



Invitation to Bid Service Contract City of Galveston, Texas

Bid # 15-37

Date: January 27, 2015

Open: February 24, 2015 at 3:00PM

Sealed bids shall be prepared to include **one original, three copies, and one data source with your bid**. Sealed bids shall be addressed to the Purchasing Supervisor, City Hall, room 306, 823 Rosenberg, Galveston, Texas 77550, and will be received until **3:00PM February 24, 2015** and opened immediately in that office in the presence of the City's auditor or a witness from the Finance Department and the Purchasing Supervisor. Any bid received after **3:00PM** on the date specified will be returned unopened, for the following project.

Bid #15-37

City of Galveston is accepting sealed proposals for a firm to perform system verification, supply, install and commission of compatible submersible pumps and motors at Multiple Sewage Pumping Stations for the Department of Public Works in the City of Galveston, Texas.

Bid package

The Invitation to Bid or Request for Proposals, Specifications/line Item Details, and the Bid Sheet are all considered part of the bid package. Bids must be submitted in duplicate on the forms provided by the City, including the Bid Sheet completed in its entirety and signed by an authorized representative by original signature. Failure to complete and sign the bid sheet/contract page(s) will disqualify the bid from being considered by City Council. Any individual signing in behalf of the bidder expressly affirms that he/she is duly authorized to tender this bid and to sign the Bid Sheet/contract under the terms and conditions in this bid. Bidder further understands that the signing of the contract shall be of no consequence unless the bid is subsequently awarded and the contract properly executed by City Council. All figures must be hand written in ink or typed. Figures written in pencil or with erasures are not acceptable; however, mistakes may be crossed out, corrections inserted, and initialed in ink by the individual signing the bid. If there are discrepancies between unit prices quoted and extensions, the unit price will prevail.

Note: bidder must submit his/her bid proposal on the forms provided herein. The bid sheet, tax statement, nepotism statement, non-collusion statement, and any other forms marked as needing to be returned must be completed, signed and witnessed as required or the bid will be non-responsive.

Envelopes will be sealed and marked with the bid number and opening time on the outside bottom left corner to avoid the opening of any bid before the prescribed time.

Bids sent by facsimile (fax) machine shall be rejected as being non-responsive specifications.

Plans, specifications, proposal forms and contract documents may be examined without charge at the office of the Purchasing Supervisor at the above address. You may also download a complete package on the website www.cityofgalveston.org

Any questions regarding procurement procedures should be addressed to Tifney Scott, Purchasing Assistant, at the address above or by calling (409) 797-3575.

Restrictive or ambiguous specifications

It is the responsibility of the prospective bidder to review the entire bid packet and to notify the Purchasing Office if the specifications are formulated in a manner that would restrict competition or appear ambiguous. Any such protest or question(s) regarding the specifications or bidding procedures must be received in the Purchasing Office not less than seventy-two hours prior to the time set for bid opening. Vendors are to bid as specified herein or bid an approved equal. The mention of any brand name in the specifications is not intended to be restrictive, but is intended to describe the general features and requirements (or equivalent) that the City of Galveston is seeking.

Performance and payment bonds

The prime contractor is required to execute one, and in some cases two statutory bonds before commencing the work. A corporate surety authorized to do business in Texas must execute each bond. If the contract is with the state or a department, board, or agency of the state, each bond must be approved by the Attorney General as to form. If the contract is awarded by any other governmental authority, each bond must be approved by that authority as to form. The two bonds required of the prime contractor are (see Tex. Gov't. Code § 2253.021):

For a contract in excess of \$100,000, a performance bond in the amount of the contract, conditioned on the faithful performance of the work in accordance with the plans, specifications, and contract documents. This bond is solely for the protection of the state or governmental authority awarding the contract

For a contract in excess of \$50,000, a payment bond for the amount of the contract is required. This bond is solely for the protection and use of payment bond beneficiaries, who have a direct contractual relationship with the prime contractor or a subcontractor to supply work labor or material *

A government entity must ensure that an insurance company that fulfills its obligation under a contract of insurance by arranging for the replacement of a loss, rather than by making a cash payment directly to the governmental entity, furnishes (has furnished by a contractor) the following bonds

(Tex. Gov't Code § 2253.022(a)):

A performance bond as described by Section 2253.021(b) for the benefit of the governmental entity; and a payment bond as described in Section 2253.021(c) for the benefit of the beneficiaries described by that subsection.

* The City's purchasing policy requires a payment bond for all construction contracts in excess of \$25,000.

Pricing

Bids will be either lump sum or unit prices as shown on the bid sheet. The net price will be that which reflects the goods be delivered to the City of Galveston, including all freight or shipping charges. The City is tax exempt and no taxes should be included in your bid.

Pass-through cost adjustments

Except in instances of extreme extenuating circumstances, vendor prices shall remain firm throughout the contract period and any renewal period(s). Examples of extreme extenuating circumstances include such situations as a nationwide rail strike, oil shortage, oil embargo or war.

In extreme extenuating circumstances vendors may be allowed to temporarily "pass-through" additional costs that they are forced to incur through no fault of their own. A request for a pass through cost increase will not be considered unless a vendor's cost for his product exceeds 10% over

the original cost of the product. Also, the increase in cost must be nationwide and consistent for a minimum period of sixty (60) days. If a vendor thinks he/she will be asking for a pass through cost adjustment during the term of his/her contract, then the original cost of his/her product to him/her must be stated in the vendor's original bid.

Modification of bids

A bidder may modify a bid by letter at any time prior to the submission deadline for receipt of bids. The modification letter must be received prior to the submission deadline. Alterations made before opening time must be initialed by the bidder guaranteeing authenticity. Bids may not be amended or altered after the official opening with the single exception that any product literature and/or supporting data required by the actual specifications will be accepted at any time prior to City Council's consideration of the bid.

Award of contract

In accordance with State law, if the competitive sealed bidding requirement applies to the contract for goods or services, the contract must be awarded to the lowest most responsive and responsible bidder or to the bidder who provides goods or services at the best value for the municipality.

Each bidder/proposer by submitting a bid/proposal agrees that if their bid/proposal is accepted by City Council, such bidder/proposer will furnish all items and services upon which prices have been tendered and upon the terms and conditions in this bid/proposal and contract.

Contractor shall submit to the City, for approval, within ten (10) days from notice of contract award, all Certificates of Insurance evidencing the required coverage as described under the required insurance schedule of the (Invitation to Bid or Request for Proposal).

The contractor shall not commence work under these terms and conditions of the contract until all applicable Certificates of Insurance, Performance and Payment Bonds and Irrevocable Letters of Credit (if required) have been approved by the City of Galveston and he/she has received notice to proceed in writing and an executed copy of the contract from the City of Galveston.

Best and final offers

In determining and evaluating the best bid/proposal, the pricing may not necessarily be controlling, but quality, equality, efficiency, utility, general terms, delivery, suitability of service offered and the reputation of the service in general use will also be considered with any other relevant items. The City Council shall be sole judge in the determination of these matters.

Per Local Government Code 252.043(b):

In determining the best value for the municipality, the municipality may consider:

- (1) the purchase price;
- (2) the reputation of the bidder's goods or services;
- (3) the quality of the bidder's goods or services;
- (4) the extent to which the goods or services meet the municipality's needs;
- (5) the bidder's past relationship with the municipality;
- (6) the impact on the ability of the municipality to comply with laws and rules relating to contracting with historically underutilized businesses (HUB) and non-profit organizations employing persons with disabilities;
- (7) the total long-term cost to the municipality to acquire the bidder's goods or services; and
- (8) any relevant criteria specifically listed in the request for bids or proposals.

Evaluation Process

Bids that do not conform to the instructions given or which do not address all the services as specified may be eliminated from consideration. The City of Galveston, however, reserves the right to accept such bid if it is determined to be in the City's best interest to do so.

The City of Galveston may initiate discussions with vendors. Discussions may not be initiated by vendors. The City of Galveston expects to conduct discussions with vendor personnel authorized to contractually obligate the vendor with an offer. Vendors shall not contact any City of Galveston personnel during the bid process without the express permission from the city's Purchasing Agent. The City of Galveston Purchasing Agent may disqualify any vendor who has made site visits, contacted City of Galveston personnel or distributed any literature without authorization from this office.

All correspondence relating to this bid, from advertisement to award, shall be sent to the City of Galveston's Purchasing Department. All presentations and/or meetings between the City of Galveston and the vendor relating to this bid shall be coordinated by the City of Galveston Purchasing Department.

No award can be made until the City of Galveston City Council approves such action.

Single bid/proposal response

If only one proposal or bid is received in response to the Request for Proposals/Bids, a detailed cost proposal may be requested of the single contractor. A cost/price analysis and evaluation and/or audit may be performed of the cost proposal in order to determine if the price is fair and reasonable.

Non-discrimination:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

Responsibility

The City must decide whether or not the supplier has the strengths to be granted an award. Certain criteria must be met such as: financial stability, capability and capacity. History of past litigation due to lack of performance may be considered but not necessarily used as a determining factor. The award will be made to the bidder who is determined to be the lowest bidder demonstrating the best ability to fulfill the requirements of the bid. The prices proposed will be considered firm and cannot be altered after the submission deadline. The City of Galveston reserves the right to award this bid on a per line item basis or in its entirety, whichever is in the best interest of the City.

Contract term

The term of the resultant contract will begin on the date of execution by City Council and will terminate on the date specified in the resultant contract unless terminated earlier as herein set forth.

Termination for default

Failure of either party in the performance of any of the provisions of this contract shall constitute a breach of contract, in which case, either party may require corrective action within ten (10) days from date of receipt of notice citing the exact nature of such breach. Failure of the party being

notified to take corrective action within the prescribed ten (10) days, or failure to provide written reply of why no breach has occurred, shall constitute a Default of Contract.

In the event of Termination for Default, the City of Galveston, its agents or representatives shall not be liable for loss of any profits anticipated to be made by contractor.

No waiver by either party of any event of default under this agreement shall operate as a waiver of any subsequent default under the terms of this agreement.

The City of Galveston reserves the right to terminate this contract immediately in the event contractor:

1. Fails to meet delivery or completion schedules;
2. Fails to otherwise perform in accordance with the accepted (bid, proposal) and the contract.

Termination for convenience

The City of Galveston may terminate this contract upon at least thirty (30) days prior written notice for its convenience or for any reason deemed by the City to serve the public interest; and/or the City of Galveston may terminate this contract upon thirty (30) days prior written notice for any reason resulting from any governmental law, order, ordinance, regulations, or court order. In no event shall the City be liable for any profits anticipated to be made hereunder by the contractor should this contract be terminated early.

Re-appropriation of Budget Items

The City may reduce the funds allocated and the services required under this Agreement at its discretion. The City shall notify Contractor in writing of this reduction. Contractor shall not perform any services subtracted from this Agreement. The de-obligation of funds does not require any formal amendment of this Agreement but shall be evidenced by a revised budget approved by City Council.

Force Majeure

If by reason of Force Majeure either party shall be rendered unable, wholly or in part, to carry out its responsibilities under this contract by any occurrence by reason of Force Majeure, then the party unable to carry out its responsibility shall give the other party notice and full particulars of such Force

Majeure in writing within a reasonable time after the occurrence of the event, and such notice shall suspend the party's responsibility for the continuance of the Forced Majeure claimed, but for no longer period.

Force Majeure means acts of God, floods, hurricanes, tropical storms, tornadoes, earthquakes, or other natural disasters, acts of public enemy, acts of terrorism, sovereign conduct, riots, civil commotion, strikes or lockouts, and other causes that are not occasioned by either Party's conduct which by the exercise of due diligence the party is unable to overcome and which substantially interferes with operations.

No commitment by the City of Galveston

This (Invitation to Bid or Request for Proposal) does not commit the City of Galveston to award any costs or pay any costs, or to award any contract, or to pay any costs associated with or incurred in the preparation of a (bid/proposal) to this request, or to procure or contract for services or supplies.

Wage Rates

In conformance with applicable statutes, the general prevailing wage rates determined by the United States Department of Labor in accordance with the Davis-Bacon Act, in the locality in which the work is to be performed have been asserted and such rates shall be the minimum paid for labor employed on this project. If, however, Federal funds are used, specified wage decisions will be listed as part of the overall bid document.

Change Orders, as per Texas Local Government Code section 252.048

- (a) If Changes in plans or specifications are necessary after the performance of the contract is begun or if it is necessary to decrease or increase the quantity of work to be performed or of materials, equipment or supplies to be furnished, the governing body of the municipality may approve change orders making the changes.
- (b) The total contract price may not be increased because of the changes unless additional money for increased costs is appropriated for that purpose from available funds or is provided for by the authorization of the issuance of time warrants.
- (c) If a change order involves a decrease or an increase of \$15,000 or less, the governing body may grant general authority to an administrative official of the municipality to approve the change order.
- (d) The original contract price may not be increased under this section by more than 25 percent. The original contract price may not be decreased under this section by more than 25 percent without the consent of the contractor.

Appropriation of Funds

The City of Galveston has established an appropriation (allocation) of funds for this project, if in the event that appropriated (allocated) funds are exhausted, the contractor's only remedy shall be suspension or termination of its performance under this contract and shall have no other remedy in law or in equity against the City and no right to damages of any kind.

Confidentiality of information in bids and proposals

Pursuant to State law, bids/proposals shall be opened in a manner that avoids disclosure of the contents to competing offerors and keeps the bids/proposals secret during negotiations. All bids/proposals are open for public inspection after the contract is awarded, but trade secrets and confidential information in the bids/proposals are not open for public inspection.

Exception to bid

The bidder will list on a separate sheet of paper any exceptions to the conditions of the bid. This sheet will be labeled, "Exceptions to bid conditions", and will be attached to the bid proposal. If no exceptions are stated, it will be understood that all general and specific conditions will be complied with, without exception.

Changes in specifications

If it becomes necessary to revise any part of this bid, a written notice of such revision will be provided to all bidders. The City is not bound by any oral representation(s), clarification(s), or changes made in the written specifications by the City's employees, unless such clarification or change is provided to bidders in a written addendum from the Purchasing Supervisor.

Protest

Any actual or prospective bidder/proposer who is allegedly involved with the solicitation or award of bid/proposal may protest. The protest must be submitted in writing to the City of Galveston's Purchasing Supervisor within three working days after such aggrieved person knows of, or should have known of the facts giving rise thereto. If the protest is not resolved by mutual agreement, the Purchasing Supervisor will promptly issue a decision in writing to the protesting party.

All protest lodged by potential or actual bidders, contractors or proposers must be made in writing and contain the following information.

1. Name, address and telephone number of the protestor.
2. Identification of the solicitation or contract number and time.
3. A detailed statement of the protest's legal and factual grounds, including copies of relevant documents.

4. Identification of the issue (§) to be resolved and statement of what relief is requested.
5. Arguments and authorities in support of the protest.
6. A statement that copies of the protest have been mailed or delivered to all interested parties in the invitation to bid or request for proposals process. In the case of request for proposals, the City of Galveston Purchasing Supervisor shall ask the protester to mail or deliver the protest to relevant parties.

The City of Galveston's City Manager has the authority to render the final determination regarding the protest. Any determination rendered by the City of Galveston will be final.

Proof of insurance

The successful bidder agrees to maintain certain types of insurance and bond protection throughout the duration of the project. All insurance policies and bonds are to be issued by an insurance company authorized to do business in the State of Texas, using an insurance company with an A.M. Best rating of B+ or better. All subcontractors utilized must also comply with these specifications as if they were the winning bidder. Specific details of coverage limits and conditions are to be followed as listed below. Any variance from these requirements must be denoted in writing and included as exceptions to the bid specifications.

Required insurance

Commercial general liability insurance, naming the City of Galveston as an additional insured and as certificate holder, and waiving subrogation per the contractual requirements of this project. Limits are to be equal to or greater than:

\$2,000,000 general liability (includes products and personal, etc.)

\$1,000,000 fire damage

\$1,000,000 automobile damage

\$500,000 workers compensation employers' liability

Statutory limits for workers compensation

Insurance coverage shall be on an "occurrence basis"

Builder's risk

The contractor shall provide builder's risk insurance in the amount of the construction value to include labor and materials. The coverage shall be "All-risk" type with the contractor being the named insured and the City of Galveston being named as additionally insured.

Liquidated damages

The parties agree that, if the Project is not completed within the time specified plus any extensions of time allowed pursuant thereto, the actual damages sustained by the Owner because of any such delay will be uncertain and difficult of ascertainment, and that the reasonable foreseeable value of the use of said project by the Owner would be the sum of \$200.00 per calendar day. The Contractor therefore agrees to pay, and the Owner agrees to accept, as liquidated damages and not as a

penalty, the sum of \$200.00 per calendar pay for each day's delay in fully completing said project beyond the time specified in the Contract and any extensions of such time allowed there under.

Workers Compensation

The successful bidder/proposer (as required by State of Texas Workers Compensations law) shall carry in full force workers compensation policy (ies) for all employees, including but not limited to full-time, part-time, and emergency employees employed by the successful bidder/proposer. Current insurance certificates, certifying that such policies as specified above are in full force, shall be presented to the City of Galveston by the successful bidder/proposer.

Definitions: workers compensation insurance coverage

1. Certificate of coverage - a copy of a certificate of insurance, a certificate of authority to self-insure issued by the State, or a coverage agreement showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

2. Duration of the project - includes the time from the beginning of the work on the project until the contractor's / person's work on the project has been completed and accepted by the governmental entity.

3. Persons providing services on the project.

Includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, with limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any such entity, which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

The contractor shall provide coverage, based on proper reporting of classification code and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas, for all employees of the contractor providing services on the project, for the duration of the project. The contractor must provide a certificate of coverage to the governmental entity prior to being award the contract.

If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

The contractor shall obtain from each person providing services on a project, and provide to the City:

1. A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

2. No later than seven days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project.

The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten days after the contractor knew or should have known of any change that materially affects the provision of coverage of any person providing services on the project.

The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Insurance, Commissioner of the Division of Workers' Compensation informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

The contractor shall contractually require each person with whom it contracts to provide services on a project, to:

1. Provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas, for all of its employees providing services on the project, for the duration of the project;

2. Provide to the contractor, prior to that person beginning work on the project a certificate showing that coverage is being provided for all employees of the person providing services

on the project, for the duration of the project:

3. Provide to the contractor, prior to the end of the coverage, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project;
4. Obtain from each other person with whom it contracts, and to provide to the contractor;
 - A. A certificate of coverage, prior to the other person beginning work on the project; and
 - B. The coverage period, if the coverage period shown on the current certificate of a new certificate of coverage showing extension of coverage, prior to the end of coverage ends during the duration of the project;
5. Retain all required certificates of coverage on file for the duration of the project and for one year thereafter;
6. Notify the governmental entity in writing by certified mail or personal delivery, within days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
7. Require each person / firm with whom it contracts to perform as required by this invitation to bid, conform to project specifications, and abide by any/all requirements placed on the contractor, and to provide any certificates of coverage to the person/firm for whom they are providing services.

By signing this contract or providing or causing to be provided a certificate of coverage, the

contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self - insured, with the commission's division of self insurance regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, or other civil actions.

The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach with ten days after receipt of notice of breach from the governmental entity.

Pursuant to Sec. 2-341 of the City Code, the City has made the following Declaration of policy

It is the policy of the City of Galveston to stimulate growth of local minority and women-owned business enterprise (M/WBE) by encouraging their participation in all phases of its contract and procurement activity and by affording them the opportunity to compete for all City of Galveston contracts. The purpose and objectives of this article are to:

1. Increase the capacity of local M/WBE's to provide products and services.
2. Increase the opportunities for local M/WBE's to expand their business with the city and other public and private sector business entities.

Provided, however, nothing herein shall require the city to award contracts for services or procurements to a M/WBE which is not also the lowest responsive and responsible bidder and otherwise qualified unless the city may otherwise lawfully award the contract to someone other than the lowest responsive, responsible bidder.

Additionally The City of Galveston has a Disadvantaged Business Enterprise, (DBE) program mandated by the US Department of Transportation, which is part of its M/WBE program.

Laws

Contractors must comply with all Federal, State, and local laws and regulations.

Withdrawal of bid

Bidders may request withdrawal of a sealed bid prior to the scheduled bid opening time provided the request for withdrawal is submitted to the Purchasing Supervisor in writing. No bids may be withdrawn for a period of sixty calendar days after the opening of bids.

The City of Galveston reserves the right to reject any and all bids, in whole or in part; to waive any informality in any bid, and to accept the bid, which, in its discretion, is in the best interest of the City of Galveston. In case of ambiguity or lack of completeness in stating the prices in any bid, the City reserves the right to consider the most advantageous bid thereof.

The City Manager is the only person authorized to execute contracts on behalf of the City. All signature pages must include "approved as to form" and be signed by the City Attorney before the City Manager will execute the contract.

Neither department heads nor elected officials are authorized to sign any binding contracts or agreements prior to being properly placed on the City Councils agenda and approved in an open meeting. Department heads and other elected officials are not authorized to enter into any type of agreement or contract on behalf of the City of Galveston. Only the City Manager may enter into a contract on behalf of the City of Galveston as authorized by City Council and the City Charter.

Additionally, department heads and other elected officials are not authorized to agree to any type of supplemental agreements or contracts for goods or services. Supplemental agreements are subject to review by the City's Legal Department prior to being signed by the City Manager, (City's authorized representative).

Local Bidder Options

Texas Local Govt. Code 271.905 states that municipalities with a population under 200,000 may utilize a local bidder preference when a bidder whose principal place of business is in the municipality. The local bidder preference is a 3% allowance against a non-resident bidder. This is able to be used for bids dealing with the purchase of goods only. There is not a limited dollar amount for the purchase.

Texas Local Govt. Code 271.9051 states that municipalities with a population under 250,000 may utilize a local bidder preference when a bidder whose principal place of business is in the municipality. The local bidder preference is a 5% allowance against a non-resident bidder. This is able to be used for bids dealing with the purchase of goods and services for an amount less than \$100,000.

Indemnify clause

IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR AGREES TO INDEMNIFY, SAVE, AND HOLD HARMLESS THE CITY OF GALVESTON, TEXAS, ITS EMPLOYEES, OFFICIALS, AND AGENTS FROM ANY AND ALL CLAIMS, ACTIONS, DAMAGES, LAWSUITS, PROCEEDINGS, JUDGMENTS, OR LIABILITIES, FOR PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE RESULTING FROM THE ACTS OR OMISSIONS OF ANYONE UNDER THE CONTRACTOR'S SUPERVISION OR CONTROL.

IN THE EVENT OF ANY CAUSE OF ACTION OR CLAIM ASSERTED BY A PARTY TO THIS AGREEMENT OR ANY THIRD PARTY, THE CITY WILL PROVIDE THE CONTRACTOR WITH TIMELY NOTICE OF SUCH CLAIM, DISPUTE OR NOTICE. THEREAFTER, THE CONTRACTOR SHALL AT ITS OWN EXPENSE, FAITHFULLY AND COMPLETELY DEFEND AND PROTECT THE CITY AGAINST ANY AND ALL LIABILITIES ARISING FROM THIS CLAIM, CAUSE OF ACTION, OR NOTICE.

IF THE CONTRACTOR SHOULD FAIL TO SO SUCCESSFULLY DEFEND, THE CITY MAY DEFEND, PAY OR SETTLE THE CLAIM OR OTHER CAUSE OF ACTION WITH FULL RIGHTS OF RECOURSE AGAINST THE CONTRACTOR FOR ANY AND ALL FEES, COSTS, EXPENSES, AND PAYMENTS, INCLUDING BUT NOT LIMITED TO ATTORNEY FEES AND SETTLEMENT PAYMENTS, MADE OR AGREED TO BE PAID IN ORDER TO DISCHARGE THE CLAIM, CAUSE OF ACTION, DISPUTE OR LITIGATION.

IT IS THE EXPRESS INTENTION OF THE PARTIES HERETO, BOTH CONTRACTOR AND CITY OF GALVESTON, THAT THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH IS AN AGREEMENT BY CONTRACTOR TO INDEMNIFY AND PROTECT CITY OF GALVESTON FROM CONSEQUENCES OF CITY OF GALVESTON'S OWN NEGLIGENCE, WHEN THAT NEGLIGENCE IS A CONCURRING CAUSE OF THE INJURY, DEATH, OR DAMAGE. FURTHERMORE, THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL HAVE NO APPLICATION TO ANY CLAIM, LOSS, DAMAGE, CAUSE OF ACTION, SUIT, OR LIABILITY WHERE THE INJURY, DEATH, OR DAMAGE RESULTS FROM THE SOLE NEGLIGENCE OF THE CITY OF GALVESTON UNMIXED WITH THE FAULT OF ANY OTHER PERSON OR ENTITY. CONTRACTOR ASSUMES NO LIABILITY FOR THE SOLE NEGLIGENCE OF CITY OF GALVESTON, ITS OFFICERS, AGENTS, OR EMPLOYEES.

Provision to be applied if Indemnity is Void

If the foregoing indemnity provision is found void for any reason, and only in that case, then the parties agree that if any claim or suit for damages of any nature arising out of or occasioned by Contractor's breach of any of the terms or provisions of this Contract or by any negligent act or omission of Contractor, its officers, agents, associates, employees or subcontractors, then Contractor will be obligated to pay for the legal defense of the City, its officers, agents and employees against such claim or suit (including the costs and expenses associated with that defense). It is additionally expressly agreed that any payment due as a result of any successful claim or lawsuit shall be paid by the party or parties found liable in the proportion of liability found against that party after the matter has been finally litigated or, alternatively, in the proportion agreed upon by the parties if the matter is settled. This provision does not waive any immunity or defense available to either party under Texas law. The provisions of this Paragraph are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

This agreement is binding upon and is to inure to the benefit of the parties, their successors, assigns, and personal representatives.

City of Galveston
Department of Finance
Purchasing Division

**INVITATION TO BID SHEET
#15-37
CITY OF GALVESTON, TEXAS**

Having read and understood the instructions, terms, conditions and specifications, we submit the following:

Witness

Company Name

Date

Authorized Representative Signature

Printed Name

Title

Correspondence Address

Remit Address

City, State, Zip Code

City, State, Zip Code

Tax Identification Number (Tin/Fien/Ssn)

Telephone Number

Fax Number

Email address

THIS DOCUMENT MUST BE COMPLETED AND SUBMITTED

ATTACHMENT A - "PROPERTY TAXES STATEMENT"

FAILURE TO COMPLETE THIS ATTACHMENT SHALL RESULT IN THE PURCHASING SUPERVISOR DEEMING YOUR BID OR PROPOSAL "NON-RESPONSIVE."

The City of Galveston, Texas has adopted the following policy:

The City of Galveston will not do business with any person or business that owes delinquent property taxes to the City.

Please indicate whether you or your company, owe delinquent property taxes to the City whether an assumed name, partnership, corporation, or any other legal form.

_____ I do not owe the City property taxes that are delinquent.

_____ I owe City property taxes that are delinquent on property located at

Bidder's Printed or Typed Name

Bidder's Signature

Date

THIS DOCUMENT MUST BE COMPLETED AND SUBMITTED

ATTACHMENT B – “NEPOTISM STATEMENT”

FAILURE TO COMPLETE THIS ATTACHMENT SHALL RESULT IN THE PURCHASING SUPERVISOR DEEMING YOUR BID OR PROPOSAL “NON-RESPONSIVE.”

The Bidder or Proposer or any officer, if the Bidder or Proposer is other than an individual, shall state whether Bidder or Proposer has a relationship, either by blood or marriage, with any official or employee of the City of Galveston by completing the following:

If the Bidder or Proposer is an individual:

_____ I am not related by blood or marriage to any official or employee of the City of Galveston

_____ I am related by blood or marriage to the following official(s) or employee(s) of the City of Galveston

Name and title of City Official

Or employee: _____

Relationship: _____

If the Bidder or Proposer is **NOT** an individual:

_____ The officers of the company submitting this bid or proposal are not related by _____ blood or marriage to any official or employee of the City of Galveston.

_____ The officers of the company submitting this bid are related by blood or marriage to the following official(s) or employee(s) of the City of Galveston.

Name and title of officer: _____

Employee and title of City Official or Employee:

Relationship: _____

THIS DOCUMENT MUST BE COMPLETED AND SUBMITTED

ATTACHMENT C –“NON-COLLUSION STATEMENT”

THE UNDERSIGNED AFFIRM THAT THEY ARE DULY AUTHORIZED TO EXECUTE THIS CONTRACT, THAT THIS COMPANY, FIRM, PARTNERSHIP OR INDIVIDUAL HAS NOT PREPARED THIS BID IN COLLUSION WITH ANY OTHER BIDDER, AND THAT THE CONTENTS OF THIS BID AS TO PRICES, TERMS OR CONDITIONS OF SAID BID HAVE NOT BEEN COMMUNICATED BY THE UNDERSIGNED NOR BY ANY EMPLOYEE OR AGENT TO ANY OTHER PERSON ENGAGED IN THIS TYPE OF BUSINESS PRIOR TO THE OFFICIAL OPENING OF THIS BID.

VENDOR _____

ADDRESS _____

PHONE _____

FAX _____

BIDDER (SIGNATURE) _____

BIDDER (PRINTED NAME) _____

POSITION WITH COMPANY _____

**SIGNATURE OF COMPANY OFFICIAL
AUTHORIZING THIS BID** _____

**COMPANY OFFICIAL
(PRINTED NAME)** _____

OFFICIAL POSITION _____

THIS DOCUMENT MUST BE COMPLETED AND SUBMITTED

THE CITY OF GALVESTON, TEXAS

DOCUMENT 00435, REQUIRED BY ALL BIDDERS WHO WILL RECEIVE FEDERAL FUNDS IN PAYMENT OF PROCUREMENT.

BIDDER'S CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION (49 CFR PART 29)

The undersigned certifies, by submission of this proposal or acceptance of this contract, that neither Contractor nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Bidder agrees that by submitting this proposal that Bidder will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the Bidder or any lower tier participant is unable to certify to this statement, that participant shall attach an explanation to this document.

Certification-the above information is true and complete to the best of my knowledge and belief.

(Printed or typed Name of Signatory)

(Signature)

(Date)

NOTE: The penalty for making false statements in offers is prescribed in **18 U.S.C. 1001**

END OF DOCUMENT 00435-FAA

THIS DOCUMENT MUST BE COMPLETED AND SUBMITTED

City of Galveston Lift Station Pump Replacement Specifications

I. GENERAL INFORMATION: Selection of Firm to Perform System Verification, Supply, Install and Commission of Compatible Submersible Pumps and Motors at Multiple Sewage Pumping Stations

The scope of work for this project consists of performing system verification, supplying, installing and commissioning compatible submersible pumps and motors at multiple lift stations in the City of Galveston.

It is the City of Galveston's intent to select a firm to perform system verification, supply, install and commission compatible submersible pumps and motors at multiple LIFT STATIONS in the City of Galveston. Firms submitting cost proposal (bids) may or may not be selected for aforementioned services based on the needs of the City of Galveston at the time of considering awards.

A. BACKGROUND

1. General Project Description

- The City seeks to select a firm to perform system verification followed by supply, install and commission of compatible submersible pumps and motors at multiple LIFT STATIONS in the City of Galveston.
- Some of these LIFT STATIONS pump replacement needs have currently been identified, and other related unanticipated needs may arise during the performance period of the contract with the selected vendor.
- The performance period of this Contract is 6 months or 180 Calendar days from Notice to Proceed. All installations shall be complete and system fully operational at the end of 6 months with full acceptance of work provided by the City of Galveston.

2. Project Elements

- Selected firm may be requested to perform system verification, supply, install and commission of compatible submersible pumps and motors at multiple LIFT STATIONS in the City of Galveston.
- The selected firm will be required to work closely with the City Engineer for performing system verification, supplying, installing and commissioning compatible submersible pumps and motors at multiple LIFT STATIONS in the City of Galveston.

3. Noted Project Issues

- It is of the utmost importance for the selected firm to be able to provide time sensitive support for performing system verification, supplying, installing and commissioning compatible submersible pumps and motors at multiple LIFT STATIONS in the City of Galveston within the timeframe agreed upon with the City Engineer.
- The City will select the most responsive firm that meets the project specific needs which include cost, product compatibility, experience, previous performance, and schedule. Other factors may be incorporated into the selection/award process that are important considerations for the City of Galveston, but are not listed here.

- Selected firm will be required to complete the work within the 6 month firm schedule and time allotted for the performance period.

B. PRELIMINARY SCOPE OF WORK AND SPECIFICATIONS

- The City of Galveston is requesting cost proposal (bids) for performing system verification, supplying, installing and commissioning compatible submersible pumps and motors at the multiple LIFT STATIONSs in the City of Galveston.
- Cost proposal (bids) shall include all work, material and labor required to perform system adequacy verification/evaluation/compatibility, furnish, and install 13 submersible pumps and motors, followed by quality control and testing (mechanical/hydraulic, electrical, and controls) on the installed thirteen (13) submersible pumps with motors (for application at multiple sanitary sewer lift stations). Results of factory testing shall be provided to the City at the same time the pumps are shipped to the project site.
- The pumps and motors shall be installed complete with rail systems and appropriate retrieval hardware to provide a complete and working system where the new and the existing pumps will operate in the alternating lead-lag mode to optimize each pump's utilization and to minimize uneven wear and tear on one single pump. The pumps shall be checked for adequate surge protection and other control devices internal and external to the pump to protect it from deviations outside its manufacturer's recommended range of safe operation. Pump, motor and the protective devices shall all bear manufacturer's product and contractor's installation warranty against failure. Protective controls for the pump and motor shall be checked prior to acceptance by the City of Galveston, and contractor shall provide the results of the field quality control testing and certificate of proper installation from the manufacturer's representative. All pumps and motors will be checked for operation and performance prior to final approval. All hardware shall be stainless steel. All cables supplied will be installed so that sewer gases will not enter the panels or escape the wet well. This item is critical to the installation, and contractor shall be financially and legally liable and responsible for any potential damages to the pumps, panels, associated infrastructure or personnel (City, Contractor or Public) if explosive gases gain access to panels and pump components or the general ambient air at sufficient concentrations to cause ignition.
- The pumps will be replacing existing Flygt model submersible pumps but acceptable substitutions that are approved equals for the City of Galveston may be accepted by the City of Galveston staff. Following is the breakdown of the pumps required to be furnished, installed, quality tested after installation, and commissioned for use:

Table 1.

S. No.	Location	Quantity	Horsepower	Manufacturer or Approved Equal	Model #	Discharge Size	Voltage/amps	Minimum Efficiency Required
1	LIFT STATIONS#20	2	20	Flygt	3153	6	Match electrical system at LIFT STATIONS	80%
2	LIFT STATIONS#26	1	35	Flygt	3171	8"	" "	80%
3	LIFT	1	35	Flygt	3171	8"	" "	80%

	STATIONS#3 0							
4	Pirates Beach LIFT STATIONS#3 4	1	5	Flygt	3102	4"	" "	80%
5	Pirates Beach LIFT STATIONS#3 8	1	5	Flygt	3102	4"	" "	80%
6	Pirates Beach LIFT STATIONS#4 7	1	15	Flygt	3153	6"	" "	80%
7	LIFT STATIONS#5 2	1	20	Flygt	3153	6"	" "	80%
8	LIFT STATIONS#5 3	1	7.5	Flygt	3127	6"	" "	80%
9	LIFT STATIONS#5 4	1	7.5	Flygt	3127	6"	" "	80%
10	LIFT STATIONS#5 9	2	5	Flygt	3085	3"	" "	80%
11	LIFT STATIONS Clock Tower	1	15	Flygt	3153	6"	" "	80%
Total # of Pumps		13	NA					
		2	Rail Systems for 3" Submersible Pumps Furnish and Install					
		2	Rail Systems for 4" Submersible Pumps Furnish and Install					
		8	Rail Systems for 6" Submersible Pumps Furnish and Install					
		2	Rail Systems for 8" Submersible Pumps Furnish and Install					
		14	Total # of Rail Systems					
		15	Surge Protection and Pump Operational Range Protective System Evaluations (includes Electrical and Hydraulic Water Hammer)					

The LIFT STATIONSs shall be evaluated by the bidder for the presence of adequate surge control and hydraulic adequacy with the following criteria:

- **Surge relief valves are typically installed at pump stations to protect the pumps, piping, valves and other equipment from potential damage from surge pressures.**
- **Surge relief valves should be sized to release the excess surge flows through the valve either on the basis of system flow or so that the inlet pressure measured at the relief valve will be lower than the lowest pressure rating of the pumping equipment.**
- **All manufacturers of surge relief valves have a value size selection chart in their catalog for the purpose of selecting the proper sized valve for the force main system, or portion thereof, to be protected. Figure 2 is an example of a valve size selection chart, which is reproduced from the GA Industries, Inc. Catalog No. GA-2000.**

- Surge relief valves are to be located downstream of the pump control valve/check valve or on the main discharge header as close to the pump(s) as practical. Surge relief valves typically discharge back into the wet well.
- Consideration should be given to providing two or smaller sized valves having a total combined relieving capacity equal to or greater than a single larger sized valve, especially when there is more than one pump discharging into a common header.
- A surge relief valve may be utilized on each pump discharge line or several valves may be provided on the common discharge header.
- When several valves are provided, it is advisable that each valve's pressure setting be slightly higher than the adjacent valve allowing the valves to open in sequence instead of all at once.
- It should be noted that all surge relief valves are field adjustable and their relief pressure setting range is determined when the valves are ordered from the manufacturer.
- Lift Station Configuration, Pump Ranges, Capacity Ranges, Discharge Piping,

Wet Well Size and Site Size shall be evaluated based on Table 2.

Table 2. Hydraulic Adequacy Verification

Number of Pumps	Individual Pump Capacity – GPM		Lift Station Firm Design Capacity – GPM		Pump Discharge Piping - Inches		Minimum Wet Well Diameter - Feet	Minimum Site Size
	From	To	From	To	From	To		
2	0	199	0	199	4	4	6' – 0"	55' x 55'
2	200	499	200	499	4	8	8' – 0"	55' x 55'
2	500	999	500	999	8	10	10' – 0"	70' x 70'
3	250	500	500	999	6	10	10' – 0"	70' x 70'
3	500	999	1000	1998	8	10	12' – 0"	75' x 75'
3	1000	1399	2000	2798	10	12	14' – 0"	75' x 75'
3	1400	1999	2800	3998	12	16	16.5' – 0"	75' x 75'
3	2000	3499	4000	7198	16	24	21' – 0"	85' x 85'
4	800	3499	2400	10,497	10	20	21' – 0"	85' x 85'
5	2500	3999	7500	15,996	18	20	25' – 0"	85' x 85'
6	3000	5299	15,000	21,196	18	20	28' – 0"	90' x 90'

PUMP DESIGN CONFIGURATION (Wet pit installation): The pump(s) shall be automatically and firmly connected to a discharge connection, guided by no less than two guide bars extending from the top of the station to the discharge connection. There shall be no need for personnel to enter the wet-well. Sealing of the pumping unit to the discharge connection shall be accomplished by a machined metal to metal watertight contact. Sealing of the discharge interface with a diaphragm, O-ring or profile gasket will not be acceptable. No portion of the pump shall bear directly on the sump floor.

PUMP CONSTRUCTION: Major pump components shall be of grey cast iron, ASTM A-48, Class 35B, with smooth surfaces devoid of blow holes or other irregularities. The lifting handle shall be of stainless steel. All exposed nuts or bolts shall be AISI type 316 stainless steel construction. All metal surfaces coming into contact with the pumpage, other than stainless steel or brass, shall be protected by a factory applied spray coating of acrylic dispersion zinc phosphate primer with a polyester resin paint finish on the exterior of the pump. Sealing design shall incorporate metal-to-metal contact between machined surfaces. Critical mating surfaces where watertight sealing is required shall be machined and fitted with Nitrile or optional Viton rubber O-rings. Fittings will be the result of controlled compression of rubber O-rings in two planes and O-ring contact of four sides without the requirement of a specific torque limit.

Rectangular cross sectioned gaskets requiring specific torque limits to achieve compression shall not be considered as adequate or equal. No secondary sealing compounds, elliptical O-rings, grease or other devices shall be used.

COOLING SYSTEM: Motors are sufficiently cooled by the surrounding environment or pumped media. A water jacket is not required. Pumps must be able to run continuously without being submerged.

CABLE ENTRY SEAL: The cable entry seal design shall preclude specific torque requirements to insure an airtight, watertight and submersible seal. The cable entry shall consist of a single cylindrical elastomer grommet, flanked by washers, all having a close tolerance fit against the cable outside diameter and the entry inside diameter and compressed by the body containing a strain relief function, separate from the function of sealing the cable. The assembly shall provide ease of changing the cable when necessary using the same entry seal. The cable entry junction chamber and motor shall be separated by a stator lead sealing gland or terminal board, which shall isolate the interior from foreign material gaining access through the pump top. Epoxies, silicones, or other secondary sealing systems shall not be considered acceptable.

MOTOR: The pump motor shall be a NEMA B design, induction type with a squirrel cage rotor, shell type design, housed in an air filled, watertight chamber. The stator windings shall be insulated with moisture resistant Class H insulation rated for 180°C (356°F). The stator shall be insulated by the trickle impregnation method using Class H monomer-free polyester resin resulting in a winding fill factor of at least 95%. The motor shall be inverter duty rated in accordance with NEMA MG1, Part 31. The stator shall be heat-shrink fitted into the cast iron stator housing. The use of multiple step dip and bake-type stator insulation process is not acceptable. The use of bolts, pins or other fastening devices requiring penetration of the stator housing is not acceptable. The motor shall be designed for continuous duty handling pumped media of 40°C (104°F) and capable of no less than 30 evenly spaced starts per hour. The rotor bars and short circuit rings shall be made of cast aluminum. Thermal switches set to open at 125°C (260°F) shall be embedded in the stator end coil lift stations to monitor the temperature of each phase winding. These thermal switches shall be used in conjunction with and supplemental to external motor overload protection and shall be connected to the control panel. The junction chamber containing the terminal board, shall be hermetically sealed from the motor by an elastomer

compression seal. Connection between the cable conductors and stator leads shall be made with threaded compression type binding posts permanently affixed to a terminal board. The motor and the pump shall be produced by the same manufacturer. The combined service factor (combined effect of voltage, frequency and specific gravity) shall be a minimum of 1.15. The motor shall have a voltage tolerance of plus or minus 10%. The motor shall be designed for operation up to 40°C (104°F) ambient and with a temperature rise not to exceed 80°C. A performance chart shall be provided upon request showing curves for torque, current, power factor, input/output kW and efficiency. This chart shall also include data on starting and no-load characteristics. The motor horsepower shall be adequate so that the pump is non-overloading throughout the entire pump performance curve from shut-off through run-out. The motor shall be capable of continuous submergence underwater without loss of watertight integrity to a depth of 65 feet or greater.

The power cable shall be sized according to the NEC and ICEA standards and shall be of sufficient length to reach the junction box without the need of any splices. The outer jacket of the cable shall be oil resistant chlorinated polyethylene rubber. The cable shall be capable of continuous submergence underwater without loss of watertight integrity to a depth of 65 feet or greater.

BEARINGS: The pump shaft shall rotate on two bearings. Motor bearings shall be permanently grease lubricated. The upper bearing shall be a single deep groove ball bearing. The lower bearing shall be a two row angular contact bearing to compensate for axial thrust and radial forces. Single row lower bearings are not acceptable. The minimum L10 bearing life shall be 50,000 hours at any usable portion of the pump curve.

MECHANICAL SEAL: Each pump shall be provided with a tandem mechanical shaft seal system consisting of two totally independent seal assemblies. The sealift stations shall operate in a lubricant reservoir that hydro-dynamically lubricates the lapped seal faces at a constant rate. The lower, primary seal unit, located between the pump and the lubricant chamber, shall contain one stationary and one positively driven rotating, corrosion and abrasion resistant tungsten-carbide ring. The upper, secondary seal unit, located between the lubricant chamber and the motor housing, shall contain one stationary and one positively driven rotating, corrosion and abrasion resistant tungsten-carbide seal ring. Each seal interface shall be held in contact by its own spring system. The sealift stations shall require neither maintenance nor adjustment nor depend on direction of rotation for sealing. The position of both mechanical sealift stations shall depend on the shaft. Mounting of the lower mechanical seal on the impeller hub will not be acceptable. For special applications, other seal face materials shall be available.

The following seal types shall not be considered acceptable or equal to the dual independent seal specified: shaft sealift stations without positively driven rotating members, or conventional double mechanical sealift stations containing either a common single or double spring acting between the upper and lower seal faces. No system requiring a pressure differential to offset pressure and to effect sealing shall be used.

Each pump shall be provided with a lubricant chamber for the shaft sealing system. The lubricant chamber shall be designed to prevent overfilling and to provide lubricant

expansion capacity. The drain and inspection plug, with positive anti-leak seal shall be easily accessible from the outside. The seal system shall not rely upon the pumped media for lubrication. The motor shall be able to operate dry without damage while pumping under load.

Where a seal cavity is present in the seal chamber, the area about the exterior of the lower mechanical seal in the cast iron housing shall have cast in an integral concentric spiral groove. This groove shall protect the sealift stations by causing abrasive particulate entering the seal cavity to be forced out away from the seal due to centrifugal action.

Seal lubricant shall be FDA Approved, nontoxic.

PUMP SHAFT: Pump and motor shaft shall be the same unit. The pump shaft is an extension of the motor shaft. Couplings shall not be acceptable. The pump shaft shall be stainless steel – ASTM A479 S43100-T.

If a shaft material of lower quality than stainless steel – ASTM A479 S43100-T is used, a shaft sleeve of stainless steel – ASTM A479 S43100-T is used to protect the shaft material. However, shaft sleeves only protect the shaft around the lower mechanical seal. No protection is provided for in the oil housing and above. Therefore, the use of stainless steel sleeves will not be considered equal to stainless steel shafts.

High-chrome Impeller: The impeller shall be of ASTM A 532 (Alloy III A), 25% chrome cast iron, dynamically balanced, semi-open, multi-vane, back swept, screw-shaped, non-clog design. The impeller leading edges shall be mechanically self-cleaned automatically upon each rotation as they pass across a spiral groove located on the volute suction. The screw-shaped leading edges of the impeller shall be capable of handling solids, fibrous materials, heavy sludge and other matter normally found in wastewater. The screw shape of the impeller inlet shall provide an inducing effect for the handling of up to 7% sludge and rag-laden wastewater. The impeller to volute clearance shall be readily adjustable by the means of a single trim screw. The Impeller shall be locked to the shaft and held by an impeller bolt.

VOLUTE/SUCTION COVER: The pump volute shall be a single piece gray cast iron, ASTM A-48, Class 35B, non-concentric design with smooth passages of sufficient size to pass any solids that may enter the impeller. Minimum inlet and discharge size shall be as specified. The volute shall have a replaceable volute insert ring containing spiral-shaped, sharp-edged groove(s). The spiral groove(s) shall provide the relief path and sharp edge(s) across which each impeller vane leading edge shall cross during rotation so to remain unobstructed. The internal volute bottom shall provide effective sealing between the multi-vane semi-open impeller and the volute. The insert ring shall be cast of (ASTM A-48 Class 35B cast iron or ASTM A 532 (Alloy III A), 25% chrome cast iron).

PROTECTION: All stators shall incorporate thermal switches in series to monitor the temperature of each phase winding. The thermal switches shall open at 125°C (260°F), stop the motor and activate an alarm.

A leakage sensor shall be available as an option to detect water in the stator chamber. The Float Leakage Sensor (FLIFT STATIONS) is a small float switch used to detect the presence of water in the stator chamber. When activated, the FLIFT STATIONS will stop the motor and send an alarm both local and/or remote. USE OF VOLTAGE SENSITIVE SOLID STATE SENSORS AND

TRIP TEMPERATURE ABOVE 125°C (260°F) SHALL NOT BE ALLOWED.

The thermal switches and FLIFT STATIONS shall be connected to a Mini CAS (Control and Status) monitoring unit. The Mini CAS shall be designed to be mounted in any control panel.

II. GENERAL REQUIREMENTS

- The selected firm shall perform system verification, supply, install and commission compatible redundant submersible pumps at multiple LIFT STATIONSs in the City of Galveston. The selected firm must demonstrate it is qualified, capable, and competent, and:
 - Cognizant of and able to apply design criteria accepted by the City of Galveston.
 - Have the ability to provide these services within the timeframe indicated.
 - Have the ability to provide these services within the budget established during negotiation of the scope of work.
 - Understand that if at any time during the effective period of this contract, (whether before or after selection), changes to key personnel are made, a notification in writing shall be provided to the City of Galveston City Engineer. Failure to notify the City and receive conformation of such change may render the firm ineligible for this project.

Figure 1. Locations of the Lift Stations

