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WASCO SANITARY DISTRICT
Kane County, Illinois
CENTER PIVOT RIG REPLACEMENT
CONTRACT DOCUMENTS

December 1, 2022

Prepared for:

WASCO SANITARY DISTRICT
P.O. BOX 9
WASCO, ILLINOIS 60183

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NOTICE TO BIDDERS

Sealed bids submitted in **duplicate** in a sealed envelope with the words "Center Pivot Rig Replacement" clearly marked on it, will be received by the Wasco Sanitary District until **1:00 p.m., Monday, January 9, 2023** at the Office of the Wasco Sanitary District, 40W250 LaFox Road, Campton Hills, IL, at which time they will be publicly opened and read aloud for the furnishing of all materials, labor, and for performing all related work for:

- Removal of existing center pivot rig at the Campton Hills Road irrigation field
- Installation of a new center pivot rig

his work shall be done in accordance with the specifications as prepared by Sheaffer & Roland, Inc. Copies of the plans and specifications may be obtained in electronic form after 8:00 a.m. on Friday, December 2, 2023 from the District's web site. Hard copies are also available after the same date at the office of, Sheaffer & Roland, Inc. 611 Stevens Street, Geneva Illinois 60134 (Office: 630-208-9898).

Bidders are required to submit qualifications in accordance with contract documents. There will be a non-mandatory pre-bid meeting on Wednesday, December 21, 2022 at 1:00 p.m. at Wasco Sanitary District Offices, 40W250 LaFox Road, Campton Hills, IL.

The Contractor and sub-contractors shall comply with prevailing wage requirements at the time of the signing of the contract as found by the Department of Labor or as determined by the Court of Appeal, to all his/her employees performing work under the Contract. A signed certification stating the above as well as the fact that the bidder is not barred from bidding as a result of a violation of either Section 33E-3 or 33E-4 of Chapter 38, Illinois Revised Statutes, 1987 (as amended) must be submitted by the successful bidder as part of this contract.

The Wasco Sanitary District reserves the right to reject any or all bids and waive technicalities. In addition, the District reserves the right to hold all bids for up to 90 days after opening.

INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS:

The term "Bidder" means one who submits a Bid directly to Owner, as distinct from a sub-bidder, who submits a bid to a Bidder. The term "Successful Bidder" (who may also be the lowest Bidder) means the Bidder who on the basis of Owner's evaluation as hereinafter provided is qualified, responsible and responsive to whom Owner makes an award. The term "Bidding Documents" includes the Notice to Bidders, Instructions to Bidders, the Proposal and Bid Form, the proposed Contract Documents and Project Specifications (including all Addenda issued prior to receipt of Bids), and the plans prepared by Sheaffer & Roland, Inc.

2. COPIES OF BIDDING DOCUMENTS:

- 2.1. Complete sets of the Bidding Documents are available electronically from the District's web site and hard copies at the price stated in the Notice to Bidders may be obtained at Sheaffer & Roland, Inc. 611 Stevens Street, Geneva, Illinois, 60134, (phone 630-208-9898).
- 2.2. Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.3. Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.
- 2.4. BIDDER is solely responsible to verify if addenda to the Bid Documents are issued by checking the District web site or by contacting the Engineer prior to the Bid Opening.

3. QUALIFICATIONS OF BIDDERS:

To demonstrate qualifications to perform the work and to be considered responsive and to consider the proposal as complete, each Bidder must be prepared and submit **with the Bid Form**, written evidence of the Bidder's ability to perform the Work. The submittal should be prepared using the Affidavit of Experience provided hereafter. Each Bid must contain evidence of Bidder's qualification to do business in Illinois or covenant to obtain such qualification prior to award of the Contract.

4. EXAMINATION OF CONTRACT DOCUMENTS AND SITE:

- 4.1. It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the Work, there will be a **non-mandatory pre-bid meeting on December 21, 2022 at 1:00 p.m. at Wasco Sanitary District Offices, 40W250 LaFox Road, Campton Hills, IL.** (c) consider federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work, (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify the Owner of all conflicts, errors or discrepancies in the Contract Documents, in writing, five days prior to the bid opening.

- 4.2. On request in advance, Owner will provide each Bidder access to the site to conduct explorations and tests as each Bidder deems necessary for submission of a Bid.
- 4.3. The submission of a Bid shall constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the contract Documents and such means, methods, techniques, sequences or procedures of maintenance activities as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

5. INTERPRETATIONS AND ADDENDA:

All questions about the meaning or intent of the Contract Documents are to be directed to the Owner. Interpretations or clarifications considered necessary by the Owner in response to such questions will be issued by Addenda posted to the District web site. Questions received less than five days prior to the date for opening of Bids may not be answered. Questions answered by fax or a formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

6. CONTRACT TIME:

The number of days within which, or the dates by which, the Work is to be substantially completed and also completed and ready for final payment (the Contract Time) are set forth in the Bid Form and the Agreement.

7. SUBSTITUTE OR "OR-EQUAL" ITEMS:

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to the Owner, application for such acceptance will not be considered by the Owner until after the Effective Date of the Agreement.

8. BID FORM:

- 8.1. All Bids must be made on the required Bid Form. The Bid Form is included with the Bidding Documents. All bids must be filled out in duplicate.
- 8.2. All blanks on the Bid Form must be completed in ink or typed.
- 8.3. Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.
- 8.4. Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.
- 8.5. All names must be typed or printed below the signature.
- 8.6. The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of

which must be filled in on the Bid Form).

8.7. The address and telephone number for communications regarding the Bid must be shown.

8.8. A Bid price shall be made for all items of work and materials indicated in the bid schedule for each section of work. A bid price may or may not be submitted for the alternatives described in the documents as provided in the Bid Form. The Owner shall select which alternate, if any, will be awarded.

9. SUBMISSION OF BIDS:

Bids shall be submitted at the time and place indicated in the Notice to Bidders and shall be enclosed in an opaque sealed envelope, marked with the Project title and if applicable, the designated portion of the Project for which the Bid is submitted, and name and address of the Bidder and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

10. MODIFICATION AND WITHDRAWAL OF BIDS:

10.1. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

10.2. If, within twenty-four hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid security will be returned. Thereafter, that Bidder shall be disqualified from further bidding on the Work to be provided under the Contract Documents.

11. OPENING OF BIDS:

Bids will be opened and (unless obviously non-responsive) read aloud publicly at a time and place in accordance with the Notice to Bidders. A tabulation of the amounts of the base Bids and major alternates (if any) will be made available to Bidders after the opening of Bids.

12. BIDS TO REMAIN SUBJECT TO ACCEPTANCE:

All bids shall remain subject to acceptance for ninety days after the day of the Bid opening, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to that date.

13. AWARD OF CONTRACT:

13.1. Owner reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder, and the right to disregard all nonconforming, non-responsive, unbalanced or conditional Bids. Also, Owner reserves the right to reject the Bid of and Bidder if Owner believes that it would not be in the best interest of the project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. Discrepancies in the multiplication of units of Work and unit prices shall be resolved in favor of the unit prices. Discrepancies between the

indicated sum of any column of figures and the correct sum thereof shall be resolved in favor of the correct sum.

- 13.2.** In evaluating Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award. It is the intent of the District to award the contract to the most qualified, responsible and responsive bidder, based on the combination of base bid and bid alternates yielding the optimum overall project cost. Bidders who have not submitted qualifications with the Bid Form in accordance with bid requirements will not be considered responsive or qualified.
- 13.3.** Owner may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Contract Documents. Owner also may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.
- 13.4.** Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed Subcontractors, Suppliers and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.
- 13.5** If the contract is to be awarded, it will be awarded to a qualified Bidder who has fully complied with bid requirements and whose evaluation by Owner indicates to Owner that the award will be in the best interests of the Project. If the lowest bidder happens to be best qualified bidder to perform the work he/she or his/her firm will be the Successful Bidder.
- 13.6** If the contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within seven business days after the day of the Bid opening. Should there be reasons the Contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and Bidder.

14. CONTRACT SECURITY:

A Performance bond is not required for this contract.

15. SIGNING OF AGREEMENT:

- 15.1.** Then Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within three business days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner with the required Bonds. Within one business day thereafter Owner shall deliver one fully signed counterpart to Contractor. Each counterpart is to be accompanied by a complete set of the Drawings with appropriate identification.
- 15.2.** In case of failure of the Bidder to execute the Agreement, the Owner may at his option consider the Bidder in default, in which case the Bid Security accompanying the

proposal shall become the property of the Owner.

16. SALES AND USE TAXES:

Under Rule No. 40 of the Illinois Retailer's Occupation Tax Rules, issued April 15, 1965, sales to governmental bodies are exempt from State and Local Retailer's Occupation Tax, State and Local Service Occupation Tax, Use Tax and Service Use Tax.

17. APPLICABLE LAWS, ORDINANCES, RULES, AND REGULATIONS:

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over maintenance activities shall apply to the Contract throughout.

18. PREVAILING WAGE & CERTIFIED PAYROLL:

As required by the Department of Labor and as set forth in the Kane County Prevailing Wage for January 1, 2022, the general prevailing rate of wages in the locality for each craft or type or worker or mechanic needed to execute the Contract or perform such work, also the general prevailing rate for legal holiday and overtime work, as ascertained by the public body or by the Department of Labor shall be paid for each craft or type of worker needed to execute the Contract or to perform such work, and it shall be mandatory upon the Contractor to whom the Contract is awarded and upon any subcontractor under him, and where the public body performs the work, upon the public body, to pay not less than the specified rates to all laborers, workers and mechanics employed by them in the execution of the Contract or such work.

The Contractor and each subcontractor shall keep or cause to be kept and accurate record showing the names and occupation of all laborers, workers and mechanics employed by them, in connection with said public work, and showing also the actual hourly wages paid to each of such persons, which record shall be open at all reasonable hours to the inspection of the public body awarding the Contract, its officers and agents, and to the Director of Labor and his deputies and agents. **Furthermore the Contractor and all Subcontractors shall submit Certified Payroll documentation in accordance with Illinois Department of Labor requirements on a monthly basis and/or with any pay request.**

19. BIDDING CERTIFICATE:

A statement certifying that the Bidder is not barred from bidding on the Project Specifications as a result of a violation of either Section 33E-3 or 33E-4 of Chapter 38, Illinois Revised Statutes, 1987 (as amended) shall be submitted with the Bid prior to the time of the Bid opening. The certificate form is attached to the Project Specifications.

20. PHOTOCOPIED BID PROPOSAL:

The Contractor shall submit the original bid documents along with a copy of the bid proposal which can be removed from the original documents. The copy shall be a photocopy of the original and be placed in the designated location in the Bid Documents.

21. CONTRACT PROVISIONS & SPECIFICATIONS:

Submission of a bid proposal shall be sufficient to satisfy the requirement for a written agreement between the Contractor and Engineer as stipulated in Section 202.07(a) of the

Standard Specifications. **Any discrepancies or disagreement with the specifications must be provided to the District in writing, prior to or at the bid opening.**

PROPOSAL

The following proposal is hereby made to the **Wasco Sanitary District**, hereinafter called the

Owner. Proposal is submitted in duplicate by _____

The undersigned hereby proposes and agrees to furnish all the necessary labor, materials, equipment, tools and services necessary to perform all work associated with the Center Pivot Rig Replacement in accordance with the Specifications and procedural documents attached, and other contractual documents, including the plans.

In submitting this proposal the undersigned declares that the only persons or parties interested in the Proposal as principals are those named herein and that the Proposal is made without collusion with any other person, firm, or corporation.

The Undersigned acknowledges receipt of the following Addenda.

<u>Addendum No.</u>	<u>Date</u>	<u>Initials</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

The Undersigned declares that he has examined the Contract Documents and is familiar with the local conditions at the site where the work is to be performed and with the conditions affecting the Contract and the requirements of the maintenance work and understands that in making this Proposal he waives all right to plead any misunderstanding regarding the same.

The undersigned further agrees to begin work after the issuance date of the notice to proceed unless otherwise provided and to prosecute the work in such a manner and with sufficient materials, equipment, and labor as shall insure its completion by the completion date, it being understood and agreed that the completion within the time limit is an essential part of the Contract.

Any discrepancies or disagreement with the plan quantities must be provided to the District in writing, prior to or at the bid opening.

BID FORM – SCHEDULE OF PAY ITEMS

Special Provision	Item	Quantity	Unit	Unit Price	Amount
SP-1	Removal of Existing Center Pivot Rig	1	L. SUM	\$	\$
SP-2	Installation & Startup of New Center Pivot Rig	1	L. SUM	\$	\$

TOTAL: _____

SUBCONTRACTOR / SUPPLIER LIST

The following information gives the name, business address, and portion of work (description of work) for each subcontractor and equipment supplier listed below that will be used in the work if the bidder is awarded the Contract. Each listed discipline must be completed prior to the time of the bid opening. Failure to complete this section may result in the Bid being declared non-responsive.

(Additional supporting data may be attached to this page. Each page shall be sequentially numbered, e.g., 00430-2, and headed "Subcontractor / Equipment Supplier List" and shall be signed.)

SUBCONTRACTOR LIST

Name	Business Address	Description of Work
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

SUPPLIER LIST

Name	Business Address	Description of Work
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Signature of Bidder

AFFIDAVIT OF EXPERIENCE

STATE OF _____)

)SS

COUNTY OF _____)

_____ being duly sworn, that he is

_____, of _____
(Sole owner, member of firm, corporate official) (Individual, firm, or corporate name)

Which has performed work of the general description and type identified in this contract for

_____ years and _____ months beginning in (year) _____

Has successfully completed work for the following entities of the general description and type identified in this contract:

<u>Name of Owner</u>	<u>Job Description/Location</u>	<u>\$ Amount</u>	<u>Year</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

and that _____ will be subcontracted to perform the
(Name of Subcontractor)

following work under this contract, and that his experience in this kind of work is as follows:

<u>Name of Subcontractor</u>	<u>Work Scope</u>	<u>References</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Signature: _____

Subscribed and sworn to before me this _____ day of _____ 20_____.

Notary Public

CERTIFICATION FOR BID

The undersigned, as a duly-authorized representative of the Bidder do hereby certifies to The Wasco Sanitary District, Kane County, Illinois, that the bidder is not barred from bidding upon the Bid Specifications for the Project known as Center Pivot Rig Replacement as a result of a violation of either Section33E-3 or33E-4 of Chapter 38, Illinois Revised Statutes, 1987 (As Amended).

All laborers, mechanics and any other workers employed in this Public Work contract, whether employed by the Contractor or any Sub-contractors, shall be paid in accordance with the prevailing wages accepted and approved by the Wasco Sanitary District as attached to the Contract Documents and Project Specifications.

NAME

COMPANY

DATE

CERTIFICATION FOR DRUG FREE WORK PLACE

The undersigned, as a duly-authorized representative of the Contractor do hereby certifies to The Wasco Sanitary District, Kane County, Illinois, that the Contractor ensures that he/she will operate a work environment which is free of any and all illegal drugs in accordance with the Drug Free Workplace Act of January, 1992. In addition, any prescribed drugs that will impair an employee's judgment or ability to work safely should not be allowed on the work site or on any satellite location.

NAME

COMPANY

DATE

**SPECIAL PROVISIONS
WASCO SANITARY DISTRICT
RADIUM PLANT PIPING & VALVE REPAIR**

The following Special Provisions; the "Standard Specifications for Road and Bridge Construction," adopted April 1, 2016, (hereinafter referred to as the Standard Specifications), the Standard Specifications for Water and Sewer Main Construction in Illinois (latest edition) shall apply to and govern the maintenance activities of the Center Pivot Rig Replacement. In case of conflict with any part or parts of said specifications, the Special Provisions shall take precedence and shall govern. In addition, these Special Provisions shall supersede any conflict with Division 100 of the Standard Specifications.

These Special Provisions supplement the Standard Specifications. In case of any conflict these Special Provision shall precede and govern.

The Contractor is herein notified that the Wasco Sanitary District reserves the right to add or delete items and delete sections of the improvement from this Contract as deemed necessary. The aforementioned deletions or additions shall not alter the contract unit prices for this project.

The Contractor shall provide a list of the intended Subcontractors to be used for the project. **THE WASCO SANITARY DISTRICT SHALL APPROVE ALL SUB-CONTRACTORS TO BE USED ON THE PROJECT AND RESERVES THE RIGHT TO REJECT THE USE OF ANY SUBCONTRACTOR DUE TO PAST PERFORMANCE or THE APPARENT INABILITY TO PROPERLY PERFORM THE WORK REQUIRED.**

All work as described by the BID FORM shall be completed within 75 days of bid award.

Maintenance activities shall be limited to the hours between 7:30 a.m. and 3:30 p.m. each working day unless required for safety purposes or approved otherwise by the district. No work is to be performed on Weekends and holidays observed in the State of Illinois.

INCIDENTAL ACTIVITIES

The Contractors shall perform all work indicated or implied in the Contract Documents. All work not specified, but required to complete the project in a satisfactory manner, shall be performed by the Contractor. All items of work not listed in the Bid Items shall be considered as incidental work to the Contract and no additional compensation shall be allowed.

WORK SCHEDULE

The Contractor is required to coordinate all work activities with Wasco Sanitary District operations staff.

CLEAN UP AND DISPOSAL

All excess material and any debris disposal by the Contractor shall be incidental and no additional compensation shall be allowed. The Contractor shall dispose of debris and surplus material off-site and is responsible to acquire any permit required for such disposal.

SAFETY AND PROTECTION

The Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with his work. The Engineer does not have the authority or the obligation to stop work based on unsafe work practices. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. All employees on the work site and other persons and organizations who may be affected thereby;
2. All of the work and materials and equipment to be incorporated therein, whether in storage on or off site; and

The Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor's duties and responsibilities for the safety and protection of the work shall continue until such time as all the work is completed and the Contractor has issued a notice to the Owner that the work is acceptable.

DEFINITIONS

"District" or "Owner" is the Wasco Sanitary District and its agents and/or representatives.

"Engineer" is Wasco Sanitary District Engineer, his representative and/or his agents.

All definitions stated in Section 101 of the Standard Specifications shall apply to this Contract.

INSURANCE REQUIREMENTS

The Contractor shall not start or allow his subcontractor to start any work under this contract until all insurance required by Section 107 of the Standard Specifications has been secured and that such insurance has been approved by the District. Such insurance, after the date filed, shall be maintained during the remaining life of the contract. The Contractor shall submit, on forms satisfactory to the District, a certificate of insurance showing the required coverage.

The Certificate of Insurance shall name the Wasco Sanitary District and its Elected and Appointed Officials and Sheaffer and Roland, Inc. as additional insured. In addition, the certificate of insurance shall state, "the coverage and limits conforms to the minimums required by Article 107.27 of the Standard Specifications". All costs associated with meeting these requirements shall be considered incidental to the Contract.

Revise Article 107.27 of the Standard Specifications and Supplemental Specifications so that "Department" will be replaced by "District" and its representatives and add the following:

- A. SAFETY: The Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work.

Nothing contained in these insurance requirements is to be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from his operations under this Contract.

Add to Article 107.27(b):

The coverage provided shall be sufficiently broad to insure the provisions entitled, "Indemnification," as discussed in the paragraph below.

- B. INDEMNIFICATION: The Contractor shall defend, indemnify, keep and save harmless the Wasco Sanitary District and Sheaffer & Roland, Inc., and their employees, in both individual and official capacities, against all suits, claims, damages, losses and expenses, including attorney's fees, caused by, growing out of, or incidental to, the performance of the work under the contract by the Contractor or his subcontractors to the full extent as follows by the laws of the State of Illinois and not beyond any extent which would render these provisions void or unenforceable.

A Certificate of Insurance evidencing the required coverages shall be submitted to the Owner and Engineer prior to commencing work on the project.

Liability Insurance

The limits of liability for the liability insurance required shall provide coverages for not less than the following amounts or greater where required by law and coverages shall be as follows:

Workers' Compensation

i.	Coverage A	Statutory
iii.	Coverage B	
	Bodily Injury by Accident (each accident)	\$500,000
	Bodily Injury by Disease (policy limit)	\$500,000
	Bodily Injury by Disease (each employee)	\$500,000

Include a waiver of Subrogation in favor of Wasco Sanitary District.

Commercial General Liability (including Blanket Contractual; Employees as Insureds; Broad Form Property Damage):

i.	General Aggregate	\$2,000,000
	Products/Completed Operations (Per Occurrence)	\$1,000,000
	Personal & Advertising Injury (Per Occurrence)	\$1,000,000
	Each Occurrence	\$1,000,000
	Fire Damage (Any One Fire)	\$ 100,000
ii.	Property Damage liability insurance will provide Explosion, Collapse and Underground coverages.	
iii.	The term "caused by an accident" shall be replaced by the term "occurrence".	

Comprehensive Automobile Liability:

- i. Bodily Injury / Property Damage
(Combined Single Limit per Accident): \$1,000,000
- ii. All owned, hired, or non-owned vehicles including the loading or unloading thereof.
- iii. The term “caused by an accident” if used in bodily injury or property damage coverage shall be replaced by the term “occurrence”.

Additional liability coverage for Owner and Engineer will be provided:

- i. By endorsement as additional insureds on Contractor’s General Liability policy.
- ii. Contractor's general liability carrier shall issue a separate Protective Liability policy covering Owner and Engineer.
(Combined Single Limit): \$1,000,000

Umbrella Liability Insurance in Contractor's name with Owner and Engineer as additional insureds.

- i. Each Occurrence \$1,000,000
Aggregate \$1,000,000
- ii. In addition to the insurance coverage set forth in the contract documents, the

Contractor shall maintain an Umbrella/Excess Liability policy with coverages for the same perils as covered under the primary policies, including any special requirements.

The deductible on the Contractor's Insurance Policy (as outlined above) will not exceed \$5,000.00.

ALL INSURANCE COVERAGE LIMITS PROVIDED THE DISTRICT (OWNER) ARE ON A PER LOCATION AGGREGATE LIMIT BASIS.

All insurance provided to the District (Owner) is primary and non-contributory with any insurance or self-insurance program maintained by the District (Owner).

The Contractor's insurance policies are to be endorsed to the District (Owner) and at least 30 days advanced notice will be given to the District (Owner) of cancellation, material reduction of insurance or non-renewal.

SP-1 EXISTING CENTER PIVOT RIG REMOVAL

Contractor shall furnish all labor, equipment, and supplies necessary for the removal of the existing center pivot rig. Contractor shall provide for the disposal of all removed equipment. Upon decommissioning of the existing center pivot rig the contractor shall provide a written list of critical parts that can be used as spare parts for the new center pivot rig. These items will include but are not limited to drive motors, wheels, tires and pumps. The District will provide space for the storage of these items at the Campton Hills facility. The contractor will transport the materials to the specified storage location.

SP-2 INSTALLATION OF NEW CENTER PIVOT RIG

General Description of Work

- A. An authorized Valley dealer will furnish, install and place in satisfactory operating condition one (1) Valley 8000P series center pivot and all required appurtenances in accordance with the approved plans and specifications. The description of the equipment to be provided is identified in attachment A. Alternate manufacturers will be considered. The contractor is responsible to provide an item by item comparison showing the alternate meets or exceeds the items specified below.
- B. The unit will be a self-contained, electrically propelled land irrigation machine driven by individual drive unit structures supported on rubber pneumatic tires. The basic power train will consist of a three-phase electric motor at each drive tower that will drive the wheels through a series of gear reductions. Each tower will be electrically controlled to maintain the selected operating speed and correct alignment.
- C. A Valley ICON5 control panel will provide operator control from the pivot point.
- D. The pivot irrigation equipment will be supplied by a manufacturer who conforms to Quality Standard, ISO 9001, 1994. Valmont Irrigation conforms to this standard for the Design and Manufacture of Irrigation Products.
- E. The existing center pivot rig spans shall be matched with the new equipment. The existing tires run along a stone track to minimize rutting as the rig travels around the field. Any modifications to manufacturer supplied equipment or additional components to meet this requirement shall be included in the base bid price. No additional compensation shall be provided to meet this requirement. Any modifications to manufacturer supplied equipment or additional components to meet this requirement shall come with a written warranty that meets or exceeds that of the manufacturer and installers warranty for similar non-modified components.
- F. The pump providing water to the irrigation rig is controlled using the Districts SCADA system. The new equipment shall operate when water is delivered to the system and pressure is observed at the pivot point.

General Design Criteria

- A. All equipment furnished will be new and unused, and will be the product of a manufacturer having successful experience in the manufacture of center pivot irrigation equipment.
- B. All equipment provided will be capable of maximum interchangeability of spare parts. The equipment incorporated in this proposal will be the product of, and furnished by, a manufacturer who is regularly engaged in the production of such equipment for similar applications, and who has an experience record of fifteen (15) years with installations similar to that contemplated in these specifications.

- C. All the equipment will be the manufacturer's latest and proven design. Specifications call attention to certain features, but do not purport to cover all details entering into the design of the entire pivot.
- D. All electrical components of the pivot will operate from a 480-volt, three-phase, 60-Hertz, 4-wire power supply to be provided at the pivot as per ASABE Standard S397.1.
- E. All controls for remote electrically operated or motor driven equipment will be complete, including all necessary auxiliary relays so as to require only remote wiring and wiring connections to the equipment.
- G. Commercially plated fasteners will be used on all connections, including the drive train U-joints, center drives and wheel gearboxes.
- G. All necessary fuses or switches required by the manufacturer for his equipment will be provided with the equipment.

Basis of Bid

- A. It is the intent that all equipment as defined from the pivot point to the end of the machine in this specification shall be supplied by the irrigation pivot manufacturer. Other non Valmont manufactured or supplied material to be designed, procured and installed by the authorized dealer.
- B. The manufacturer or dealer of the center pivot irrigation equipment will erect the center pivot with one or more factory trained personnel. This will include assembly of the mechanical portion of the center pivot, and start-up and adjustment of the equipment. This portion of the manufacturer's responsibility will be concluded when the center pivot has been operated continuously for one (1) field revolution.
- C. The pivot point foundation will comply with the requirements set by the center pivot manufacturer.

Instruction Manuals

One (1) copy of the Owner's Manual will be inserted inside the door of the pivot control panel.

Structural

- A. 6 5/8" Pivot Point - The four legged pivot point structure will be erected with 1/4" x 3" x 3" structural angle. The horizontal braces will be 1/8" x 2" x 2" or larger angle. Fixed pivot leg pads will be provided. The rotating swivel will be constructed with a stainless steel nipple that provides a smooth durable surface for the riser gasket water seal. The riser pipe will be 6 5/8" O. D. 12 gauge (.109" wall) hot dipped galvanized steel with a Pierce Coupling and triple lip seal and is attached with riser support steel rods to the non-rotating

swivel bearing. Two horizontal riser support angles and a gusset will stabilize the riser against deflection. Lower elbow will contain a 6 inch ANSI flange.

- B. PolySpan Pipeline - The main structural water supply pipe will be 6 5/8" O.D. 12 gauge (.109" wall) hot dipped galvanized steel with a polyethylene liner. The polyethylene liner is heated and extruded into the flanges at the ends of the pipes using a patented process that secures the liner to the pipe to prevent it from moving. On the ends of the pipe without a flange, the liner is formed back over the pipe end (non flange end) so that it makes a secure fit on the O. D. of the pipe. Water outlet couplings are 3/4" NPT made out of corrosion resistant Zytel material which forms a water tight seal between the inner liner and the outlet. Drop hoses are supported by a separate saddle attached to the steel pipe to prevent excessive loading on the outlet coupler. Outlet spacing to be 110".
- C. Pipe Support Structure - The pipe support structure of the pivot will be of a bow string, under truss design. Vee positioned truss angles will be .163" x 2" x 2" attached to wrap around brackets welded to the pipes. The truss angles will be supported with a .163" x 2" x 2" spreader angle positioned perpendicular to the pipeline. Truss rods will be a minimum 3/4" diameter steel and the rods will have radius hot forged head ends.
- D. Span Connections - The spans will be connected using an external ball and socket flex joint which allows for span to span flexibility, and does not transmit bending or torsional stresses into the pipe. The pipeline flex hose will be replaceable without disengaging the structural components of the flex joint and without any lifting equipment. The flex joint will not obstruct the water flow inside the pipeline. The flex hose will match the pipe diameter.
- E. Drive Unit Tower - The drive unit tower will be a four legged structure designed to withstand the forces induced when traversing rough terrain and ridged row crops. The drive unit legs will be fabricated from 1/4" x 3" x 3" angle. Two diagonal and six horizontal pre-galvanized braces will provide rigidity and strength to the drive unit. The horizontal base beam at the lower end of the structure will be constructed of 6 5/8" O. D., 12 gauge (.109") pipe and will provide a wheel base of 13.3 feet.
- H. Drive Unit Attachment - The fixed pipe of each span will be constructed of one piece of tubing. No stub pipe assemblies will be used. Drive unit legs will be attached to the one piece fixed or last pipe assembly to minimize the number of flanged connections on each span.
- I. Tower Supports - Two 2.875" O. D. 14 gauge (.083) pre-galvanized tubular tower support assemblies will be attached between the drive unit legs (Upper Brace connection) and pipeline attachment brackets. The tower supports will also be tied into the truss rods with a cross channel member. This arrangement provides a unitized support structure to withstand tension and compression forces as the towers move around the field on level and rolling terrain.

- J. Structural Component Finish - All critical structural members, including the pipe, angles, and base beam will be hot dip galvanized per ASTM Specification 123 on all surfaces, with the exception of the Xenoy nipple and various small brackets, which will be painted or plated.
- K. Fasteners - All bolts will be Grade 5 minimum. Locknuts will be used in all structural assemblies. All fasteners will be plated for corrosion protection.
- L. Any field welded connections or modified structural components shall be properly coated or painted as to minimize corrosion.

Drive Train

- A. Center Drive - The center drive will use a high efficiency, totally enclosed irrigation duty motor directly coupled to a double reduction gearbox with stainless steel stator bolts. Steel heat treated helical gears will be used for maximum efficiency and strength. The motor housing will be finned aluminum to provide additional cooling for longer life. The complete unit is designed to operate under extreme environmental conditions and is CSA and UL certified. The center drive motors will be 0.6 Hp (UL rating .8 Hp) and/or 1.2 Hp (UL rating 1.6 Hp) with a thermal sensitive device to protect the motor against excessive current or heat. One (1) motor at each drive unit provides input power to the two wheel gearboxes and will operate at 1800 (4-pole) or 3600 (2-pole) RPM for standard and high speed respectively. The motors will be rated at 1100 in.-lb. torque with a 1.3 service factor (continuous rating 1400 in.-lb.) and 6800 in.-lb. starting torque. Amp draw will be 1.1A (0.6 Hp) and 1.8A (1.2 Hp).
- B. Wheel Gearbox - The pivot will be equipped with heavy duty gearboxes (52:1 gear ratios) with a rating of 30,000 in.-lbs. continuous output torque for a minimum of 1000 operating hours, and capable of withstanding 150,000 in.-lbs. instantaneous output torque without failure. The wheel drive gearboxes will be a self-locking worm gear design to provide positive braking. The cast iron worm wheel and integral ductile worm input shaft have a 25 degree pressure angle design for full recessed action and proper lubrication. The gears and American made bearings will operate in a submerged oil bath. A hermetically sealed 15.9 cubic inch vented expansion chamber with a rubber diaphragm will compensate for variations in operating temperature to minimize pressure fluctuations inside the gearbox. The output shaft of the wheel gearbox will 2 1/4" diameter, stress relieved, cold drawn steel. The input and output shaft will use a proprietary patented cartridge type seal construction containing 7-barriers that resist water contamination and oil leakage. The inner part of the seal turns with the shaft to minimize grooving. All gearboxes will be properly filled with lubricant by the manufacturer. Visual inspection of the lubricant will be provided by removal of the expansion chamber cover or fill level plug.
- C. Gearbox Oil - The gearboxes as shipped will be filled with oil to its normal operating level. The original lubricant will meet SAE 85W/140 API classification GL5. Replacement lubricants must meet manufacturer's specification.

- D. The drive shafts will be designed to withstand the maximum torque of the drive train with no permanent deformation and will be 7/8" square steel. The drive shaft will be adequately shielded to meet OSHA safety standards. Greaseless U-joints will connect the drive train components. The U-joints will incorporate flexible urethane inserts to absorb shock from motor starts and stops to reduce stress. Urethane inserts anchored between cast aluminum yokes will be attached to the drive shafts with four (4) 1/4" cap screws.
- E. Tires will have an R-1 agricultural traction tread design. The rims will be hot dipped galvanized in accordance to ASTM 123.

Control Panel

- A. Valley ICON5 panel will be provided with the pivot. The essential characteristics include:
 - 1. Start-stop
 - 2. Change speeds or depth of application
 - 3. Direction control, forward or reverse
 - 4. Position in the field display
 - 5. Programmable end gun controls
 - 6. Programmable functions by field position, time, date and external inputs
 - 7. Programmable application rate by field position
 - 8. Digital voltage display and low voltage shut down
 - 9. Advanced diagnostics for easy trouble shooting
 - 10. 5-inch full color touchscreen display
 - 12. Pump start/stop
 - 13. Bypass switch for engine run/start
 - 14. Stop-in-slot bypass
 - 15. Wet and dry digital hour meter
 - 16. Auto reverse/Auto Stop
 - 17. GPS Position Ready
 - 18. BaseStation3 Compatible
 - 19. AgSense Enabled (AgSense ICON Link)
 - 20. Variable Rate Irrigation capable
- B. The main control panel will be constructed to meet or exceed the standards for a National Electrical Manufacturers Association (NEMA) Type 3R enclosure. All operator controls will be protected from the elements by an outside door. The main panel will also be provided with latches to accommodate a padlock. 480-volt, three-phase, 4-wire, 60-cycle electrical power will be furnished to the main control panel at the appropriate amperage to match the pivot requirements. The pivot panel will be rated for 30 amps or 45 amps depending upon the total pivot amperage requirements based upon the number of spans, drive motors and end gun booster pump as calculated in VSOC. All wiring will be color coded. An optional stainless steel control panel is available.

- C. Each main pivot control panel will include functional capability for starting/stopping, speed/depth of water applied, start/override button, forward-stop-reverse, 480/120 control transformer, volt meter, fuses and main disconnect switch. Diagnostic display will identify cause for pivot shut-down from control panel, towers or end tower. Each center pivot will be equipped to automatically restart itself in the event of a power interruption, up to three (3) seconds in duration, and to shut itself down if the pivot fails to move for a preselected time interval. Units will be grounded in accordance with the National Electric Code, Article 250, Section H.
- D. The main pivot panel can be equipped with auxiliary contacts which will interface with auxiliary equipment. However, safety circuit wire and main power cable are to be supplied and installed by other supplier/contractor.
- E. The following options will be included with the ICON5 Control Panel
 - a. High voltage surge protection
 - b. Wind Speed Indicator
 - c. Rain Bucket
 - d. Temperature Sensor
 - e. Pressure Transducer
 - f. GPS
 - g. LED Running Light

Electrical

- A. The pivot electrical circuits will operate from a 480-volt, three-phase, 4-wire power (with ground) source with a step down transformer for the seven conductor 120-volt, VAC., single-phase control and safety circuits.
- B. The main power cable from the pivot box to the tower boxes will be a minimum 12 gauge stranded copper wire. All exposed wiring will be bundled and jacketed with a black, U.V. stabilized polyethylene cable jacketing material.
- C. The individual tower panels will be constructed to meet or exceed the standards for a National Electrical Manufacturers Association (NEMA) Type 3R enclosure. All wiring will be color coded.
- D. The electrical alignment system will consist of micro-switches for tower alignment and safety shutdown. The motor control or alignment micro-switch will not cycle the center drive motors more than once each 10 seconds.
- E. Integral, thermal sensitive automatic reset overload protection will be provided for all 480-volt motors. A suppresser circuit will be provided in each tower control box to reduce arcing at contacts.
- F. The collector ring will be mounted on a stainless steel J Tube that extends through the rotating swivel. A three cap screw top clamp and V seals will provide a water tight seal

around the tube. A collector ring cover with gasket will protect the internal electrical components against the effects of the environment.

- G. The collector ring will use 11 sliding contactors rated at 600 volts and either 35 amps or 45 amps to match the control panel. To assure positive contact of the brushes to the contact point, leaf springs will be used. Slip rings will be seamless and not more than 4" in diameter.
- H. Valmont electric irrigation equipment is designed and manufactured according to the National Electrical Code (NEC) Article 675, including:
 - Article 430 - motors, motor circuits and controllers
 - Article 250 - grounding
 - Article 240 – over current protection
 - Article 310 - conductors for general wiring
- I. Valmont equipment is also designed to meet the conditions outlined in ASABE Standard: ASABE S362. This standard covers all electrical equipment, apparatus, component and wiring necessary for electrically driven or controlled irrigation machines from the point of connection of the electric power to the machine. Other Standards cited are:
 - ASABE 318 - Safety for Agricultural Equipment
 - ASABE S350 - Safety Alert Symbol for Agricultural Equipment
 - ANSI 235-1 - Specification for Accident Prevention Signs
 - NEMA 151.1 - Controls and System
 - NFPA No. 70 - National Electric Code
- J. All electrical components and wiring will meet or exceed the requirements of the National Electric Code, Article 675, and American Society of Agricultural and Biological Engineers Standard S362, "Wiring and Equipment for Electrically Driven or Controlled Irrigation Machine."
- K. All part circle operating pivots will be equipped with End of Field Auto Stop/Auto Reverse units with barriers to ensure that encroachment beyond field boundaries is prevented. These devices will be mounted on a distant tower unit.
- L. Options may be specified to provide additional capability for the pivot.

Service

The manufacturer is represented on the project by the authorized Valley dealer who will install and provide warranty support for the equipment provided by Valmont.

Training

The dealer will orient the on site operators regarding operation of the Valley 8000P pivot equipment.

ATTACHMENT A – EQUIPMENT DESCRIPTION

Pivot Configurations

One (1) Valley Model 8000P center pivot will be required for this application. The configuration of the center pivot will be as follows:

Span # (ft)	#1 3t 613' Pivot 1				
1	160	+3.3' stub			
2	180	+2.2' stub			
3	180	+2.2' stub			
OH	83				
Total (ft)	613				
Flow (gpm)	500				
Pressure ¹ (psi)	27				

Notes:

NR – not required

¹ Pressure require at top of pivot (approximately 12 feet above surface of pivot pad).

Water Distribution

- A. Water outlet couplings are ¾” NPT made out of corrosion resistant Zytel material which forms a water tight seal between the inner liner and the outlet. Drop hoses are supported by a separate saddle attached to the steel pipe to prevent excessive loading on the outlet coupler. Outlet spacing to be 108”.

Sprinkler Package will consist of the following components:

- Senninger 6 5/8” U-Pipe 6 (in) Poly ¾ M NPT x ¾ M Hose
- Blue Premium Hose Drop Variable Length 50 (in) ground Clearance
- Nelson Irrigation Regulator Acme thread 15 PSI ¾ FNPT
- Nelson D3000 Integrated weight 1.00 lbs
- Nelson R3030 D8 – Orange ¾ F Acme thread
- Poly remote drains at each tower

- B. Sprinkler assembly on two (2) sprinkler outlets prior to and two (2) sprinkler outlets after each tower drive unit will consist of the following sprinkler components:

- IACO Rigid hose drop 84 in ¾ M NPT x ¾ F Hose
- Nelson Irrigation Regulator Acme thread 15 PSI ¾ FNPT

Nelson PC-R3030 Part Circle Rotator $\frac{3}{4}$ F Acme thread

- C. End Gun Nelson SR100 w/ 2HP Booster pump and various nozzle sizes based on flow requirement. Nelson 1000V 2" valve for controlling end gun. End gun dirty water filter and plumbing will be included.