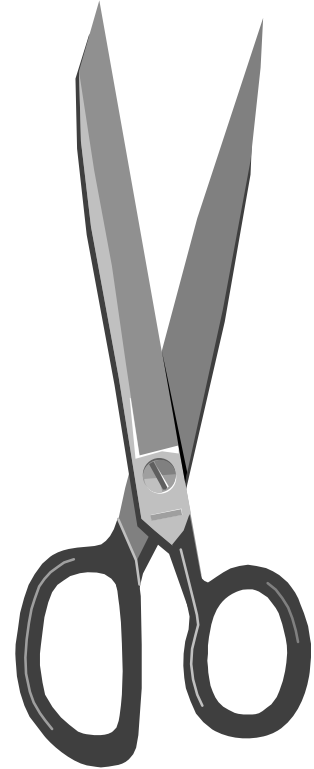


Cut along the outer border and affix this label to your sealed bid envelope to identify it as a “Sealed Bid”. Neither faxed nor electronically submitted bids will be accepted. Be sure to include the name of the company submitting the bid where requested.

DELIVER TO: PURCHASING DEPARTMENT School Board of Polk County 1915 South Floral Avenue, PO Box 391 Bartow, FL 33831-0391	
SEALED BID DO NOT OPEN	
SEALED BID NO.:	100-MHH-0508
BID TITLE:	District Wide Grounds Irrigation - Term Contract
DUE DATE/TIME:	May 29, 2008 @ 2:30PM
SUBMITTED BY:	_____
	Name of company



Please Note:

From time to time, addenda may be issued to this bid. Any such addenda will be posted on the same web site from which you obtained this bid. Vendors receiving bids via US mail will be sent notification of all addenda. If you downloaded the bid from this web site, you will need to check the web site to see if there are any addenda that have been posted.

Interested vendors must have a completed vendor application on file with the School Board Purchasing Department prior to bid award in order for your bid to be considered. The Vendor Application Form is available from our web site at <http://www.polk-fl.net/districtinfo/departments/businessservices/purchasing.htm> Click on “[Vendor Application](#)” from the menu on the left side of the screen and follow the instructions.

THE SCHOOL BOARD OF POLK COUNTY, FLORIDA

P.O. BOX 391
BARTOW, FLORIDA 33831-0391

1915 SOUTH FLORAL AVENUE
BARTOW, FLORIDA 33830-7124

INVITATION TO BID

Bid Title District Wide Grounds Irrigation - Term Contract

Bid File Number 100-MHH-0508 Posted May 9, 2008

Sealed bids will be received until 2:30 PM on May 29, 2008 in the School Board Purchasing Office at the above address. The official clock for the purpose of receiving bids is located in the Purchasing Office. All bids must be date and time stamped by the official clock. Bids will be opened in the Purchasing Offices after the deadline for receiving bids. Any bid received in Purchasing after the deadline indicated above will be date and time stamped and will not be opened. It is vendors' responsibility to see that their bids are properly received at the correct location prior to the deadline. Your bid must be on this form with the Bidder Acknowledgment completed. Inquiries on this bid should be addressed to: Harold Hamby telephone (863) 534-0575, FAX (863) 534-0802, E-Mail harold.hambyjr@polk-fl.net.

BIDDER ACKNOWLEDGMENT

The undersigned, having carefully examined the "Invitation to Bid" with any attached "Special Terms and Conditions" agrees to abide by all conditions of the bid and offers to furnish the items or services as set forth. I further certify that I am authorized to sign this bid.

_____	_____
VENDOR NAME	MAILING ADDRESS
_____	_____
PRINT OR TYPE SIGNATURE AND TITLE	CITY, STATE, ZIP
_____	_____
WRITTEN SIGNATURE	DATE
_____	_____
TELEPHONE NUMBER (TOLL FREE, IF AVAILABLE)	FAX NUMBER
_____	_____
E-MAIL ADDRESS	FEID NUMBER

DISCOUNT: Our company offers the following discount schedule: _____.

NOTE: THE ABOVE BIDDER ACKNOWLEDGMENT MUST BE SIGNED FOR YOUR BID TO BE ACCEPTED.

GENERAL INSTRUCTIONS AND CONDITIONS

- CONTRACT PERIOD:** Bids that do not offer prices good until the following date will not be accepted: July 31, 2009. Contract(s) awarded from this bid will begin on June 25, 2008 and will run through July 31, 2009.
- F.O.B. DELIVERY POINT:** All prices bid must include delivery charges to stated destination(s) as follows: See bid form.
- POSTING OF BID AWARDS:** Recommended award of this bid will be posted at the School Board Administrative Offices on or about June 2, 2008 and will remain posted for a period of 72 hours. Bid tabulations will not be mailed. Bid files and tabulations may be examined during normal working hours.
- PRICES AND TAXES:** All prices are normally fixed for the duration of the contract period. Fluctuating or adjustable prices are only acceptable if so stated in the Special Terms and Conditions". The School Board is exempt from State sales and use taxes and Federal excise taxes. (State Exemption No. 85-8013927632C-8)

5. **DISCOUNTS:** Bidders may offer a cash discount for prompt payment; however, such discounts shall not be considered in bid evaluation unless all other factors are equal. Bidders are encouraged to reflect cash discounts in the unit prices quoted.
6. **DELIVERY:** Deliveries must be made in accordance with specified delivery schedules or as soon as possible after receipt of the purchase order if no delivery schedule is specified or bid. All delivery containers must be marked with the Polk County School Board purchase order number and product item number. Unless stated otherwise, all products being shipped into the Board's warehouse shall be packaged in cardboard cartons so as to prevent damage both in transit and in the warehouse. For all truck deliveries into the warehouse, the Bidder is required to provide notification AT LEAST 24 HOURS PRIOR TO DELIVERY. For Bartow deliveries, call Warehouse Receiving at (863) 534-0910. Truck drivers will be required to assist in unloading.
7. **QUANTITIES:** Quantities shown are not guarantees of purchase. The Board may purchase additional quantities during the life of the contract unless the bid sheets are noted, "Bid is for Specified Quantity Only," by the Bidder. The bid sheets must state, "Minimum Reorder Quantities," if applicable.
8. **EQUIVALENT PRODUCTS:** Any manufacturers' trade, brand, model or catalog number listed as a specification is for information purposes and not to limit competition. The Bidder may offer any equivalent current production model which meets or exceeds the specifications unless noted otherwise in the specifications. If an equivalent model is offered, the Bidder must clearly indicate any deviation from the specifications and include complete descriptive literature on alternate item(s) or the items will not be considered.
9. **SPECIFICATIONS:** All items offered must be in accordance with specifications except as noted above. Minor departures from specifications may be considered at the option of the Board. When applicable, all products shall carry evidence of Underwriters' Laboratory (UL) listing and comply with the requirements of the Occupational Safety and Health Act, (OSHA). When applicable, delivered items must be accompanied by a Material Safety Data Sheet (MSDS). If product packing or packaging is to be different than specified in the bid, the Bidder must state any deviation. The bid, lacking any statement to the contrary, will be received as being in complete compliance with specifications. When more than one bid meets all specifications, the Board reserves the right to determine the "Lowest and Best" bid. Bid items are subject to testing at the Bidder's expense. Delivery of items not meeting specifications is cause for removal from the list of acceptable Bidders and no payment will be made for the entire delivery, including usage.
10. **SAMPLES:** When requested, samples will be furnished at Bidder's expense. Requests for sample returns must be made within 30 days of the bid opening. If no return request is made, the samples will become the property of the Board. Failure to submit samples when required may result in non-acceptance of the bid.
11. **SERVICE AND WARRANTY:** Bidder should attach any warranties offered and explain warranties and service provided. These may not be in conflict with warranties required in the specifications.
12. **ACCEPTANCE OR REJECTION:** The right to accept or reject any bids or individual items in the bids and to waive irregularities in bids is reserved by the Board.
13. **DETERMINATION OF BID AWARD BASIS:** Unless specifically excluded by the Bidder, bid awards may be made on either a composite or a line item basis.
14. **MISTAKES:** In case of mathematical errors, the Bidder's unit price shall be considered the bid price. It is the Bidder's responsibility to understand the terms, conditions, and specifications of the bid. Failure to do so will be at the Bidder's risk.
15. **PLACING AND ACCEPTANCE OF ORDERS:** The award of this bid does not constitute an order. Before delivery is made the Bidder must receive a duly executed purchase order or contract. Acceptance by the Bidder is assumed upon issue by the Board of a duly executed purchase order or contract. Inspection and acceptance of items will be at the stated destination(s) unless otherwise provided, and title to and risk of loss or damage is the responsibility of the Bidder until acceptance by the Board.
16. **ASSIGNMENT, INVOICES, AND PAYMENT:** No assignment of an order or monies to be derived there from is acceptable without the prior written approval of the Board. All invoices must be submitted in triplicate to the Board with each purchase order being invoiced separately. Payment shall be made upon presentation of properly prepared invoices. Payment is generally made on the next Friday following the week in which invoicing is completed.

17. **PERFORMANCE:** If the Bidder refuses or is unable to make delivery within a reasonable time, the Board may hold the Bidder responsible for any damages or costs incurred by the Bidder's actions. The Board may withhold payments pending satisfactory compliance with the terms of the agreement. The Bidder shall hold and save the Board and Board employees harmless from liability of any kind in the performance of this contract.
18. **CONTRACT FAILURE:** Should any Contractor fail to enter into a contract with the School Board on the basis of the submitted bid by said Contractor, Contractor acknowledges that Contractor shall be liable to the School Board for the difference between such bid price and the price the School Board pays to secure the merchandise from another source. Failure to pay said amount to the School Board upon demand will result in the company being removed from the bid list for a period of not less than two (2) years from the date of infraction.
19. **CONFLICT OF INTEREST:** All Bidders must disclose with their bid the name of any officer, director, or agent who is also an employee of the Board. Further, all Bidders must disclose the name of any Board employee who owns, directly or indirectly, any interest of any amount in the Bidders firm or branches.
20. **ATTACHMENTS:** All attached sheets are a part of this bid and any Special Terms and Conditions contained therein which are in conflict with the GENERAL INSTRUCTIONS AND CONDITIONS shall have precedence.
21. **ADDENDUM:** Any changes in this bid shall be in the form of a written addendum by the Purchasing Director. No other person shall be authorized to make changes verbally or in writing. It shall be the responsibility of the bidder to ascertain if any addenda have been issued and to obtain all such addenda. Any Addendum shall be returned with this bid by the Bidder.
22. **EXTENSION:** The Board reserves the option to extend the contract period provided the Bidder is in agreement. The request for extension shall be submitted by the Bidder in writing.
23. **DISPUTES:** Any person who may be adversely affected by an intended decision with respect to the award of any bid, may protest such a decision by following the Bid Protest Procedure of the School Board of Polk County. A copy of the Procedure, which has been prepared in accordance with the provisions of the Florida Administrative Code, is available upon request and is permanently posted at the Administrative Offices of the School Board of Polk County, Florida. Failure to follow the requirements of the bid protest procedures established by the School Board of Polk County, Florida shall constitute a waiver of all protest rights. Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.
24. **PREFERENCE FOR DRUG-FREE WORKPLACE:** Whenever two or more bids which are equal with respect to price, quality, and service are received, preference shall be given to a bid received from a business that certifies that it has implemented a drug-free workplace program in accordance with Section 287.087, Florida Statutes. In order to receive preference, a signed certification of compliance must be submitted with the bid response.
25. **AGREEMENT:** This Bid and the Purchase Orders issued hereunder constitute the entire agreement between the School District and the Vendor awarded the bid. No modification of this bid shall be binding on the District or the Bidders.
26. **TERMS AND CONDITIONS:** No additional terms and conditions included with the bid response shall be evaluated or considered and any and all such additional terms and conditions shall have no force and effect and are inapplicable to this bid. If submitted either purposely through intent or design or inadvertently appearing separately in transmitted letters, specifications, literature, price estimates or warranties, it is understood and agreed the General Conditions and Special Terms and Conditions in this bid solicitation are the only terms and conditions applicable to this bid and the bidders authorized signature affixed to the bidder acknowledgment form attests to this.
27. **PUBLIC ENTITY CRIME & CONVICTED VENDOR LIST:** Per the provisions of Florida Statute 287.133 (2)(a), "a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statute 287.017 for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list". The prospective bidder certifies, by submission and signature of this bid, that neither the bidder, nor its principal, its agent or its representative is presently debarred, suspended, proposed for debarment, declared ineligible, voluntarily excluded from

participation in this transaction or otherwise precluded by Florida Statute 287.133 from participating in this contract.

28. **DISCRIMINATORY VENDOR LIST:** Per the provisions of Florida Statute 287.134(2)(a), "An entity or affiliate who has been placed on the discriminatory vendor list 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." The prospective bidder certifies, by submission and signature of this bid, that neither the bidder, nor its principal, its agent or its representative is presently on the discriminatory vendor list, or otherwise precluded by Florida Statute 287.134 from participating in this contract.
29. **FEDERAL DEBARMENT CERTIFICATION:** Certification regarding debarment, suspension, ineligibility and voluntary exclusion as required by Executive Order 12549, Debarment and Suspension, and implemented at 34 CFR, Part 85, as defined at 34 CFR Part 85, Sections 85.105 and 85.110.
- a. The prospective lower tier participant certifies, by submission and signature of this bid, that neither it, nor its principals, its agents or its representatives are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this bid.
30. **NON-COLLUSION:** The bidder certifies, by submission and signature of this bid, that it warrants that he/she has not employed or retained any company or person other than a bonafide employee working solely for the bidder to solicit or secure this bid and that he/she has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bonafide employee working sole for the bidder, any fee, commission, percentage, gift or any other consideration contingent upon or resulting from this award or making of this bid.

The bidder further certifies that its bid is made without previous understanding, agreement or connection with any person, firm or corporation making a bid for the same item(s) and is in all respects fair, without outside control, collusion, fraud or otherwise illegal action.

31. **SALES TO OTHER PUBLIC AGENCIES:** With the consent and agreement of the successful bidder(s), purchases may be made under this bid by other public agencies within the State of Florida. Such purchases shall be governed by the same terms and conditions as stated herein. (Check where applicable): Agree to extend pricing to ___ School Boards and/or ___ public agencies within the State of Florida.
32. **BID RESPONSES:** If the bid is to be returned via express mail or in a courier envelope, the bid the bid documents should be submitted in a separate sealed envelope within the courier envelope. Express mail or courier envelopes will be opened and discarded. The face of the sealed bid envelope should have attached the label included with the bid package or noted, the Bid File Number and "Attention: Purchasing Department - Sealed Bid." If there is not going to be a bid submitted, return the "No Bid" post card, or return the Invitation to Bid, marked, "No Bid."
33. **TERMINATION OF CONTRACT:** This contract may be terminated without liability to the School Board in whole or in part when it is deemed to be in the best interest of the School Board to so act. Notification of termination must be in writing and issued by the Director of Purchasing or designee. This contract may be terminated upon 30 days written notice. Further, at the discretion of the School Board, the contract may be terminated in a period of less than 30 days in the event of poor performance or violation of the terms and conditions of this contract.

The School Board, upon termination, shall exercise its discretion to complete the balance of the contract consistent with the best interest of the School Board.

SCOTT CLANTON
DIRECTOR, PURCHASING AND WAREHOUSING

NOTE: The Bidder Acknowledgment on Page 1 MUST be signed for your bid to be considered.

Special Terms and Conditions

A. **SCOPE:** This bid is to establish competitive pricing to furnish and install irrigation system(s) in schools and other educational support facilities throughout the Polk County School District. Vendors will bid on three (3) initial projects, one located on the campus of Frostproof Middle-Senior in Frostproof Florida and the practice fields located at the campuses of Southwest Middle School in Lakeland Florida and Crystal Lake Middle School in Lakeland Florida. These projects will be utilized to determine the most appropriate vendors to be awarded this Term Contract, as noted in Section F below.

B. **MANDATORY PRE-BID CONFERENCE:** A "**mandatory**" Pre-Bid Conference Walkthrough shall convene in the lobby of the main administrative office at Frostproof Middle-Senior at 1000 North Palm Ave. Frostproof FL 33843. The pre-bid conference shall start at 10:00 A.M. on **Thursday, May 15, 2008**. After reviewing the scope of work the conference shall move to Southwest Middle Practice Field at 2815 Eden Parkway Lakeland, FL 33803 and from there the Pre-bid conference shall move to Crystal Lake Middle Practice Field at 2410 North Crystal Lake Drive Lakeland, FL 33801. All bidders are required to attend this pre-bid conference. Bids received from contractors bidding who are not present for the entire Mandatory Pre-Bid Conference will not be considered.

Important Note: In order to be considered for award of Contract, bidders must be represented at the entire Pre-Bid Conference referenced above.

C. **F.O.B. DESTINATION:** Prices bid for all items shall be F.O.B. Destination and include all shipping charges to all Polk County school locations.

D. **COMPLIANCE WITH THE JESSICA LUNSFORD ACT:** Florida Statutes contain certain fingerprinting and/or screening requirements pertaining to all persons or entities entering into contracts with Schools/School Boards/School Districts/Charter Schools who may have personnel who will be on school grounds when students may be present. Any individual who fails to meet the statutory requirements shall not be allowed on school grounds. Failure to comply with the statutory requirements will be considered a material default of this contract/agreement. Please visit <http://www.polk-fl.net/community/doingbusinesswithus/jessicalunsfordact.htm> for a list of links to requirements regarding the Jessica Lunsford Act.

E. **BASIS FOR AWARD:** Bidders whose bids, past performance, or current status do not reflect the capability, integrity or reliability to fully and in good faith perform the requirements of the Contract may be rejected as non-responsible.

F. AWARD OF CONTRACT:

1. For evaluation purposes, vendors will be invited to bid on three (3) projects (Frostproof Middle-Senior, Southwest Middle School and Crystal Lake Middle School), typical of projects likely to arise throughout the term of this bid, however; many of these future projects may be smaller or larger in scope than the original project. After bids are opened, tabulated and evaluated, it is anticipated there will be a recommendation presented to the School Board for award of this Term Contract to approximately three vendors deemed to have submitted the three (3) lowest bids meeting the requirements and specifications. Pending approval by the Board, the vendors awarded this contract will be invited to submit quotes for subsequent projects as the need arises during the term of the bid. A Purchase Order will be issued to the vendor(s) deemed to have submitted the lowest bid meeting the requirements and specifications for each of the initial projects (Frostproof Middle-Senior, Southwest Middle School and Crystal Lake Middle School).
2. The School Board of Polk County reserves the right to reject any or all bids and to waive any informalities or irregularities in any bids received.
3. This bid will be awarded to responsive and responsible bidder(s) qualified by experience to provide the work specified. Award will be based on a composite of each school (site).

G. CANCELLATION: In the event any of the provisions of this bid are violated by the awarded vendor, the Superintendent or designee will give written notice to the vendor stating the deficiencies and unless the deficiencies are corrected within ten (10) days, recommendation will be made to the Board for immediate cancellation of this contract. Upon cancellation hereunder the Board may pursue any and all legal remedies as provided herein and by law. The Board will only be required to pay to the vendor that amount of the contract actually performed to the date of termination.

H. WARRANTY OF ABILITY TO PERFORM: By signing the "Bidder Acknowledgment" on page 1 of this document, the Bidder warrants that, to the best of its knowledge, there is no pending or threatened action, proceeding, or investigation, or any other legal or financial condition, that would in any way prohibit, restrain, or diminish the Bidder's ability to satisfy its Contract obligations. The Bidder warrants that neither it nor any affiliate is currently on the convicted vendor list maintained pursuant to section 287.133 of the Florida Statutes, or on any similar list maintained by any other state or the federal government. The Bidder shall immediately notify the District in writing if its ability to perform is compromised in any manner during the term of the Contract.

I. QUALIFICATION OF BIDDERS: In order to be considered for award of this bid, the bidder shall meet or exceed the following qualifications and provide documentation of same as requested below. Please return required submittal listed in items 1, 2, 3, 4 and 5 (if applicable) with your bid.

After bid opening the Polk County School Board reserves the right to request the required submittals listed below (items 1, 2, 3, 4 and 5 if applicable) should bidder not return these submittals with their bid packet. Any requested additional information and product data must be received by the Polk County School Board Purchasing Department within three (3) business days of the request. The request will be in writing and will be sent via email or fax.

1. The bidder shall have satisfactorily completed a minimum of three (3) recent projects furnishing and installing irrigation systems. Bidder shall submit a list of references for at least three (3) projects (please list school system projects, if applicable) and include for each: the project name and scope, owner name, contact person's name - address - telephone number and account tenure (dates). The School Board of Polk County reserves the right to waive this submittal requirement for any bidder that has, in the recent past, satisfactorily performed the services requested in this bid for The School Board of Polk County.
2. The bidder shall submit a narrative describing the method your firm will use to place 4" and 6" sleeves under concrete sidewalks and Asphalt drives. (Note: space for this narrative is provided on the BID FORM AND SPECIFICATIONS).
3. The bidder shall comply with the Occupational Safety and Health Administrations (OSHA) excavation safety standards 29 CFR, Section 1926.650, Subpart P., otherwise known as "Trench Safety Act", Chapter 90-96, Florida Statutes. The bidder shall provide written assurance of compliance with this law (Note: space for this written assurance is provided on the BID FORM AND SPECIFICATIONS).
4. The bidder shall submit Product data (if required) as per SECTION 02810 / IRRIGATION SYSTEMS PART 1. 1.04.
5. The bidder should submit the name and address of any subcontracting firm the bidder intends to use to subcontract any portion of this work.

J. **SUBCONTRACTORS:** If a bidder intends to subcontract any portion of this work for any reason, the name and address of the subcontracting firm must be submitted along with their bid for approval. No subcontracting shall take place prior to awarded bidder furnishing this information and receiving written approval from the District (Note: space for subcontractor name and address is provided on the BID FORM AND SPECIFICATIONS).

The subcontractor will be equally responsible for meeting all requirements as specified in Section D. The School Board of Polk County reserves the right to reject a subcontractor who previously failed in the proper performance of an award or failed to deliver on-time contracts of a similar nature, or who (in the opinion of the Superintendent Of Schools, or designee) is not in the position to perform this award. The School Board of Polk County reserves the right to inspect all facilities of any subcontractor in order to make the determination as to the foregoing. In the event the School Board of Polk County elects to reject a subcontractor for cause, the bidder may submit another subcontractor, which will also be subject to approval by the School Board of Polk County.

K. **EMPLOYEES, SUBCONTRACTORS, AND AGENTS:** Nothing contained in these specifications shall be construed as creating any contractual relationship

between any subcontractor and the District. The successful firm shall not only be held liable to the School Board of Polk County for the acts and omissions of its employees, but also for the employees of any of its subcontractors. The School Board of Polk County may reject and bar from any facility (for cause) any of the Contractor's employees, subcontractors, or agents.

L. **QUOTES:** After award of contract the awarded vendor(s) quote for each project shall clearly and separately identify any, each and all-applicable charges. All prices quoted shall be FOB Jobsite (or the Polk County location as directed on PO) and shall include the furnishing of all materials, equipment, hardware and accessories required to accomplish the installation of the irrigation system as directed by the Manager of In-House Construction (or designee). Purchase Orders will be issued for each subsequent project to the vendor submitting the lowest quote meeting the requirements and specifications. Request for quotes on subsequent projects will follow the procedures outlined below.

1. **Written Quotes:** Written quotes may be requested for projects with an estimated value greater than \$12,500. Written quotes will be requested from any or all awarded bidders for projects with an estimated value of greater than \$25,000. When feasible the School Board of Polk County will send a Request for Quote form to the awarded bidders. This Request for Quote form will cover the scope of each project. If a pre-quote conference is required awarded bidders will receive written notice of the pre-quote conference date, time and place. This notice will be faxed, mailed and/or emailed to the awarded bidders.
2. **Submission of Quotes:** Quotes shall be submitted no later than ten - (10) workdays after the vendor has received a Request For Quote (unless otherwise instructed by the Polk County Schools' Custodial Services Grounds Manager or designee).

M. **LIQUIDATED DAMAGES:** Should the awarded vendor fail to perform under the terms and conditions of this Bid the vendor agrees to make payment to the School Board of Polk County (the District) in an amount up to \$100.00 per day for each day the system is not completed. Completion time shall be no later than the date indicated on the Purchase Order, unless the failure to perform was caused by acts or omissions of the District. In addition to the above requirement for Liquidated Damages, the District may hold the bidder responsible for any additional damages or costs incurred by the District as a result of the bidder's actions.

N. **AUTHORIZATION TO PERFORM UNDER CONTRACT:** All purchases must be properly authorized in advance. Vendors must first obtain a printed purchase order before commencing performance under a contract. Vendors shall take no directions to modify (increase, change, decrease, cancel) a purchase order, once issued, from anyone other than the District's Purchasing Department. Additional work must be authorized in advance by the Purchasing Department; at the discretion of the Purchasing Department either a change order to the original purchase order or a supplemental purchase order will be issued for the requested modification (increase, change, decrease, cancel). The vendor assumes all liability for any costs or damages incurred and payment will be denied for additional work if this procedure is not strictly followed.

O. **USE OF OTHER CONTRACTS:** The School Board reserves the right to utilize any other District contract, any State of Florida Contract, any contract awarded by any other city or county governmental agencies, any other school board, or any other community college/state university system cooperative bid agreement, in lieu of any offer received or award made as a result of this bid, if it is in its best interest to do so. The School Board also reserves the right to separately bid any single order or to purchase any item on this bid if it is in its best interest to do so.

P. **FAMILIARITY WITH LAWS:** The awarded vendor is required to be familiar with all Federal, State, and local laws, ordinances, rules and regulations that may in any manner affect their work. Failure on the part of the vendor to be aware of any law, ordinance, rule or regulation will in no way relieve him from any responsibility or liability arising from the contract award. The awarded vendor assures and certifies that they will comply with all laws, ordinances, rules, regulations, and all other legal requirements.

Q. **ADDENDA:** It shall be the responsibility of each responding bidder to check The School Board of Polk County Purchasing Department website @ <http://www.polk-fl.net/community/doingbusinesswithus/purchasing/default.htm> for addendum related to this bid and to obtain all addendum.

R. **LINE ITEM CORRECTIONS:** The use of correction fluid or erasures to correct line item bid prices and/or quantities are not acceptable. Corrections must be by strikethrough (~~strikethrough~~) of the incorrect figures, writing in of correct figures and initialing of the corrections by the originator. Correction fluid or erasure corrected bids will be considered non-responsive for the corrected items only.

S. **ADDITIONAL PURCHASES:** The School Board of Polk County also reserves the right to issue additional purchase orders on bid prices for immediate delivery through the effective date of the bid.

T. **EXAMINATION OF CONTRACT DOCUMENTS AND WORK SITES:**

1. Before submitting a bid, each Bidder should:

- (a) visit project site and become familiar with the facilities and equipment that may in any manner affect performance of the work
- (b) consider federal, state or local laws, ordinances, rules and regulations that may in any way affect performance of the work
- (c) notify the Purchasing Administrator of all conflicts, errors and discrepancies (if any) in the Bid Documents

2. The Bidder, by and through submission of a bid, agrees that he/she shall be held responsible for having examined the facilities and equipment; become familiar with the nature and extent of the work and any local conditions that may affect the work to be done and the technical expertise, equipment, materials parts and labor required.

U. **INSURANCE:** The contractor(s) shall take every precaution to prevent injury to persons, particularly children, or damage to public or private property while performing services under this agreement. He shall assume full responsibility for such occurrences if resulting from his operations. Before commencing work, the contractor shall furnish the School Board a certificate of insurance showing his coverage with the following minimum requirements:

<u>TYPE OF INSURANCE</u>	<u>LIMITS OF LIABILITY</u>
Worker's Compensation	Statutory
Commercial General Liability	Combined Single Limit \$1,000,000 per occurrence
Automobile Liability	\$1,000,000 Combined single limit (All owned autos, or any auto if vehicles other than owned are used).

- a) The School Board of Polk County shall be named as an additional insured and certificate holder on the certificate for commercial general liability insurance and as a certificate holder for automobile liability insurance. All insurance must be issued by a company or companies approved by the School Board.
- b) The VENDOR shall be responsible for assuring that the insurance remains in force for the duration of the contractual period, including any and all option years that may be granted to the VENDOR. **A Certificate of Insurance shall contain the provision that the SBPC LOCATION be given no less than thirty (30) days written notice of cancellation.** If the insurance is scheduled to expire during the contractual period, the VENDOR shall be responsible for submitting any new or renewed Certificate of Insurance at a minimum of fifteen calendar days in advance of such expiration.

V. **REQUESTS FOR BID INFORMATION & RELATED DATA:** Requests for information relating to bids in process will be addressed without delay when such information has a **material** effect on the completion of your bid response. Every effort will be made to supply other requested information of a less critical nature, such as, **lists of vendors solicited, pre-bid conference attendees, individuals picking up plans and specifications, historical bid data or tabulations** within (48) hours from receipt of a request. Vendors are welcome to visit our offices to obtain the information in person, but we respectfully request that you notify the buyer in advance at the telephone number listed on the **Invitation to Bid** form so that they might have ample opportunity to compile the information for you before you arrive.

If you have Internet access, visit our Web site @ <http://www.polk-fl.net/districtinfo/departments/businessservices/purchasing.htm> to obtain:

- ❖ A copy of a bid packet for a contract or project currently out for bid
- ❖ A listing of all term and recurring contracts awarded by the School Board of Polk County, FL currently in force.

Please state company name and authorized signature _____

- ❖ A copy of any addenda issued to current bids in process

NOTE: It is the bidders responsibility to check our Web site frequently for updated information.

- ❖ A copy of a Vendor Application Form
- ❖ A copy of our Commodity List which will, when properly completed and returned to Purchasing, enable us to notify you of future bids
- ❖ A listing of departmental personnel, with job titles, phone numbers and email addresses

W. **CLEAN UP:** All work shall be done in a neat and workmanlike manner. The contractor shall dispose of all packing, crating, unusable scraps, and any miscellaneous materials. The contractor(s) shall remove all rubbish, materials and equipment, and leave the premises clean and orderly. The contractor shall legally dispose of unsalvageable materials at the contractor(s) expense.

The contractor shall, as a part of this job, properly store and secure any salvageable materials, at the location designated by the Contract Administrator.

X. **EMPLOYEES:** The contractor shall at all times enforce strict discipline, good order, proper dress and appearance among employees and shall employ skilled personnel for the assigned work. No person shall be allowed to bring alcoholic beverages, controlled substances, firearms, or dogs to the site. Smoking on school premises is not permitted.

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Y. **SPECIFICATIONS:**

1. **General:** The apparent silence of the Specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of the Specifications shall be made on the basis of this statement.
2. **Permits:** It shall be the responsibility of the awarded bidder to secure all necessary permits. For information on the requirements for obtaining a permit please go to this web page www.polk-fl.net/community/doingbusinesswithus/facilitiesprojects.htm.
3. **Shop Drawings and Manuals:** Shop drawings (if required), and Manuals shall be submitted prior to final acceptance by the School Board of Polk County as specified in SECTION 02810.
4. **As-Built Drawings:** The awarded vendor shall furnish the Polk County School Board as-built drawings showing the installed location of all components of the irrigation system. Prior to final acceptance of the project the awarded vendor shall submit a 24" x 36" plan(s) and an electronic copy in .DWG format.
5. **Locating Underground Utilities:** The School Board of Polk County will be responsible to locate underground utilities. The awarded vendor must contact the Maintenance Service Center that services the school a minimum of 48 hours prior to commencing work. Failure to comply with this requirement shall make the awarded vendor responsible for any damage to underground utilities. See ATTACHMENT 1 for a listing of the Maintenance Service Center contact information.
6. **Practice Fields:** The Polk County School Board is not using the Hunter HQ-44-XX-AW quick coupler valves listed as an option on the plans for the practice fields. The Polk County School Board reserves the right to add these couplers to future request for quotes if deemed in the Polk County School Boards best interest to do so.
7. **Damage to School Board Property/Facilities :** The awarded bidder shall replace all property damaged by awarded bidder including but not limited to fences, trees, plants, grass, walks, drives, building surfaces, etc.
8. **Minimum Standards and Specifications:** The following sections are minimum standards and specifications applicable to School Board irrigation installations reprinted directly from the "Polk County School Board Guideline Specifications".

SECTION 02000 / SITEWORK, GENERAL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Conform to Division 1, General Requirements, which applies to all sections of this Division 2. Provisions of this Section 02000 also apply to all sections of this Division 2. The articles contained in this section may modify, delete or add to the provisions of the conditions of the Contract.

PART 2 - CONSTRUCTION STAKE-OUT

- 2.01 It shall be the duty of the CONTRACTOR to make his own construction stake-out from Bench Marks and Control Points established. Field crew(s) shall be under the direction of a registered surveyor, duly licensed in the State of Florida.

PART 3 - GUARANTEE

- 3.01 All materials and workmanship involved in this project shall be guaranteed free from defects owing to faulty material or workmanship for a period of one year, unless otherwise specified, after the date of acceptance. Any part of work proving defective from these causes, within this period, shall be replaced free of cost to the OWNER. Copies of all guarantees must be furnished the OWNER before final acceptance.

PART 4 - SCHEDULE OF WORK

- 4.01 All work shall be so scheduled as to minimize interference with traffic and convenience of the public. The ARCHITECT/ENGINEER and OWNER reserves the right to require rescheduling of the work where interference is indicated. The work shall progress as expeditiously as possible.

PART 5 - SAFETY PRECAUTIONS

- 5.01 The CONTRACTOR shall take all precautions for the safety of employees on the work, and shall comply with all applicable provisions of safety laws and building codes to prevent accidents or injury to persons on or about the premises where the work is being performed. The CONTRACTOR shall erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of workmen and the public and shall post danger signs, use blinker lights, or other means deemed appropriate to warn against the hazards created by features of construction including off-site signs if required by governing agencies, and he shall designate a responsible member of his organization on the work whose duty shall be the prevention of accidents.

- A. The CONTRACTOR shall comply with the Occupational Safety and Health Administrations (OSHA) excavation safety standards 29 CFR, Section 1926.650, Subpart P., otherwise known as "Trench Safety Act", Chapter 90-96, Florida Statutes.
1. The CONTRACTOR shall provide written assurance of compliance with this law.
 2. A trench safety system shall be designed by the CONTRACTOR.
 3. Provide for a separate cost item identifying the cost of the trench safety.
- B. Comply with the Underground Facility Damage Prevention & Safety Act, referred to as "Sunshine State One-Call of Florida, Inc.", prior to digging. Toll Free: 1-800-432-4770.

PART 6 - PROTECTION OF PROPERTY

6.01 The CONTRACTOR shall be solely responsible for properly storing and protecting all materials, equipment, and the entire work furnished under this contract from the time such materials and equipment are delivered at the site of the work until final acceptance of the entire work. He shall at all times, take the necessary precautions to prevent injury or damage by water or by inclemencies of the weather to materials, equipment, and work. All injury or damage to materials, equipment, and work resulting from any cause whatsoever shall be made good by the CONTRACTOR. If it becomes necessary to remove and restack materials to avoid impeding the progress of any part of the work or interference with the work to be done by any other CONTRACTOR, the CONTRACTOR shall remove and restack such materials at his own expense.

- A. The CONTRACTOR accepts the site as he finds it upon mobilization, unless specifically agreed to otherwise with the OWNER prior to starting work. Site features (either on site or adjacent thereto) designated to remain in place after completion of project shall be protected from damage and if damaged the CONTRACTOR will be required to replace same acceptable to OWNER, ARCHITECT or governing agencies at no additional expense to the OWNER. (Examples: streets, curbs, walks, trees, shrubs, wells, irrigation systems, utilities, buildings, etc.)

PART 7 - DEWATERING OF TRENCHES

7.01 Dewatering of trenches and excavations shall be considered an integral part of the CONTRACTOR'S responsibility if required to complete the work in this contract.

PART 8 - TESTS

8.01 The costs of all tests for soils and related compaction or concrete construction will be paid by the OWNER. Tests will be made at any time or place during the progress of construction as deemed necessary by the OWNER, ARCHITECT, ENGINEER or testing agency. Should the work fail a test, the OWNER shall withhold further progress payments until the CONTRACTOR reworks, replaces, or causes the work to meet the requirements set forth and passes a new test. **CONTRACTOR will reimburse the OWNER for the cost of failed tests.**

PART 9 - MATERIALS AND WORKMANSHIP QUALITY

9.01 The materials and quality of workmanship shall conform to current Department of Transportation Specifications and otherwise specified herein or on the drawings.

PART 10 - GEOTECHNICAL EXPLORATION

10.01 Geotechnical investigation will be performed by a licensed Testing & Environmental company. Only portions of the Geotechnical ENGINEER'S site preparation recommendations will be included in this Division.

A. A full report is available in both ARCHITECT'S, ENGINEER'S, and OWNER'S offices for review by interested parties. Copies of the full certified report must be obtained from a licensed Testing & Environmental company and CONTRACTOR will be required to comply with the requirements of the full report.

1. Boring locations are indicated on drawings and Boring Logs are bound in these specifications following Section 02301/Grading and Earthwork (Buildings and Structures). They are not intended as representation or warranty of accuracy or continuity between soil borings. It is expressly understood that OWNER will not be responsible for interpretations or conclusions drawn therefrom by CONTRACTOR. Data are made available for convenience of CONTRACTOR.

END OF SECTION 02000

SECTION 02810 / IRRIGATION SYSTEMS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Conform to Division 1, Section 02000 and other sections of this division.
- B. Conform to Florida Building Code - Plumbing 2004, Appendix F.

1.02 DESCRIPTION

- A. Furnish and provide all labor, materials, necessary equipment and services to complete the landscape and site irrigation work and related work, as specified herein, except for items specifically indicated as "Not in Contract" (NIC) and items specifically indicated as "Items Not Included".
- B. Three copies of written operating instruction for the most efficient operation and maintenance of the system, together with parts listed covering all operating equipment.
- C. Reproducible "as built" drawing of completed system if any changes have been effected to specified system as drawn.
- D. Provide electronic "as built" drawing files in AutoCad 14 or later version. Files shall be submitted in .DWG format.
- E. Work by other sections in contract shall include the following:
 - 1. Electrical service to well location.
 - 2. Electrical services for power supply to low voltage controllers.
 - 3. Water Well: Work required for the provision and installation of an irrigation well and pump system.

1.03 JOB CONDITIONS

- A. The Irrigation CONTRACTOR shall examine the subgrade, verify elevations, observe the conditions under which work is to be performed and notify the General CONTRACTOR in writing of unsatisfactory conditions prior to beginning work. Start of work will indicate the acceptance of conditions and full responsibility for the completed work.
- B. Responsibility to the Owner: The Contractor shall not willfully install the irrigation system as specified in the Contract Documents when it is obvious in the field that there are obstructions, grade differences and/or discrepancies in area dimensions that are not accounted for on the Drawings. The Contractor shall not proceed until such conditions are brought to the attention of the Owners Representative.
- C. Revisions and Changes: Any and all substitutions, changes, additions or deletions to the Contract Documents shall be expressly approved by the Owner through written addendum and copied to the Architect.

- D. Utilities and Structures: Attention is directed to the fact that overhead, underground and surface utilities, structures and vegetation are in the area of the work and must be protected against damage during the progress of the work. The Contractor shall be held responsible and liable for any damages incurred resulting from his negligence.
- E. Protection and Safety: The Contractor shall be responsible and liable for the protection and safety against injury of property and persons on or about the project site during the term of his work. The Contractor shall provide and properly maintain necessary warning signs and lights, barricades, railings and other safeguards. The Contractor shall conform with the current "Occupational Safety and Health Standards Act" standards and shall carry in-force Workmens' Compensation, vehicle and occupational liability insurance.
- F. Site familiarity: Where and whenever possible, the Contractor shall visit the project site to examine such conditions as soils, vegetation, utilities, structures, water supply, etc., as they will influence the work pursuant to bid submission and/or contract execution.
- G. Permits and Fees: It shall be the responsibility of the Contractor to determine and acquire any and all permits and licenses required relevant to the irrigation contract and to assume the cost for such. Inspections required by local ordinances during the course of construction shall be arranged by the Contractor as required. On completion of the work, satisfactory evidence shall be furnished to the Owners Representative to show that all work has been installed in accordance with the ordinances and code requirements.
- H. Utility Connections: The Contractor shall include in his bid all costs (excluding deposits) for utility connections, unless otherwise specifically stated in the bid proposal and Contract Documents.
- I. The Irrigation CONTRACTOR shall coordinate his work with other trades on the site as necessary.
1. Refer to Section 02920 for special requirements at sodded or sprigged playfield locations. The areas to be sodded or sprigged shall be fully prepared, including irrigation system, in adequate time for grass to reach maturity for school use on or before contract completion date.
 2. Furnishing an acceptable operable irrigation system is the responsibility of the project CONTRACTOR such that the sprigging CONTRACTOR can rely upon having available an adequate quantity of water to promote and maintain proper growth and development of the grass. The sod or sprigging CONTRACTOR will establish the required watering schedule and be responsible for monitoring same.
 3. Should the irrigation system fail to provide adequate consistent water supply, causing death of any sprigged, sodded or seeded areas, the project CONTRACTOR will be responsible for cost of replacement sprigging (material and labor).

1.04 SUBMITTALS

- A. Product Data: Submit to the Architect samples, manufacturer's technical data and installation instructions for all components of the underground sprinkler system if different from the materials specified on the Drawings.
- B. Shop Drawings: Submit to the Architect shop drawings for the irrigation system if different from the materials specified on the Drawings.
- C. Record Drawings: Prior to final acceptance, the Contractor shall furnish the Architect with record drawings of "as built" conditions on a reproducible media of the original Contract Irrigation Drawing. All change orders and field changes shall be shown. All remote control and isolation valves shall be dimensioned from two permanent points of reference. Record drawings shall include:
1. Location of water supply (water meter, well pump, or effluent).
 2. Tie-in and Owner/General Contractor furnished electrical service and disconnects.
 3. Location of gate and zone valve controller and other control equipment.
 4. Routing and sizing of all sprinkler pipe.
 5. Location and type of all sprinkler heads.
 6. Routing of zone control valve electrical wiring.
 - a. Delivery of the "as built" drawings will not relieve the Contractor of responsibility of furnishing required information that may be omitted from the plans.
- D. Tools: The Contractor shall provide as part of this contract the following tools:
1. Two (2) sets of special tools required for adjusting, cleaning or disassembling each type of sprinkler and valve supplied on this project.
 2. Two (2) sets of keys for each controller.
 3. Two (2) valve keys for the operation of the isolation valves.
- E. Manuals: Two operation/service manuals covering all major equipment used on this project shall be furnished to the Architect for approval. Manuals will be hard cover, three ring binders and include the following information:
1. Catalog sheets and exploded views of equipment, including part numbers.
 2. Operation and maintenance instructions for all equipment.
 3. Listing of major equipment with names, addresses and phone numbers of local manufactures representatives.
 4. Warranty information on all major equipment.

1.05 DEFINITIONS AND ABBREVIATIONS

The Definitions and abbreviations given here below shall be considered a part of these specifications and shall apply to the interpretation and execution thereof.

- A. Owner: To be known as that entity which holds title or control to the premises on which the work is performed.

- B. Architect: This person or firm is the responsible representative of the Owner who produces the irrigation plans and specifications.
- C. Contractor: In reference to these specifications, the "Contractor" shall mean the irrigation contractor bidding on and/or being awarded the contract for the work stipulated. Said contractor shall be duly licensed and insured as an irrigation contractor in the state, county and municipality where the work is to be executed.
- D. Project: The project as referenced herein shall be that tract of real property where the irrigation system is to be installed.
- E. P.S.I.: Static water pressure shall be given as pounds per square inch, abbreviated P.S.I., and where one (1) P.S.I. shall equal 2.31 feet of head.
- F. G.P.M.: Volume of water shall be given as gallons per minute abbreviated G.P.M.
- G. Zone: A zone shall be defined as a group of heads operating at the same time downstream under a common control valve. A zone shall be derived as further described hereinafter on the basis of available water pressure and volume and physical location/orientation.
- H. P.V.C.: P.V.C. shall denote the abbreviation for polyvinyl chloride material used in the manufacture of pipe and fittings as further specified hereinafter.
- I. Contract Documents: For the purposes of bid submission, contract agreement and execution of the work, the contract documents shall be binding upon all parties and shall include but not be limited to applicable plans, details, schedules, specifications and bidder instructions.
- J. Equivalency: Relevant to manufacturer product lines specified herein, equivalents shall be of like type, manufacture, design, materials, operation and performance. They shall be approved by the Architect.
- K. The Plans: Irrigation Design and/or specifications provided by the Owner or Architect. In the event of conflict between the plans and the written specifications, the plans shall prevail.
- L. P.O.C.: Water source(s) for the irrigation system shall be referred to as the point of connection abbreviated P.O.C.
- M. A.S.T.M.: Abbreviation for the American Society for Testing Materials.
- N. A.W.W.A.: Abbreviation for the American Water Works Association.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:
 - 1. Rain Bird Sprinkler Mfg. Corp.
 - 2. Hunter Industries
 - 3. Irri-trol Irrigation

2.02 MATERIALS

- A. General: All major equipment has been categorized and listed on the drawings. Materials not named shall be subject to approval or rejection by the Architect. All material shall be of new stock and best grade of its kind. It shall be as specified unless otherwise specifically approved by the Architect. In all cases, workmanship and material shall conform to or exceed the requirements and codes of the municipalities having jurisdiction on the project.
- B. PVC Pipe:
1. General: Plastic pipe shall be rigid, high impact, Type I, unplasticized polyvinyl chloride extruded from virgin parent material PVC 1120. The pipe shall be homogeneous throughout and free from visible cracks, holes, foreign materials, blisters, deleterious wrinkles or dents. All plastic pipe shall be continuously and permanently marked with:
 - a. manufacturer's name
 - b. nominal pipe size
 - c. pressure rating
 - d. NSF approval
 - e. schedule or class
 - f. date of extrusion
 2. Plastic pipe shall be as manufactured by World of Plastics, Johns Manville, or Colonial.
 3. Main Lines: All piping under constant pressure, between the point of connection and control valves shall meet local code or shall be P.V.C. SDR 21, 200 P.S.I. gasket joint pipe meeting ASTM D2241.
 4. Lateral Lines: All piping under intermittent pressure, downstream of control valves, shall meet local code or shall be P.V.C. SDR 26, 160 P.S.I. solvent weld pipe meeting ASTM D2241.
- C. Pipe Fittings and Connectors:
1. Main Line Fittings: 200 PSI PVC gasket joint fittings shall be used for all main line connections. Fittings shall be designed for use with IPS Plastic Pipe and feature deep bells.
 2. Lateral Line Fittings: Plastic pipe fittings to be installed shall be Schedule 40 injection molded from virgin Type I high impact unplasticized rigid Polyvinyl Chloride (P.V.C.) molding compound. Unless otherwise specified on the plans.
 3. Threaded PVC Nipples: Shall be Schedule 80 PVC.
 4. Shrub Head Risers: Risers for shrub spray heads are to be Schedule 40 PVC pipe, unless otherwise specified on the plans.
 5. ½" Sprinkler Head Connectors: Shall be an 18 inch long flexible connection, Heavy Wall PVC IPS Hose or equal. Unless otherwise specified on the plans.

6. 3/4" Sprinkler Head Connectors: Shall be an 18 inch long flexible connection, Heavy Wall PVC IPS Hose or equal. Unless otherwise specified on the plans.
 7. 1" Sprinkler Head Connectors: Shall be a three elbow, Sch. 80 PVC swing joint or equal. Unless otherwise specified on the plans.
- D. Solvent Cement: Provide solvent cement and primer for PVC solvent weld pipe and fittings as recommended by the pipe and fitting manufacturer.
- E. Valves
1. Electric Control Valves: Globe configuration valves operated by low-power (24 volt) solenoid, normally closed, manual flow adjustment and 200 PSI working pressure. All electric control valves shall be fully compatible with the automatic controller with respect to the type of control, voltage, amperage and "normal" sequence positioning. Control valves shall be Hunter #ICV-FS Series.
 2. Threaded Gate Valves: Gate Valves shall conform to federal specification WWV 54, Type I, Class A, with all brass or bronze body, non-rising stem, NIBCO #T-113, or approved equal.
 3. Gasket Joint Gate Valves: Gate Valves shall be iron body with resilient wedge, equipped with a square operating nut, Matco 10RT or approved equal.
- F. Valve Boxes:
1. General: Tapered rib reinforced enclosures manufactured from structural foam, chemically inert and resistant to moisture, ultraviolet light, corrosion and temperature changes. Lids shall be of same material and green in color. Valve Numbers shall be marked on the lids in 2" lettering with high visibility paint or permanent marker.
 2. For Control Valves: Carson 1419B-13.
 3. For Gate valves: Carson 910-12.
 4. For Wire Splices: Carson 910-12.
 5. For Drip Valve Assemblies: Carson 1324B-12L.
- G. Sprinkler Heads:
1. General: Manufacturer's standard unit designed to provide uniform coverage over entire area of spray shown on drawings at available water pressure.
 2. 1/2" Inlet Pop-Up Spray Head: Removable nozzle with fixed or adjustable spray pattern, with screw-type flow adjustment and stainless steel retraction spring. Hunter #PROS-06.
 3. 3/4" Inlet Pop-up Rotor Head: Gear driven, full circle and adjustable part circle. Hunter #I20-ADV.
 4. 1" Inlet Pop-up Rotor Head: Gear driven, full circle and adjustable part circle. Hunter #I25-ADV.

- H. Drip Tubing: Heavy wall flexible tube with one (1) GPH pressure compensating emitters factory installed at 12 inch spacing. Rain Bird XPC-10-12.
- I. Automatic Controller: Automatic controller shall be of the size and type as shown on the drawings. Controller shall be capable of "water budgeting" each program and shall be compatible with a "rain shut off" device.
- J. Rain Shut Off Device: Hunter #502 "Mini-Clik" Rain Switch.
- K. 110 Volt Surge Protection: Advanced Protection #TE/120VAC-15A1.
- L. Sleeves and Conduit: Sleeves shall be PVC SCH 40 or cast iron pipe of adequate diameter to accommodate the pipe(s) or wire(s) with sufficient free play to allow removal and reinstallation without binding. Minimum sleeve size shall be 2".
- M. Control Wiring: Shall be direct burial, single strand, size AWG 12 or 14 gauge, UL Listed, Type U.F., 600 volt wire. Use red for pilot (hot) wire and white for common wire. Use blue for spare wires.
- N. Backflow Prevention: Backflow prevention device shall be as approved by the local governing body. Watts Series 007 Double Check Valve Assembly.
- O. Concrete
2500 PSI/28 day, to conform to Division 3 requirements.

PART 3 - EXECUTION

3.01 SYSTEM DESIGN

- A. Construction Drawings: The drawings are generally diagrammatic. Due to the scale of the drawings, it is not possible to indicate all offsets, fittings and sleeves which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the work and plan his work accordingly.
- B. Location of Heads: The location of heads are approximate. Make minor adjustments as necessary to avoid plantings and other obstructions and to obtain coverage. In no case shall head spacing exceed a distance equal to 60% of the manufacturer's effective diameter rating if the sprinklers are placed in a square or rectangular pattern, nor 70% if in an equilateral triangular pattern.
- C. Pipe Sizes: All lateral line pipes shall be sized to provide a maximum pressure loss (from the remote control valve to the last sprinkler head on the zone) of 10% of the operating pressure on that zone. Maximum water velocity shall not exceed 5.0 feet per second in the main line and 7.0 feet per second in the lateral lines. Unless specified on the drawings.

3.02 PIPE INSTALLATION

A. Trenching:

1. Trenches shall be dug straight. Trench bottoms shall be at true gradient providing support to pipe through its entire length. Trench bottoms shall be free from rocks, clods, debris, and sharp-edged objects. The minimum depth of lines measured to top of pipe, unless otherwise indicated on plans, shall be as stated herein.
 - a. Main lines and quick coupler lines shall be 24 inches.
 - b. Lateral sprinkler lines shall be 12 inches.
 - c. Provide minimum cover of 18 inches for all control wiring.
 - d. Drip tubing shall be installed at grade and covered with mulch.
2. All trenching or other work under the limb spread of any and all plants shall be done by the Contractor by hand or by other methods so that no limbs or branches are damaged in any way.

B. Sleeves and Conduit:

1. All pipe and wiring routed under areas to be paved shall be placed in separate sleeves extending 12 inches beyond the edges of the pavement. Unless otherwise noted on the plans, sleeves are to be provided by the Irrigation Contractor.
2. Where pavement is existing, the Contractor shall "jack and bore" a sleeve a minimum of 18 inches under the finish grade of existing paving as per local regulatory codes.

C. Piping:

1. Storage and Transportation: Pipe shall be handled and stored in a manner to prevent damage. The plastic pipe and fittings shall be stored under cover, and shall be transported in a vehicle with a bed long enough to allow the length of pipe to lie flat so as not to be subject to undue bending or concentrated external load at any point. Any plastic pipe that has been dented or damaged shall not be used unless such damage has been cut and pipe is rejoined with a coupling.
2. Cleaning Requirement: Clean interior of pipe thoroughly and remove all dirt or foreign matter before lowering pipe into trench. Keep pipe clean during operations by plugs or other approved methods. All offsets shall be made with fittings. All water lines shall be thoroughly flushed out before valves or sprinkler heads are installed.
3. Install P.V.C. pipe in dry weather when temperature is above 40°F in strict accordance with manufacturer's instructions. Allow joints to cure at least 24 hours at temperature above 40°F before testing, unless otherwise recommended by manufacturer.
4. All PVC pipe and fittings shall be installed by the Contractor as recommended by the pipe manufacturer. The Contractor shall assume full responsibility for the correct installation.

5. Pipe Joints, in general, shall be formed by competent tradesmen specifically trained in the type of work required and using tools and equipment recommended by the manufacturers of the pipe, fittings or equipment.
- D. Thrust Blocking: All main line over 2" (nominal size) shall have thrust blocks at all tees, bends, changes in size or at the end of pipe lines, as recommended by the pipe manufacturer. All wires shall be kept free from concrete by the Contractor and placed outside of the thrust block. Thrust blocks shall be poured against undisturbed ground. Use poured concrete only, no precast thrust blocks will be allowed. See "Thrust Block Detail" on Irrigation Plan.
- E. Fittings:
1. Solvent Welded PVC Fittings: Install as per manufacturers recommendations.
 2. PVC Gasket Joint Fittings: Install as per manufacturers recommendations.
 3. Galvanized Steel Pipe and Fittings: Threads shall be sound, clean cut, and well fitting. Threaded joints shall be made up with the best quality pure joint compound or lead paste, carefully and smoothly placed on the male threads only, throughout the system. Any leaky joints shall be remade with new material. Use of thread cement or caulking to make joints tight will not be permitted. All cut ends shall be remade to full bore before assembly.
 4. Plastic to Steel Connections: Male thread plastic to female thread steel shall be used. The same shall apply to plastic and brass or other metal. In no case shall metal be screwed into a plastic fitting. A non-hardening pipe dope such as "Permatex No. 2" or equal, shall be used on threaded plastic to metal joints, and light wrench pressure is that should be used.
- F. Wiring:
1. Wiring shall occupy pipe trenches wherever possible. Lay the wire(s) along the side of the pipe. Where more than one (1) wire is placed in a trench, all wires shall be taped together at intervals of twenty (20) feet.
 2. An expansion curl shall be provided within three (3) feet of each wire connection and at least every two hundred (200) feet in length. Expansion curls shall be formed by wrapping at least twelve (12) turns of wire around a pipe 1" (or more) in diameter, then withdrawing pipe.
 3. All splices shall be made with 3M DBY connectors. All wire splices must be enclosed in a valve box for easy inspection and servicing.
 4. All control wiring routed beneath or through pavement, walks, curbs and/or other structural elements shall be run through P.V.C. Schedule 40 conduit of sufficient diameter for wire pulling.

5. Install two (2) spare wires from each controller to the furthest valve in each direction from that controller. A pair of spare wires should pass every valve box on the system. Leave a loop with 36 inches of excess spare wire in every valve box.
6. Where multiple valves are to be connected to a single controller station, a separate hot wire should be installed from the controller to each valve. Multiple valves tied to a single hot wire will not be accepted.

G. Backfilling:

1. Backfill material shall be approved soil, free from large rocks (over 1 inch in size), debris or sharp objects. In general, the material removed from excavation may be used. All excavated rocky material shall be removed from the site and suitable fill material, approved by the Architect, obtained for backfill.
2. Backfilling shall be done when pipe is not in an expanded or contracted condition due to temperature extremes. Cooling of the pipe can be accomplished by operation of the system for a short time before backfill, or by backfilling in the early part of the morning before the heat of the day.
3. Long runs of P.V.C. pipe shall be snaked in the trench to allow for contraction.
4. Backfill shall follow excavation with the least possible delay. Open trenches shall be adequately protected to cause the least possible hazard to and interference with people and animals.
5. The Contractor shall hand place the first 6 inches of backfill (or to the top of pipe) and have it compacted so as to secure the position of the pipe and wire. Backfill shall be compacted by tamping while soil is moist (not wet). The operation shall be repeated until finished grade of back filled trenches matches that of adjacent soil.

3.03 EQUIPMENT INSTALLATION

A. Backflow Preventor: Install as per local codes. All piping exposed above ground shall be SCH 40 Galvanized or Ductile Iron. Use of PVC pipe above grade will not be accepted.

B. Electric Control Valves:

1. Adjust the flow control on all electric control valves to limit the down stream pressure to the recommended operating pressure for the sprinkler/nozzle combination used on each zone.
2. Wherever possible, locate valves in plant bed areas for best concealment and accessibility.
3. Valves are to be large enough to accommodate maintenance and operations of valves. Provide a 3 inch deep sump of ½ inch diameter river gravel at bottom of valve pit.

C. Sprinkler Heads:

1. Sprinkler heads shall be installed in a plumb position at intervals not to exceed the maximum spacings specified by the manufacturer for project conditions, or as indicated on the drawings.
2. Heads in turf areas shall be installed 6 inches away from the edge of the curb or walk. All heads shall be installed on flexible connectors or swing joints and shall allow for vertical adjustment of heads. 6 inch pop-up spray heads or 4" pop-up rotors (where appropriate) shall be used in turf areas.
3. Where pop-up spray or rotor heads are installed in low ground cover areas, including mass plantings of dwarf shrubs (not exceeding 16 inches in height at maturity), use 12 inch pop-up heads installed with the top of the sprinkler head 6 inches above grade.
4. Where pop-up spray or rotor heads are installed in tall shrubs, hedges or mass plantings of large shrubs (exceeding 16 inches in height at maturity), use 12 inch pop-up heads installed above grade with the top of the sprinkler head flush with the surrounding plant material. Install on PVC SCH. 40 risers. Support all risers with a #5 rebar stake (from base of sprinkler to 24 inch below grade) fastened with nylon cable ties. If heads are installed in areas abutting parking spaces, they must be placed a minimum of 30 inches away from back of curb stop so as not to be damaged by vehicle overhang. All risers and other above-ground piping and fixtures shall be painted with a permanent flat black enamel paint.
5. Pop-up heads adjacent to vehicle pavement that is not curbed shall be installed with 8" x 8" x 4" concrete block set flush with the top of the heads. Head installed adjacent to pedestrian curbs or walks shall be installed 6 inches away from the curb or walk. Where adjacent to buildings, fences or similar structures, heads shall be installed 12 inches away from the structure.

D. Automatic Controller:

1. Unless otherwise noted on the plan, the 120 volt electrical power to the automatic controller location to be furnished by others. The irrigation contractor shall make all connections in the low-voltage system between the automatic controller and the valves.
2. Each controller shall be properly grounded with the use of one or more 5/8"x8' copper clad ground rods and AWG #6 bare copper wire. The resistance from the ground rod to earth shall be 5 ohms or less.

3.04 TESTING

A. General: In no event shall the contractor cover up or otherwise remove from view any work under this contract without prior approval of the Owner. Any work covered prior to inspection shall be opened to view by the Contractor at his expense. Notify the Architect in writing when testing will be conducted, and conduct tests in presence of the Architect.

B. Leakage Testing:

1. All Main Lines shall be tested prior to backfill of joints. Slowly fill the main line piping with water, taking care to purge the air from it by operating all of the control valves one or more times and/or such other means as may be necessary. Allow the pipe to sit full of water for 24 hours to dissolve remaining trapped air. Use a metering pump to elevate the water pressure to 100 PSI and hold there

for a period of 2 hours. The formula " $L = N D P / 7,400$ " shall be used to determine the maximum allowable leakage. Where:

- a. L = allowable leakage (GPH)
- b. N = number of joints
- c. D = nominal diameter of pipe (inches)
- d. P = average test pressure (PSI)
- e. S = length of pipe (feet)

- 2. If the test indicates leaks in the system, locate and repair the leak, then retest the pipeline until it passes the test. Any covered pipe found to leak, shall be excavated and repaired at the Contractor's expense.
- 3. All Lateral Lines shall be tested prior to backfill of joints. Testing shall be conducted during the operational testing of the system by visually inspecting the joints and the ground surface along trench lines. All leaks found shall be repaired by the Contractor at his expense and the system shall then be retested.

C. Operational Test: The entire installation shall be placed in operation by this Contractor and tested in the presence of the Owner or his Representative for proper functioning as a whole. Location and arc of heads shall be adjusted if required to eliminate any dry spots, over-water or spillage on adjacent areas and to prevent over spray onto walks, roadways and buildings as much as possible.

3.05 GUARANTEE

- A. General: The entire sprinkler system shall be guaranteed for reasons other than neglect, abuse, accidental damage, undue weather condition and/or any other Acts of God, by the Contractor to give complete and satisfactory service as to materials and workmanship for a period of one year from the date of final acceptance of the work by the Owner.
- B. Corrections: Should any trouble develop within the specified guarantee period which in the opinion of the Owner is due to inferior or faulty materials and/or workmanship, the trouble shall be corrected without delay by the Contractor, to the satisfaction of any at no expense to the Owner.
- C. Liability: Any and all damage to rain water drains, water supply lines, gas lines and/or other service lines, shall be repaired and made good by the Contractor at no extra cost to the Owner. It is the responsibility of the Contractor to be aware of the location of all utilities of other permanent or non-permanent installations and to protect these installations from any damage whatsoever.

END OF SECTION 02810

BID FORM AND SPECIFICATIONS

ITEM NUMBER	DESCRIPTION	UNIT PRICE
1a.	Phase 1 Irrigation - Frostproof Middle-Senior 1000 North Palm Avenue Frostproof, FL 33843 Furnish and Install an irrigation system for Phase 1 per the specifications listed in sections Y., 02000, 02810, 02920 and the plans issued during the mandatory pre-bid conference.	\$ <u> </u> ea.
1b.	Phase 2 Irrigation - (pending available funding) Frostproof Middle-Senior 1000 North Palm Avenue Frostproof, FL 33843 Furnish and Install an irrigation system for Phase 2 per the specifications listed in sections Y., 02000, 02810, 02920 and the plans issued during the mandatory pre-bid conference.	\$ <u> </u> ea.
2.	Practice Field Irrigation - Southwest Middle 2815 Eden Parkway Lakeland, FL 33803 Furnish and Install a practice field irrigation system for the practice field per the specifications listed in sections Y., 02000, 02810, 02920 and the plans issued during the mandatory pre-bid conference.	\$ <u> </u> ea.
3.	Practice Field Irrigation - Crystal Lake Middle 2410 North Crystal Lake Drive Lakeland, FL 33801 Furnish and Install a practice field irrigation system for the practice field per the specifications listed in sections Y., 02000, 02810, 02920 and the plans issued during the mandatory pre-bid conference.	\$ <u> </u> ea.

Comments / Bidder acknowledgement of compliance with the "Trench Safety Act": _____

Please state company name and authorized signature _____

BID FORM AND SPECIFICATIONS continued

Subcontractors Name and Address (if applicable): _____

Warranty: At a minimum the warranty shall be for one year after acceptance of the project on all parts and workmanship as per the specifications.

SUBMITTALS CHECKLIST

To help ensure that you include all the submittals necessary to complete a thorough evaluation of your bid proposal, we suggest that you use this checklist as a reminder to yourself, by placing a check in each box in the **Verified** column indicating that the item is included in your bid proposal packet. Include this completed checklist along with your bid. Items checked **Required** should be submitted at the time you submit your bid or your bid may be declared non-responsive. Items checked **Requested** should be submitted at the time you submit your bid to facilitate the bid evaluation process, but will not be cause for declaring your bid non-responsive.

Verified	Required	Requested	Description of Submittal	Page No.
	x		Completed and signed Invitation to Bid Form	1
	X		Recent Project References	7
	X		Written assurance your firm will comply with the "Trench Safety Act". Space provided on BID FORM AND SPECIFICATIONS	7
	X		Subcontractors Name and address (if applicable). Space provided on BID FORM AND SPECIFICATIONS	7
	X		Submittals as required by SECTION 02810	19
		X	Certificate of Insurance including evidence of workers compensation coverage	10
		X	Completed and signed Drug Free Workplace Certification (optional)	

NOTE: Sign the "Bidder's Acknowledgment" section on Page 1 of our "Invitation to Bid". Return the original of the Invitation to Bid and retain a photocopy for your files.

Please state company name and authorized signature _____

ATTACHMENT 1

L4 Service Center, North Lakeland
Manager - Sonny Boyette
200 W. Robson St.
Lakeland, FL 33805
Tel: 863/413-2028, 413-2029
FAX: 863/413-2030
Email: L4shop@polk-fl.net

L6 Service Center, South Lakeland
Manager - Doug Castile
360 Brannen Rd.
Lakeland, FL 33813
Tel: 863/648-3582
Fax: 863/648-3584
Email: L6shop@polk-fl.net

LW9 Service Center
Manager - James Cobb
4020 Polk Bus Rd.
Lake Wales, FL 33853
Tel: 863/678-4272
Fax: 863/678-4273
Email: LW9shop@polk-fl.net

WH5 Service Center
Manager - Tim Smith
5500 Commercial Blvd.
Winter Haven, FL 33880
Tel: 863/965-6290
Fax: 863/965-6291
Email: WH5shop@polk-fl.net

UA1 Service Center
Manager - Dwight Marsh
1795 E. Wabash Street
Tel: 863/534-0850
Fax: 863/534-0852
Email: UA1shop@polk-fl.net