	$8.00	$ 584.00
26	Wild Coffee	*PSYCHOTRIA NERVOSA*	3 GAL	-	293	$9.00	$ 2,637.00
27	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	600	$6.00	$ 3,600.00
28	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	2,180	$0.90	$ 1,962.00
29	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,810	$0.60	$ 2,286.00
30	Maidencane	*PANICUM HEMITOMON*	BR	-	6,750	$0.60	$ 4,050.00
31	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	1,630	$0.60	$ 978.00
32	Soft-Stem Bulrush	*SCIRPUS VALIDUS*	LN	-	1,742	$0.90	$ 1,567.80
33	Soft Rush	*JUNCUS EFFUSUS*	BR	-	2,510	$0.60	$ 1,506.00
34	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,465	$1.50	$ 6,697.50
35	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	17,624	$1.50	$ 26,436.00
36	Leather Fern	*ACROSTICHUM DANAEIFOLIUM*	1 GAL	12"	582	$7.00	$ 4,074.00
37	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	482	$4.00	$ 1,928.00
38	Dwarf Bougainvillea	*DWARF BOUGAINVILEA "HELEN JOHNSON"*	3 GAL	18"x18"	122	$8.00	$ 976.00
39	Liriope	*LIRIOPE MUSCARI*	1 GAL	-	360	$3.00	$ 1,080.00
40	Asian Jasmine	*TRACHELOSPERMUM ASIATICUM*	1 GAL	-	146	$4.00	$ 584.00
41	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	451	$4.00	$ 1,804.00
42	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	1,954	$7.50	$ 14,655.00
43		**Total for Shrubs and Groundcover**	--	--	--	--	**$78,581.30**

TREES

LINE NO	DESCRIPTION (Common Name)	(Scientific Name)	SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
44	Crape Myrtle	*LAGERSTROEMIA INDICA 'SIOUX'*	30 GAL	7'-9' OA	10	$200.00	$ 2,000.00
45	Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'+2" OA	60	$200.00	$ 12,000.00
46	Cypress	*TAXODIUM DISTICHUM*	45 GAL	12'+3" OA	60	$300.00	$ 18,000.00
47	Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" C	60	$600.00	$ 36,000.00
48	Green Buttonwood	*CONOCARPUS ERECTUS*	30 GAL	14'(B)OA	9	$200.00	$ 1,800.00
49	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	71	$500.00	$ 35,500.00
50	Red Bay	*PERSEA BORBONIA*	3 GAL	2'-4' OA	28	$12.00	$ 336.00
51	Red Bay	*PERSEA BORBONIA*	15 GAL	6'-8' OA	28	$150.00	$ 4,200.00
52	Red Bay	*PERSEA BORBONIA*	25 GAL	8'-10' OA	29	$350.00	$ 10,150.00
53	Royal Poinciana	*DELONIX REGIA*	45 GAL	12'-14'x8'SPR OA	7	$300.00	$ 2,100.00
54	Royal Palm	*ROYSTONEA REGIA*		10'-12' OA	28	$500.00	$ 14,000.00
55	Red Maple	*ACER RUBRUM*	10 GAL	8' OA	64	$100.00	$ 6,400.00
56	Red Maple	*ACER RUBRUM*	25 GAL	8'-10' OA	63	$200.00	$ 12,600.00
57	Red Maple	*ACER RUBRUM*	45 GAL	12'-14' OA	63	$250.00	$ 15,750.00
58	Red Maple	*ACER RUBRUM*	65 GAL	14'-16'x4"Cal OA	11	$350.00	$ 3,850.00
59	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	4	$400.00	$ 1,600.00
60	Cabbage Palm	*SABAL PALMETTO*	FG	12'-14' OA	124	$200.00	$ 24,800.00
61		**Total for Trees**	--	--	--	--	**$201,086.00**

SCHEDULE 2 - LENNARD SQ / AZZI STA LANDSCAPING/IRRIGATION BID TOTAL	--	**$413,255.32**

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ARAZOZA BROTHERS CORP.

SCHEDULE 3 - TIFFANY CHANNEL STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 16,000.00	$ 16,000.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 12.00	$ 1,200.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ 2.00	$ 200.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.50	$ 6,250.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 2.52	$ 6,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 2,500.00	$ 2,500.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,500.00	$ 18,000.00
9	Total for General Items	--	--	--	$ 55,450.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/3 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,875.00	$ 7,875.00
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 32,500.00	$ 32,500.00
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 500.00	$ 500.00
13	4" Class 200 PVC Mainline/Fittings	LF	2276	$ 8.00	$ 18,208.00
14	4" Nibco T-8 Gate Valve	EA	1	$ 750.00	$ 750.00
15	Carson 1419 Valve Box with Lid	EA	1	$ 250.00	$ 250.00
16	2" Rain Bird PESB Series Remote Control Valve	EA	12	$ 1,086.49	$ 13,037.88
17	Carson 1220 Jumbo Valve Box with Lid	EA	13	$ 250.00	$ 3,250.00
18	Class 200 PVC Lateral Line/Fittings (size per plan)	LF	10800	$ 1.46	$ 15,768.00
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	LF	244	$ 8.44	$ 2,059.36
20	Rain Bird 1812 -SAM-PRS with Hunter MP Rotator Nozzle	EA	28	$ 31.50	$ 882.00
21	Hunter PGP-04-CV with #6 Nozzle	EA	5	$ 31.50	$ 157.50
22	Hunter PGP-04-CV with #9 Nozzle	EA	56	$ 31.50	$ 1,764.00
23	Hunter PGP-04-CV with #12 Nozzle	EA	31	$ 31.50	$ 976.50
24	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 33.50	$ 67.00
25	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	10	$ 33.50	$ 335.00
26	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	18	$ 33.50	$ 603.00
27	Total for Irrigation Items	--	--	--	$ 98,983.24

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
28	Red Tip Cocoplum	*CHRYSOBALANUS ICACO 'RED TIP'*	3 GAL	24"	140	$8.00	$ 1,120.00
29	Saw Palmetto	*SERENOA REPENS*	1 GAL	10"	831	$6.00	$ 4,986.00
30	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	Full	700	$4.00	$ 2,800.00
31	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	944	$7.50	$ 7,080.00
32		*Total for Shrubs and Groundcover*	--	--	--	--	$15,986.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
33	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	14	$600.00	$ 8,400.00
34	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"CAL OA	66	$500.00	$ 33,000.00
35	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$350.00	$ 7,350.00
36	Slash Pine	*PINUS ELLIOTII(South Florida Densa)*	45 GAL	10'-12' OA	118	$250.00	$ 29,500.00
37	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	26	$400.00	$ 10,400.00
38		Total for Trees	--	--	--	--	$88,650.00

SCHEDULE 3 - TIFFANY CHANNEL STA LANDSCAPING/IRRIGATION BID TOTAL	--	$259,069.24

SCHEDULE 4 - LEITHGOW STREET STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 15,000.00	$ 15,000.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ 12.00	$ 600.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	50	$ 2.00	$ 100.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	1250	$ 2.50	$ 3,125.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	1250	$ 2.52	$ 3,150.00
6	SITE ACCESS RESTORATION	LS	1	$ 1,500.00	$ 1,500.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,000.00	$ 12,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 750.00	$ 9,000.00
10	Total for General Items	--	--	--	$ 49,475.00

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ARAZOZA BROTHERS CORP.

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,500.00	$ 7,500.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 15,000.00	$ 15,000.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 400.00	$ 400.00
14	3" Class 200 PVC Mainline/Fittings	LF	1660	$ 7.00	$ 11,620.00
15	3" Nibco T-113 Gate Valve	EA	2	$ 750.00	$ 1,500.00
16	Carson 1419 Valve Box with Lid	EA	2	$ 250.00	$ 500.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	8	$ 780.62	$ 6,244.96
18	Carson 1220 Jumbo Valve Box with Lid	EA	8	$ 250.00	$ 2,000.00
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	1640	$ 1.84	$ 3,017.60
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	98	$ 8.44	$ 827.12
21	Hunter PGP-04-CV with #6 Nozzle	EA	1	$ 31.50	$ 31.50
22	Hunter PGP-04-CV with #9 Nozzle	EA	44	$ 31.50	$ 1,386.00
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 33.50	$ 100.50
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	4	$ 33.50	$ 134.00
25	**Total for Irrigation Items**	--	--	--	**$ 50,261.68**

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
26	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	1,740	$0.60	$ 1,044.00
27	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,420	$0.90	$ 1,278.00
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	3,270	$0.60	$ 1,962.00
29	Maidencane	*PANICUM HEMITOMON*	BR	-	1,740	$0.60	$ 1,044.00
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	2,500	$0.60	$ 1,500.00
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	2,180	$0.90	$ 1,962.00
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	4,790	$1.50	$ 7,185.00
33	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	517	$1.50	$ 775.50
34	Firebrush	*HAMELIA PATENS*	3 GAL	20"-24"	22	$8.00	$ 176.00
35	Fire Flag	*THALIA GENICULATA*	BR	-	1,420	$0.90	$ 1,278.00
36	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	269	$4.00	$ 1,076.00
37	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	BR	-	1,310	$1.30	$ 1,703.00
38	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	383	$4.00	$ 1,532.00
39	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	326	$7.50	$ 2,445.00
40		**Total for Shrubs and Groundcover**	--	--	--	--	**$24,960.50**

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	*(Scientific Name)*					
41	Laurel Oak	*QUERCUS LAURIFOLIA*	65 GAL	14'-16'x4"Cal OA	13	$600.00	$ 7,800.00
42	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	37	$200.00	$ 7,400.00
43	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	37	$300.00	$ 11,100.00
44	Bald Cypress	*TAXODIUM DISTICHUM*	65 GAL	14' OA	39	$600.00	$ 23,400.00
45	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	4	$500.00	$ 2,000.00
46	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	28	$100.00	$ 2,800.00
47	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	28	$300.00	$ 8,400.00
48	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	29	$500.00	$ 14,500.00
49	Royal Poinciana	*DELONIX REGIA*	60 GAL	14'-16'x8"SPR OA	2	$300.00	$ 600.00
50	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	15	$350.00	$ 5,250.00
51	Geiger Tree	*CORDIA SEBESTENA*	45 GAL	10'x2"Cal	6	$300.00	$ 1,800.00
52	Cabbage Palm	*SABAL PALMETTO*	-	12'-18' STG	17	$200.00	$ 3,400.00
53	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	3	$300.00	$ 900.00
54		**Total for Trees**	--	--	--	--	**$89,350.00**

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ARAZOZA BROTHERS CORP.

SCHEDULE 4 - LEITHGOW STREET STA LANDSCAPING/IRRIGATION BID TOTAL	--	$214,047.18

SCHEDULE 5 - LOUTUS STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 17,000.00	$ 17,000.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	100	$ 12.00	$ 1,200.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	250	$ 2.00	$ 500.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	5000	$ 2.50	$ 12,500.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	5000	$ 2.52	$ 12,600.00
6	SITE ACCESS RESTORATION	LS	1	$ 1,500.00	$ 1,500.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,000.00	$ 12,000.00
9	Total for General Items	--	--	--	$ 62,300.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
10	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 7,875.00	$ 7,875.00
11	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 15,000.00	$ 15,000.00
12	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 500.00	$ 500.00
13	4" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	4229	$ 8.00	$ 33,832.00
14	4" Nibco T-8 Gate Valve	EA	3	$ 750.00	$ 2,250.00
15	Carson 1419 Valve Box with Lid	EA	3	$ 250.00	$ 750.00
16	2" Rain Bird PESB Series Remote Control Valve	EA	17	$ 1,034.21	$ 17,581.57
17	Carson 1220 Jumbo Valve Box with Lid	EA	17	$ 250.00	$ 4,250.00
18	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	10060	$ 1.98	$ 19,918.80
19	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	184	$ 8.44	$ 1,552.96
20	Hunter PGP-04-CV with #6 Nozzle	EA	6	$ 31.50	$ 189.00
21	Hunter PGP-04-CV with #9 Nozzle	EA	88	$ 31.50	$ 2,772.00
22	Hunter PGP-04-CV with #12 Nozzle	EA	2	$ 31.50	$ 63.00
23	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	2	$ 33.50	$ 67.00
24	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	22	$ 33.50	$ 737.00
25	Hunter PGP-12-CV with #12 Nozzle on Schedule 40 PVC Riser	EA	5	$ 33.50	$ 167.50
25	Total for Irrigation Items	--	--	--	$ 107,505.83

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
26	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	1,196	$1.50	$ 1,794.00
27	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	687	$4.00	$ 2,748.00
28	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	855	$4.00	$ 3,420.00
29	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	952	$7.50	$ 7,140.00
30		*Total for Shrubs and Groundcover*	--	--	--	--	$15,102.00

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
31	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18' OA 4.5" CAL	75	$500.00	$ 37,500.00
32	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	21	$350.00	$ 7,350.00
33	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8'SPR OA	8	$300.00	$ 2,400.00
34	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	40	$400.00	$ 16,000.00
35	Sycamore	*PLANTANUS*	65 GAL	14'-16'x4"Cal OA	10	$400.00	$ 4,000.00
36	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	10	$400.00	$ 4,000.00
37	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5"Cal OA	13	$300.00	$ 3,900.00
38		Total for Trees	--	--	--	--	$75,150.00

SCHEDULE 5 - LOUTUS STA LANDSCAPING/IRRIGATION BID TOTAL	--	$260,057.83

CITY OF PORT ST. LUCIE

EASTERN WATERSHED IMPROVEMENT PROJECT (EWIP)

LANDSCAPING / IRRIGATION AT VARIOUS EWIP SITES

E-BID #20110079

Company Name: ARAZOZA BROTHERS CORP.

SCHEDULE 6 - MARY TERRACE STA

GENERAL ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
1	MOBILIZATION	LS	1	$ 15,000.00	$ 15,000.00
2	FLOATING TURBIDITY BARRIER (PLACE AS DIRECTED)	LF	50	$ 12.00	$ 600.00
3	STAKED SILT FENCE (PLACE AS DIRECTED)	LF	100	$ 2.00	$ 200.00
4	MULCH (3" MIN. THICK) (PLACE AS DIRECTED)	SY	2500	$ 2.50	$ 6,250.00
5	BAHIA SOD (PLACE AS DIRECTED)	SY	2500	$ 2.52	$ 6,300.00
6	SITE ACCESS RESTORATION	LS	1	$ 1,500.00	$ 1,500.00
7	SURVEY WORK/PREPARATION OF AS-BUILT DRAWINGS	LS	1	$ 5,000.00	$ 5,000.00
8	SITE MOWING (POST COMPLETION)	EA	12	$ 1,000.00	$ 12,000.00
9	AQUATICS MAINTENANCE (POST COMPLETION)	MONTH	12	$ 750.00	$ 9,000.00
10	Total for General Items	--	--	--	$ 55,850.00

IRRIGATION ITEMS

LINE NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	BID TOTAL
11	240v/1 phase electrical service (concrete pole, meter, disconnect, wiring)	EA	1	$ 8,400.00	$ 8,400.00
12	Contractor Built Pump Station with concrete slab, suction line assembly, controller & rainsensor	EA	1	$ 15,000.00	$ 15,000.00
13	Baseline Water Tec S100 Soil Moisture Sensor interface and field sensor	EA	1	$ 400.00	$ 400.00
14	2 1/2" Class 200 PVC Mainline with Schedule 40 PVC gasketed Fittings	LF	1160	$ 8.00	$ 9,280.00
15	2 1/2" Nibco T-113 Gate Valve	EA	1	$ 750.00	$ 750.00
16	Carson 1419 Valve Box with Lid	EA	1	$ 250.00	$ 250.00
17	2" Rain Bird PESB Series Remote Control Valve	EA	7	$ 1,115.12	$ 7,805.84
18	Carson 1220 Jumbo Valve Box with Lid	EA	7	$ 250.00	$ 1,750.00
19	Class 200 PVC Lateral Line with Schedule 40 PVC fittings (size per plan)	LF	2960	$ 1.81	$ 5,357.60
20	Rain Bird 1404 PC Bubbler Nozzle on poly pipe	EA	129	$ 8.44	$ 1,088.76
21	Hunter PGP-04-CV with #6 Nozzle	EA	30	$ 31.50	$ 945.00
22	Hunter PGP-12-CV with #6 Nozzle on Schedule 40 PVC Riser	EA	3	$ 33.50	$ 100.50
23	Hunter PGP-12-CV with #9 Nozzle on Schedule 40 PVC Riser	EA	6	$ 33.50	$ 201.00
24	Total for Irrigation Items	--	--	--	$ 51,328.70

LANDSCAPING AND GRASSES

HERBACEOUS

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
25	Duck Potato	*SAGITTARIA LATIFOLIA*	BR	-	2,070	$0.60	$ 1,242.00
26	Giant Bulrush	*SCIRPUS CALIFORNICUS*	BR	-	1,200	$0.90	$ 1,080.00
27	Fire Flag	*THALIA GENICULATA*	BR	-	440	$0.90	$ 396.00
28	Jointed Spikerush	*ELEOCHARIS INTERSTINCTA*	BR	-	1,850	$0.60	$ 1,110.00
29	Maidencane	*PANICUM HEMITOMON*	BR	-	110	$0.60	$ 66.00
30	Pickerel Weed	*PONTEDERIA CORDATA*	BR	-	870	$0.60	$ 522.00
31	Crinum Lily	*CRINUM AMERICANUM*	BR	-	440	$0.90	$ 396.00
32	Sand Cordgrass	*SPARTINA BAKERI*	LN	-	3,050	$1.50	$ 4,575.00
33	Purple Lovegrass	*ERAGROSTIS SPECTABILIS*	LN	-	650	$1.30	$ 845.00
34	Muhly Grass	*MUHLENBERGIA CAPILLARIS*	LN	-	355	$1.50	$ 532.50
35	Macho Fern	*NEPHROLEPIS FALCATA*	1 GAL	Full	359	$4.00	$ 1,436.00
36	Sword Fern	*NEPHROLEPIS EXALTATA*	1 GAL	-	348	$4.00	$ 1,392.00
37	Fakahatchee Grass	*TRIPSACUM DACTYLOIDES*	3 GAL	30" Full	272	$7.50	$ 2,040.00
38		Total for Shrubs and Groundcover	--	--	--	--	$15,632.50

TREES

LINE NO	DESCRIPTION		SIZE	HEIGHT	QUANTITY	UNIT PRICE	TOTAL
	(Common Name)	(Scientific Name)					
39	Bald Cypress	*TAXODIUM DISTICHUM*	25 GAL	10'-12' OA	38	$200.00	$ 7,600.00
40	Bald Cypress	*TAXODIUM DISTICHUM*	45 GAL	12' OA	38	$300.00	$ 11,400.00
41	Bald Cypress	*TAXODIUM DISTICHUM*	100 GAL	14'x4" Cal OA	38	$600.00	$ 22,800.00
42	Live Oak	*QUERCUS VIRGINIANA*	100 GAL	16'-18'x4.5"Cal	11	$500.00	$ 5,500.00
43	Mahogony	*SWIETENIA MAHAGONI*	65 GAL	14'-16- OA	2	$350.00	$ 700.00
44	Pond Apple	*ANNONA GLABRA*	15 GAL	6'-8' OA	18	$100.00	$ 1,800.00
45	Pond Apple	*ANNONA GLABRA*	25 GAL	8'-10' OA	18	$300.00	$ 5,400.00
46	Pond Apple	*ANNONA GLABRA*	45 GAL	10'-12' OA	18	$600.00	$ 10,800.00
47	Royal Poinciana	*DELONIX REGIA*	45 GAL	14'-16'x8"Spr OA	2	$300.00	$ 600.00
48	Red Maple	*ACER RUBRUM*	65 GAL	14' OA	20	$350.00	$ 7,000.00
49	Sycamore	*PLANTANUS*	65 GAL	14'-16x4"' OA	2	$400.00	$ 800.00
50	Gumbo Limbo	*BURSERA SIMARUBA*	65 GAL	14'-16' OA	2	$400.00	$ 800.00
51	Glaucous Cassia	*SENNA SURATTENSIS*	45 GAL	12'-14'x2.5" OA	8	$300.00	$ 2,400.00
52		Total for Trees	--	--	--	--	$77,600.00

SCHEDULE 6 - MARY TERRACE STA LANDSCAPING/IRRIGATION BID TOTAL	--	$200,411.20

BID SUMMARY:

SCHEDULE 1 SUB TOTAL:	$866,513.58
SCHEDULE 2 SUB TOTAL:	$413,255.32
SCHEDULE 3 SUB TOTAL:	$259,069.24
SCHEDULE 4 SUB TOTAL:	$214,047.18
SCHEDULE 5 SUB TOTAL:	$260,057.83
SCHEDULE 6 SUB TOTAL:	$200,411.20
INDEMNIFICATION FEE:	$10.00

SCHEDULES 1 - 6 BID TOTAL	--	$2,213,364.35

E-Bid Reply Sheet #20110079

EWIP Landscaping & Irrigation / Various EWIP Sites

1. **COMPANY NAME**: Arazoza Brothers Corporation

DIVISION OF: n/a

PHYSICAL ADDRESS: 15901 SW 248 Street

MAILING ADDRESS: PO Box 924890

CITY, STATE, ZIP CODE: Homestead, FL 33031

TELEPHONE NUMBER: 305 246 3223 FAX NO. 305 246 0481

CONTACT PERSON: Alberto Arazoza E-MAIL: aarazoza@arazozabrothers.com

2. **ORGANIZATIONAL PROFILE**: (complete all appropriate information)

Is the firm incorporated? (Yes) No If yes, in what state? Florida

Alberto Arazoza
President

Eduardo Arazoza
Vice President

Eduardo Arazoza
Treasurer

How long in present business: 23yrs How long at present location: 23yrs

Is firm a minority business: (Yes) No; Does firm have a drug-free workplace program: (Yes) No
If no, is your company planning to implement such a program? _____

3. **ADDENDUM ACKNOWLEDGMENT** - Bidder acknowledges that the following addenda have been received and are included in its proposal/bid:

Addendum Number	Date Issued
1	6/14/11
2	7/7/11
3	7/12/11
4	7/21/11
5	7/21/11

4. **VENDOR'S LIST** – If your company offers commodities other than the one specified for this bid, and you wish to be put on the vendor's list, please contact Onvia.com at (800) 711-1712. Bid Tabulation Reports are advertised on the City's Web Site at www.Cityofpsl.com.

5. **BID RESPONSE:**

5.1 Bidder will / will not accept the Purchasing Card (Visa).
(please circle one)

5.2 Percentage of discount when payment is made with Visa: n/a %

5.3 Bid Reply Sheet Totals from Schedule "A": $ 2,213,364.35.
(This figure must match the E-Bid Excel Reply Spreadsheet and the figure that is to be used on the Demandstar submittal page. Discrepancies between the E-Bid Excel Spreadsheet uploaded on Demandstar, the dollar amount listed on the web page at time of submittal and the E-Bid Reply Sheet #20110079 uploaded on Demandstar will be resolved in favor of the E-Bid Excel Spreadsheet that is uploaded at time of submittal.)

Bidders are cautioned that the anticipated quantities used for this computation will be estimates. The City makes no guarantee as to the actual quantity that will be utilized during the Contract period. A unit price for each item offered shall be shown, and such price shall include all labor, materials, equipment and warrantees unless otherwise specified. A total shall be entered in the "Total" column for each separate item. In case of discrepancy between the unit price and the extended price, the unit price will be presumed correct.

6. **INSURANCE CERTIFICATES LICENSE** - Bidders are required, in accordance with Section 5, to submit a copy of their Insurance Certificate for the type and dollar amount of insurance they currently maintain. Bidders are required to submit all licenses and certifications required to perform this project.

7. **COMPLETION OF FORM** - An authorized representative of the firm offering this Bid must complete this form in its entirety. Prices entered herein shall not be subject to withdrawal or escalation by Bidder. The City reserves the right to hold proposals and bid guarantees for a period not to exceed 90 days after the date of the bid opening stated in the Invitation to Bid before awarding the Contract. Contract award constitutes the date that City Council executes the motion to award the bid.

8. **CONTRACT** - Bidder agrees to comply with all requirements stated in the specifications for this bid.

9. **CERTIFICATION**

This bid is submitted by: Name (print) Alberto Arozqui who is an officer of the above firm duly authorized to sign bids and enter into Contracts. I certify that this bid is made without prior understanding, Contract, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of this bid.

Signature _____ Date 7/14/11

10. Bidder has read and accepts the terms and conditions of the City's standard Contract:

Signature _____ President
Title

If a corporation renders this Bid, the corporate seal attested by the secretary shall be affixed below. Any agent signing this Bid shall attach to this form evidence of legal authority.

(seal)

Balance of page left intentionally blank

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Arazoza Brothers Corporation

Reference: Community Asphalt Corp Fax #: (305)884-9449
Email: sherrera@cacorp.net Telephone #: (305)884-9444 ex. 464
Person to contact: Susana Herrera

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM

Bidder Instructions: Fill out top portion only. (Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Arazoza Brothers Corporation

Reference: Russell Engineering Corp Fax #: (954) 321-0691
Email: brian.g@russellengineering.com Telephone #: (954) 321-9336
Person to contact: Brian Gibbs

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM

Bidder Instructions: Fill out top portion only. (Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Arazoza Brothers Corporation

Reference: The de maya Grup Fax #: (305) 2551935
Email: AJ.demaya@demaya.com Telephone #: (305) 2555713
Person to contact: AJ demaya

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Arazoza Brothers Corporation

Reference: FDOT Turnpike Enterprise Fax #: (954)934-1354
Email: jeremiah.marek@dot.state.fl.us Telephone #: (954)975-4855 or 868-4851
Person to contact: Jeremiah Marek

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

EWIP Landscaping & Irrigation/ Various EWIP Sites
CITY OF PORT ST LUCIE
121 SW Port St. Lucie Boulevard
Port St. Lucie, Florida, 34984
772-871-5223

REFERENCE CHECK FORM
Bidder Instructions: Fill out top portion only.
(Please print or type)

E-Bid Number: 20110079

Title: EWIP Landscaping & Irrigation / Various EWIP Sites

Bidder: Arazoza Brothers Corporation

Reference: Norm Springs Improvement Dist Fax #: (954) 698-6010
Email: jane.early@CH2M.com Telephone #: (954) 426-6112
Person to contact: Jane Early

Reference Instructions: The above Bidder has given your name to the City of Port St. Lucie as a reference. Please complete the information below and fax within five (5) days to 772-871-7337.

Describe the scope of work of the contract awarded by your firm to this Contractor.

Was the project completed on time and within budget?
What was the project completion date?
How many projects has this vendor completed for you within the past 5 years?

What problems were encountered (claims)?

How many change orders were requested by this Contractor?

How would you rate the contractor on a scale of low (1) to high (10) for the following?

Professionalism _____ Final Product _____
Qualifications _____ Cooperation _____
Budget Control _____ Reliability _____

Would you contract with this Contractor again? Yes [ ] No [ ] Maybe [ ]
Comments:

Thank you.

For OMB Use Only	
Reference Checked	
Clerk Checked	

Arazoza Bros., Corp.

P.O. Box 924890, Homestead, Florida 33092 - (305) 246-3223 - Fax (305) 246-0481

No Subs will be utilized

Form **W-9**
(Rev. October 2007)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)
ARAZOZA BROTHERS CORPORATION

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☑ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶
☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)
P.O. BOX 924890

Requester's name and address (optional)

City, state, and ZIP code
HOMESTEAD, FL 33092-4890

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
| | | |

or

Employer identification number
65 | 0031332

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here Signature of U.S. person ▶ [signature] Date ▶ 7/27/11

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

Alberto J. Arazoza
9700 S.W. 93 Avenue
Miami, Fl. 33176

CAREER OBJECTIVE

To utilize my business, marketing, and sales experience to successfully run and operate a landscape and environmental contracting firm.

WORK EXPERIENCE

President

Arazoza Brothers Corporation, Landscape and Irrigation Contracting Company (February, 1988 to present)
My responsibilities include, but are not limited to: Managing the daily in-house operation, Project design, project sales, preparing and finalizing all project bids, securing financial sources, overseeing collections, and supervising employees and office staff. Responsible for sales, marketing, advertising, and daily contact with the general public. Responsible for budgeting projects to secure the financial needs of the operation.

President of Agri-Brothers Corporation, (Oct 1995 to Present)
My responsibilities include, but are not limited to: managing and overseeing the operations of over 200 acres of wholesale nursery materials, securing financial sources, overseeing collections, and supervising employees and office staff.

EDUCATIONAL BACKGROUND

Bachelor of Science in Business Administration,
specialization in marketing.
University of Florida, December 1987
Attended two years of graduate study; 1 year of Masters Business Administration at Florida International University, 1989 and 1 year of Masters Landscape Architecture at Florida International University, 1990. Major GPA 3.0 / 4.0

Graduated Belen Jesuit Preparatory School 1984
Vice President of Student Council 1984

Additional Related Coursework:
Sales Management Marketing Research
Marketing Management Real Estate Analysis
Consumer Behavior

PROFESSIONAL AFFILIATIONS

Member of Engineering Contractors Association
Florida Nurseryman Growers Landscape Association
Associated Landscape Contractors of America
Dade County Farm Bureau
Florida International University Presidents Council

REFERENCES

Available upon request.

Eduardo J. Arazoza
470 Campana Avenue
Coral Gables, Florida 33156

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CAREER OBJECTIVE

To utilize my agricultural skills, background in nursery production, landscape design, and to successfully run and improve the operations of a landscape and environmental firm.

WORK EXPERIENCE

Vice President

Arazoza Brothers Corporation, (February 1988 to present)
My responsibilities include but not limited to: Managing the daily field operations, supervising 85 employees in the field and superintendents, project management, layout, landscape design, purchasing of plants, equipment, and materials. Responsible for continuous research in the plant industry, ensure up-to-date techniques and procedures in the maintenance and installation of new material.

President

Edmar Farms , (December, 1986 to January, 1988).
Solicited new accounts and managed administrative and field operations.

Sales Manager

Costa Nursery Farms, (July, 1984 to January, 1988).
Solicited new accounts, ensured customer satisfaction, and secured prompt delivery of orders.

Production Manager

Costa Nursery Farms, (July, 1982 to July, 1984).
Analyzed plant production, inspected plants for diseases and growth schedules, and projected all inventory requirements.

EDUCATIONAL BACKGROUND

Valley Forge Military Academy, 1984

PROFFESIONAL AFFILIATIONS

Florida Nurseryman Growers Association,
Associated Landscape Contractors of America

REFERENCES

Available upon request.

Tedd A. Kenny
154 Temple Drive
Loxahatchee, Fl 33470

CAREER OBJECTIVE

To utilize my skills in the greens industry to improve the operations of an established Environmental Services firm as well as increase quality and customer satisfaction.

WORK EXPERIENCE

General Manager
Certified Arborist

Arazoza Brothers Corporation, August 2005 to Present
GM of landscape and irrigation services company managing the daily operations of installation of new landscape and irrigation; supervising project managers in the field; manage and oversee landscape maintenance operations; work with design teams for landscape and irrigation design build projects; manage and oversee fleet of equipment, mechanics and purchases. Conduct Business Development to attract new clients and business opportunities (e.g., wetland restoration and mitigation).
www.arazozabrothers.com

General Manager

DeAngelo Brothers, Corp. 1995 to 2005
GM of Environmental services company. Manager of southeast operations, responsible for day to day operations of 10 branch locations. Oversee budgets, purchasing, customer service, training, etc. Ensure compliance with all applicable local, state and federal laws and regulations.
www.dbiservices.com

Operations Manager

Plants For Tomorrow, Inc. 1989 to 1994
Operations Manager of environmental services company engaged in wetland mitigation services which included wetland planting and restoration, exotic vegetation removal and maintenance, wetland monitoring. Worked directly with nursery staff to coordinate plant needs for upcoming projects.

EDUCATIONAL BACKGROUND

University of Florida, Gainesville, FL Extension Offices
Environmental Technology Academy, Tampa, FL

LICENSES

ISA Certified Arborist FL-6134A
Fla. Dept. of Agriculture Certified Pesticide Applicator # CM10001
ATSSA Worksite Traffic Supervisor ID #37

REFERENCES

Available upon request.

International Society of Arboriculture

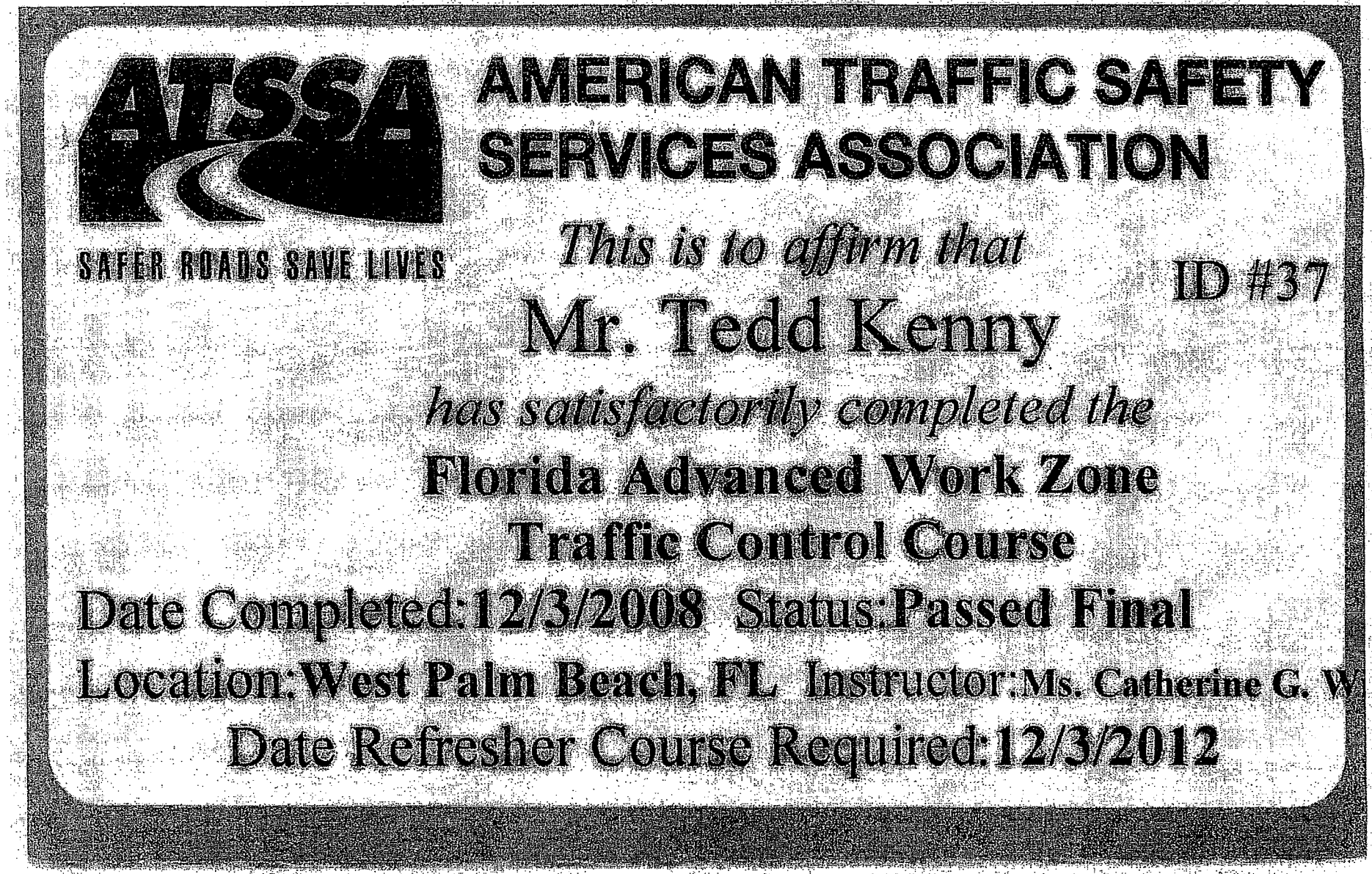
Certified Arborist

Tedd A Kenny

Having successfully completed the requirements set by the Arborist Certification Board of the International Society of Arboriculture, the above named is hereby recognized as an ISA Certified Arborist

Jim Skiera, Executive Director
International Society of Arboriculture

FL-6134A	Nov 14, 2009	Dec 31, 2012
Certification Number	Certified Since	Expiration Date



ATSSA

SAFER ROADS SAVE LIVES

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

ID #37

Mr. Tedd Kenny

has satisfactorily completed the

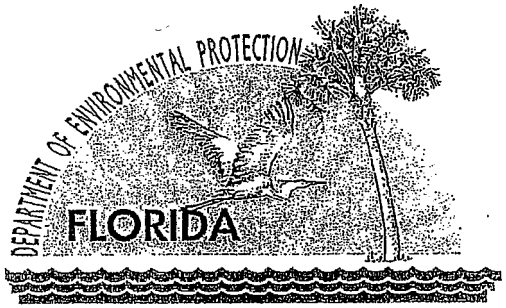
Florida Advanced Work Zone Traffic Control Course

Date Completed: **12/3/2008** Status: **Passed Final**

Location: **West Palm Beach, FL** Instructor: **Ms. Catherine G. W**

Date Refresher Course Required: **12/3/2012**

QUALIFIED STORMWATER MANAGEMENT INSTRUCTOR



The undersigned hereby acknowledges that

Tedd Kenny

has successfully met all requirements necessary to be an Instructor for the Florida Stormwater, Erosion, and Sedimentation Control Inspector Training Program

May 20, 2005

Instructor # 221

John Abendroth

QUALIFIED
STORMWATER MANAGEMENT
INSPECTOR

The undersigned hereby acknowledges that

Tedd A. Kenny

has successfully met all requirements necessary to be fully certified through the Florida Department of Environmental Protection Stormwater, Erosion, and Sedimentation Control Inspector Training Program

May 12, 2005

Inspector #9345

8 PDHs - CEP00110

8 CEUs Provider 004-0001229/Course 0002207

John Abendroth

Environmental Technology Center

certifies that

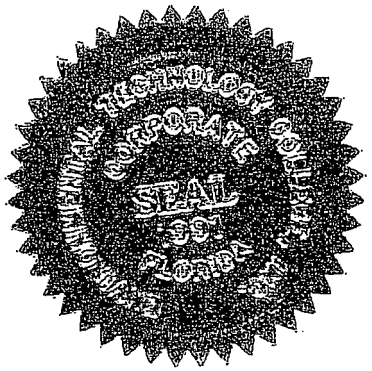
Tedd Kenny

has successfully completed the

Florida Statewide Wetland Delineation Training Program (62-340 FAC)

Issued this Certificate on this second day of August, 1996, in Tampa, Florida

Richard Chinn, C.E.T., Director of Training



Environmental Technology Center
8413 Laurel Fair Circle, Suite 200, Tampa, FL 33610-7355
Ph: 813-621-8848 Fax: 813-621-0153

Florida Department of Agriculture and Consumer Services
Pesticide Certification Office
Commercial Applicator License
License # CM10001

KENNY, TEDD ALLYN
154 TEMPLE DR
LOXAHATCHEE, FL 33470

Categories
6, 5A

Issued: November 12, 2008

Expires: October 31, 2012

Signature of Licensee

CHARLES H BRONSON, COMMISSIONER

The above individual is licensed under the provisions of Chapter 487, F S to purchase and apply restricted use pesticides

VOID

VOID

State of Florida

Department of Agriculture and Consumer Services

Pesticide Certification Office

COMMERCIAL PESTICIDE APPLICATOR LICENSE

Number: CM10001

TEDD ALLYN KENNY

This is to certify that the individual named above is a Commercial Pesticide Applicator and is licensed to purchase and apply restricted use pesticides in the following work related categories:

Right-Of-Way Pest Control, Aquatic Pest Control

This license is issued under the provisions of the Florida Pesticide Law, Chapter 487 F.S.

Charles H. Bronson

Charles H. Bronson
Commissioner of Agriculture

Issue Date: November 12, 2008
Expiration Date: October 31, 2012

Jose Ruiz
12309 TH North Street
Royal Palm Beach, Fl. 33411

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CAREER OBJECTIVE

To utilize my experience in the landscape field to perform the tasks required to successfully completing projects.

WORK EXPERIENCE

Superintendent

Arazoza Brothers Corporation, (Jan. 1992 to current)
June 2004 to current - Field Manager- my duties include but are not limited to managing the daily field operations, weekly safety meetings, in the field design changes as well as project plan layout, overseeing 5 field crews on various projects, meeting with project inspectors and contractors.
Mar 1993 to June 2004 – Foreman- my duties included but were not limited to supervising a 5-man crew on job sites, project design and layout, and safety issues, installation of plan layout, equipment operator.
Jan. 1992 to Mar. 1993 – Field Worker- my duties included but were not limited to installing plants, trees, shrubs and other plant materials as per landscape plans, driver of the crew, overseeing the project, and specs and operating some equipment.

EDUCATIONAL BACKGROUND

Escuela Secundria Tenica 23, Mexticacan Jalisco, Mexico
High School Graduation Certificate

REFERENCES

Available upon request.

Joseph L. Quinn
Project Manager; Business Development

Areas of Specialization
University of Florida 2001:
Landscape management certificate
University of Maryland: Associate Degree

Arazoza Brothers Corporation

(February 2011 to Present)

Landscape Project Manager

My responsibilities include, but are not limited to: managing projects, with several supervisors, crew leaders and workers, in the field of landscape and irrigation. This includes coordination with clients, inspectors, material shipments and administrative paperwork required for the projects

In addition, my Sales duties include reviewing available bid notification resources for new prospects and actively soliciting new projects to bid; coordinating with Estimating Team to ensure everyone understands scope, trade summaries, re-bids, deadlines, etc., for each project; submitting bids and selling projects and providing follow-up on submitted bids.

Quinn Design (2000 to 2011)

Owner and Manager

Owned and operated a full service landscape company and nursery. My primary responsibilities included purchasing, estimating, installation and supervision of work crews.

Arazoza Bros., Corp.

P.O. Box 924890, Homestead, Florida 33092 - (305) 246-3223 - Fax (305) 246-0481

To Whom It May Concern

Arazoza Brothers Corporation is a fully bonded and insured Landscape, Irrigation, Mitigation, and Maintenance Contracting Company founded in February 1988. It is a family run operation priding itself on superior workmanship and plant selection, as well as timely and satisfactory completion of landscape contracts.

In the past twenty-three years Arazoza Brothers Corporation has grown steadily on the strength of our improving reputation and respect for our client's needs and concerns. During this time we have completed many landscape construction projects of a variety of scopes. These projects range from residential homes and developments to government parks, roads and state highways. We have completed jobs from Key West to as far north as Jacksonville.

Arazoza Brothers also operates 300 acres of field and container grown plant material under the name Agri Brothers Corporation. Agri Brothers is a wholesale nursery servicing other landscape companies, as well as growing plant material for upcoming Arazoza Brothers landscaping projects.

All this helps to make Arazoza Brothers a complete package for our customers.

Enclosed you will find other pertinent company information.

Cordially

Albert Arazoza
President

Arazoza Bros., Corp.

P.O. Box 924890, Homestead, Florida 33092 - (305) 246-3223 - Fax (305) 246-0481

COMPANY INFORMATION

Main Office:	Arazoza Brothers Corporation
Physical Address:	15901 SW 242 Street Homestead, Florida 33031
Mailing Address:	PO Box 924890 Homestead, Florida 33092 Ph: (305) 246-3223 Fax: (305) 246-0481
Website:	www.arazozabrothers.com
Date Established:	February 22, 1988
Federal Id No.:	65-0031332
President:	Albert Arazoza
Vice President:	Eduardo Arazoza
General Manager:	Tedd Kenny
Superintendents:	Hubaldo Lomeli Jose Ruiz Paul McDade Fortino Hernandez
Estimating Department:	Vanessa Ygualada Robert Ayala
Accounting Department:	Vicky Cabaleiro- CFO Rosey Asensio- Contracts/AR Octavio Olivera- AP
Bonding/ Insurance Agency:	Brown & Brown Insurance Company 5900 N Andrews Avenue Ft. Lauderdale, FL 33309 Contact: James Murphy/ Joanne Mursell Ph: (888) 267-4379

Arazoza Bros., Corp.

P.O. Box 924890, Homestead, Florida 33092 – (305) 246-3223 – Fax (305) 246-0481

CONTRACTS IN PROGRESS

Class of Work	Contract Amt.	DOC	Completion	% Complete	Name/Address of Owner
Prime Contractor SR408 Landscape Improvements ABC803	$ 507,294	1/26/11	Jul-11	73%	Orlando Orange County Expy Auth. 4974 ORL Tower Rd Orlando, FL 32807 Contact: Benjamin J. Baker Phone: 407-806 4272
Prime Contractor FIN#249653-2-52-01 cont#T6248 SR826 Palmetto Exp ABC782	$ 712,502	10/28/10	Jul-11	80%	Florida Department of Transportation 1000 NW 111 Ave Miami, Florida 33172 Contact: Farhang Esmailzadeh Phone: 305-640-7298
Sub-Contractor FIN#406870-1-52-01 T4190 SR9A/I95 (PGA Blvd -Donald RossRd) ABC695	$ 519,000	5/8/08	Oct-11	10%	Community Asphalt Corp 14005 NW 186 Street Hialeah, FL 33018 Contact: Igancio Halley Phone: (305)829-0700
Sub-Contractor Central Blvd Widening MDX 11211.030 ABC771	$ 2,075,473	8/2/10	Jul-12	10%	Community Asphalt Corp 14005 NW 186 Street Hialeah, FL 33018 Contact: Igancio Halley Phone: (305)829-0700
Prime Contractor US1 Median/Airport ABC804	$ 108,549	3/30/11	Aug-11	30%	City of Marathon 9805 Overseas Highway Marathon, FL 33050 Contact: Carlos Solis Phone: 305-289-5008
Sub Contractor Downtown Beautification ABC774	$ 235,660	8/23/10	Jul-11	75%	Burkhardt Construction 1400 Alabama Ave. #20 West Palm Beach, FL 33401 Contact: Mark Kleisley Phone: (561)659-1400
Sub Contractor Miami Senior High School ABC774	$ 354,999	12/8/09	Aug-13	10%	MCM Corp 9805 Overseas Highway Marathon, FL 33050 Contact: Gredel del Toro Phone: (305) 642-2702
Prime Contractor FIN#411948-2-52-01 Contract# BDR86 ACB688	$ 1,000,000	5/19/08	May-12	60%	Florida Department of Transportation 3400 W Commercial Blvd Ft Lauderdale, Fl 33309 Contact: Elisabeth A. Hassett, RLA, PM Phone: 954-777-4219

Arazoza Bros., Corp.

P.O. Box 924890, Homestead, Florida 33092 - (305) 246-3223 - Fax (305) 246-0481

CONTRACTS COMPLETED

Class of Work	Contract Amt.	D.O.C.	Completed	% By Us	Name/Address of Owner
Prime Contractor Sombrero Road Landscaping ABC774	$ 98,621	9/21/10	Feb-11	100%	City of Marathon 9805 Overseas Highway Marathon, FL 33050 Contact: Carlos Solis Phone: 305-289-5008
Sub-Contractor Rickenbacker Causeway Recreational Facility ABC743	$ 488,250	8/20/09	Nov-10	67%	The Redland Company Inc. 48 NE 15 Street Homestead, FL 33030 Contact: Juan Medina Phone: (305) 247-3226
Prime Contractor Patch Reef Park Irrigation & Sod Renovations ABC761	$ 322,600	4/1/10	Oct-10	95%	City of Boca Raton 201 W. Palmetto Park Road Boca Raton, FL 33432 Contact: Michael J. Gagnon Phone: 561-239-1840
Prime Contractor Okeechobee Blvd Beautification FIN#411889-1-52-01 ABC756	$ 264,750	2/3/10	Oct-10		City of West Palm Beach PO Box 3366 West Palm Beach, FL 33402 Contact: Jeff Halverson Phone: 561- 494-1092
Sub-Contractor FIN#227773-1-52-01/56-01 SR7(US441) ABC667 **Increase by change orders**	$ 635,000 90,239	11/5/07	Aug-10	100%	Russell Engineering Corp. 2530 SW 36 Street Ft. Lauderdale, FL 33312 Contact Person: Brian Gibbs Phone: (954)321-3996
Prime Contractor MDX Project 50026 System Wide ABC601	$ 2,000,000 3 year renewal	7/25/06	Jun-10	100%	Miami Dade Expressway Authority 3790 NW 21 Street Miami, Florida 33142 Contact: Rick Johnson Phone: 305-637-3277 x2142 Email: rjohnson@mdx-way.com
Sub-Contractor FIN#415308-1-52-01 (T4241) SR808 Glades Rd ABC760	$ 119,814	5/26/10	Nov-10	100%	Community Asphalt Corp 14005 NW 186 Street Hialeah, FL 33018 Contact: Igancio Halley Phone: (305)829-0700
Prime Contractor Landscape Restoration Project Ph III ABC662	$ 1,319,585	10/10/07	Nov-10	100%	City of Sunrise 10770 W Oakland Park Blvd. Sunrise, Florida 33351 Contact: Dave Abderhalden Phone: 954-572-2274

Arazoza Bros., Corp.

P.O. Box 924890, Homestead, Florida 33092 - (305) 246-3223 - Fax (305) 246-0481

REFERENCES

Community Asphalt Corp.
9725 NW 117 Ave
Miami, Florida 33178
Phone: (305) 829-0700
Fax: (305) 829-8772
Contact: Ignacio Halley
Email: sherrera@cacorp.net

Russell Engineering Corporation
2530 SW 36 Street
Ft. Lauderdale, FL 33312
Ph#: (954)321-9336
Fax: (954) 321-0621
Contact: Brian Gibbs
Email: brian.g@russellengineering.com

The de Moya Group, Inc.
14600 SW 136th Street
Miami, Florida 33186
Ph#: (305) 255-5713
Fax: (305) 255-1935
Contact: AJ deMoya
Email: AJ.Demoya@demoya.com

Hubbard Construction Co.
2269 E Indian Road Bldg-3
West Palm Beach, FL 33409
Ph#: (561) 683-8601
Fax: (561) 683-0121
Contact: Rob Ueltschi
Email: Robert.UELTSCHI@hubbard.com

Sunbeam Properties Inc
10212 USA Today Way
Miramar, FL 33025
Ph#: (954) 450-7904
Fax: (954) 433-0124
Contact: Scott Hodges
Email: shodges@wsvn.com

Arazoza Bros., Corp.

P.O. Box 924890, Homestead, Florida 33092 - (305) 246-3223 - Fax (305) 246-0481

VEHICLE & EQUIPMENT LIST

VEHICLES

NO	Year	Vehicle Description	Serial Number
AB10	1995	Chassis Freightliner	1FUYDZYB2SH598073
AB12	1990	Chevrolet 2500 Pick-up	1GCFC24K3LZ113448
AB16	1999	Chevrolet 2500 Pick-up	1GBGC24R5XR711424
AB32	2001	Ford F-750 Water Truck	3FDXF75N31MA20554
AB34	2001	Ford F350 Supercab	1FTSX30L41EA86952
AB68	1995	Freightliner Tractor Truck	1FUYDZYB1SH830257
AB69	2004	Ford F-350 SRW Super-Duty US5631	1FTSX30L64EB22287
AB70	2004	Ford F-350 SRW Super-Duty US5630	1FTSX30L84EB22291
AB72	2004	Ford F-750 Medium Duty US5883 (water truck)	3FRXF75474V607353
AB78	2004	Ford F-750 Flatbed	3FRXF75FX4V693646
AB80	2004	Ford F-750 XL US7121	3FRXF75GX4V694496
AB88	2005	Chevy Silverado 1500 US7329	1GCEC19X75Z148703
AB91	2005	Chevy Silverado USC010	1GCHK39U65E131870
AB92	2005	Chevy Silverado USC011	1GCHK39U55E132136
AB96	2005	Chevy Silverado 1500 USC150	1GCEC19XX5Z177774
AB97	2005	Chevy Trail Blazer	1GZESS16MX56142416
AB108	2005	Chevy Silverado 1500 USC470	1GCEC19X35Z256333
AB109	2005	Chevy C-Series USC246	1GBE4E1215F533801
AB110	2000	Freightliner Tractor Truck C120	1FUYSSEB1YLG55826
AB116	2006	Chevy Silverado 1500 LT 4x4 USG053	2GCEK13T261186679
AB118	2006	Chevy Silverado 3500 USG196	1GCHK39U96E169742
AB119	2006	Chevy Silverado 3500 USG197	1GCHK39U76E113749
AB121	2006	Chevy Silverado 3500 USG195	1GCHK39U96E209186
AB122	2006	Chevy C4500 USG375	1GBE4C1266F15782
AB123	2006	Chevy Trail Blazer LS 4x2	1GNDS13S962102965
AB125	2006	GMC C7500 USG705	1GBM7C1396F400687
AB131	2006	Chevy Silverado 1500 Ecab USK225	1GCEK19V36E271005
AB132	2006	Chevy Silverado 1500 Ecab USK208	1GCEK19V46Z296715
AB134	2006	Chevy C4500 USK165	1GBE4E3GX6F408869
AB135	2005	Chevrole Express (van) USK510	1GAHG39U351111187
AB137	2007	Chevrolet Silverado 3500 USK564	1GCHK39U77E107175
AB138	2006	Chevrolet Silverado 3500 USK565	1GCHK39U37E107593
AB139	2006	Chevrolet Silverado C4500 USK402	1GBE4E3G16F427665
AB140	2007	Chevrolet Silverado 1500 LT Cab USK799	2GCEK13C771524689
AB141	2007	Chevrolet Silverado 1500 LT1 4x4 USK801	2GCEK13CX71542426

AB142	2007	Chevrolet Silverado 1500 LT1 CAB USK800	2GCEK13C771537071
AB143	2007	Chevrolet Silverado C5500 USK798	1GBE5C1247F401538
AB144	2007	Chevrolet Silverado C7500 USK783	1GBM7C13X7F402854
AB145	2007	Chevrolet Silverado C7500 USK779	1GBM7C1347F402199
AB152	2007	Chevrolet Silverado 1500 CAB USM212	2GCEC13C171557412
AB157	2007	Chevrolet Colbalt LT 4DR Sedan USM466	1G1AL55F777358843
AB158	2007	Chevrolet Silverado 3500HD Ext. Cab USM486	1GCJC33607F558483
AB159	2007	Chevrolet C7500 Reg Cab USM688	1GBM7C1377F407493
AB167	2008	Chevy Colorado USS494	1GCCS199898118990
AB168	2008	Chevy Colorado USS493	1GCCS199998116715

TRAILERS

NO	Year	Trailer Description	Serial #
AB37	1994	Belshe Trailer (Yellow)	16F01423R1024512
AB39	2001	Belshe Trailer	16JF0142611035882
AB40	2001	Belshe Trailer	16JF0142X11035884
AB41	2000	Diamond Trailer	1C9US1625YR574410
AB42	1996	Eager Beaver AP10 trailer	112AAH204TLO44832
AB44	1972	East Trailer	DSO32474
AB45	1996	Fontaine Flatbed Trailer	13N248209T1567794
AB46	1989	Fontaine Flatbed Trailer	13N1452C9K1545216
AB47	1988	Great Dane	1GRAA9629JSO81803
AB67	2003	Belshe Trailer W12-EP	16JF0162831038153
AB74	2003	Belshe Trailer WB12- 2EP	16JF0162341039003
AB75	1991	Stoughton Trailer 11500	1DW1A4824MS732201
AB77	2004	Eager Beaver 10HDB trailer	112HAN3004L062742
AB79	1996	Utility Trailer. #OH-3194	1UYFS2454TA942414
AB94	2004	Belshe Trailer	16JF0162741040073
AB95	1976	Fontaine w/ Beavertail	DPT3504227777
AB102	2000	Belshe Trailer WB-2EP AQ16	16JFO1429Y1034929
AB103	2001	Belshe Trailer WB-12-2EP AQ17	16JF0162311036453
AB107	1999	Triple Crown AQ15	27505080080991902
AB112	2005	Trailer 8x10 deluxe-	N/A
AB113	2005	Trailer 8x10 deluxe-	N/A
AB117	2005	Belshe Trailer WB12- 2EP	16JF0162251041102
AB124	2005	Soue Trailer	4Y3US14245S015921
AB130	2006	Belshe Trailer WB12- 2EP	16JF0162061042489
AB133	2006	Sure-Trac Dump Trailer	5JWTD142X61008008
AB153	2007	Belshe Trailer WB12- 2EP	16JF0162071043157
AB154	2007	Belshe Trailer WB12- 2EP	16JF0162371043170
AB155	2007	Belshe Trailer WB12- 2EP	16JF0162771043169
AB160	2007	Trailer SUCO 7000 LBS	1S9E0162271303636
AB161	2008	Fontaine Trailer	13N1482C871545104
AB164	2000	Kara Boat Trailer	5KTBS1711YF022390
AB164	1997	Carolina Skiff FbGlass Boat 13'8"	EKHJ31521697
AB166	2008	Triple Crown 6x12 Utility	1XNU6X12281025732

EQUIPMENT NO	Year	Equipment Description	Serial #
AB49	1999	Bobcat 873	514126288
AB53	1999	Caterpilliar 416C Backhoe	4ZN16442
AB54	1992	Ford Backhoe Loader 555C	A406291
AB55	1994	Ford New Holland L785 w/ Bucket	848168
AB56	1997	Ford New Holland LX 885 w/ Bucket	113223
AB57	1998	Ford New Holland LX 885	115150
AB58		Kubota Tractor B1700	10550
AB59		Kubota Tractor B7500DT	31729
AB60		Kubota Tractor L2600F	10362
AB61	1999	Massey Ferguson 1250 Tractor	GA3507
AB62	2003	Bobcat T200 Skid Steer Loader	518917225
AB63	1998	Caterpilliar IT28G front end loader	8CR01368
AB65	2003	Bobcat S250 Skid Steer Loader	521313804
AB66		Caterpilliar IT28G front end loader	8CR00695
AB71	2003	Caterpillar Backhoe 416D	BFP03305
AB73		Caterp. Skid Steer Loader 287 w/	CNY-00864
AB83	2004	Caterp. Skid Steer Loader 262B w/	PDT00567
AB84	2004	Mobark Tornado #13Drum Chipper	4S8SZ16104E023909
AB85	2004	Kubota Tractor M5700	11187
AB86	2004	Kubota Tractor B7410 DT	30241
AB87	2004	Kubota Tractor B7410 DT	30236
AB90	2004	Caterpillar Skid Steer Loader 262B	PDT01526
AB93	2004	Vermeer Trencher RT450	1VRX0721151000524
AB104	1999	Ditch Witch 3700 AQ18	3S0680
AB105	2000	Ditch Witch 3700 AQ19	3S1120
AB106	2000	Ditch Witch Trencher 1820 AQ20	1S2598
AB114	2005	Caterpillar Backhoe 416D	BFP15978
AB115	2005	Caterpillar Skid Steer Loader 262B	PDT02664
AB120		John Deere Tractor 4100	H213883
AB126	2006	Caterpillar Skid Steer Loader 262B	PDT03391
AB127	2006	Caterpillar Skid Steer Loader 262B	PDT00337
AB128	2006	Caterpillar Skid Steer Loader 262B	PDT03513
AB136	2006	Caterpillar Skid Steer Loader 262B	PDT04032
AB146	2007	Vermeer CX229 Mini Excavator	1VRY100R653000167
AB147	2007	Vermeer RT650-Ride-On Trencher	1VRZ0821951000334
AB149	2007	Caterpillar Skid Steer Loader 262B terra tires	PDT0464
AB150	2007	Caterpillar Skid steer 72GP Bucket	PDT04650
AB151	2007	Caterpillar Skid steer 72GP Bucket	PDT04639
AB156	1997	Caterpillar 928GZ Wheel Loader	DJD02645
AB165	2008	Bobcat Skid-Steer S300 Hi Flow	531117461
AB164	1997	Carolina Skiff Boat	EKHJ31521697
AB164	2009	Kara (carolina) Boat Trailer	5KTBS1711YF022390
AB169	1990	Carolina Fbglass Boat	CAIF0695C090
AB169	1985	Hori Boat Trailer	H24912851820
AB173	2008	Airboat	PAP00013E808
AB174	2009	Airboat trailler	1R5AB061591016052
	2007	36" Rapid Height Lawn Mower	38070
	2007	61" Velocity Turf Tiger Mower	C7400316
	2008	61" Velocity Kubota Scag Lawn Mower	D1000414
		BH-SQ160 Lawn Mower	12-08451

CONTRACTOR'S QUESTIONNAIRE
E-BID #20110079
EWIP LANDSCAPING & IRRIGATION / VARIOUS EWIP SITES

It is understood and agreed that the following information is to be used by the City of Port St. Lucie to determine the qualifications of Bidders to perform the work required. The Bidder waives any claim against the City that might arise with respect to any decision concerning the qualifications of the Bidder.

The undersigned attests to the truth and accuracy of all statements made on this questionnaire. Also, the undersigned hereby authorizes any public official, Engineer, Surety, Bank, material or equipment manufacturer or distributor, or any person, firm or corporation to furnish the City of Port St. Lucie any pertinent information requested by the City deemed necessary to verify the information on this questionnaire.

Dated this 14 day of July, 2011.

Arazoza Brothers Corporation
Name of Organization / Proposer

Submitted by: Alberto Arazoza President
Name and Title

(If more space is needed, please attach additional sheets.)

1. Type of Organization: Corporation, Partnership, Joint Venture, Individual or other? (*circle one*)

2. If a Corporation answer the following:
When incorporated feb 22, 1988
In what State Florida
Name of Officers: President Alberto Arazoza
Vice President Eduardo Arazoza
Secretary Alberto Arazoza
Treasurer Eduardo Arazoza

3. If a Partnership, answer the following: n/a
Date of organization
General Limited Partnership
Name and address of each partner:

(Attach additional pages if necessary)

4. Firm's name and main office address, telephone, fax number, and e-mail address, contact person:
Arazoza Brothers Corporation 15901 SW 242 St Homestead, Fl
Ph: (305) 2463223, fx (305) 2460481
Alberto Arazoza email: aarazoza@arazozabrothers.c

5. Firm's previous names (if any) — What year(s)

n/a

6. Area of expertise: Landscape and Irrigation

7. How many years has your organization been in business? 23yrs.

8. Describe organization profile, including the size, range of activities, licenses, etc.

see attached company package

(Attached additional pages if necessary.)

9. Number of full time personnel:

	Current	Maximum	Minimum
a. Partners	2	2	2
b. Managers	4	4	4
c. Supervisors Senior Staff	4	4	4
d. Other Professional Staff	87	87	87
g. Total number of full time personnel	97	97	97

10. What is the drainage construction experience of the principals and supervisory personnel of your organization?
(Add resumes of person that will be assigned to this project – limit one page per person.)

Name	Title	Years of Experience	% of Time to be Spent on City Projects	In What Capacity and With Whom
Tedd Kenny	General manager	20	15%	QA and oversight
Joe Quinn	PM	30	50%	Project Manager
Pepe Ruiz	Supervisor	22	30%	Supervisor

11. Firm's experience with similar contracts. Indicate which team member(s) was part of similar contracts. Indicate specifically the nature and extent of the work performed by the individual(s) or firms on prior similar contracts.

Name	Work Performed
See Attached	

12. Provide an organizational chart identifying relationship of entity and sub-contractors (if any) and the role description of key personnel proposed. Attached

13. State your firm's commitment to perform in a timely fashion:

See attached

14. Submit the current and projected workloads of identified key personnel to be assigned to this contract.

Name	Current and Projected Workloads
See attached	

15. State your firm's ability to meet budget and schedule:

See attached

16. Provide information regarding any favorable cost containment approaches or ideas that have been successful for you:

See attached

17. Identify any sub-contractor(s) that will be involved, including address(s) and a description of qualification(s). **The "Certification Regarding Lobbying" form must be submitted with each subcontractor listed.**

Name	Address	Qualifications
N/A		

18. Has the Bidder or any principals of the applicant organization failed to qualify as a responsible Contractor; refused to enter into a contract after an award has been made; failed to complete a contract during the past five (5) years; or been declared to be in default in any contract or been assessed liquidated damages in the last five (5) years? If yes, please explain:

No

(Attached additional pages if necessary.)

19. Has the Bidder or any of its principals ever been declared bankrupt or reorganized under Chapter 11 or put into receivership?

Yes ( ) No (✓)

If yes, please explain:

20. List any lawsuits pending or completed involving the corporation, partnership or individuals with more than ten percent (10 %) interest:

N/A

21. List any judgments from lawsuits in the last five (5) years:

N/A

22. List any criminal violations and/or convictions of the Bidder and/or any of its principals:

N/A

23. Is firm claiming to be a Certified Minority Business Enterprise as defined by the Florida Small and Minority Business Assistance Act of 1985, and in accordance with Florida State Statutes, #287.09451?

Yes (✓) No ( )

If "Yes" was checked, include a copy of certificate with proposal.

24. Has the Bidder obtained a Payment & Performance Bond within the last five (5) years?

Yes (✓) No ( )

If "Yes" was checked, state the bonding capacity of the firm. $ 10,000,000.00

25. Describe any significant or unique accomplishment in previous contracts. Include any additional data pertinent to firm's capabilities. (Please limit to two (2) pages)

See Attached

BALANCE OF PAGE INTENTIONALLY BLANK

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we Arazoza Brothers Corp.
15901 S.W. 242nd Street, Homestead, FL 33031

as Principal, hereinafter called the Principal, and The Guarantee Company of North America USA
25800 Northwestern Highway, Suite 720, Southfield, MI 48075

a corporation duly organized under the laws of the State of Michigan

as Surety, hereinafter called the Surety, are held and firmly bound unto City of Port St. Lucie, 270 S.W. Grove Avenue, Port St. Lucie, FL 34983

as Obligee, hereinafter call the Obligee, in the sum of Five Percent of Amount Bid (5%)

for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said Principal has submitted a bid for EWIP Landscaping & Irrigation at Various EWIP Sites

NOW, THEREFORE, if the Obligee shall accept the bid of the principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed July 14, 2011.

Witnesses:

Arazoza Brothers Corp. (Seal)

By: President

The Guarantee Company of North America USA (Seal)

By:
James F. Murphy, Attorney-In-Fact

THE GUARANTEE COMPANY OF NORTH AMERICA USA

Southfield, Michigan

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS: That **THE GUARANTEE COMPANY OF NORTH AMERICA USA**, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Gerald J. Arch, Shawn A. Burton, James F. Murphy, Joanne M. Mursell, Michael A. Holmes
Brown & Brown of Florida, Inc. ~ Ft. Lauderdale

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon **THE GUARANTEE COMPANY OF NORTH AMERICA USA** as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of **THE GUARANTEE COMPANY OF NORTH AMERICA USA** at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof; and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below
3. In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner – Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 31st day of December 2003, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, **THE GUARANTEE COMPANY OF NORTH AMERICA USA** has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 2nd day of February, 2010.

THE GUARANTEE COMPANY OF NORTH AMERICA USA

Stephen C. Ruschak, Vice President

Randall Musselman, Secretary

STATE OF MICHIGAN
County of Oakland

On this 2nd day of February, 2010 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of said Company.

Cynthia A. Takai
Notary Public, State of Michigan
County of Oakland
My Commission Expires February 27, 2012
Acting in Oakland County

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

Cynthia A. Takai

I, Randall Musselman, Secretary of **THE GUARANTEE COMPANY OF NORTH AMERICA USA**, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by **THE GUARANTEE COMPANY OF NORTH AMERICA USA**, which is still in full force and effect.

IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 14th day of July , 2011 .

Randall Musselman, Secretary

Licensed Pesticide Applicator Detail

Print

Close

Applicator's Name	City, State
KLOSS, ROBERT W	STUART,FL

License No.	License Status	License Type:
CM12109	Normal	Commercial RUP Applicator License

License Categories

Aquatic Pest Control, Right-Of-Way Pest Control

Original Issue Date	Last Issue Date	Expiration Date
11/12/1996	12/16/2008	11/30/2012

Company Name

Agent Count: 0

Licensed Pesticide Applicator Detail

Print

Close

Applicator's Name	City, State
KENNY, CODY ALLYN	LOXAHATCHEE,FL

License No.	License Status	License Type:
CM19608	Normal	Commercial RUP Applicator License

License Categories

Aquatic Pest Control, Natural Areas Weed Management, Right-Of-Way Pest Control

Original Issue Date	Last Issue Date	Expiration Date
1/30/2009	1/30/2009	1/31/2013

Company Name

Agent Count: 0

Licensed Pesticide Applicator Detail

Print

Close

Applicator's Name	City, State
MC DADE, PAUL DARRIN	DAVIE,FL

License No.	License Status	License Type:
CM11950	Normal	Commercial RUP Applicator License

License Categories

Aquatic Pest Control, Natural Areas Weed Management

Original Issue Date	Last Issue Date	Expiration Date
7/14/2000	1/29/2009	7/31/2012

Company Name

Agent Count: 0

Licensed Pesticide Applicator Detail

Print

Close

Applicator's Name	City, State
KENNY, TEDD ALLYN	LOXAHATCHEE,FL

License No.	License Status	License Type:
CM10001	Normal	Commercial RUP Applicator License

License Categories

Aquatic Pest Control, Natural Areas Weed Management, Right-Of-Way Pest Control

Original Issue Date	Last Issue Date	Expiration Date
9/24/1996	12/1/2008	10/31/2012

Company Name

Agent Count: 0

10. What is the drainage construction experience of the principals and supervisory personnel of your organization?

Arazoza Brothers President, Albert Arazoza is a license general contractor who's been involved in countless site construction, beautification and irrigation projects with drainage aspects, over the past 23 years. The Company has participated in multiple projects, which included drainage construction: whether as a subcontract to GCs, such as Russell Engineering or Community Asphalt on the Turnpike and Griffin Rd.; or as a prime contractor such as the construction of a wetland (including the installation of the drainage structures) for FDOT District 2.

13. State your firm's commitment to perform in a timely fashion.

Arazoza Brothers has committed each of the key project team members identified in the Bid to devote the time and resources necessary to complete the services required under this contract, as they arise. We have chosen the individuals with the appropriate talent to skills to respond to the potential needs on specific project assignments. When selecting staff to work on a project, we consider a variety of factors including staff availability to meet project deadlines, project complexity and scale, and the necessary performance schedule. Should we encounter any unexpected situations, The City can be certain that we will draw upon the experience of all of our resources to resolve the issues as quickly as possible. We realize that for the City of Port St. Lucie, just as for us, time is money and we are fully committed to perform our services on time or faster.

14. Submit the current and projected workloads of identified key personnel to be assigned to this contract.

Name	Current and Projected Workloads
Tedd Kenny, General Manager	Mr. Kenny will devote approximately 15% of his time to this project.
Joe Quinn, Project Manager	Mr. Quinn will devote approximately 50% of his time to this project.
Pepe Ruiz, Supervisor	Mr. Ruiz will devote approximately 30% of his time to this project.

15. State your firm's ability to meet budget and schedule:

Arazoza Brothers is accustomed to working on a wide variety of projects simultaneously. The firm has a long history of successfully managing multiple projects for both public and private clients. AB's proposed team of professionals will make this significant project a top priority. Our team is immediately available and committed to the successful execution and delivery of all task assignments that will be requested under this contract. It is imperative for AB to demonstrate to the City of Port St. Lucie that we will respond rapidly, provide ample personnel and resources, perform in a technically competent manner, and maintain complete project integrity, including services that are on time and within budget.

As a sizeable corporation with sound accounting and audited financials, we shall maintain accurate books, records and documents to reflect all costs, direct and indirect, expended in the performance of this contract. Over the years we have perfected inter-company procedures that streamline costs and ensure we remain on budget throughout the project timeline. Our supervisors meet on a weekly basis with the General Manager and Vice President. During these meetings we ensure that we adhere strictly to our estimates on any task orders. We never perform work that is not budgeted for by the City and we share each other's experience in the field to continue innovating and finding new ways to bring down costs and subsequent prices to the City.

Schedule and cost control are two of the most important factors in any public sector project. Producing quality service for the City of Port St. Lucie on schedule and within budget required the union of several elements:

Extensive experience in ecological restoration and enhancement, specifically exotic vegetation removal, including manual, chemical, and mechanical means.

A talented, cohesive team with all team members equally devoted to the success of the project.

The ability to maintain clear, open and on-going communications among all project team members and with the client.

Offering each of these strengths, members of the proposed team are committed to delivering the City's projects efficiently, on schedule and within the quoted costs.

16. Provide information regarding any favorable cost containment approaches or ideas that have been successful for you:

One such approach is having our crews work four 10-hour days per week instead of five 8-hour days. This has avoided superfluous overtime as well as reduced our fuel and administrative costs. The crews are satisfied since they get the same pay but have an extra day off and the work gets done faster when there are fewer "mornings" in the week, in which some workers are slower.

Arazoza Brothers also owns and operates over 300 acres of field and container grown plant nurseries under the name Agri Brothers Corporation. Specialized in native Florida stock, we can grow from seed to the project specifications. This not only results in tremendous cost containment, since growing from seed is vastly more economical, but it also ensures the ready supply of the specific plants needed for the job. Other landscapers, who do not operate their own nurseries, must source the materials elsewhere, which sometimes leads to lack of availability, especially with large quantities, or lack of uniform quality when purchasing from various nurseries.

25. Describe any significant or unique accomplishment in previous contracts. Include any additional data pertinent to firm's capabilities.

Arazoza Brothers is one of the foremost suppliers of landscape as well as wetland and upland restoration services in the State of Florida. Active for more than twenty years, the company has worked for countless environmental projects all over the State, and we have on-going projects on lands managed by both governmental and private entities.

Our Environmental Division is composed of experts in wetlands and uplands maintenance, restoration and conservation; experienced in all aspects of the project, from initial observation and documentation, though the development of cost estimates and mitigation schedules, to the removal of exotic plants, trees, shrubs and grasses, the re-establishment of a micro-topography and the installation of native plant material.

Over the years we have tackled unique and challenging projects with professionalism and verve, resulting in an unsurpassed reputation. One such example is the clearing and re-vegetation of Cape Florida (Key Biscayne) following Hurricane Andrew. Headquartered in Homestead, our company, its equipment and materials suffered substantial damage during the hurricane. Nevertheless, when we were called upon to participate in the restoration of Bill Baggs Park, we did so without hesitation and with exceptional results.

Over the past several years AB has had to deal with quite a few projects in which time was a critical factor. One such example is the landscaping on I95 between I195 and I395. The scope was $987,000.00 and included landscape alongside the highway and

surface side streets. This was done for FDOT District 6. The project needed to be expedited because of the Super Bowl, held in South Florida. AB finished 45 days early, with a highly-satisfied client.

Another example of working under a tight schedule is a project done for Granite Construction Co. and the FDOT, near Orlando. The project was the Turnpike Widening, from I4 to Gotha Road. The construction company had many delays, before landscaping even began. AB finally received instructions to commence work six months later than scheduled, but was still required to finish within the original budget and on time. Needless to say, we did.

E-Bid #20110079
BUY AMERICA CERTIFICATE OF COMPLIANCE

CERTIFICATE OF COMPLIANCE

COMPLIANCE

The Contractor hereby certifies that it will comply with the requirements of 23 C.F.R. 635.410, as amended, and utilize only iron or steel manufactured in the United States, or components made with iron or steel that meet the Buy America requirements. Contractor acknowledges that it will be required to produce Buy America certification(s) from the producer(s) of the steel or iron or components prior to incorporating any such materials into the work or project.

Company Name: Arazoza Brothers Corporation

Authorized By: _____ Alberto Arazoza
(Sign) (Print Name)

Title: President Date: 7/1+/11

E-BID #20110079

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

The Contractor certifies that, the firm or any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of federal funds:

(a) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR s29.110(a), by any federal department or agency;

(b) have not within a three-year period preceding this certification been convicted of or had a civil judgment rendered against it for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state, or local government transaction or public contract; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property

(c) are not presently indicted for or otherwise criminally or civilly charged by a federal, state, or local governmental entity with commission of any of the offenses enumerated in paragraph (b) of this certification; and

(d) have not within a three-year period preceding this certification had one or more federal, state, or local government public transactions terminated for cause or default.

The Contractor certifies that it shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this project by any federal agency unless authorized by the Florida Department of Transportation."

Company Name: Arazoza Brothers Corporation

Authorized By: _____ Arsenio Arazoza
(Sign) (Print Name)

Title: President Date: 7/14/11

EWIP Landscaping & Irrigation/ Various EWIP Sites

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

E-Bid #20110079

State of Florida }

County of Dade }

Alberto Arazoza ; being first duly sworn, disposes and says that:
(Name/s)

1. They are President of Arazoza Brothers Corporation the Bidder that
(Title) (Name of Company)

has submitted the attached bid/PROPOSAL;

2. He is fully informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such Bid/PROPOSAL;

3. Such Bid/Proposal is genuine and is not a collusive or sham Bid;

4. Neither the said Bidder/Proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Proposer, firm or person to submit a collusive or sham Bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such Contract or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Proposer, firm or person to fix the price or prices in the attached Proposal or of any other Proposer, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Port St. Lucie or any person interested in the proposed Contract; and

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

(Signed) _____

(Title) President

STATE OF FLORIDA }
COUNTY OF ST. LUCIE }SS:

The foregoing instrument was acknowledged before me this 7/14/2011
(Date)

by: Alberto Arazoza who is personally known to me or who has produced

_____ as identification and who did (did not) take an oath.

_____
Notary (print & sign name)

Commission No. DD758399

ROSEMARY ARENSIO
MY COMMISSION EXPIRES
May 28, 2012
#DD 758399
Bonded thru Notary Public Underwriters
NOTARY PUBLIC, STATE OF FLORIDA

E-BID #20110079
CERTIFICATION REGARDING LOBBYING

The undersigned Contractor certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying", 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the awards documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. 1352 (1)-(2)(A), any person who makes a prohibited expenditure of fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure]

The Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, *apply* to this certification and disclosure, if any.

Company Name: Arazoza Brothers Corporation

Authorized By: _____ Alberto Arazoza
(Sign) (Print Name)

Title: President Date: 7/14/11

(All Subcontractors are required to submit this form with the Prime Contractor's Bid)

DRUG-FREE WORKPLACE FORM

The undersigned vendor in accordance with Section 287.087, Florida Statutes hereby certifies that Arazoza Brothers Corporation does:

(Name of Business)

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

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

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

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

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

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

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

Bidder's Signature

7/14/11

Date

TRENCH SAFETY ACT COMPLIANCE STATEMENT

Project Name: EWIP Landscaping & Irrigation / Various EWIP Sites

Project Location: Port St. Lucie, Florida

Project Number 20110079

Project Location (See Plans)

Instructions:

Chapter 90-96 of the Laws of Florida requires all Contractors' engaged by The City of Port St. Lucie, Florida to comply with Occupational Safety and Health Administration Standard 29 C.F.R. s. 1926.650 Subpart P. All prospective Contractor's are required to sign the compliance statement and provide compliance cost information where indicated below. The costs for complying with the Trench Safety Act must be incorporated into this project's base bid.
Certify this form in the presence of a notary public or other officer authorized to administer oaths.

Certification

1. I understand that Chapter 90-96 of the Laws of Florida (The Trench Safety Act) requires me to comply with OSHA Standard 29 C.F.R. s. 1926.650 Subpart P. I will comply with The Trench Safety Act and I will design and provide trench safety systems at all trench excavations in excess of five feet in depth for this project.

2. The estimated cost imposed by compliance with The Trench Safety Act will be:

   ___Ø___ Dollars (Written) N/A (Figures)

3. The amount listed above has been included within the Base Bid.

   Certified: Arazoza Brothers Corporation
   (Company-Contractor)

   By: _____
   (President's Signature)
   (President's Typed or Printed Name)

Sworn to and subscribed before me in Dade County, Florida on the 14 day of July 2011.

_____
NOTARY PUBLIC

ROSEMARY ASENSIO
MY COMMISSION EXPIRES May 23, 2012
#DD 758399
Bonded thru Notary Public Underwriters
NOTARY PUBLIC, STATE OF FLORIDA

OP ID: D3

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/28/11

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Brown & Brown of Florida, Inc. 1201 W Cypress Creek Rd # 130 P.O. Box 5727 Ft. Lauderdale, FL 33310-5727 James F. Murphy 954-776-2222 954-776-4446	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: ARAZO-2
INSURED Arazoza Brothers Corporation, Agri Brothers Corp, Arcost LLC Abre Investment LLP, Abre Hendry LLC, Arco Partners LLC P.O. Box 924890 Princeton, FL 33092	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Hanover American Insurance Co — 36064 INSURER B : Hanover Insurance Co. — 22292 INSURER C : Bridgefield Casualty Ins Co — 10335 INSURER D : INSURER E : INSURER F :

COVERAGES — CERTIFICATE NUMBER: — REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC			LZJ838553105	08/05/10	08/05/11	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Emp Ben	$ 1,000,000 $ 500,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $ 1,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			AZJ837787304 AZJ837787304 AZJ837787304	08/05/10 08/05/10 08/05/10	08/05/11 08/05/11 08/05/11	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
B	UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE X RETENTION $			UHJ838553504	08/05/10	08/05/11	EACH OCCURRENCE AGGREGATE Prod. Agg	$ 8,000,000 $ 8,000,000 $ 8,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		01965966	04/01/11	04/01/12	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
A	Leased & Rented Equipment			IHJ364248502	08/05/10	08/05/11	Each Item Aggregate	200,000 200,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

City of Port St Lucie is listed additional insured with respects to general liability as required by written contract. *10 Day Notice of Cancellation for Non Payment.

CERTIFICATE HOLDER

PORTSAI

City of Port St Lucie
121 SW Port St Lucie Blvd
Port St Lucie, FL 34984

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Michael Hurley

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summit

...the people who know workers' comp℠

LOSS CONTROL SERVICES

February 21, 2002

Ms. Rosey Ferrino
Arazoza Brothers Corporation
Post Office Box 924890
Princeton, FL 33092

To Whom It May Concern:

Arazoza Brothers Corporation, including Agri Brothers Corporation and Aqualawn, Inc., has an active workers' compensation insurance policy with Bridgefield Employers Insurance Company.

We have reviewed and verified the compliance of their Drug-Free Workplace Program with the Florida requirements under F.S. 440.102.

Accordingly, we consider Arazoza Brothers Corporation, including Agri Brothers Corporation and Aqualawn, Inc., an active employer in good standing with the Drug-Free Workplace Program. We have issued premium credit applicable to their workers' compensation insurance policy effective March 10, 2000.

Sincerely,

Steven A. Smithson
Director

SAS:mlh

P.O. Box 1087 • Lakeland, FL 33802-1087
(863) 665-6060 • 1-800-282-7648 • Fax (863) 665-3546
www.summitholdings.com

Contents of this report are based upon conditions and practices observed and information supplied by company personnel at the time of this visit. It is not purported to list all hazards nor to indicate that other hazards do not exist. There is no guarantee of exemption from citation by any legally constituted authority of any state or federal occupational safety and health standard. Recommendations made by Summit Loss Control Services, Inc., are advisory and are designed to assist the employer in the establishment and maintenance of his own loss-prevention activities. Summit Loss Control Services, Inc., assumes no responsibility for the control of these activities nor for the correction of the conditions pointed out within the body of this report.

Arazoza Bros., Corp.

P.O. Box 924890, Homestead, Florida 33092 – (305) 246-3223 – Fax (305) 246-0481

Certifications, Licenses and Qualifications

MBE Certifications	Exp Date
City of Orlando	3/31/2013
City of Tampa	3/31/2013
State of Florida Dept of Supplier Diversity "Florida Statewide"	1/11/2012
Southern Florida Minority Supplier Development	6/1/2012
Lee County	1/11/2012
Miami-Dade County Public Schools	6/6/2013

Contractor Licenses	Exp Date
State of Florida Registered Contractor CGC#1506166	8/31/2012
Collier County Contractor License #34894	9/30/2012
City of Delray Beach #123690	9/30/2011

Landscape Licenses	Exp Date
Dade County Occupational #222152-1	9/30/2011
Broward Tree Trimming #189C-129	9/30/2011
Broward County Occupational #324-0224739	9/30/2011
City of Delray Beach #123690	9/30/2011
Collier County Landscape License #18087	9/30/2011
Duval County/ City of Jacksonville #134124	9/30/2011
Palm Beach County #1996-09852	9/30/2011
Village of Royal Palm Beach	9/30/2011
Pesticide Commercial Applicator License #CM10001	10/31/2012
Pesticide Commercial Applicator License #CM11950	7/31/2012
DEP Stormwater Mgt Instructor DEP#221	

Irrigation Licenses	Exp Date
Dade County Occupational #407669-1	9/30/2011
Dade County Municipal #30-4076691	9/30/2011
Dade County CC #04P000860	9/30/2011
Broward County Occupational #182-000125	9/30/2011
Broward County CC#04-CLS-741-R	8/31/2012
City of Delray Beach	9/30/2011
Collier County Contractor License #27940	9/30/2011
Martin County CC#CIS4274	9/30/2012
Martin County Occupation #2005-518-0019	9/30/2011
Palm Beach County Occupational #2005-01572	9/30/2011
Palm Beach County CC#U-20084	9/30/2011

Qualifications	Exp Date
Florida Certified Landscape Contractor (FNGLA) #C30148	3/31/2013
FDOT Landscape Contractor Prequalification	6/30/2012
City of Clearwater	3/10/2012

The Florida Nursery, Growers & Landscape Association

Confers on

Eduardo Arazoza, Sr.

Certificate No. C33 0148

The Title of

FNGLA Certified Landscape Contractor (FCLC)

FNGLA

March 31, 2013
Expiration Date

April, 1998
Certified Since

State of Florida

Minority, Women & Service-Disabled Veteran

Business Certification

Arazoza Brothers Corporation

Is certified under the provisions of
287 and 295.187, Florida Statutes for a period from:

January 11, 2010 to January 11, 2012

Torey Alston, Executive Director

Florida Department of Management Services
Office of Supplier Diversity

Office of Supplier Diversity • 4050 Esplanade Way, Suite 380 • Tallahassee, FL 32399-0950 • 850.487.0915 • www.osd.dms.state.fl.us

Southern Florida Minority Supplier Development Council

THIS CERTIFIES THAT

Arazoza Brothers Corporation

Has met the requirements for certification as a bona fide Minority Business Enterprise as defined by the National Minority Supplier Development Council, Inc.® (NMSDC®) and as adopted by the Southern Florida Minority Supplier Development Council

**NAICS Code(s): 561730 ; 562910

**Description of their product/services as defined by the North American Industry Classification System (NAICS)

06/01/2011	FL01907
Issued Date	*Certificate Number*
06/01/2012	Beatrice Louissaint, Président, SFMSDC
Expiration Date	

By using your assigned (through NMSDC only) password, NMSDC Corporate Members may view the original certificate by logging in at: http://www.nmsdc.org.

An affiliate of the National Minority Supplier Development Council, Inc.® (NMSDC®)

State of Florida

Department of State

I certify from the records of this office that ARAZOZA BROTHERS CORPORATION is a corporation organized under the laws of the State of Florida, filed on February 22, 1988.

The document number of this corporation is K15656.

I further certify that said corporation has paid all fees due this office through December 31, 2010, that its most recent annual report was filed on April 27, 2010, and its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of Florida, at Tallahassee, the Capital, this the Twenty Eighth day of April, 2010

Secretary of State

Authentication ID: **500177992015-042810-K15656**

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.
https://efile.sunbiz.org/certauthver.html

CITY OF PORT ST. LUCIE
E-BID # 20110079

PROJECT TITLE: EWIP Landscaping & Irrigation / Various EWIP Sites

CONTRACTOR VERIFICATION FORM

THE FOLLOWING IS TO COMPLETED BY PRIME BIDDER:

Name of Firm: Arazoza Brothers Corporation

Corporate Title: Florida Corporation

Address: 15901 SW 242 St. / PO Box 904890

Homestead FL 33031
(Zip Code)

By: Alberto Arazoza President
(Print name) (Print title)

(Authorized Signature)

Telephone: (305) 246-3333

Fax: (305) 246-0481

State License # CGC1506466 (ATTACH COPY)

County License # 222152-1 (ATTACH COPY)

City License: (ATTACH PROOF OF REGISTRATION WITH THE CITY)

Type of License: City of Port St Lucie

Unlimited yes (yes/no)

If "NO", Limited to what trade? General Contractor

AC# 4408877

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD

SEQ# L09051900560

DATE	BATCH NUMBER	LICENSE NBR
05/19/2009	088220564	QB26966

The BUSINESS ORGANIZATION
Named below IS QUALIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2011
(THIS IS NOT A LICENSE TO PERFORM WORK. THIS ALLOWS COMPANY TO DO BUSINESS ONLY IF IT HAS A QUALIFIER.)

ARAZOZA BROTHERS CORPORATION
15901 SW 242 STREET
HOMESTEAD FL 33031

CHARLIE CRIST
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CHARLES W. DRAGO
SECRETARY

AC# 4980714

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD

SEQ# L10060200549

DATE	BATCH NUMBER	LICENSE NBR
06/02/2010	000000000	CGC1506166

The GENERAL CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2012

ARAZOZA, ALBERTO JOSE
ARAZOZA BROTHERS CORPORATION
15901 SW 242 STREET
HOMESTEAD FL 33031

CHARLIE CRIST
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CHARLIE LIEM
INTERIM SECRETARY

MIAMI-DADE COUNTY
TAX COLLECTOR
140 W. FLAGLER ST.
1st FLOOR
MIAMI, FL 33130

2010 LOCAL BUSINESS TAX RECEIPT 2011
MIAMI-DADE COUNTY - STATE OF FLORIDA
EXPIRES SEPT. 30, 2011
MUST BE DISPLAYED AT PLACE OF BUSINESS
PURSUANT TO COUNTY CODE CHAPTER 8A - ART. 9 & 10

FIRST-CLASS
U.S. POSTAGE
PAID
MIAMI, FL
PERMIT NO. 231

THIS IS NOT A BILL - DO NOT PAY

211194-6 RENEWAL

BUSINESS NAME / LOCATION RECEIPT NO. 222152-1

ARAZOZA BROTHERS INC
15901 SW 242 ST
33031 UNIN DADE COUNTY

OWNER
ARAZOZA BROTHERS INC

Sec. Type of Business EMPLOYEE/S
213 SERVICE BUSINESS 50

THIS IS ONLY A LOCAL BUSINESS TAX RECEIPT. IT DOES NOT PERMIT THE HOLDER TO VIOLATE ANY EXISTING REGULATORY OR ZONING LAWS OF THE COUNTY OR CITIES, NOR DOES IT EXEMPT THE HOLDER FROM ANY OTHER PERMIT OR LICENSE REQUIRED BY LAW. THIS IS NOT A CERTIFICATION OF THE HOLDER'S QUALIFICATIONS.

NOT A CONTRACTORS RECEIPT

DO NOT FORWARD

ARAZOZA BROTHERS INC
ALBERTO ARAZOZA
P O BOX 924890
PRINCETON FL 33092

PAYMENT RECEIVED
MIAMI-DADE COUNTY TAX COLLECTOR:
07/09/2010
09010061001
000375.00

558

SEE OTHER SIDE

MIAMI-DADE COUNTY
TAX COLLECTOR
140 W. FLAGLER ST.
1st FLOOR
MIAMI, FL 33130

2010 LOCAL BUSINESS TAX RECEIPT 2011
MIAMI-DADE COUNTY - STATE OF FLORIDA
EXPIRES SEPT. 30, 2011
MUST BE DISPLAYED AT PLACE OF BUSINESS
PURSUANT TO COUNTY CODE CHAPTER 8A - ART. 9 & 10

FIRST-CLASS
U.S. POSTAGE
PAID
MIAMI, FL
PERMIT NO. 231

THIS IS NOT A BILL - DO NOT PAY

552423-7 RENEWAL

BUSINESS NAME / LOCATION RECEIPT NO. 407669-1

ARAZOZA BROTHERS CORP CC # 04P000960
15901 SW 242 ST
33031 UNIN DADE COUNTY

OWNER
ARAZOZA BROTHERS CORP

Sec. Type of Business WORKER/S
196 SPECIALTY PLUMBING CONTRACTOR 3

THIS IS ONLY A LOCAL BUSINESS TAX RECEIPT. IT DOES NOT PERMIT THE HOLDER TO VIOLATE ANY EXISTING REGULATORY OR ZONING LAWS OF THE COUNTY OR CITIES, NOR DOES IT EXEMPT THE HOLDER FROM ANY OTHER PERMIT OR LICENSE REQUIRED BY LAW. THIS IS NOT A CERTIFICATION OF THE HOLDER'S QUALIFICATIONS.

DO NOT FORWARD

ARAZOZA BROTHERS CORP
ALBERT ARAZOZA PRES
PO BOX 924890
HOMESTEAD FL 33092

PAYMENT RECEIVED
MIAMI-DADE COUNTY TAX COLLECTOR:
07/20/2010
02280042002
000075.00

59

SEE OTHER SIDE

CTQB

Construction Trades Qualifying Board
BUSINESS CERTIFICATE OF COMPETENCY

04P000960

ARAZOZA BROTHERS CORPORATION

D.B.A.:

ARAZOZA ALBERTO

Is certified under the provisions of Chapter 10 of Miami-Dade County

VALID FOR CONTRACTING UNTIL 09/30/2011

QUALIFYING TRADE(S)

0003 LAWN SPRINKLER

Herminio Gonzalez P.E.
Secretary of the Board
Miami-Dade County retains all property rights herein.

MIAMI-DADE COUNTY

www.miamidade.gov/buildingcode

CITY OF PORT ST. LUCIE
BUILDING DEPARTMENT
COMPUTER SERVICE MEMBER
EXPIRE: 09/30/12

111105

ARAZOZA, ALBERTO
ARAZOZA BROTHERS CORPORATION
15901 SW 242 ST
HOMESTEAD, FL 33031

SIGNATURE _____

GENERAL CONTRACTOR

FL#: CGC1506166

PSL12*11385

CHECKLIST
E-Bid #20110079
EWIP Landscaping & Irrigation / Various EWIP Sites

Name of Bidder: Arazoza Brothers Corporation

This checklist is provided to assist Bidders in the preparation of their bid response. Included in this checklist are important requirements that are the responsibility of each Bidder to submit with their response in order to make their bid response fully compliant. This checklist is only a guideline -- it is the responsibility of each Bidder to read and comply with the Sealed E-Bid in its entirety.

✓ E-Bid Reply Sheet #20110079 with proper signature uploaded to Demandstar.

✓ E-Bid Reply Excel Spreadsheet uploaded to Demandstar.

✓ Drug-Free Workplace Form uploaded to Demandstar.

✓ 5% Bid Bond uploaded to Demandstar and mailed in immediately after opening.

✓ All pricing has been mathematically reviewed and all corrections have been initialed.

✓ All price extensions and totals have been thoroughly checked.

✓ Each Bid Addendum (when issued) is acknowledged on the E-Bid Reply Sheet #20110079.

✓ Required W-9 as per Section 1.24.1 uploaded to Demandstar.

✓ Copy of Insurance Certificate in accordance with Section 5 of the E-Bid documents uploaded to Demandstar.

✓ Copy of all required licenses and certifications to do work in the City of Port St. Lucie uploaded to Demandstar.

✓ Have reviewed the Contract and accept all City Terms and Conditions.

✓ Contractor's Questionnaire uploaded to Demandstar.

✓ Required forms: Non-Collusion Affidavit of Prime Bidder; Buy America Certificate of Compliance; Certification Regarding Lobbying; Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions; and Contractor Verification Form. All forms are to be uploaded to Demandstar.

N/A No Subs List of all sub-contractors with required forms for "Certification Regarding Lobbying" and Minority Status Statement. (Use the Questionnaire for the Minority Status providing all sub-contractors are listed). All requested information is to be uploaded to Demandstar.

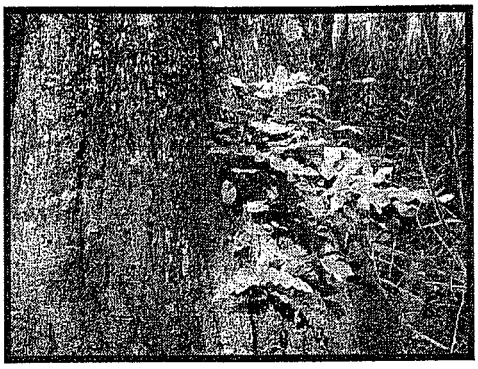
✓ 5 completed Reference Check Forms uploaded to Demandstar.

✓ Copy of the Checklist uploaded to Demandstar.

THIS FORM SHOULD BE RETURNED WITH YOUR E-BID REPLY SHEET

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481



Project:	**Billy Creek Filter Marsh & Park**	
Location:	Ft. Myers, FL	
Contact:	Scott Loiacano Wright Construction 5811 Youngquist Road Ft. Myers, FL 33912 (239) 481-5000	
Progress:	June 2009 – Currently in Progress	
Contract Amount:	$163,516.40	
Project Team:	Tedd Kenny Jose Ruiz Cody Kenny	General Manager Project Manager Superintendent

---

Scope of Services:
Installation of native plants in Filter Marsh project for Billy Creek in Fort Myers, Florida.

Summary of Work:
Project included installation of aquatic plants in marsh and lake area, Xeriscape plants in upland buffer area, palm relocations throughout the project, sodding of berms and roadway areas.

Project also included ongoing weekly maintenance to preserve health of plants and to control nuisance exotic weeds in planted areas.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project: **Everglades Reforestation**

Location: Everglades, Broward Co. FL

Contact: Justin ____
Florida Fish & Wildlife
Conservation Commission
(FWC)
8535 Northlake Boulevard
West Palm Beach, FL 33412

Proress: Completed 2002

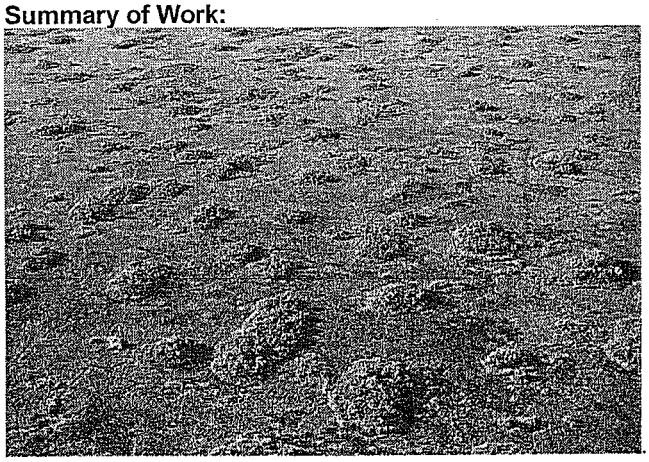
Contract Amount: ~$150,000

Project Team:

Tedd Kenny	Project Manager
Paul McDade	Supervisor

Scope of Services:
Reforestation and restoration

Summary of Work:



Restoration and reforestation of tree islands. After removal of invasive exotics was completed, we planted native species, including red maple, pond apple, dahoon holly, bald cyprus and other trees and shrubs. About 5,000 three-gallon, 4'-6' high trees. We built wire cages around each tree to protect them from damage by deer and hogs

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project: **Everglades Reforestation**

Location: Everglades, Broward Co. FL

Contact: Justin ____
Florida Fish & Wildlife
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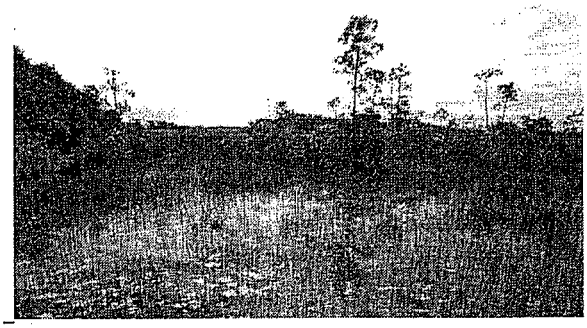
8535 Northlake Boulevard
West Palm Beach, FL 33412



Proress: Completed 2003

Contract Amount: $150,000

Project Team: Tedd Kenny Project Manager
Paul McDade Supervisor

Scope of Services:
Reforestation and restoration

Summary of Work:

Restoration and reforestation of tree islands. After removal of invasive exotics was completed, we planted native species, including red maple, pond apple, dahoon holly, bald cyprus and other trees and shrubs. About 5,000 three-gallon, 4'-6' high trees. We built wire cages around each tree to protect them from damage by deer and hogs

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Calusa Cove**	
Location:	Miami, FL	
Contact:	Kria Martinez Riverstone Residential Group 8000 S.W. 210 Street Miami, FL 33189 (305) 969-0594	
Progress:	In Progress	
Contract Amount:	$34,250.00	
Project Team:	Tedd Kenny Paul McDade	General Manager Supervisor

Scope of Services:
Mitigation of preserve area

Summary of Work:
Project includes removal of Australian Pines, Melaleucas, Brazilian Peppers and other exotic plants from preserve. Work also includes planting of Leather Fern, Wild Coffee and Cocoplum. In addition, contract provides for maintenance of conservation easement free of exotics in order to enable the acquisition of DERM permits.

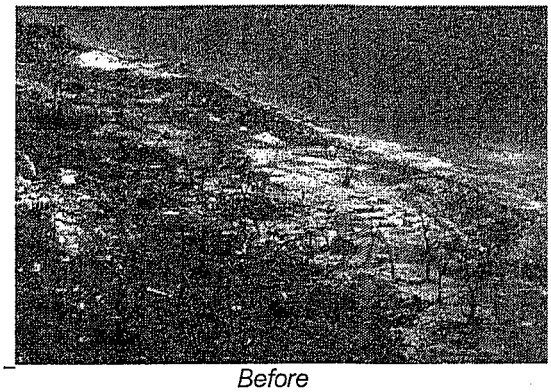
Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project: **Cape Florida Restoration**

Location: Cape Florida, Key Biscayne

Contact: Jim Ross
Florida Department of Environmental Protection (DEP)
3900 Commonwealth Boulevard M.S. 49
Tallahassee, Florida 32399
850-245-2118



Before

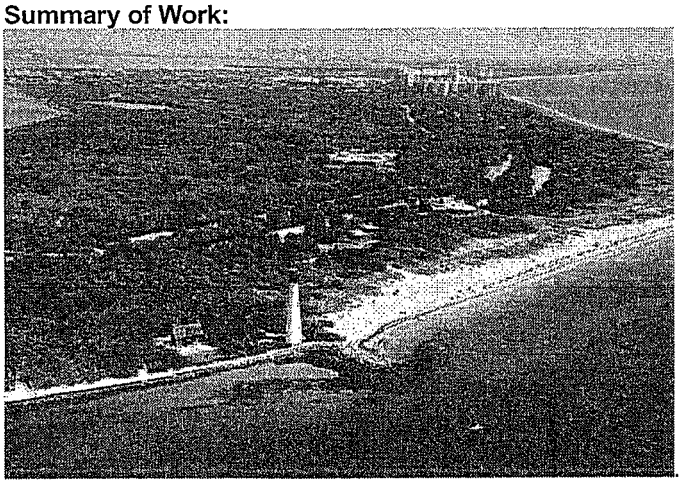
Contract Amount: ~$2,000,000

Project Team:

Eddy Arazoza	Project Manager
Hubaldo Lomelí	Supervisor
Pepe Ruíz	Supervisor

Scope of Services:
Reforestation and restoration

Summary of Work:



After

Restoration of most of Cape Florida, following Hurricane Andrew, to its original natural habitat state from the 1940s. Planting of thousands of native trees, palms, shrubs and ground cover, including pigeon plum, gumbo limbo, native fichus area – banyan trees, and many other species

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Storm Water Pond Planting Projects: FN#421207-1-52-01 E7D48**	
Location:	Citrus County, FL	
Contact:	William Moriaty FDOT District 7- Tampa Construction Office 2822 Leslie Road, MS 7-1110 Tampa, Florida 33619 (813) 975-6442	
Progress:	Completed 2009	
Contract Amount:	$450,000.00	
Project Team:	Tedd Kenny Jose Ruiz	Project Manager Superintendent

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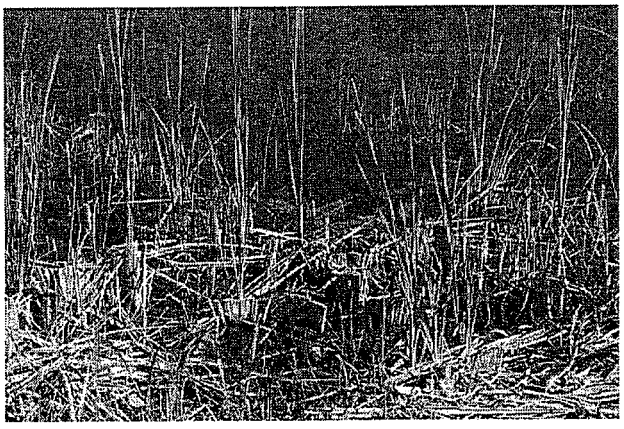
Scope of Services:
Clearing and grubbing of sites to remove exotics. Plating of native species. One year warranty and maintenance, including water, fertilization and tree pruning.

Summary of Work:
Project included planting of various storm water ponds located throughout district 7. Arazoza Brothers Corp. did initial cleanups to remove exotics, prepare the area for planting and install a variety of native plant species.



Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Storm Water Pond Planting Projects: FN#421207-3-52-01 E7D50**	
Location:	Hillsborough County, FL	
Contact:	William Moriaty FDOT District 7- Tampa Construction Office 2822 Leslie Road, MS 7-1110 Tampa, Florida 33619 (813) 975-6442	
Progress:	Completed 2009	
Contract Amount:	$450,000.00	
Project Team:	Tedd Kenny Jose Ruiz	Project Manager Superintendent

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Scope of Services:
Clearing and grubbing of sites to remove exotics. Plating of native species. One year warranty and maintenance, including water, fertilization and tree pruning.

Summary of Work:
Project included planting of various storm water ponds located throughout district 7. Arazoza Brothers Corp. did initial cleanups to remove exotics, prepare the area for planting and install a variety of native plant species.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

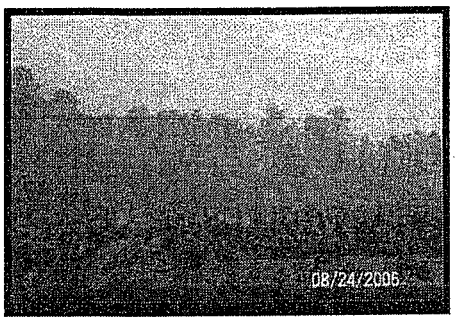
Project:	**Storm Water Pond Planting Projects: FN#421207-4-52-01 E7D51**	
Location:	Pasco County, FL	
Contact:	William Moriaty FDOT District 7- Tampa Construction Office 2822 Leslie Road, MS 7-1110 Tampa, Florida 33619 (813) 975-6442	
Progress:	Completed 2009	
Contract Amount:	$450,000.00	
Project Team:	Tedd Kenny Jose Ruiz	Project Manager Superintendent

Scope of Services:
Clearing and grubbing of sites to remove exotics. Plating of native species. One year warranty and maintenance, including water, fertilization and tree pruning.

Summary of Work:
Project included planting of various storm water ponds located throughout district 7. Arazoza Brothers Corp. did initial cleanups to remove exotics, prepare the area for planting and install a variety of native plant species.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481



Project:	**FIN#209513-5-52-01 T2128** **SR212 Beach Blvd**
Location:	Lake City, FL
Contact:	Chris Beury FDOT District Two 1109 So Marion Ave Lake City, FL 32025-5874 (904) 744-3368
Progress:	Completed April 2006
Contract Amount:	$1,376,590.00
Project Team:	Tedd Kenny — General Manager Bobby Pickle — Project Manager Mario Gutierrez — Superintendent

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Scope of Services:
Construction and Creation of Wetland for FDOT District 2

Summary of Work:
Construction and creation of wetland site on parcel of land owned by FDOT. Activities included clearing & grubbing, excavation, grading, hauling of excess fill material, installation of drainage structures, planting of wetland species, monthly maintenance to control exotic weed species, quarterly monitoring to document survival and coverage of planted species as well as recruited species.

*2179 3 gallon native trees were planted 10' off center.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**FIN 227708-1-52-01T4132** **CR818 Griffin Rd at LC11** **Broward County**	
Location:	Hialeah, FL	
Contact:	Felipe Fernandez Community Asphalt 14005 NW 186 St Hialeah, FL (305) 829-0700	
Progress:	Completed February 2010	
Contract Amount:	$983,891.47	
Project Team:	Tedd Kenny Jose Ruiz **********	General Manager Project Manager Superintendent

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Scope of Services:
*Installation of Landscaping
*Installation of irrigation system with two pumps
*Installation of aquatic plants in mitigation ponds
*Tree Relocation

Summary of Work:

Project included the installation of landscaping, irrigation and planting of mitigation ponds. Project also included relocates of native trees impacted by construction and the canopy pruning of remaining trees done by staff certified arborists.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Heron Bay Wetlands Mitigation**	
Location:	Coral Springs, FL	
Contact:	Jane Early North Springs Improvement District 10300 NW 11 Manor Coral Springs, FL 33071 (954) 426-6112 ext 203	
Progress:	Completed October 2009	
Contract Amount:	$503,802.00	
Project Team:	Tedd Kenny Jose Ruiz	Project Manager Superintendent

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Scope of Services:

Contracted to remove all exotics from previously planted wetlands. Replant wetlands to achieve 100% coverage of desirable plants. Upon completion of restoration contract became that of maintenance with monthly service for a period of two years.

Summary of Work:

Heron Bay is a golf course community located in Coral Springs, FL. The property boasts a beautiful 18 hole golf course nestled next to the everglades. The course is surrounded by 357 acres of lakes, canals, wetland preserves and upland buffers. ABC was contracted to remediate the previously planted wetlands and uplands by removing exotic vegetation and replanting with desirable native plants. The contract also included 2 years of monthly aquatic maintenance and upland/wetland maintenance to control exotics.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project: **Indian River Drive Phase II Shoreline Re-vegetation**

Location: Ft. Pierce, FL, along Indian River

Contact: St. Lucie County
2300 Virginia Ave
Ft. Pierce, FL 34982

Contract Amount: $2,400,000

Project Team:		
	Eddy Arazoza	General Manager
	Jose Ruiz	Supervisor

Scope of Services:
The work done under this contract was the restoration of the banks of the Indian River Lagoon damaged by the 2004/2005 hurricanes.

Summary of Work:
Project included installation of Sea Oats and Spartina Patens, Salt Meadow Cord Grass, as well as Sea Grapes, Green Buttonwoods and Saw Palmettos. Red Mangroves were also planted. Some slopes were too steep to plant and were stabilized by jute netting.

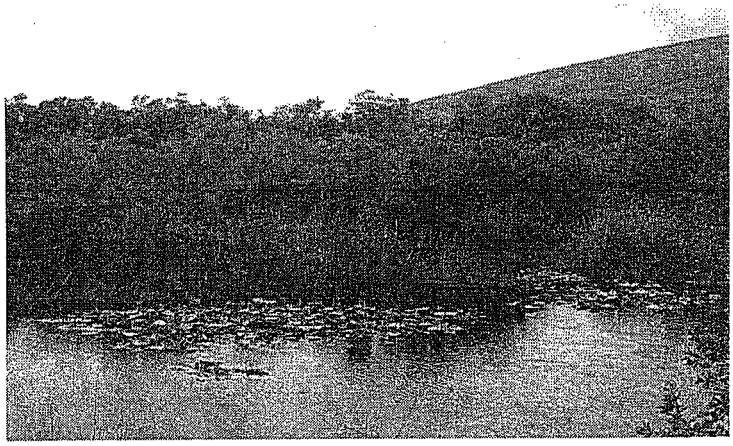
Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Exotic & Nuisance Control Services**	
Location:	Miami, FL	
Contact:	Steve Christensen Miami Dade County Dept. of Solid Waste Management 1050 Royal Palm beach Boulevard Royal Palm Beach, FL 33411 (561) 790-5178	
Progress:	Currently in Progress	
Contract Amount:	$55,500.00/anually	
Project Team:	Tedd Kenny Jose Ruiz	Project Manager Superintendent

Scope of Services:
Exotic and nuisance vegetation control for created wetlands located adjacent to four landfills in Miami-Dade county.

Summary of Work:
Exotic species control to maintain the planted wetland and preserve areas free of exotics. Work includes hand removal of Melaleuca seedlings, hand pulling of vines and herbicide treatment targeting torpedo grass, cat tails and primrose willows. Contract also includes a semi annual monitoring report to document spread and growth of desirable species as well as control efforts to maintain nuisance and exotic species to less than 10%.



Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Pennsuco Mitigation Project**	
Location:	Medley, FL	
Contact:	Gisele Colbert ESciences 5310 NW 33rd ave, Ste. 201 Fort Lauderdale, Fl. 33309 (954) 484-8500	
Progress:	In Progress	
Contract Amount:	$479,000.00	
Project Team:	Tedd Kenny Cody Kenny	General Manager Supervisor

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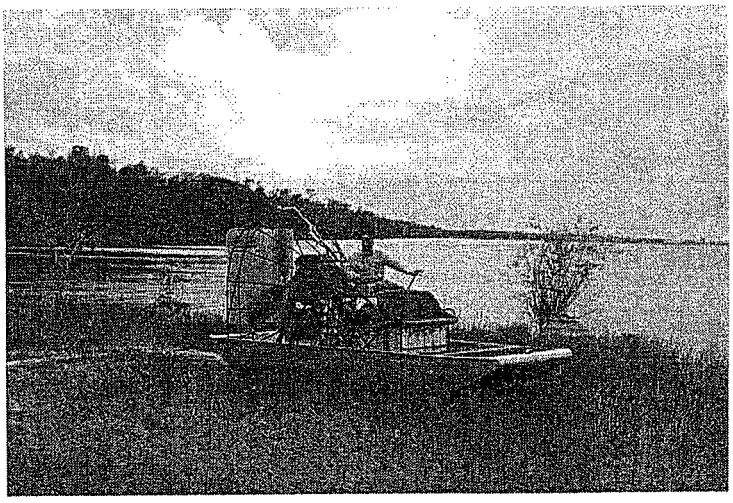
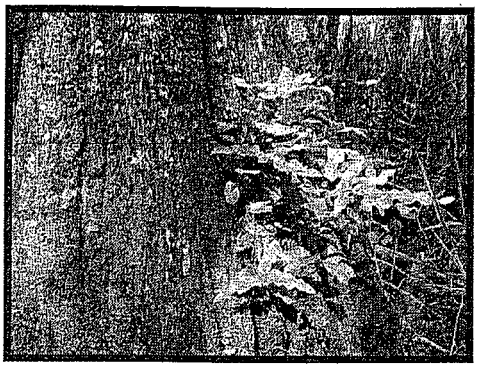
Scope of Services:
Mitigation of mining pits for Titan America: Clearing of exotics from lakes and shoreline; planting of native aquatic and other plants.

Summary of Work:
Project includes removal of Australian Pines, Melaleucas and other trees from shoreline and herbicide spraying of Torpedo Grass, Cattails, Primrose Willows and other aquatic invasives in two lakes. Work also includes planting of both shoreline and lakes with Cord Grass, Maidencane, Pickerel Weed, Duck Potato, Soft Stem Bulrush and Alligator Flag as well as some native trees. Contract also provides for maintenance of lakes and shoreline free of exotics.



Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481



Project:	**Billy Creek** **Filter Marsh & Park**
Location:	Ft. Myers, FL
Contact:	Scott Loiacano Wright Construction 5811 Youngquist Road Ft. Myers, FL 33912 (239) 481-5000
Progress:	June 2009 – Currently in Progress
Contract Amount:	$163,516.40
Project Team:	Tedd Kenny — General Manager Jose Ruiz — Project Manager Cody Kenny — Superintendent

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Scope of Services:
Installation of native plants in Filter Marsh project for Billy Creek in Fort Myers, Florida.

Summary of Work:
Project included installation of aquatic plants in marsh and lake area, Xeriscape plants in upland buffer area, palm relocations throughout the project, sodding of berms and roadway areas.

Project also included ongoing weekly maintenance to preserve health of plants and to control nuisance exotic weeds in planted areas.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project: **Everglades Reforestation**

Location: Everglades, Broward Co. FL

Contact: Justin ____
Florida Fish & Wildlife
Conservation Commission
(FWC)
8535 Northlake Boulevard
West Palm Beach, FL 33412

Proress: Completed 2002

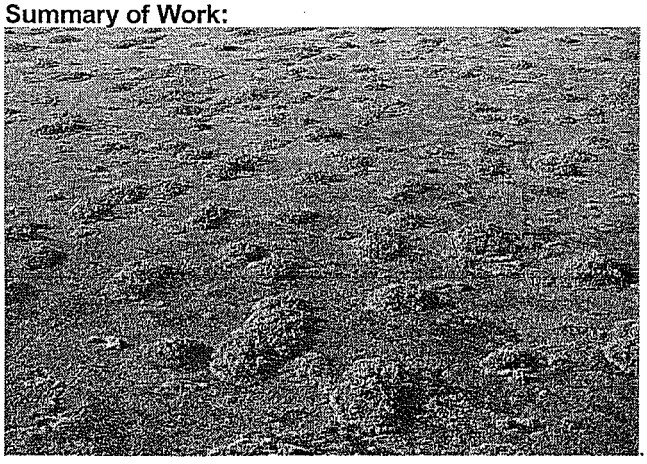
Contract Amount: ~$150,000

Project Team:

Tedd Kenny	Project Manager
Paul McDade	Supervisor

Scope of Services:
Reforestation and restoration

Summary of Work:



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Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project: **Everglades Reforestation**

Location: Everglades, Broward Co. FL

Contact: Justin ____
Florida Fish & Wildlife
Conservation Commission
(FWC)
8535 Northlake Boulevard
West Palm Beach, FL 33412

Proress: Completed 2003

Contract Amount: $150,000

Project Team:

Tedd Kenny	Project Manager
Paul McDade	Supervisor

Scope of Services:
Reforestation and restoration

Summary of Work:

Restoration and reforestation of tree islands. After removal of invasive exotics was completed, we planted native species, including red maple, pond apple, dahoon holly, bald cyprus and other trees and shrubs. About 5,000 three-gallon, 4'-6' high trees. We built wire cages around each tree to protect them from damage by deer and hogs

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Calusa Cove**	
Location:	Miami, FL	
Contact:	Kria Martinez Riverstone Residential Group 8000 S.W. 210 Street Miami, FL 33189 (305) 969-0594	
Progress:	In Progress	
Contract Amount:	$34,250.00	
Project Team:	Tedd Kenny Paul McDade	General Manager Supervisor

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Scope of Services:
Mitigation of preserve area

Summary of Work:
Project includes removal of Australian Pines, Melaleucas, Brazilian Peppers and other exotic plants from preserve. Work also includes planting of Leather Fern, Wild Coffee and Cocoplum. In addition, contract provides for maintenance of conservation easement free of exotics in order to enable the acquisition of DERM permits.

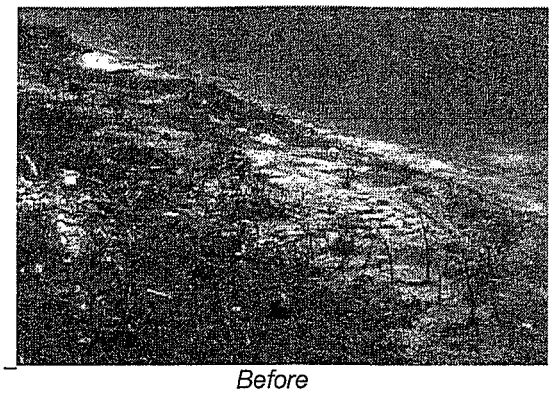
Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project: **Cape Florida Restoration**

Location: Cape Florida, Key Biscayne

Contact: Jim Ross
Florida Department of Environmental Protection (DEP)
3900 Commonwealth Boulevard M.S. 49
Tallahassee, Florida 32399
850-245-2118



Before

Contract Amount: ~$2,000,000

Project Team:

Eddy Arazoza	Project Manager
Hubaldo Lomelí	Supervisor
Pepe Ruíz	Supervisor

Scope of Services:
Reforestation and restoration

Summary of Work:

After

Restoration of most of Cape Florida, following Hurricane Andrew, to its original natural habitat state from the 1940s. Planting of thousands of native trees, palms, shrubs and ground cover, including pigeon plum, gumbo limbo, native fichus area – banyan trees, and many other species

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Storm Water Pond Planting Projects: FN#421207-1-52-01 E7D48**	
Location:	Citrus County, FL	
Contact:	William Moriaty FDOT District 7- Tampa Construction Office 2822 Leslie Road, MS 7-1110 Tampa, Florida 33619 (813) 975-6442	
Progress:	Completed 2009	
Contract Amount:	$450,000.00	
Project Team:	Tedd Kenny Jose Ruiz	Project Manager Superintendent

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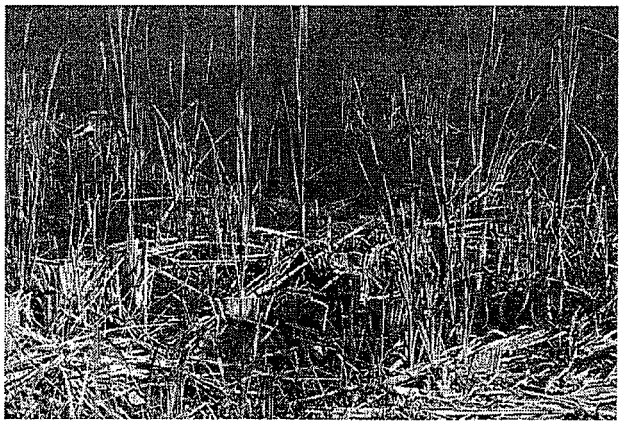
Scope of Services:
Clearing and grubbing of sites to remove exotics. Plating of native species. One year warranty and maintenance, including water, fertilization and tree pruning.

Summary of Work:
Project included planting of various storm water ponds located throughout district 7. Arazoza Brothers Corp. did initial cleanups to remove exotics, prepare the area for planting and install a variety of native plant species.



Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Storm Water Pond Planting Projects: FN#421207-3-52-01 E7D50**
Location:	Hillsborough County, FL
Contact:	William Moriaty FDOT District 7- Tampa Construction Office 2822 Leslie Road, MS 7-1110 Tampa, Florida 33619 (813) 975-6442
Progress:	Completed 2009
Contract Amount:	$450,000.00
Project Team:	Tedd Kenny — Project Manager Jose Ruiz — Superintendent

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Scope of Services:
Clearing and grubbing of sites to remove exotics. Plating of native species. One year warranty and maintenance, including water, fertilization and tree pruning.

Summary of Work:
Project included planting of various storm water ponds located throughout district 7. Arazoza Brothers Corp. did initial cleanups to remove exotics, prepare the area for planting and install a variety of native plant species.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Storm Water Pond Planting Projects: FN#421207-4-52-01 E7D51**	
Location:	Pasco County, FL	
Contact:	William Moriaty FDOT District 7- Tampa Construction Office 2822 Leslie Road, MS 7-1110 Tampa, Florida 33619 (813) 975-6442	
Progress:	Completed 2009	
Contract Amount:	$450,000.00	
Project Team:	Tedd Kenny Jose Ruiz	Project Manager Superintendent

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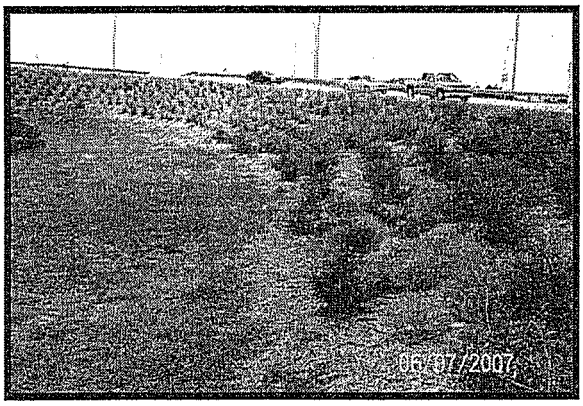
Scope of Services:
Clearing and grubbing of sites to remove exotics. Plating of native species. One year warranty and maintenance, including water, fertilization and tree pruning.

Summary of Work:
Project included planting of various storm water ponds located throughout district 7. Arazoza Brothers Corp. did initial cleanups to remove exotics, prepare the area for planting and install a variety of native plant species.



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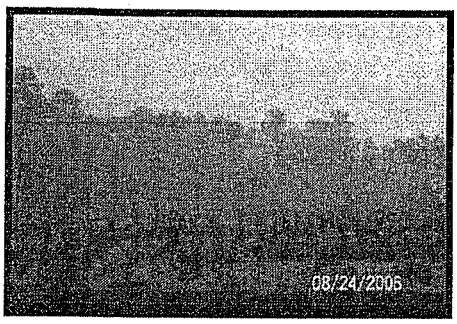

Project:	**FIN#209513-5-52-01 T2128** **SR212 Beach Blvd**
Location:	Lake City, FL
Contact:	Chris Beury FDOT District Two 1109 So Marion Ave Lake City, FL 32025-5874 (904) 744-3368
Progress:	Completed April 2006
Contract Amount:	$1,376,590.00
Project Team:	Tedd Kenny — General Manager Bobby Pickle — Project Manager Mario Gutierrez — Superintendent

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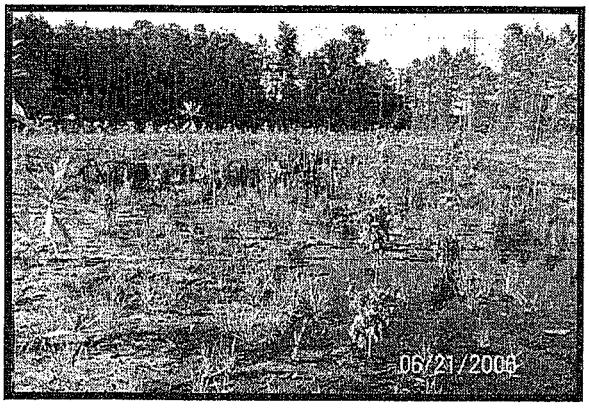
Scope of Services:
Construction and Creation of Wetland for FDOT District 2

Summary of Work:
Construction and creation of wetland site on parcel of land owned by FDOT. Activities included clearing & grubbing, excavation, grading, hauling of excess fill material, installation of drainage structures, planting of wetland species, monthly maintenance to control exotic weed species, quarterly monitoring to document survival and coverage of planted species as well as recruited species.



*2179 3 gallon native trees were planted 10' off center.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**FIN 227708-1-52-01T4132** **CR818 Griffin Rd at LC11** **Broward County**	
Location:	Hialeah, FL	
Contact:	Felipe Fernandez Community Asphalt 14005 NW 186 St Hialeah, FL (305) 829-0700	
Progress:	Completed February 2010	
Contract Amount:	$983,891.47	
Project Team:	Tedd Kenny Jose Ruiz **********	General Manager Project Manager Superintendent

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Scope of Services:
*Installation of Landscaping
*Installation of irrigation system with two pumps
*Installation of aquatic plants in mitigation ponds
*Tree Relocation

Summary of Work:

Project included the installation of landscaping, irrigation and planting of mitigation ponds. Project also included relocates of native trees impacted by construction and the canopy pruning of remaining trees done by staff certified arborists.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project:	**Heron Bay Wetlands Mitigation**
Location:	Coral Springs, FL
Contact:	Jane Early North Springs Improvement District 10300 NW 11 Manor Coral Springs, FL 33071 (954) 426-6112 ext 203
Progress:	Completed October 2009
Contract Amount:	$503,802.00
Project Team:	Tedd Kenny — Project Manager Jose Ruiz — Superintendent

---

Scope of Services:

Contracted to remove all exotics from previously planted wetlands. Replant wetlands to achieve 100% coverage of desirable plants. Upon completion of restoration contract became that of maintenance with monthly service for a period of two years.

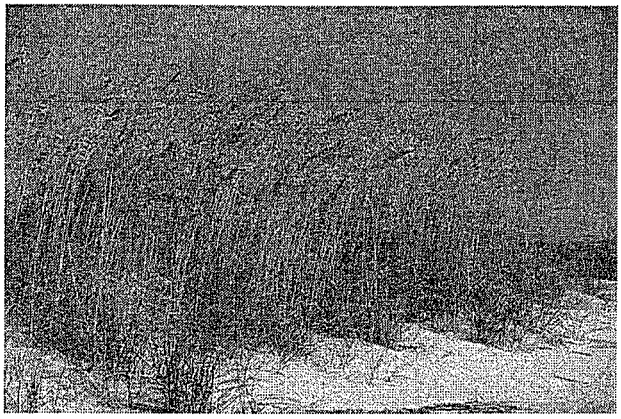
Summary of Work:

Heron Bay is a golf course community located in Coral Springs, FL. The property boasts a beautiful 18 hole golf course nestled next to the everglades. The course is surrounded by 357 acres of lakes, canals, wetland preserves and upland buffers. ABC was contracted to remediate the previously planted wetlands and uplands by removing exotic vegetation and replanting with desirable native plants. The contract also included 2 years of monthly aquatic maintenance and upland/wetland maintenance to control exotics.

Arazoza Bros., Corp.

PO Box 924890, Homestead FL 33092 Phone: 305-246-3223 Fax: 305-246-0481

Project: **Indian River Drive Phase II Shoreline Re-vegetation**



Location: Ft. Pierce, FL, along Indian River

Contact: St. Lucie County
2300 Virginia Ave
Ft. Pierce, FL 34982

Contract Amount: $2,400,000

Project Team:	Eddy Arazoza	General Manager
	Jose Ruiz	Supervisor

Scope of Services:
The work done under this contract was the restoration of the banks of the Indian River Lagoon damaged by the 2004/2005 hurricanes.

Summary of Work:
Project included installation of Sea Oats and Spartina Patens, Salt Meadow Cord Grass, as well as Sea Grapes, Green Buttonwoods and Saw Palmettos. Red Mangroves were also planted. Some slopes were too steep to plant and were stabilized by jute netting.

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Project:	**Exotic & Nuisance Control Services**	
Location:	Miami, FL	
Contact:	Steve Christensen Miami Dade County Dept. of Solid Waste Management 1050 Royal Palm beach Boulevard Royal Palm Beach, FL 33411 (561) 790-5178	
Progress:	Currently in Progress	
Contract Amount:	$55,500.00/anually	
Project Team:	Tedd Kenny Jose Ruiz	Project Manager Superintendent

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Scope of Services:
Exotic and nuisance vegetation control for created wetlands located adjacent to four landfills in Miami-Dade county.

Summary of Work:
Exotic species control to maintain the planted wetland and preserve areas free of exotics. Work includes hand removal of Melaleuca seedlings, hand pulling of vines and herbicide treatment targeting torpedo grass, cat tails and primrose willows. Contract also includes a semi annual monitoring report to document spread and growth of desirable species as well as control efforts to maintain nuisance and exotic species to less than 10%.

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Project:	**Pennsuco Mitigation Project**	
Location:	Medley, FL	
Contact:	Gisele Colbert ESciences 5310 NW 33rd ave, Ste. 201 Fort Lauderdale, Fl. 33309 (954) 484-8500	
Progress:	In Progress	
Contract Amount:	$479,000.00	
Project Team:	Tedd Kenny Cody Kenny	General Manager Supervisor

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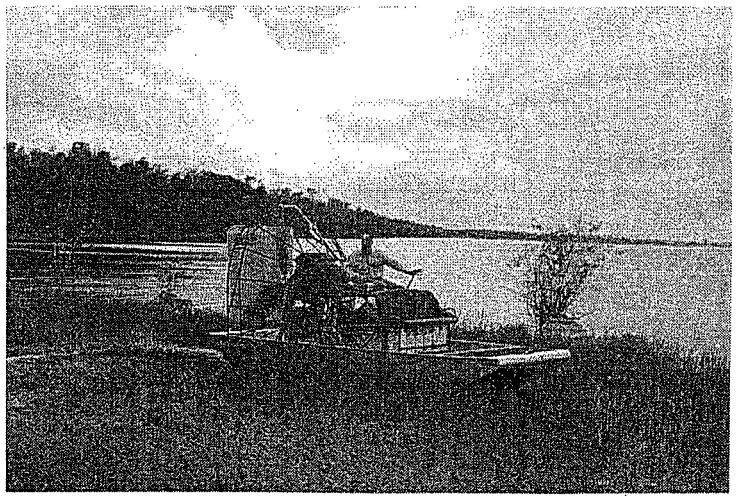
Scope of Services:
Mitigation of mining pits for Titan America: Clearing of exotics from lakes and shoreline; planting of native aquatic and other plants.

Summary of Work:
Project includes removal of Australian Pines, Melaleucas and other trees from shoreline and herbicide spraying of Torpedo Grass, Cattails, Primrose Willows and other aquatic invasives in two lakes. Work also includes planting of both shoreline and lakes with Cord Grass, Maidencane, Pickerel Weed, Duck Potato, Soft Stem Bulrush and Alligator Flag as well as some native trees. Contract also provides for maintenance of lakes and shoreline free of exotics.