



## NOTICE TO BIDDERS

The City of Edinburg is soliciting sealed bids to be received by the City Secretary's Office located at 415 W. University Drive, Edinburg, Texas 78541. City of Edinburg normal business days are Monday through Friday between the hours of 8:00 a.m. to 5:00 p.m. and shall be closed on recognized holidays.

Bids will be received until **3:00 p.m. Central Time**, on **Tuesday, January 20, 2015**, shortly thereafter all submitted bids will be gathered and taken to the Edinburg City Hall Community Room, 1<sup>st</sup> Floor, to be publicly opened and read aloud. Any bid received after the closing time will not be accepted and will be returned to the bidder unopened. It is the responsibility of the bidder to see that any bid submitted shall have sufficient time to be received by the City Secretary's Office prior to the bid opening date and time. The receiving time in the City Secretary's Office will be the governing time for acceptability of the bids. Bids will not be accepted by telephone or facsimile machine. All bids must bear original signatures and figures. The Bid shall be for:

### **BID NO. 2015-55 VERTICAL TURBINE PUMPS**

**Bidders receiving a "NOTICE TO BIDDERS" and/or "REQUEST FOR PROPOSALS" notice in the mail or reading same in the newspaper are advised that the bidding documents can be downloaded from the City of Edinburg web page address: [www.cityofedinburg.com](http://www.cityofedinburg.com), or may obtain copies of same by contacting the office of:**

**LORENA FUENTES, PURCHASING AGENT, LOCATED AT 415 W. UNIVERSITY DRIVE, Edinburg, TX 78541 by calling (956) 388-8972 or by e-mailing your request to the following e-mail address: [lfuentes@cityofedinburg.com](mailto:lfuentes@cityofedinburg.com)**

If you have any questions or require additional information regarding this bid, please contact Mr. Antonio Leal, Water Plant Superintendent, at (956) 388-8220.

**If Hand-delivering Bids:** 415 West University Drive,  
C/o City Secretary Department (1<sup>st</sup> Floor)

**If using Land Courier (i.e., FedEx, UPS):** City of Edinburg  
C/o City Secretary  
415 West University Drive  
Edinburg, Texas 78541

**If Mailing Bids:** City of Edinburg  
C/o City Secretary  
P.O. Box 1079  
Edinburg, TX 78540-1079

The City of Edinburg reserves the right to refuse and reject any or all bids and to waive any or all formalities or technicalities and to accept the bid deemed most advantageous to the City, and hold the bids for a period of **60** days without taking action.

**Bids must be submitted in an envelope sealed with tape and prominently marked on the lower left hand corner of the bid envelope with corresponding bid number and title.**



**415 W. University Drive • P.O. Box 1079 • Edinburg, Texas 78540  
Phone (956) 388-8204 • Fax (956) 383-7111**



## CITY OF EDINBURG INSTRUCTIONS TO BIDDERS

### DEVIATION FROM SPECIFICATION

Please read your specifications/requirements thoroughly and be sure that the SERVICES offered comply with all specifications/requirements. Any variation from the specifications/requirements must be clearly indicated by letter attached to your bid referencing variations on a point-by-point basis. If no exceptions are noted, and you are the successful bidder, it will be required that the SERVICES be provided as specified.

### PURPOSE

1. The purpose of these specifications/requirements and bidding documents is for the purchase of VERTICAL TURBINE PUMPS for the City of Edinburg.

2. The SERVICES to be furnished under this bid shall be as specified in these bid documents. All specifications/requirements shown are minimum. There is no intention to disqualify any bidder who can meet these specifications/requirements.

### SUBMITTAL OF BID

Bids will be submitted in sealed envelopes upon the blank bid form attached hereto. Submit two (2) complete sets of the bid, one (1) original marked "**ORIGINAL**," and one (1) copy marked "**COPY**". Each bid must be completely filled out and SUBMITTED IN ORIGINAL FORM, complete with all supporting documentation. Bids submitted by facsimile (fax) or electronically will **NOT** be accepted. Submittal of a bid in response to this solicitation for Bids constitutes an offer by the Bidder. Bids which do not comply with these specifications/requirements may be rejected at the option of the City. Bids must be filed with the City of Edinburg, before opening day and hour. No late Bids will be accepted. They will be returned to Bidder unopened (if properly identified).

**If Hand-delivering Bids:** 415 West University Drive, c/o City Secretary Department (1<sup>st</sup> Floor)  
**If using Land Courier (i.e., FedEx, UPS):** 415 West University Drive, c/o City Secretary Department (1<sup>st</sup> Floor), Edinburg, Texas  
78541  
**If Mailing Bids:** P.O. Box 1079, Edinburg, TX 78540-1079

### PREPARATION OF BID

Bids **MUST** give full firm name and address of bidder, and be manually signed. Failure to do so will disqualify your bid. Person signing bid must show title or AUTHORITY TO BIND HIS/HER FIRM IN A CONTRACT.

Firm name and authorized signature must appear on each page that calls for this information. The legal status of the Respondent/Bidder whether corporation, partnership, or individual, shall also be stated in the bid. A corporation shall execute the bid by its duly authorized officers in accordance with its corporate by-laws and shall also list the state in which it is incorporated. A partnership Respondent/Bidder shall give full names and addresses of all partners. All partners shall execute the bid. Partnership and Individual Respondent/Bidder shall state in the bid the names and addresses of all persons with a vested interest therein. The place of residence of each Respondent/Bidder, or the office address in the case of a firm or company, with county and state and telephone number, shall be given after the signature.

### ALTERATIONS/AMENDMENTS TO BID

Bids **CANNOT** be altered or amended after opening time. Alterations made before opening time must be initialed by bidder guaranteeing authenticity. No bid may be withdrawn after opening time without acceptable reason in writing and only after approval by the City of Edinburg.

## **INSTRUCTIONS TO BIDDERS (Continued):**

### **SALES TAX**

State sales tax must not be included in the bid.

### **SUBSTITUTIONS**

No substitutions or cancellations will be permitted without written approval of City of Edinburg.

### **NO BID RESPONSE**

If unable to submit a bid, bidder should return inquiry giving reasons.

### **EXCEPTIONS**

Any additions, deletions, or variations from the following specifications/requirements must be noted. The bidder shall attach to his/her bid sheet a list of any exceptions to the specifications/requirements if unable to do so, on specification sheet.

### **BRAND OR MANUFACTURER REFERENCE**

Unless otherwise specified, any catalog or manufacturer's reference or brand name used in describing an item is merely descriptive, and not restrictive, and is used only to indicate type and style of product desired. Bids on alternate brands will be considered if they meet specification requirements. If a bidder quotes on equipment other than the one(s) specified in the bid, sufficient specifications and descriptive (pictured literature) data must accompany same to permit thorough evaluation. In the absence of these qualifications, he/she will be expected to furnish the product called for.

### **DELIVERY**

Number of days required to deliver SERVICES after receiving order must be stated in the bid. Failure to so state will obligate bidder to complete service delivery within ONE day.

### **DELAY IN SERVICE DELIVERY**

When delay can be foreseen, Bidder shall give prior notice to City of Edinburg. Bidder must keep City of Edinburg advised at all times of status of order. Default in promised service delivery (without acceptable reasons) or failure to meet specifications/requirements, authorizes the City of Edinburg to purchase such SERVICES elsewhere and charge increase in cost to defaulting vendor. Acceptable reasons for delayed delivery are as follows: Acts of God (floods, tornadoes, hurricanes, etc.), acts of government, fire, strikes, war; Actions beyond the control of the successful bidder.

### **SERVICE DELIVERED PRICING**

Bids in units of quantity specified - extend and show total. In the event of discrepancies in extension, unit prices will govern. Bids subject to unlimited price increase will not be considered.

### **VALID BID TIME FRAME**

The City may hold bids 60 days after bid opening without taking action. BIDDERS shall be required to hold their Bids firm for the same period of time.

### **RIGHT TO REJECT/AWARD**

The City of Edinburg reserves the right to refuse and reject any or all Bids, and to waive any or all formalities or technicalities, and to make such awards of contract as may be deemed to be the best and most advantageous to the City of Edinburg.

## **INSTRUCTIONS TO BIDDERS (Continued):**

### **MULTIPLE VENDOR CONTRACTS**

Bidders are advised that the City of Edinburg may award Service Contracts to multiple vendors based on low bid per item basis. All items specified on the "Bid Form" **must** reflect the individual unit prices. The City of Edinburg reserves the right to award all items individually or in any combination thereof. The City reserves the right to award each item separately or individually, award to one or multiple vendors, and accept the proposal deemed most advantageous to the City.

### **INDEMNIFICATION CLAUSE**

The Bidder agrees to indemnify and save harmless the City, from all suits and actions of every nature and description brought against them or any of them, for or on account of the use of patented appliances, products or processes, and he shall pay all royalties and charges which are legal and equitable. Evidence of such payment or satisfaction shall be submitted upon request of the Purchasing Agent, as a necessary requirement in connection with the final estimate for payment in which such patented appliance, products or processes are used.

### **ADDENDA**

Bidder shall carefully examine the bid forms, specifications/requirements, and instructions to Bidders. Should the bidder find discrepancies in, or omissions from bid forms, specifications/requirements, or other documents, or should he/she be in doubt as to their meaning, he/she should at once notify the Purchasing Agent at 956-388-1895 and obtain clarification by addendum prior to submitting any bid. Explanations, interpretations, and supplemental instructions shall be in the form of written Addenda which shall become a part of the Contract documents. Said Addenda shall be mailed, e-mailed, hand delivered and/or faxed, to all prospective Bidders. All Addenda issued in respect to this project shall be considered official changes to the original bid documents. Verbal statements in response to inquiries and/or requests for explanations shall not be authoritative nor binding. It shall be the Bidder(s) responsibility to ensure that they have received all Addenda in respect to this project. Furthermore, Bidders are advised that they must recognize, comply with, and attach a signed copy of each Addendum which shall be made part of their Bid Submittal. Bidder(s) signature on Addenda shall be interpreted as the bidder's "recognition and compliance to" official changes as outlined by the City of Edinburg and as such are made part of the original solicitation documents. Failure of any bidder to receive any such addendum or interpretation shall not relieve such Bidder from its terms and requirements. The City may issue a written addendum no later than five calendar days prior to the date bids must be received. Addendums are available online at [www.cityofedinburg.com](http://www.cityofedinburg.com).

### **PAYMENT**

The City of Edinburg will execute payment by mail in accordance with the State of Texas Pay Law after SERVICES have been provided and invoiced. No other method of payment will be considered.

### **SYNONYM**

Where in this bid package ITEMS OR SERVICES is used its meaning shall refer to the VERTICAL TURBINE PUMPS as specified.

### **ASSIGNMENT**

Neither the Bidder's contract nor payment due to an awarded vendor may be assigned to a third party without the written approval of the Purchasing Department for the City of Edinburg.

### **INTERPRETATIONS**

Any questions concerning the conditions and/or specifications/requirements with regards to this solicitation for Bids shall be directed to the designated individuals as outlined in the Request for Bids. Such interpretations, which may affect the eventual outcome of this request for Bids, shall be furnished in writing to all prospective Bidders via

## **INSTRUCTIONS TO BIDDERS (Continued):**

Addendum. No interpretation shall be considered binding unless provided in writing by the City of Edinburg in accordance with paragraph entitled "Addenda".

### **STATUTORY REQUIREMENTS**

It shall be the responsibility of the successful Bidder to comply with all applicable State & Federal laws, Executive Orders and Municipal Ordinances, and the Rules and Regulations of all authorities having jurisdiction over the work to be performed hereunder and such shall apply to the contract throughout, and that they will be deemed to be included in the contract as though written out in full in the contract documents. (To include issues related to health, environmental, and safety to name a few.)

### **BIDDER'S EMPLOYEES**

Neither the Bidder nor his/her employees engaged in fulfilling the terms and conditions of this Purchase Contract shall be considered employees of the City. The method and manner of performance of such undertakings shall be under the exclusive control of the vendor on contract. The City shall have the right of inspection of said undertakings at any time.

### **RIGHT TO WAIVE**

City of Edinburg reserves the right to waive or take exception to any part of these specifications/requirements when in the best interest of the City of Edinburg.

### **COOPERATIVE PRICING**

Bidders are advised that in addition to responding to our "local" solicitation for bids/Bids with Dealer pricing, vendors/contractors are encouraged to provide pricing on the below referenced items/products/services based on BuyBoard, TX-MAS, H-GAC and/or any other State of Texas recognized and approved cooperative which has complied with the bidding requirements for the State of Texas. If bidding other than or in addition to "dealer" pricing, kindly duplicate the bid forms for each bid being provided from a cooperative contract. Any and all applicable fees must be included. All cooperative pricing must be submitted on or before bid opening date and hour.

### **TIME ALLOWED FOR ACTION TAKEN**

The City of Edinburg may hold bids 60 days after the opening of Bids without taking action. Bidders are required to hold their Bids firm for same period of time.

### **PREPARATION OF BID**

The City of Edinburg shall not be held liable for any costs incurred by any bidder for work performed in the preparation of and production of a bid or for any work performed prior to execution of contract.

### **CONFIDENTIAL INFORMATION**

Any information deemed to be confidential by the bidder should be clearly noted on the pages where confidential information is contained; however, the City cannot guarantee that it will not be compelled to disclose all or part of any public record under Texas Public Information Act, since information deemed to be confidential by the bidder may not be considered confidential under Texas Law, or pursuant to a Court order.

### **VERBAL THREATS**

Any threats made to any employee of the City, be it verbal or written, to discontinue the providing of item/material/services for whatever reason and/or reasons shall be considered a breach of contract and the City will immediately sever the contract with the Vendor on contract.

## **INSTRUCTIONS TO BIDDERS (Continued):**

### **MATHEMATICAL ERRORS**

In the event that mathematical errors exist in any bid, unit prices/rates -v- totals, unit prices/rates will govern.

### **AUDIT**

The City of Edinburg reserves the right to audit the vendor's books and records relating to the performance of this contract. The City of Edinburg, at its own expense, shall have the right at all reasonable times during normal business hours and upon at least twenty-four (24) hours' advance notice, to audit, to examine, and to make copies of or extracts from the books of account and records maintained by the vendor(s) with respect to the Supply/Service and/or Purchase Contract. If such audit shall disclose overpayment by City to vendor, written notice of such overpayment shall be provided to the vendor and the amount of overpayment shall be promptly reimbursed by vendor to the City. In the event any such overpayment is not paid within ten (10) business days after receipt of such notice, the unpaid amount of such overpayment shall bear interest at the rate of one percent (1%) per month from the date of such notice until paid.

### **PAST PERFORMANCE**

Vendor's past performance shall be taken into consideration in the evaluation and award of Service Contract for the Purchase of SERVICES.

### **JURISDICTION**

Contract(s) executed as part of this solicitation shall be subject to and governed under the laws of the State of Texas. Any and all obligations and payments are due and performable and payable in Hidalgo County, Texas.

### **VENUE**

The parties agree that venue for purposes of any and all lawsuits, cause of action, arbitration, and/or any other dispute(s) shall be in Hidalgo County, Texas.

### **CONFLICT OF INTEREST**

#### **CHAPTER 176 OF THE TEXAS LOCAL GOVERNMENT CODE**

Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that any vendor or person considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the vendor or person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the records administrator of the City of Edinburg not later than the 7<sup>th</sup> business day after the date the person becomes aware of facts that require the statement be filed. See Section 176.006, Local Government Code. A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. For more information or to obtain Questionnaire CIQ go to the Texas Ethics Commission web page at [www.ethics.state.tx.us/forms/CIQ.pdf](http://www.ethics.state.tx.us/forms/CIQ.pdf).

**IF YOU HAVE ANY QUESTIONS ABOUT COMPLIANCE, PLEASE CONSULT YOUR OWN LEGAL COUNSEL. COMPLIANCE IS THE INDIVIDUAL RESPONSIBILITY OF EACH PERSON OR AGENT OF A PERSON WHO IS SUBJECT TO THE FILING REQUIREMENT. AN OFFENSE UNDER CHAPTER 176 IS A CLASS "C" MISDEMEANOR.**

### **AWARD**

For purposes of this project, award will be contingent on approval of budget.

### **SPECIAL CIRCUMSTANCES**

In the event that the City of Edinburg has an immediate need for a particular service(s) that is/are on contract and the

## **INSTRUCTIONS TO BIDDERS (Continued):**

successful vendor on contract is not able to meet the special service delivery needs of the City of Edinburg, the City of Edinburg reserves the right to purchase such services elsewhere to fulfill its' immediate need.

### **TERMINATION OF CONTRACT**

The City of Edinburg reserves the right to terminate the contract if, in the opinion of the City of Edinburg, the successful vendor's performance is not acceptable, if the City is being repeatedly over charged, improperly charged, no funds are available, or if the City wishes, without cause, to discontinue this contract. Termination will be in written form allowing a 30-day notice. The bidder shall be afforded the same right to terminate this contract in the same manner.

### **STANDARD INSURANCE REQUIREMENTS**

Staff may waive insurance requirements for contracts \$0 - \$4,999.99, including but not limited to contracts for food, materials, supplies, and construction. Workers' Compensation in amounts which satisfy statutory coverage shall be required for construction projects.

The following insurance requirements will be included in all City contracts of \$5,000 - \$14,999.99. In contracts not involving building and construction projects, as that activity is defined in TEX. LABOR CODE §406.096, contractors may obtain alternative form of worker accident insurance with minimum limits of liability of \$100,000 per claim.

<b>Minimum Insurance Requirements</b>	
<b>Type of Coverage</b>	<b>Limits of Liability</b>
Worker's Compensation	Statutory Coverage
Comprehensive General Liability (City named as additional insured) Bodily Injury	\$250,000 each person/\$500,000 each occurrence
Property Damage	\$100,000 each occurrence/\$100,000 aggregate or \$500,000 combined single limits

The following insurance requirements will be included in all City contracts of \$15,000 or more.

- (1) The successful bidder will be required to carry the following insurance coverage and limits of coverage, as well as list the City as an additional insured to liability coverage as requested by the City. In addition, the successful bidder shall provide the City with evidence of coverage and furnish acceptable proof of payment of insurance premiums.
- (2) The successful bidder will be required to secure and/or have insurance coverage in force with an admitted property and casualty insurance company licensed by the State of Texas to conduct business in the State of Texas.
- (3) In contracts not involving building and construction projects, as that activity is defined in TEX. LABOR CODE §406.096, contractors may obtain alternative form of worker accident insurance with minimum limits of liability of \$100,000 per claim.

**INSTRUCTIONS TO BIDDERS (Continued):**

<b>Minimum Insurance Requirements</b>	
<b>Type of Coverage</b>	<b>Limits of Liability</b>
Worker's Compensation	Statutory Coverage
Employer's Liability	Bodily Injury by Accident: \$100,000 each accident  Bodily Injury by Disease: \$100,000 each employee/\$500,000 policy limit
Comprehensive General Liability Bodily Injury	\$250,000 each person/\$500,000 each occurrence
Property Damage	\$100,000 each occurrence/\$100,000 aggregate or \$500,000 combined single limits
Comprehensive Auto Liability Bodily Injury	\$100,000 each person/\$500,000 each occurrence
Property Damage	\$100,000 each occurrence/\$100,000 aggregate or \$500,000 combined single limits
City's Protective Liability Bodily Injury	\$250,000 each person/\$500,000 each occurrence
Property Damage	\$100,000 each occurrence/\$100,000 aggregate or \$500,000 combined single limits

Policies must name the City of Edinburg as an Additional Insured.

Certificates of insurance naming the CITY as an additional insured shall be submitted to the CITY for approval prior to any services being performed by Contractor. Each policy of insurance required hereunder shall extend for a period equivalent to, or longer than the term of the Contract, and any insurer hereunder shall be required to give at least thirty (30) days written notice to the CITY prior to the cancellation of any such coverage on the termination date, or otherwise.

This Contract shall be automatically suspended upon the cancellation, or other termination, of any required policy of insurance hereunder, and such suspension shall continue until evidence that adequate replacement coverage is provided to the CITY. If replacement coverage is not provided within thirty (30) days following suspension of the Contract, the Contract shall automatically terminate.

**BID BOND REQUIREMENTS**

If the contract amount is over twenty-five-thousand dollars (\$25,000) for construction of the project, the successful bidder shall provide a bid guarantee, give a good and sufficient bond in the full amount of the contract price for the faithful performance of such contract, executed by a surety company authorized to do business in the State of Texas, in accordance with Article 5160, Vernon's Texas Civil Statutes, and amendments thereto. A payment bond in the full amount of the contract price to assure payment shall be required by law of all persons supplying labor and material in the execution of the project provided for in the contract documents.

## **INSTRUCTIONS TO BIDDERS (Continued):**

A bid guarantee equivalent to five percent (5%) of the bid price will be required from each bidder. The "bid guarantee" shall consist of a firm commitment, such as a bid bond, certified check or other negotiable instrument accompanying a

bid as assurance that the bidder will upon acceptance of his/her bid, execute such contractual documents as may be required within the time specified.

A performance bond on the part of the contractor for one-hundred percent (100%) of the contract price will be required. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

A payment bond on the part of the contractor for one-hundred percent (100%) of the contract price will be required. A "payment bond" is one executed in connection with a contract to assure payment, as required by law, of all persons supplying labor and material in execution of the work provided for in the contract documents.

Bidders are expressly advised to review the contract documents fully and insurance requirements of the proposed contract as to their legal requirements and the causes which may lead to the disqualification of a bidder and/or rejection of a bid proposal. No bid may be withdrawn within a period of sixty (60) days after the date fixed for opening the bids. Unless all bids are rejected, the Owner will give Notice of Award of Contract to the successful bidder as soon as possible consistent with the time for a thorough analysis of bids submitted. Bidders are expected to inspect the site of work and to inform themselves regarding all local conditions which may affect their bid.

**CITY OF EDINBURG  
REQUEST FOR BIDS FOR  
VERTICAL TURBINE PUMPS**

**BID NO. 2015-55**

**BID OPENING DATE: January 20, 2015 at 3:00 p.m.**

It is the intent of this Request for Bids to describe and ultimately make it possible for the City of Edinburg to purchase the below mentioned **VERTICAL TURBINE PUMPS.**

**GENERAL REQUIREMENTS AND AGREEMENT FOR VERTICAL TURBINE PUMPS:**

You are invited to submit a sealed bid for the purchase of VERTICAL TURBINE PUMPS as requested by the City of Edinburg Utilities/WWTP Department.

**SEE ATTACHED SPECIFICATIONS:**



**BID FORM FOR VERTICAL TURBINE PUMPS (Continued):**

*All Addenda issued in respect to this project shall be considered official changes to the original bidding documents. It shall be the Bidder(s) responsibility to ensure that all Addenda have been received. Furthermore, bidders are advised that they must recognize, comply with, and attach a signed copy of each Addendum which shall be made part of their Bid Submittal. Bidder(s) signature on Addenda shall be interpreted as the vendor's "recognition and compliance to" official changes as outlined by the City of Edinburg and as such are made part of the original bidding documents.*

Does the Company have an office located in Edinburg, Texas?      Yes \_\_\_\_\_ No \_\_\_\_\_

Has the Company ever conducted business with the City of Edinburg?      Yes \_\_\_\_\_ No \_\_\_\_\_

Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

**SIGNATURE:** \_\_\_\_\_

**TYPE/PRINT NAME:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**COMPANY:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**TELEPHONE NO.:** \_\_\_\_\_

**FAX NO.:** \_\_\_\_\_

**EMAIL:** \_\_\_\_\_

# SPECIFICATIONS

## VERTICAL TURBINE PUMPS AND MOTORS

### GENERAL

### DESCRIPTION

The equipment to be furnished under this section of the specifications shall consist of vertical turbine transfer pumps and sump pump service complete with electrical motor as specified herein. All pieces shall be provided by the bowl manufacture as listed below

### QUALITY ASSURANCE

- a. All pumps furnished shall be the product of a single pump manufacturer regularly engaged in the manufacture of pumps for public water systems for a minimum period of 20 years. The following manufacturers are acceptable:
  - 1) Fairbanks-Morse
  - 2) Flowserve
  - 3) Peerless
  - 4) Hydroflo
  - 5) Floway
  - 6) Prior approved equal (7 days in advance of bid opening)
  
- b. The motors shall be the product of a single American motor manufacturer regularly engaged in the manufacture of motors having similar service and size for a minimum period of ten (10) years. The following manufacturers are acceptable:
  - 1) U.S Motors
  - 2) General Electric
  - 3) TECO/Westinghouse
  - 4) Prior approved equal (7 days in advance of bid opening)

- c. Manufacturer's listing above does not imply that a standard product is acceptable. The successful manufacturer will be required to conform to all requirements of the specifications. It shall be the responsibility of the pump manufacturer to supply proper materials of construction. Throughout the pump, that will be capable of withstanding all potential pressures and mechanical loads that can be imposed by the pump.
- d. The pumps furnished under this section shall be suitable for application in treated water pumping applications in public water supply systems. All Materials used in the construction and coating of the pumps shall be suitable for contact with portable water and shall comply with all applicable USPHS, EPA, FDA, NSF, and AWWA standards.

## **SUBMITTALS**

- a. The bidder shall furnish the following submittal information with proposal. Any omission will be deemed non responsive:
  - 1) Performance curves showing head/capacity curve, field efficiency, field horsepower, and NPSHR
  - 2) Full and complete specifications covering each component of the proposed pumping assemblies.
  - 3) Accurate dimensional drawings or, certified prints, that may be used for layout and construction purposes.
  - 4) Drawing showing complete dimensions, anchor bolt locations, recommendations, flange details, motor details and conduit requirements.
  - 5) Bulletins and supporting information.
- b. Submittals required after manufacturing and prior to shipment consist of six (6) bound copies of operation and maintenance manuals. Each copy to include:
  - 1) As build drawings
  - 2) Parts list and recommended spare parts list
  - 3) Operational instructions
  - 4) Maintenance instructions
  - 5) Job site storage and maintenance requirements

## **PRODUCTS**

## **PERFORMANCE REQUIREMENTS**

- a. The pumping units shall be designed to operate satisfactorily throughout the total range of head as indicted, and shall deliver the quantity shown for the rated head and capacity conditions; all as given in the following tabulation:

	Transfer Pump-1	Transfer Pumps-2&3	Sump Pump-1&2
<b>Primary Rating:</b>			
G.P.M.	2100	4200	3000
T.D.H.	28'	28'	34'
<b>Secondary Rating:</b>			
G.P.M.	2500	5000	3500
T.D.H.	20'	20'	20'
Min. Shutoff Head	44'	57'	62'
Max. RPM	1170	1170	1170
Min. Pump Efficiency @ Primary	84%	81%	78%
Max NPSH-r at Secondary	16'	19'	60'
Max . Motor H.P./ Min Efficiency	20/89%	40/94%	40/94%
Nominal Bowl Dia (Min.)	14	18"	16"
Discharge Dia (Min.)	12"	14"	12"
Discharge Location	Surface	Surface	Surface
Sump depth	28'	28'	17.85'

## CONSTRUCTION

### GENERAL

Pumps shall be of the vertical turbine, open line shaft type, with shaft direct-connected to a vertical hollow shaft induction motor. The weight of the revolving parts of the pump, including the unbalanced hydraulic thrust of the pump impellers, shall be carried by a thrust bearing in the motor. Pump shall be supported from a heavy Class 50 ductile Iron, or fabricated steel discharge head by means of a vertical column.

### BOWL ASSEMBLY

The pump bowl and suction bell shall be Class 30 Cast Iron. The bowl shall have a bearing below and above each impeller. They shall be bronze B-505-932.. The impeller shall be stainless steel 201 or 316 of the enclosed type or semi-open, dynamically balanced. The bowl shaft shall be 416 stainless steel with stainless steel lock collets or keys..

### COLUMN AND SHAFT ASSEMBLY

The column size shall be selected to produce a fluid velocity of less than 6 feet per second, having a minimum wall thickness of 1/4 inch. Maximum length of any column section shall be 10 feet. The upper end of the column pipe will be threaded to pump head. The column section shall be threaded and faced on both ends to insure proper alignment when butted against the spiders in the sleeve-type couplings. The bottom column section shall be properly adapted to connect to the bowl assembly, intermediate bearing supports shaft be 416 stainless steels shall be furnished between the column sections for supporting the line shaft bearings. The line shaft bearings shall be fluted neoprene. The line shaft shall be 416 stainless steel.

## DISCHARGE HEAD

The pump head shall be Class 50 ductile Iron, rated 250# but with 125# ANSI discharge flange or fabricated steel. The discharge head critical dimensions shall match the elevations and centerlines of the existing discharge heads. On the transfer pumps only, the discharge flange shall be in line with one of the corner pump base anchor location. The top of the head shall have a machined register to fit the motor. It shall be of sufficient strength to carry the complete weight of the pump and motor and withstand the hydraulic loads normally imposed on by the system. The stuffing box shall have the proper type and amount of packing to prevent excessive leakage in the head. The head shall include a tapped opening for draining away the normal leakage from the packing. There shall be a thread coupling between the discharge head and electric motor. All hardware shall be 316 SS.

## ELECTRIC MOTORS

- 1) The motor shall be vertical, hollow shaft, TEFC, premium efficiency, squirrel-cage, induction, high-thrust type. It shall be rated for continuous duty at the speed and electrical service specified. The base shall have a machined register to fit on the head. The motor shall be NEMA Design B, with maximum temperature rise for 80° C over 40° C ambient measured by resistance. Motor shall have a 1.15 service factor.
- 2) Each motor shall be electrically and mechanically suited for the pump to which it will be applied. The manufacturer of the motor shall coordinate closely with the manufacturer of the pump, so that the motor shall operate efficiently, without overloading, overheating or abnormal vibration, throughout the entire range of speed and load. Each motor shall be readily capable of starting the pump under all conditions to which it could be subjected. There shall be no point on the pump curve at which the motor name plate rating is overloaded, even momentarily.
- 3) Motor shall have TEFC enclosures with 1.15 service factor. All openings shall be screened to prevent entrance of insects and rodents. Each motor shall be equipped with oversize conduit boxes for power and heater circuits. The power box shall include a ground stud. Space heaters shall operate at 120 volts. They shall maintain internal temperature above dew point when the motor is not operating.
- 4) Bearings shall have an AFBMA rated life of 10 years minimum when the motor is operated continuously at rated speed bearing life rating shall consider the weight of rotor plus all combined dead and live loads.
- 5) Insulation
  - I. The maximum temperature rise above 40° C ambient shall be 90° C for a service factor of 1.15
  - II. Moisture proof premium insulation shall be used in a windings.
  - III. Insulation shall be class F.

## 6) Lubrication

- I. Each oil lubricated bearing shall have a visual level indicator and accessible filler and drain plugs.
- II. Each grease lubricated bearing shall be regreasable, with a grease reservoir above the bearing.

## 7) Non-reverse Ratchet

- I. Each motor shall be furnished with non-reverse ratchet.
- II. The ratchet shall employ steel balls to absolutely prevent the reverse rotation of the pump and motor assembly.

## **INSTALLATION AND FIELD TESTING**

The installation will be performed by others. The successful supplier shall provide 1 day of installation supervision per set of pumps. After installation the supplier shall provide 2 days of start-up supervision and 1 day for operator training.

## **WARRANTY**

The pump manufacturer shall guarantee the complete assemblies for a period of 12 months after final acceptance. The warranty shall cover all defective parts, material, and workmanship. The pump manufacturer shall replace or repair all defects without cost to the Owner.