JEFFERSON PARISH
PURCHASING DEPARTMENT

CYNTHIA LEE SHENG
PARISH PRESIDENT

RENNY SIMNO
DIRECTOR

September 5, 2025

ADDENDUM # 2

Bid Number: 50-00148341

Due Date: September 9, 2025
Postponed Date: September 18, 2025

Purchase of a Vertical Turbine Pump with On-Site Training for the Jefferson Parish Department of Water

Revision:

The Specifications has been revised.

Questions & Answers:

1. **Engine Serial Number?**
   Answer: This pump will not be connected to an engine; it's driven by an electric motor.
2. **Engine Model Number?**
   Answer: This pump will not be connected to an engine; it's driven by an electric motor.
3. **Name of Country for end destination of goods?**
   Answer: United States of America
4. **Name of end user?**
   Jefferson Parish Department of Water

*****PLEASE SEE THE REVISED SPECIFICATIONS ATTACHED. *****

*****PLEASE REMEMBER TO ACKNOWLEDGE THIS ADDENDUM BY NUMBER ON YOUR BID SUBMISSION****

Sincerely,

Stacey Champagne

Stacey Champagne, Purchasing Specialist II
Jefferson Parish Purchasing Department

Bidders must acknowledge all addenda on the bid form. Bidder acknowledges receipt of this addendum on the bid form by indicating the addendum number listed above. Failure to list each addenda number on the bid form will result in bid rejection.

This addendum is a part of the contract documents and modifies the original bidding documents and specifications. The contents of this addendum shall be included in the contract documents. Changes made by this addendum shall take precedence over the documents of earlier date.

Addendum #2 Revised Specification

Bid# 50-00148341

VERTICAL TURBINE PUMP

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The bidder shall supply one (1) Fairbanks model 36F-1-Stage, vertical turbine pump, or approved equal. Any bids submitted for alternate successful bidder, other than that as specified, must include in their bid all information needed to fully demonstrate complete compliance with the requirements of these specifications, and dimensional duplicity of the existing pump. It is the bidder's responsibility to provide adequate information necessary for the complete evaluation of their proposed equipment. Jefferson Parish shall be the sole judge as to the equality of any alternate manufacturer's offering.

B. These Specifications are intended to give a general description of what is required, but do not cover all details which will vary in accordance with the requirements of the equipment application. It is, however, intended to cover the furnishing, the shop testing, the delivery and field testing, of all materials, equipment and all appurtenances for the complete pumping units as herein specified, whether specifically mentioned in these Specifications or not.

1.03 DESCRIPTION OF SYSTEMS

A. One pumping units are required under this Contract, each of which shall be driven by a squirrel cage induction motor as specified.

B. Each pumping unit will take suction from the raw water pump station.

C. All working parts of the pump such as bearings, wearing rings, shaft, sleeves, etc., shall be standard dimensions built to limit gauges or formed to templates, such that parts will be interchangeable between like units and such that the Owner may, at any time in the future, obtain replacement and repair parts for those furnished in the original machines. All parts shall be properly stamped for identification and location in the machines as shown on the Assembly Drawings in the Instruction books furnished.

1.04 QUALIFICATIONS

1. Pump shall be NSF 61 / 372 certified.

A. The equipment covered by these Specifications is intended to be standard units of proven ability, as manufactured by a competent organization having long experience in the production of such equipment. A single manufacturer shall furnish units specified herein. The furnished pump shall be designed, constructed and installed in accordance with the best practice and methods, and shall operate satisfactorily when installed. Pumps shall be manufactured in accordance with the Hydraulic Institute Standards, except where otherwise specified herein.

B. All equipment furnished under this Specification shall be new and unused and shall be the standard product of manufacturers who have a successful record in manufacturing and servicing the equipment and systems specified herein for a minimum of ten (10) years.

C. The successful bidder shall be fully responsible for the design, arrangement, and operation of all connected rotating components of the assembled pumping unit to ensure that neither harmful nor damaging vibrations occur at any speed within the specified operating range. Design shall include all supporting sole plates and fabricated steel base plate for mounting the units.

D. The successful bidder shall perform both lateral and torsional critical speed analyses to identify and ensure that (a) the first lateral critical speed shall be at least 20 percent above the maximum pump speed, and that (b) no torsional natural frequencies occur within a range extending from 20 percent below to 20 percent above the specified operating speed range, and that (c) any blade excited resonant frequency shall be no closer than plus or minus 20 percent of the natural frequency of any part of the installed assembled pumping unit. Prior to manufacture, a statement must be forwarded to the Engineer indicating that the required analyses have been made and that the specified limitations will be met.

E. Vibration, when measured in the direction of maximum amplitude at the top motor bearing, shall not exceed 7 mils, peak-to-peak displacement at a maximum peak velocity of 0.4-in per second at any speed within the specified operating speed range.

F. Pump shall be exactly duplicate to the existing river water pumps with parts interchangeable for redundancy purpose. Pumps must match existing discharge piping elevation, bowl/bell diameter, etc. Piping changes shall not be allowed, the hole opening for bell will not be adjusted or modified and must fit into existing opening. This is a critical path pump that supplies water to the West Bank of Jefferson Parish and cannot be down for structural or construction modifications.

G. Any bids submitted for the pump other than that as specified must include in their bid all the information needed to fully demonstrate complete compliance and

duplicity of existing pump and meet the requirements of these specifications. The bid will be awarded to the lowest responsible bidder complying with all provisions of this invitation, providing the bid is reasonable, and in the best interest of Jefferson Parish to accept. Jefferson Parish reserves the right to accept or reject the bid in whole or part, any bids that are incomplete or do not demonstrate that they are equal to the requirements of these specifications. It is the bidder's responsibility to provide adequate information necessary for the complete evaluation of their proposed equipment. Jefferson Parish shall be the sole judge as to the equality of any manufacture's offering.

1.05 SUBMITTALS

A. Copies of all materials required to establish compliance with the specifications shall be submitted upon request. Submittals shall include at least the following:

1. Certified shop and erection drawings showing all-important details of construction, dimensions and anchor bolt locations.

2. Descriptive literature, bulletins, and/or catalogs of the equipment.

3. Data on the characteristics and performance of each pump. Data shall include guaranteed performance curves, based on actual shop tests of similar units, which show that they meet the specified requirements for head, capacity, efficiency, NPSHR, and horsepower. Curves shall be submitted on 8-1/2-inch by 11-inch sheets; at as large a scale as is practical. Curves shall be plotted from no flow at shut off head to pump capacity at minimum specified total head. Catalog sheets showing a family of curves will not be acceptable. Curves shall be plotted for both minimum and maximum speed. The minimum head system curve shall also be plotted on the submittal.

4. The total weight of the equipment including the weight of the single largest item.

5. A complete total bill of materials for all equipment.

6. A list of the manufacturer's recommended spare parts to be supplied in addition to those specified in paragraph 1.07, with the manufacturer's current price for each item. Include gaskets, packing, etc., on the list. List bearings by the bearing manufacturer's numbers only.

7. Copies of all factory test results, as specified in PART 2 - PRODUCTS of this Section of the Specifications.

B. Test Reports

1. A schedule of the date of shop testing and delivery of the equipment to the job site.

2. Description of pump factory test procedures and equipment.

C. Operation and Maintenance Data

Complete operating and maintenance instructions shall be furnished for all equipment included under these specifications as provided in Paragraph 1.07. The maintenance instructions shall include troubleshooting data and full preventative maintenance schedules, and complete spare parts lists with ordering information.

D. If it is impossible to conform to certain details of the specifications due to different manufacturing techniques, describe completely all non-conforming aspects.

E. The submittal format shall be in the form of a booklet, suitably tabbed and divided to cover all areas noted in Paragraphs 1.06 A. and B. above for each major equipment item. The submittal booklet shall include adequate detail and sufficient information for the Engineer to determine that all the equipment proposed meets the detailed requirements of the Specifications.

1.06 OPERATING INSTRUCTIONS

A. Operating and maintenance manuals shall be furnished. The manuals shall be prepared specifically for this installation and shall include all required cuts, drawings, equipment lists, descriptions, etc., that are required to instruct operation and maintenance personnel unfamiliar with such equipment.

B. A factory representative of all major component manufacturers, who has complete knowledge of proper operation and maintenance, shall be provided for one (1) day to instruct representatives of the Owner on proper operation and maintenance. If there are difficulties in the operation of the equipment due to the manufacturer's design or fabrication, additional service shall be provided at no cost to the Owner.

1.07 PRODUCT HANDLING

A. All parts shall be properly protected so that no damage or deterioration will occur during a prolonged delay from the time of shipment until installation is completed, and the units and equipment are ready for operation.

B. All equipment and parts must be properly protected against any damage during a prolonged storage period at the site.

C. Factory assembled parts and components shall not be dismantled for shipment unless permission is received in writing from the Engineer.

D. Finished surfaces of all exposed pump openings shall be protected by wooden blanks, strongly built and securely bolted thereto.

E. Finished iron or steel surfaces not painted shall be properly protected to prevent rust and corrosion.

F. After hydrostatic or other tests, all entrapped water shall be drained prior to shipment, and proper care shall be taken to protect parts from the entrance of water during shipment, storage and handling.

G. Each box or package shall be properly marked to show its net weight in addition to its contents.

1.08 WARRANTY

A. All equipment supplied under this section shall be warranted for a period of one (1) year by the successful bidder and the successful bidder. Warranty period shall commence on the date of Owner acceptance.

B. The equipment shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment fails during the warranty period, it shall be replaced in the machine(s) and the unit(s) restored to service at no expense to the Owner. **Push-Pull and all labor cost are excluded.**

PART 2 - PRODUCTS

2.01 GENERAL

A. The pumping units required under this section shall be complete including pumps and motors with proper alignment and balancing of the individual units. All parts should be so designed and proportionated as to have liberal strength, stability, and stiffness and to be especially adapted for the service to be performed. Ample room for inspection, repairs and adjustments shall be provided.

B. All necessary anchor bolts, nuts and washers shall be furnished and installed by the parish. The anchor bolts, nuts and washers shall be 316 stainless steels. A molybdenum disulfide anti-seize agent shall be supplied for use with all stainless-steel bolts.

C. Stainless steel nameplates giving the name of the manufacturer, the rated capacity, head, speed and all other pertinent data shall be attached to each pump.

D. Each pumping unit and its driving equipment shall be designed and constructed to withstand the maximum turbine run-away speed of the unit due to back flow through the pump with the maximum TDH specified available at the pump discharge flange. The maximum reverse runaway speed shall not exceed 130 percent of the design pump maximum operating speed. A statement of compliance with this requirement must be furnished with the Shop Drawings submittal.

2.02 PUMP

A. General

1. The pump shall be of the vertical turbine type.

2. The pump shall be built to standard dimensions such that parts will be interchangeable between existing pumps in service and the new pump being supplied.

3. The High Service pumps shall be *Fairbanks Morse Model 36F-1 stage.* All products must meet the detailed requirements of this Specification.

B. Performance Requirements:

1. When operating at the maximum output speed of the motor, each pump shall have a characteristic performance curve, which meets all the minimum conditions listed in **Table 11214-1A** The pump and drive motors shall be capable of operating satisfactorily under the full range of conditions as defined by **Table 11214-1A**

2. Each pump shall be capable of continuous adjustable speed operation over the speed range from 100 percent to 80 percent of pump design speed. There shall be no significant change in vibration and noise level over the entire listed range of speed and flow of the pumping system. (If applicable)

3. Maximum motor speeds shall not exceed those listed in **Table 11214-1A** to satisfy the specified hydraulic duty requirements. The pump design speed shall be the maximum output speed of the motor furnished, when operating at the pump's design capacity and head at 60 Hertz on utility power (full motor speed). All pumps shall have identical impeller sizes.

4. With the pumping units operating at full motor speed, the maximum brake horsepower required by the pumps shall not exceed the maximum horsepower listed in **Table 11214-1A** If the pumping units require more than the maximum horsepower listed in **Table 11214-1A** at the motor output shaft at any full motor speed operation point between primary and secondary discharge head, they will be rejected.

C. Pump Construction

1. The connection of the output shaft of the motor to the head shaft shall be made with a top adjusting nut within the VHS motor. Impeller adjustments shall be made via top adjusting nut.

2. The pump shall be furnished with a suitable, integral fabricated ASTM A-36 steel-mounting ring of adequate design with registered fit to match the mounting dimensions of the drive motor.

3. The pump's discharge head shall be fabricated steel construction of ASTM A36 of the above base type and shall be not less than the diameters listed in the attached tables. The discharge flange shall be a 150 lb. flat faced flanged discharge connection conforming, dimensionally, to ANSI/AWWA A21.15/C115.The packing gland access openings shall be of adequate size to allow for packing adjustment and replacement and shall be protected by expanded metal screens constructed of 316 stainless steel. The High Service pump's discharge head shall use 4-3" sch 80 pipes set at 90 degrees apart, connecting the top motor base ring with the head support base.

4. Incorporated in the fabrication of the Raw Water Pump's discharge head shall be a suitable pump support base not less than 1.50- inch in thickness of standard ANSI B16 B2 flanged dimensions to support both the pump and the motor. The flange bolting shall be in accordance with the requirements of ANSI B16 B2. Minimum thickness shall be 1.50 inches. A fabricated sole plate shall be provided, minimum thickness of 1.50 inches, to be installed on top of the house keeping mounting pad, grouted in place.

5. The discharged head will be fitted with a packing for enclosed line shaft freshwater flush.

6. The pump head shaft shall be constructed of ASTM A-582 416 stainless steel alloy. ANSI B58.1 standards for Deep Well Vertical Turbine Pumps, Section A4.3.3, but in no case are less than the diameter shown in Table 11214-1A. shall determine shaft diameter.

7. The pump column shall be constructed of ASTM A-36 steel, Schedule 30, flanged at each end. The column shall mate with the pump bowl assembly and the discharge head with fits to assure correct alignment. Maximum length of column sections shall be 5 feet

8. The enclosed line shaft pump line shaft shall be constructed of ASTM A-582 416 Stainless Steel Alloy and its diameter determined as described in 2.02 C.5 above but in no case shall it be less than the minimum diameter listed in Table 11214-1A. Line shaft bearing shall be fluted neoprene rubber bearings. The enclosed tube shall be made of 316 stainless steels suitable for freshwater flush.

9. The line shaft couplings shall be of the threaded type constructed of ASTM A-582 416 Stainless Steel Alloy and of such design that no threaded parts, which could cause "galling", are interconnected.

10. The pump impeller shall be of the radial type constructed of 316 stainless steels. The impeller shall be attached to the shaft by means of a collet constructed of ASTM A-276 316 Stainless Steel. High Service pump shall be supplied with 316 Stainless wear rings

11. The pump bowl shall be constructed of ASTM A-48 Class 30 cast iron having a minimum tensile strength of 30,000 psi. The pump bowl shall be of sufficient thickness to withstand stresses and strains at full operating pressure. The bowl shall be subjected to a hydrostatic test 150 percent of that specified at the design conditions in **Table 11214-1A.** The bowl shall be designed and manufactured with open and smooth water passages to ensure efficient,

reliable operation. Bowls shall be supplied with stainless rings. Bowls shall receive an internal coating of Tnemec N140.

12. The suction bowl bearing, and all bowl bearings shall be constructed of ASTM B-505 alloys 932 or 836 bronze.

13. Pump Coating: All portions of the column and pump discharge head not exposed to view, except for the interior of the bowls, have an interior and an exterior coating of high build modified epoxy of 7 mils dry thickness, compatible with the pump service. Interior of the bowls shall be coated with Tnemec N140 Epoxy paint. Surface preparation shall be in accordance with the coating manufacturer's recommendations.

2.4 MOTOR

USE EXISTING PARISH SUPPLIED MOTOR

Table 11214-1A
HIGH SERVICE PUMPING UNIT DESIGN REQUIREMENTS

Item	Design Conditions
Pump Model	36F-1 stage
Maximum Motor Speed (rpm)	710
Motor to be Supplied (Hp)	250
Minimum Column Wall thickness (inches)	Sch. 30
Column and Discharge Size (inches)	24”/24”
Minimum Discharge Head Wall thickness (inches)	.375”
Minimum Pump Shaft Diameter (inches)	3.437”
Minimum Line shaft Diameter (inches)	3.1875”
Pump Shut-Off Head at Design Speed (feet)	96
Secondary Capacity (gpm)	10000
Minimum Bowl TDH at Secondary Capacity (feet)	72
Minimum Bowl efficiency at Secondary Capacity (%)	69%
Design Capacity (gpm)	14000
Design Head (ft)	56
Minimum Bowl Efficiency at Design Capacity (%)	82%
Maximum NPSHR at Design Capacity (feet)	19’
Minimum Run out Capacity (gpm)	18000
Minimum Bowl TDH at Run out Condition (feet)	44
Minimum Bowl Efficiency at Run out (%)	75%
Minimum eye area (in^2)	258”
Minimum Bowl weight - 1st stage (lbs)	2580
Minimum Bowl pressure rating (psi)	300
Minimum Bowl Hydro Test Pressure (psi)	450