



**DALLAS COUNTY
PURCHASING DEPARTMENT**

Founders Square
900 Jackson Street * 6th Floor * Suite 680
Dallas, Texas 75202
DANIEL R. GARZA
Purchasing Director

September 29, 2017

ADDENDUM No. 1

Bid No. 2017-068-6692

CONTRACT FOR MAJOR CAPITAL IMPROVEMENT PROGRAM NO. 31402 Pleasant Run Road Pump Station
Phase 1B From Northeast Corner of Pleasant Run Road and Pinto Road

Whereas, page 13 in the bid document, "Contractors will be required to submit, in writing, any additional questions presented at the Pre-Bid Conference and/or after the Conference. Any/all additional questions must be received by 10:00-AM (CST), Monday, September 25, 2017" is hereby changed to read as follows;

"Contractors will be required to submit, in writing, any additional questions presented at the Pre-Bid Conference and/or after the Conference. Any/all additional questions must be received by 10:00-AM (CST), Monday, October 02, 2017.

Whereas, the bid opening date is hereby changed to read as follows: Monday, October 09, 2017 at 2:00 p.m.

Whereas, Page 3 in the bid document is hereby replaced with page 3A

Whereas, Pages 11, 12, and 13 in the bid document are hereby replaced with pages 11A, 12A, and 13A.

Whereas, Pages 541 to 550 in the bid document are hereby replaced with pages 541A to 550A.

Whereas, Sheet 53 of 69 of the drawings is hereby replaced with Sheet 53A

Whereas, Attachment; Bidders Review Checklist is hereby added to the bid documents.

Except as provided herein / above, all other specification requirements of the original solicitation referenced shall remain unchanged in and full force and effect. This addendum should be signed and returned with your Solicitation package on or before Monday, October 09, 2017 @ 2:00 P.M. (CT).

This addendum is hereby acknowledged, understood and considered in our Solicitation.

Printed Name: _____

Signature of Authorized Representative: _____

Title: _____

Company: _____



PROPOSAL FOR:	Contract for Major Capital Improvement Program No. 31402 Pleasant Run Road Pump Station Phase 1B from Northeast Corner of Pleasant Run Road and Pinto Road	
SOLICITATION NO. 2017-068-6692	DUE DATE: October 09, 2017 @ 2:00p.m.	
FOR FURTHER INFORMATION CALL:	PURCHASING CONTACT: Charles Price, CTPM	AT PHONE AND EMAIL ADDRESS 214.653.6223 and charles.price@dallascounty.org
PRE-BID CONFERENCE:	September 21, 2017 @ 1:00 p.m.	

INSTRUCTIONS TO BIDDERS

PLEASE READ THE ENTIRE PACKAGE CAREFULLY

This page will need to be signed and returned with bid submission.

Bids are solicited for furnishing the merchandise, supplies, services and/or equipment set forth in this Bid Proposal. Completed **SEALED Bid Proposals, ORIGINAL AND ONE (1) COPY**, must be received in the Purchasing Department, 900 Jackson Street (Founder's Square), Suite 680, Dallas, Texas 75202, **BY 2:00 P.M. ON THE ABOVE "DUE DATE"**. The official time clock will be time clock located in the Purchasing Department. Bids received at 2:01 and thereafter are Late Bids and will not be accepted.

Bids may be withdrawn at any time prior to the official opening. Alterations made before opening time must be initialed by bidder guaranteeing authenticity. After the official opening, bids may not be amended, altered, or withdrawn without the recommendation of the Purchasing Agent and the approval of the Commissioners' Court.

The County is exempt from Federal Excise and State Sales Tax; therefore, tax must not be included in this bid.

The undersigned agrees, if this bid is accepted, to furnish any and all items upon which prices are offered, at the price(s) and upon the terms and conditions contained in the Specifications. The period for acceptance of this Bid Proposal will be 120 calendar days unless a different period is noted by bidder.

The County reserves the right to accept or reject in part or in whole any bids submitted. The Commissioners Court will award the contract to the responsible bidder who submits the lowest and best bid as determined by Commissioners Court. The Commissioners Court reserves the right to determine compliance and to waive technicalities or irregularities and to make award in the best interest of Dallas County.

The undersigned affirms that they are duly authorized to execute this contract, that this company, corporation, 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 bidder or to any other person(s) engaged in this type of business prior to the official opening of this bid. And further, that the Manager, Secretary or other agent or officer signing this bid is not and has not been for the past six months directly or indirectly concerned in any pool or agreement or combination to control the price of Supplies, Services or Equipment bid on, or to influence any person to bid or not to bid thereon.

**NAME AND ADDRESS OF COMPANY/BIDDER:		<u>ALL BIDS MUST BE SIGNED PRIOR TO AWARD</u>
Company Name (PRINTED):		Name (PRINTED):
Mailing Address:		Title:
		Signature:
City/ State:	ZIP:	E-Mail Address:
***Texas Secretary of State Filing Number, Jurisdiction and Formation Date:		Telephone and Fax No.:
Federal Taxpayer ID/Certificate Number:		WEB Site:

HELP US KEEP OUR VENDORS' LIST CURRENT

NO BID is submitted for this time only; NOT THIS COMMODITY/SERVICE___ ONLY. FAILURE TO RESPOND TO BID SOLICITATIONS FOR TWO (2) BID PERIODS MAY RESULT IN REMOVAL FROM THE VENDORS LIST; however, if removed you will be reinstated upon request. If not submitting a bid, please complete the questionnaire on the next page.

**** Legal Name, Address and Taxpayer ID number:** Bidders are to submit the company's "Legal Name" as identified by their Federal Tax Certification certificate. Bidders are to complete the attached Federal Form "W-9" for verification and filing purposes. Dallas County reserves the right to withhold any invoices and/or payments, without penalties, for documents submitted under a different name/billing address than that identified on the proposal document/award court order or contract. *****Refer to paragraph 38 of the solicitation for a detailed explanation.**

NOTICE TO CONTRACTORS

FOR

DALLAS COUNTY MAJOR CAPITAL IMPROVEMENT PROGRAM

Sealed original proposals and two copies addressed to Purchasing Agent for construction of the BID No. 2017-068-6692, Pleasant Run Road, Pinto Road Pump Station Phase 1B at the Northeast Corner of Pleasant Run Road and Pinto Road, MCIP Project 31402. The project is located in Road and Bridge District 3 in the City of Wilmer and Dallas County, Texas, will be received at the office of the Dallas County Purchasing Agent, 900 Jackson Street, Suite 680, Dallas, Texas located in the Founder's Square Building, until **Two O'Clock (2:00) P.M (CST), Monday, October 09, 2017**, and then publicly opened and read aloud. Note: The Time-Date Stamp Clock located at the front counter of the Dallas County Purchasing Department will serve as the OFFICIAL CLOCK for the purpose of verifying the date and time of receipt of bids.

Bid Proposals (*one (1) original, clearly marked "ORIGINAL", and two (2) complete copies, clearly marked "COPY"*) shall be submitted in sealed envelopes marked "**Bid No. 2017-068-6692 for Project No. 31402.**" City of Wilmer and County of Dallas, Texas, District No. 3. All bids received will be retained by Dallas County and will not be returned to bidders.

The right is reserved by Dallas County to reject any and all proposals or to waive any irregularities in the bid proposal when in the best interests of the County

DESCRIPTION OF WORK TO BE DONE

The general scope of work is for the construction of a new elevated storage tank, ground storage tank, booster pump/control building, diesel or natural gas, stand by generator, metering station, all associated equipment, piping, civil, and electrical equipment for construction of a new pump station on the Pleasant Run Road, Pinto Road Pump Station Phase 1B, MCIP No. 31402 located on the northeast corner of Pleasant Run Road and Pinto Road was selected in the Major Capital Improvement Program. There are **320 working days allocated for construction of all improvements.**

PRE-BID CONFERENCE

A PRE-BID CONFERENCE will be held on **Thursday, September 21, 2017 at One O'clock (1:00) p.m. (CST)** at the Founder's Square Building, Dallas County Purchasing Department located at 900 Jackson Street, Suite 680, Dallas, Texas 75202.

Attendance at the Pre-Bid Conference is voluntary and highly recommended, but is not mandatory. All bidders are strongly encouraged to attend to discuss the requirements of this bid. It is the responsibility of each bidder to examine the entire bid package, seek clarification in writing, review the plans in detail, visit the project site and review their bid for accuracy before submitting.

All verbal responses to questions at the Conference are non-binding to County, only responses to written questions that are published and/or responded to by the Dallas County Purchasing Department in written communications will be official. Any oral instructions or information concerning the bid given by Dallas County staff or personnel will not bind Dallas County and should not be considered authoritative when assembling responses. The County will not be bound by any information conveyed verbally.

CONTRACT DOCUMENTS AND DRAWINGS

Detailed plans and specifications of the work may be obtained for a \$100 NON-REFUNDABLE FEE at the office of the County Director Public Works at 411 Elm Street, Fourth Floor, Dallas, Texas. Documents may be obtained by mail upon receipt of a separate check in the additional amount of \$10.00, which is for postage or handling charges. If the bidder elects to have a courier service pick up plans and contract documents, the courier MUST provide Dallas County with a contact person, phone number and fax number for the bidder on the bidder's letterhead with the proper mailing address indicated. Plans will not be released without said information. Contractor shall provide one original and one copy of all bid proposal submittals. The Engineer shall issue written orders to the Contractor within One Hundred Twenty (120) days after the Contract is fully executed.

BID PROPOSAL GUARANTY

Each bid proposal submittal shall be accompanied by a certified check, cashier's check, or Bidder's Bond in an amount equal to five percent (5%) of the total bid amount, made payable without recourse to the order of the County of Dallas, Texas.

A Payment Bond is required in the amount of one hundred percent (100%) of the contract amount, if the contract amount exceeds \$25,000. A Performance Bond is required in the amount of one hundred percent (100%) of the contract amount, if the contract amount exceeds \$100,000.

COMMUNICATIONS REGARDING THE BID

All questions and inquiries regarding the bid must be submitted in writing to Charles Price, CTPM, Contract Specialist, by e-mail, fax or via mail. The deadlines for submission of questions relating to this bid are listed below. All questions submitted in writing prior to the deadlines will be compiled and answered in writing. All addendums, questions, responses and answers will be posted and made available exclusively on the Dallas County Purchasing Department's website:

<http://www.dallascounty.org/departments/purchasing/currentbids.php>. (Go to the appropriate Bid #, click on the appropriate hyperlink for viewing and/or downloading.)

Bidders are solely responsible for frequently checking this website for updates and changes to this bid.

E-mail Charles.Price@dallascounty.org

Office: 214.653.6223

Fax: 214.653.7449

Mailing Address: 900 Jackson Street, Suite 680, Dallas, Texas 75202

Initial questions regarding this solicitation are to be submitted, in writing, to Charles Price by **10:00 AM (CST), Tuesday, September 19, 2017**. These questions will be addressed during the Pre-Bid Conference.

Contractors will be required to submit, in writing, any **additional questions** presented at the Pre-Bid Conference and/or after the Conference. Any/all additional questions must be received by **10:00-AM (CST), Monday, October 02, 2017**.

All questions submitted in writing prior to the deadline will be complied and answered in writing. Official answers to all written questions will be posted exclusively on the Dallas County Purchasing Department's website:

<http://www.dallascounty.org/departments/purchasing/currentbids.php> as an amendment to this bid.

Dallas County will not be bound by any information conveyed verbally. No oral statements or answers by any person, employee, unit, department, or organization shall be considered binding, cannot modify or otherwise affect the provisions of this bid and / or any contract resulting therefrom.

All modifications, changes, addendums, or amendments will be in writing by Dallas County Purchasing Department and shall be considered official and binding.

Dallas County reserves the right, as its sole discretion, to determine appropriate and adequate responses to the written comments, questions, and requests for clarification.

It is the Bidder's responsibility to review and monitor the Dallas County Purchasing Department's website:

<http://www.dallascounty.org/departments/purchasing/currentbids.php>, on a regular basis during the solicitation process up to the closing due date and time for any updates, amendments, or changes.

Dallas County Purchasing Department's website is our primary communication tool for addenda, changes, and updated information regarding this bid.

Please reference the Bid/Solicitation Number (2017-068-6692), Company Name, Representative Name and email address on all written communication and correspondence to Dallas County.

SECTION 11214
PUMPS, SINGLE STAGE, DOUBLE SUCTION, HORIZONTAL,
WITH SPLIT CASE CENTRIFUGAL

PART 1 GENERAL

1.1 SUMMARY

This Section includes the furnishing and installation of single stage, double suction, horizontal, split case, directly coupled centrifugal pumps with electric motor drive as shown on PLANS and as specified herein.

1.2 RELATED REQUIREMENTS

- A. Attachment(s) to this Section designate quantity, performance, acceptable manufacturers, and special features.
- B. Technical Specification Section 01300 – “Submittals.”
- C. Technical Specification Section 01730 – “Operation and Maintenance Data.”
- D. Technical Specification Section 09902 – “Painting and Protective Coatings.”
- E. Technical Specification Section 15172 - “Electric Motor, High Efficiency, Horizontal Induction 300 HP and Smaller.”
- F. Other related work as called for on PLANS or specified elsewhere in this or other Technical Specification Sections.

1.3 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A48/A48M	Standard Specification for Gray Iron Castings
ASTM A276	Standard Specification for Stainless Steel Bars and Shapes
ASTM A743/A743M	Standard Specification for Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application
ASTM B584	Standard Specification for Copper Alloy Sand Castings for General Applications.

1.4 - 1.05 (Not Used)

1.6 SUBMITTALS

Furnish the following in accordance with Technical Specifications Section 01300 – “Submittals” and Section 01730 – “Operation and Maintenance Data.”

- A. Shop Drawings
 - 1. Certified performance curves showing TDH, capacity, horsepower, NPSH required, and efficiency from shut-off to beyond minimum operating head at operating speed

2. Dimensioned drawings and description of construction, including parts list with materials of construction and metallurgy.
 3. Tabulated Data: Rated TDH, capacity, BHP, impeller sizes, pump speed, efficiency at rated capacity, and minimum and maximum heads at which pump will operate without cavitation or vibration
 4. Installation instructions and drawings showing anchor bolt locations, electrical and piping connections
 5. Motor drive data in accordance with applicable Technical Specification Section
 6. Equipment weights
- B. Operation and Maintenance Manuals (Pump and Drive)
1. Assembly, installation, alignment, adjustment, and checking instructions
 2. Lubrication and maintenance instructions
 3. Guide to “troubleshooting”
 4. Parts lists and predicted life of parts subject to wear
 5. Recommended spare parts list
- C. Certified Report: Furnish to ENGINEER 3 copies of reports prepared by manufacturer’s technical representative certifying satisfactory installation, operation, and startup of units.

1.7 QUALITY ASSURANCE

A. System Coordination

CONTRACTOR to coordinate with manufacturers of driver, couplings, and other related items to ensure that said items are properly designed and constructed for service with the pumps specified in this Section.

B. Standardization

All pumps in similar service to be product of single manufacturer.

C. Manufacturer acceptability contingent on manufacturer’s pump meeting all specified requirements.

1.8 DELIVERY, STORAGE, AND HANDLING

Deliver, unload, and store products on site in manner that prevents damage.

1.9 - 1.11 (Not Used)

PART 2 PRODUCTS

2.1 MANUFACTURER(S)

- A. Flowserve Morse 200-LNN-375 413412/1-BB
- B. Or equivalent pump from:
 1. Goulds
 2. Fairbanks Morse

2.2 MATERIALS AND/OR EQUIPMENT

A. General

Unit(s) to yield performance stable and free from cavitation, vibration, and noise throughout operating head range. Pump, driver, and couplings to be suitable for operating at reverse runaway speeds up to 125 percent of normal forward speed without damage.

B. Casing

1. Cast iron, ASTM A48/A48M Class 30 minimum,
2. Designed for minimum 250 psig working pressure
3. Free of blow holes, sand pockets, and other defects
4. Water passageways shall be smooth to allow for maximum operational efficiency.
5. Burrs, fins, and rough areas on pump exterior shall be ground smooth
6. Casing shall be lined –bored to assure concentricity and angular alignment.
7. Suction and discharge connections shall be sized to reduce hydraulic friction losses and to reduce turbulence and pipe noise.
8. Casing shall consist of upper and lower half castings containing the volute and suction passages, and removable bearing housings that are doweled and securely bolted to the lower half casing.
9. The upper half casing shall be completely removable without disturbing the suction or discharge piping connections.
10. Inboard and outboard bearing housings shall be replaceable without the need for field alignment.
11. Provide suction and discharge connections on opposite sides of the lower half of the casing to permit removal of rotating elements without disconnecting the system piping connections.
12. Suction and discharge flanges to be drilled ASME/ANSI Class 125 flat faced and shall be designed for straight through nut-and-bolt flange connections.
13. Pump feet shall be cast as an integral part of the lower casing.
14. NPT air vent tap in volute. Minimum ½ inch
15. NPT tap and drain plugs in lower portion of casing, Minimum ½ inch
16. NPT tap in volute for supplying seal water, Minimum ¼ inch
17. Heat-treated steel fasteners

C. Impeller

1. Impeller constructed of 316 Stainless Steel, ASTM A743, CF8M
2. The impeller shall be of the enclosed type, double suction, Francis vane design, to minimize inlet losses and accommodate high suction lifts.

3. Impeller shall be hydraulically and statically balanced to reduce bearing loading.
4. Impellers shall be precision cast in one piece with smooth flow contours to promote maximum efficiency.
5. Impellers shall be fixed axially along the shaft by shaft sleeves and sleeve nuts, and secured to the shaft through a precision fit and full-length key.
5. Impeller skirt shall be grooved and fit with close tolerances to the casing ring to minimize recirculation between the impeller and the casing ring.
6. The impeller hub shall have sufficient metal thickness to allow for installation of impeller wear rings.

D. Wear Rings

1. Internal, 316 stainless steel ASTM A743 (A744) or 416 stainless steel ASTM A276 CF8M, impeller rings
2. Nitronic 60 stainless steel ASTM A743 or 416 stainless steel, ASTM A276 CF8M casing rings
3. Impeller wear rings shall be of the annular type.
4. Wear rings shall be provided on both the impeller and casing so that clearances can be maintained throughout the life of the rings and minimize recirculation.
5. Casing wear rings shall be of the annular type pinned at the parting flange of the casing to prevent rotation.

E. Shaft

1. Shaft shall be manufactured of high quality heat treated steel, at minimum composed of forged carbon steel, AISI 1045, and fully annealed
2. Shaft shall be of sufficient diameter to allow no greater than 0.003” maximum deflection as measured at the sealing box for all normal performance conditions on the curve.
3. Designed to withstand torsional loads with high safety factor
4. Shaft shall be manufactured to meet stiff shaft construction with a critical speed at least 25% in excess of operating speed, in order to prevent vibration and fatigue.
5. Shaft shall be accurately machined along its entire length. A keyway shall be machined at the coupling end. No threads shall be machined adjacent to the impeller.
6. All threading external to water passage and mechanical seals; 316 stainless steel nut

F. Shaft Sleeves

1. 316 or 416 stainless steel, ASTM A276, Grade 416 with minimum 190 Brinell surface hardness
2. Keyed to shaft and locked in place with bronze nuts
3. O-ring seal between shaft and seal

4. Removable without removing rotating element or dismantling pump casing halves
 5. Surface finish of 32 micro-inches
- G. Bearings
1. Bearings shall be single row and deep groove ball type selected to carry radial and thrust loads.
 2. Oil lubricated, self-aligning, ball type unless otherwise noted on Attachment to this Section
 3. Minimum "Rating Life," L_{10} , of 100,000 hours
 4. Malleable iron bearing housing to be doweled and accurately positioned onto the bearing shoulders located on the lower half casing to ensure accurate alignment.
 5. Oil lubricated bearings with sight glass automatic oiler on each bearing
 6. Interchangeable inboard and outboard bearings shall be press fit and positioned onto ground journals on both ends of an accurately machined shaft.
- H. Mechanical Seal
1. Face / Primary Ring is carbon steel
 2. Seat / Mating Ring is silicon carbide – set of 2
 3. Elastomer Bellows is Buna-N, rated at 225°F maximum temperature
 4. Drive Band, Retainer, Spring and Spring Holder are 18-8 stainless steel
 5. Positive static seal between the bellows and the shaft with free movement of the bellows to eliminate sliding action that could damage shaft.
 6. Self-aligning to automatically compensate for normal run-out, axial movements and shaft end play.
 7. Positive mechanical drive protects Elastomer Bellows from overstressing
 8. Single coil spring to improve tolerance to clogging
 9. Simple to fit and completely repairable in the field
 6. Crane Type 1 Mechanical Seal, or equal
- I. Pump Drive: In accordance with Technical Specification Section 15172 - "Electric Motor, High Efficiency, Horizontal Induction 300 HP and Smaller."
- J. Accessories
1. Coupling
 - a. Nonlubricated flexible type
 - b. Service factor of 2.0
 - c. Falk coupling
 - d. Steelflex 1080T10, Thomas Type DBZ with stainless steel discs

2. Coupling Guard
 - a. Fabricated steel, ANSI B15.1 shell type coupling guard, bolted to the base
 - b. Arranged to facilitate removal
 - c. In accordance with OSHA requirements
 3. Base
 - a. Fabricated steel or cast iron with grouting hole
 - b. Provide machined pump and motor mounting surfaces
 - c. One-piece construction designed for mounting pump and directly coupled motor
 - d. Drip rim with ¾-inch NPT or larger drain tap
 - e. Motor mount suitable for standard NEMA frame
 4. Air Vent
 - a. ½ inch bronze cock
 - b. Crane No. 256 or equal
- K. Painting
Per Technical Specification Section 09902 - "Painting and Protective Coatings."

2.3 FABRICATION

- A. Completely assemble pump, driver, and all accessories on common base at factory.
- B. Provide dowel holes in pump and driver feet, but do not drill dowel holes in base.
- C. After factory testing, items such as seal water piping may be removed if necessary to avoid possible damage in shipment. Provide instructions for reassembly in field if items are temporarily removed.

2.4 SOURCE QUALITY CONTROL

Factory Test

- A. Test each pump at factory in accordance with Hydraulic Institute Standards, using a prototype unless otherwise designated.
- B. Certified Hydrostatic Test of each casing to 150 percent of shutoff head, but not less than 375 psig.

PART 3 EXECUTION

3.01 - 3.02 (Not Used)

3.3 ERECTION/INSTALLATION/APPLICATION AND/OR CONSTRUCTION

- A. Install pumps in accordance with PLANS, approved shop drawings, Manufacturer's installation manual, and supplemental specification below.
- B. Uncouple pump from drivers and align and level pumping unit to elevation shown. Use precision levels and gauges.

- C. Use wedges or shims to level, providing for grout of thickness indicated.
- D. Realign pump and drivers, following manufacturer's instructions. All hold-down nuts on foundation bolts to have full thread make-up.
- E. Grout in accordance with the applicable concrete Items. Let grout set seven days before removing wedges or shims. Remove all wedges or shims. Grout gap left by wedges or shims.
- F. After grout is set, check alignment and realign as necessary. Connect piping, making sure no stresses are transferred to the pump. Make any necessary changes to piping. Check alignment again, then reconnect couplings. After start-up and testing as specified below, shut down pump and recheck alignment of coupling. Check in all directions and follow manufacturer's instructions.
- G. After unit has been operated under normal conditions for one week, check couplings for misalignment and correct as necessary. After correction, dowel pump and drivers to base plate.
- H. After completion of all procedures specified above, clean and touch up any damaged coating system as required.

3.4 REPAIR/RESTORATION (Not Used)

3.5 FIELD QUALITY CONTROL

- A. Start-Up and Field Testing
 - 1. Observe the following precautions before start-up.
 - a. Check rotating elements to ensure that they are free and clear.
 - b. Check direction of motor rotation with pump disconnected, or "bump" motor with pump still connected to determine that direction of rotation of pump and motor are compatible.
 - c. The manufacturer's representative shall provide a certification that the pump equipment has been installed in accordance with the manufacturer's instructions and is ready for operation.
 - 2. After taking precautions specified above, start up each pumping unit and check discharge pressure and flow using permanently installed instrumentation.
 - a. Manufacturer's and ENGINEER's representatives to observe operational tests.
 - b. Manufacturer's representative to inspect and approve installation and prepare installation report.
- B. Manufacturer's Services

Furnish services of manufacturer's technical representative to check installation and to assist CONTRACTOR in field testing, making adjustments, and instructing operators in maintenance and operation procedures.

3.6 - 3.07 (Not Used)

3.8 DEMONSTRATION

Manufacturer's representative to conduct training for operators.

3.9 - 3.10 (Not Used)

3.11 MEASUREMENT AND PAYMENT

No separate measurement or payment for work performed under this Section. Include cost of same in Contract price bid for work of which this is a component part.

ATTACHMENT A

The following information is provided as a reference in paragraph 1.02.A.

A. General

1. Number of Unit(s): 4
2. Designation of Pumping Unit(s): BP-1, BP-2, BP-3, and BP-4.
3. Type of Service: Potable Water.
4. Pumping Unit Drivers: Electric Motor.

B. Pump Performance Requirements

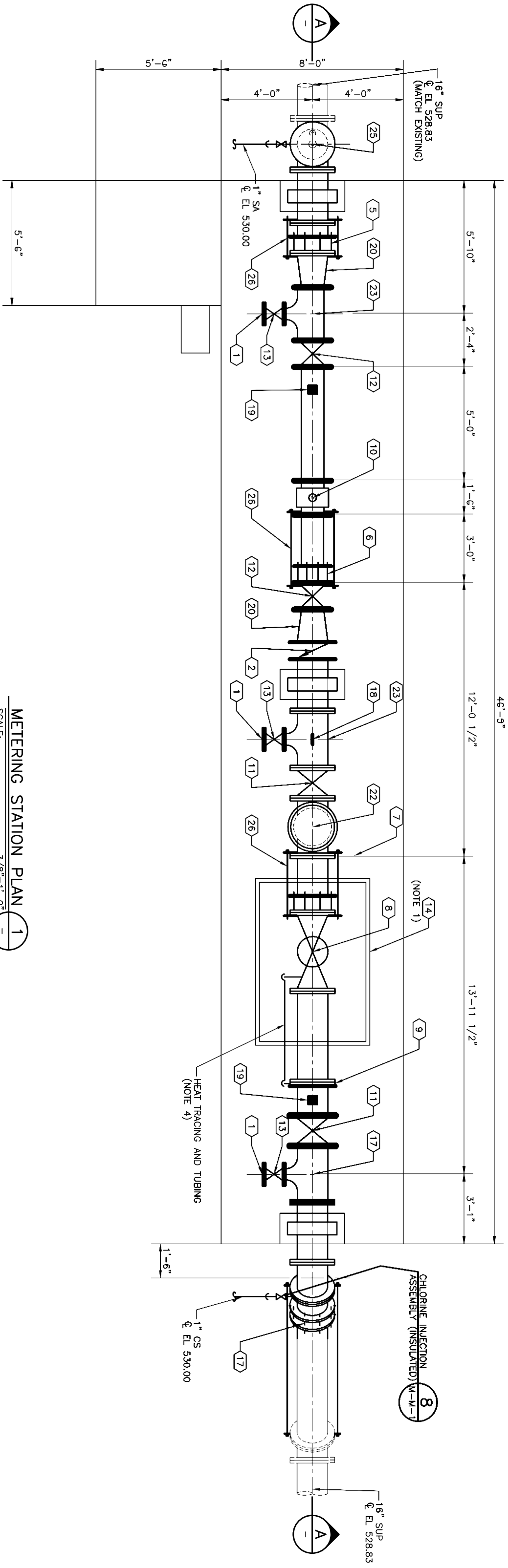
BP-1 through BP-4

	<u>Parameter</u>	
1.	Rated Capacity (gpm)	1,220
2.	Total Dynamic Head at Rated Capacity (feet):	88
3.	Min Shut-off Head (feet):	100
4.	Min. Efficiency at Design	80%
5.	Maximum Brake Horsepower at all Points on Head Capacity Curve (Hp):	50
6.	Min TDH Operation without Cavitation and Vibration (ft)	64
7.	Max Nominal Pump Speed (rpm):	1,800
8.	Min Run Out Capacity (gpm):	1,500
9.	Minimum Preferred Operating Range TDH (ft):	75-92
10.	Run Out Head (feet):	64
11.	Minimum Efficiency (Percent) at Run Out Capacity:	68%
12.	Suction Flange Size (inch):	10 or less
13.	Discharge Flange Size (inch):	8 or less
14.	Max Bare Pump Weight (lbs):	1040
15.	Number of Units	4

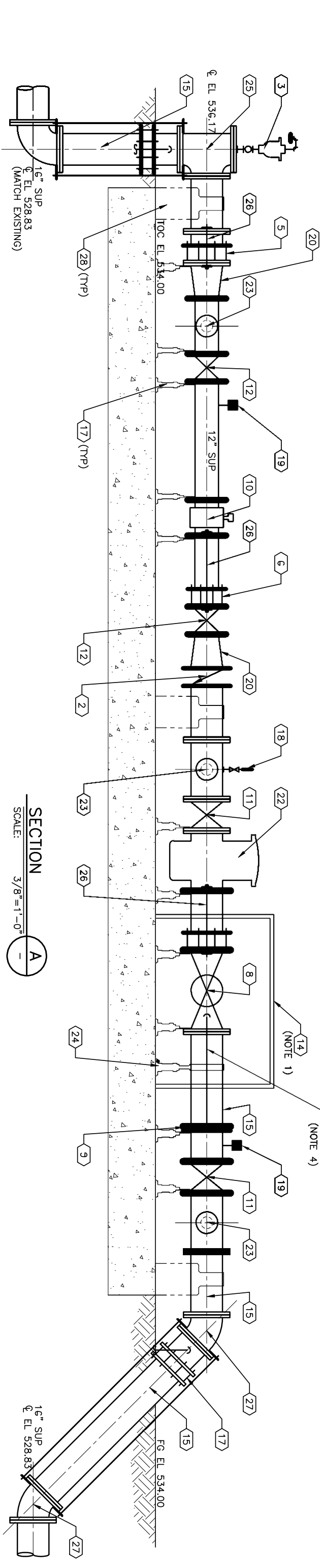
C. Electric Motor per Technical Specification Section 15172 - "Electric Motor, High Efficiency, Horizontal Induction 300 HP and Smaller."

<u>Parameter</u>	<u>BP-1 through BP-4</u>
1. Maximum Rating (Hp)	50
2. Maximum Synchronous Speed (rpm)	1,800
3. Type of Drive	Set Speed

END OF SECTION



METERING STATION PLAN 1
 SCALE: 3/8"=1'-0"



SECTION A-A
 SCALE: 3/8"=1'-0"

ITEM	DESCRIPTION
1	6" BLIND FLANGE
2	16" CHECK VALVE (CV-1)
3	2" COMBINATION AIR RELEASE VALVE (NOTE 6)
4	16" 90° ELBOW
5	16" FLANGED COUPLING ADAPTER (CA-1R)
6	12" FLANGED COUPLING ADAPTER (CA-1R)
7	16" COUPLING ADAPTER (CA-1R)
8	16" FLOW CONTROL VALVE (FCV-1)
9	16" FLOW ELEMENT
10	12" FLOWMETER

ITEM	DESCRIPTION
11	16" GATE VALVE (GV-1)
12	12" GATE VALVE (GV-1)
13	6" GATE VALVE (GV-1)
14	HOT BOX, REFER TO DWG M-M-3
15	16" PIPE SPOOL
16	12" PIPE SPOOL
17	PIPE SUPPORT, REFER TO 5/M-M-1
18	PRESSURE GAUGE, REFER TO 1/M-M-1
19	PRESSURE TRANSMITTER, REFER TO 6/M-M-1
20	16" X 12" CONCENTRIC REDUCER

ITEM	DESCRIPTION
21	1" SAMPLE LINE TO CL2 ANALYZER
22	12" STRAINER (STR-1)
23	16" X 16" X 6" TEE
24	PIPE SUPPORT, REFER TO 2/M-M-1
25	16" TEE
26	RESTRAINTS, REFER TO DETAILS ON DWG M-M-2
27	16" 45° ELBOW
28	CONCRETE PIPE SUPPORT, REFER TO 4/F-S-4

- NOTES:**
- ALL HOT BOXES ARE TO BE INSTALLED PER THE DETAILS AND NOTES SHOWN ON SHEET M-M-4 AND PER TECHNICAL SPECIFICATION SECTION 15959.
 - INSTALL 120 VAC RECEPTACLES, WIRING DEVICES, CONDUIT, WIRE AND RELATED ITEMS TO SERVICE THE ELECTRIC HEATER AND TEMPERATURE SWITCH FOR EACH HOT BOX PER DETAILS AND NOTES FOUND ON SHEET M-E-3.
 - RESTRAINED JOINTS WILL BE INSTALLED AT THE LOCATIONS SHOWN. RESTRAINTS WILL BE INSTALLED PER THE DETAILS AND NOTES FOUND ON SHEET M-M-2. ALL RESTRAINTS WILL INCLUDE HOT-DIPPED GALVANIZED ANCHOR PLATES, HEX NUTS, LOCK TUBING RUNNING FROM THE CONTROL VALVE TO THE FLOW ELEMENT WILL BE HEAT TRACED AND INSULATED PER DETAILS AND NOTES FOUND ON SHEET M-E-3.
 - CONDUIT IS TO BE ROUTED TO MINIMIZE THE LENGTH OF CONDUIT RUNNING ON THE SURFACE. THE WORK WILL INCLUDE SURFACE AND UNDERGROUND CONDUIT INSTALLATION BETWEEN THE SERVICES AND PLC CABINET AND POWER PANEL BOARD.
 - INSTALL COMBINATION AIR VALVE PER 6/M-M-2 AND PER TECHNICAL SPECIFICATION SECTION 15111.
 - ALL ABOVEGROUND PIPING, VALVES, AND APPURTENANCES SHALL BE INSULATED PER TECHNICAL SPECIFICATION SECTION 15261.



AECOM

ACCOM TECHNICAL SERVICES, INC.
 1600N DALLAS PARKWAY, SUITE 300
 DALLAS, TEXAS 75249
 WWW.AECOM.COM
 972.725.2000

ADDITIONAL NO. 1
 REVISION
 NO. DATE BY DATE

DESIGNED - AECOM (GAMER) DATE: 07/29/2016 FILE: PLEASANT-RUN-PUMP-STATION-900-01.dwg
 APPROVED - AECOM (GAMER) SCALE: AS SHOWN SHEET: M-M-3

METERING STATION - MECHANICAL
 MCP 31402
 COUNTY OF DALLAS, TEXAS
 DEPARTMENT OF PUBLIC WORKS
 PLEASANT RUN ROAD
 PINTO ROAD PUMP STATION

BID NO: 2017-068-6692
PLEASANT RUN ROAD PUMP STATION PHASE 1B – MCIP 31402
Northeast Corner of Pleasant Run Road and Pinto Road
Dallas County, City of Wilmer, Texas

Bidders Review Checklist

Documents to be returned with bid submission

- Copies of Bid Proposal for submission (3 Total) found in Section A: Notice to Contractors, Bid Doc No. 05 (pages 11A-13A)
- “Original” (copy of all documents Pages 1-971) Sealed envelope marked “ORIGINAL Bid No. 2017-068-6692 for Pleasant Run Road Pump Station Phase 1B Project No. 31402”
- “Copy” (Sections A – L, Pages 1 – 114) Sealed envelope marked “COPY Bid No. 2017-068-6692 for Pleasant Run Road Pump Station Phase 1B Project No. 31402”
- “Copy” (Sections A – L, Pages 1 – 114) Sealed envelope marked “COPY Bid No. 2017-068-6692 for Pleasant Run Road Pump Station Phase 1B Project No. 31402”

Documents to be executed in bid submission.

- Instructions to Bidders, Bid Doc No. 00 (Page 3A)
- Section A: Bid Proposal Guaranty (certified check, cashier’s check, or Bidder’s Bond), amount equal to five percent (5%) of total bid amount, made payable to County of Dallas, Texas
- Section B: Proposal to Bid, Bid Doc No. 07 (pages 17-19)
- Section C: Proposal Sheets, Bid Doc No. 09 (pages 23-27)
- Section D: Bid Summary Sheets, Bid Doc No. 11 (pages 31-35)
- Section G: Title VI Assurance / Compliance, Bid Doc No. 18 (pages 63-69)
- Section H: Disclosure of Interest Parties (Form 1295), Bid Doc No. 20 (page 77)
- Section I: Conflict of Interest (Form CIQ), Bid Doc No. 22 (page 81)
- Section J: Insurance Requirement Affidavit, Bid Doc No. 24 (page 87)
- Section K: W-9 Request for Taxpayer Identification Number & Certification (page 91)
- Section L: Minority & Women Business Enterprise Specifications, Bid Doc No. 28 (pages 103-113)

Submission Date: October 09, 2017 by 2:00 p.m.

Purchasing Department, Attn: Charles Price, 900 Jackson Street, Suite 680, Dallas, TX 75202