



To: Ken Komiske, PE / Mark Daniels, PE ^{KK} MD
From: Nathan Madenwald, PE ^W
Re: Sole Source Authorization for Lift Station Pumps
Summit Valley Lift Station
Date: November 19, 2019

office memorandum

Background:

To allow for ease of maintenance, reduced amount of replacement parts, and possibility for switching pumps between stations during emergency conditions, submersible Flygt pumps are being installed for all lift stations when constructed or upgraded or when pumps require replacement.

Discussion:

The Summit Valley lift station was constructed by the developer in order to provide sewer service to the Summit Valley development. The lift station was constructed as a triplex in 2005 and but only two Paco pumps were installed and are currently in service. The Summit Valley Interceptor project (WW0278) is currently under construction and will increase the flow to the Summit Valley lift station and will also eliminate the existing East Ridge lift station.

Due to age of the existing pumps and the increased flow and consequence of failure, the pumps are proposed for replacement at this time. The goal is to get the replacement pumps in service before or close to the increase in flow to the Summit Valley lift station.

Since the Flygt pumps are proposed as the sole source option for all lift stations, one quote for Automatic Engineering, Inc. (AEI) was requested and received. Additional quotes for this are not feasible since AEI is the only Flygt pump representative for this region.

Therefore, authorization to move forward with a City Council agenda item is proposed to receive authorization from Council for purchase of the two pumps.

Attachment AEI Replacement Pump Quote

cc: David Hager
John McCarrell
Dustin Johnson
Randy Larson



AUTOMATIC ENGINEERING

A COGENT COMPANY

DATE: 10/30/2019

PROPOSAL #: TF10302019-Norman

TO: Nathan Madenwald

PROJECT: Summit Valley Lift Station

Automatic Engineering proposes to furnish equipment or materials as described below.

| Quantity | Item | Unit Price | Total Price |
|----------|---|-------------|--------------------|
| 2 | NP3171 HT 3 – 455 Flygt 25hp submersible pumps – 460/3/60 – 50' power cord | \$24,991.00 | \$49,982.00 |

Freight is prepay and add.

Note: Could not confirm discharge elbow size to
guarantee flange connection size

TOTAL

\$49,982.00

THIS PROPOSAL IS SUBJECT TO OUR STANDARD ATTACHED CONDITIONS OF SALE

TERMS: Net 30 Days

QUOTED BY: Travis Fox 918-261-5415

SHIPMENT: ___ weeks ARO and APPROVAL

F.O.B. Factory

Phone (918) 585-5703

This quote is valid for 30 days

Fax (918) 585-5707

STANDARD TERMS AND CONDITIONS

Price is FOB factory. Price does not include any freight charges. Price does not include any applicable duties or sales tax, use tax, excise tax, value-added or other similar taxes that may apply to this equipment and/or project. Unless specifically stated, price does not include manual or automatic controls, starters, protective or signal devices, wiring, anchor bolts, gauges, vibration isolation devices, installation, startup or testing.



AUTOMATIC ENGINEERING

A COGENT COMPANY

If the price is included in a proposal, the price is firm for receipt of an order within 30 days of the date shown on the proposal. Any additional terms and conditions included in the proposal are specifically included in these terms and conditions.

Payment is due upon receipt of the invoice. An interest charge of 1-1/2% per month will be added to past due balances. Retainage of any invoiced amount is unacceptable unless specifically agreed to by Company at the time of order, and shall in no case exceed a period of 120 days. If payments are not timely received by Company, and this account is turned over to an attorney for collections, Customer agrees to pay all reasonable costs and attorney fees incurred in collection of the past due amounts.

Payment of "commercial transaction" invoices by credit card will be charged a fee based upon Cogent's average discount rate for credit card transactions for the prior calendar year. This fee will change annually and is currently 2.55%.

All equipment either rented from or through Company is subject to all of the terms and conditions listed on the back of the rental contract. Pricing does not include any overtime running of power equipment.

In no event shall Company's obligations and liabilities under this Agreement include any direct, indirect, punitive, special, incidental or consequential damages or losses that Customer may suffer or incur in connection with this sale, service or rental, including, but not limited to, loss of revenue or profits, damages or losses as a result of Customer's inability to operate, perform its obligations to third persons or injuries to goodwill; nor shall Company's liability extend to damages or losses Customer may suffer or incur as a result of such claims, suits or other proceedings made or instituted against Customer by third parties. Customer remises, releases and discharges Company from any and all liability or damages which might be caused by failure to deliver any equipment within the agreed time by Company.

Customer shall be responsible for determining the good operating condition of all materials and equipment prior to accepting the materials and equipment. NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS MADE UNLESS THE SAME IS SPECIFICALLY SET FORTH IN WRITING AND ACCEPTED IN WRITING BY COMPANY, BUT IN SUCH CASE THE WARRANTY OR GUARANTEE IS LIMITED AS ABOVE PROVIDED. Notwithstanding the foregoing, Company will pass through to the Customer any warranty provided by the manufacturer of any equipment supplied by Company.

Customer covenants and agrees to defend, indemnify and hold Company harmless from any claims, damages or liability arising out of the use, maintenance or delivery of the equipment or materials purchased or rented hereunder. Customer shall further defend, indemnify and hold Company harmless from any and all damages to third persons or to property caused by Customer's use or possession of the equipment or materials, to the fullest extent allowable by law.

In connection with a proposal, if Customer has any further questions or comments regarding the proposal, please feel free to contact Company. If the proposal meets with Customer's approval, please sign, date and mail or fax a copy of the proposal back to Company's office, and the identified equipment will be ordered and/or scheduled for delivery.

This agreement shall be governed by the laws of the state where the Company's branch office is located from which the equipment is rented or purchased. Customer further agrees that venue and jurisdiction shall be appropriate in the county in which Company's branch office is located from which the equipment was rented or purchased. Any provisions hereof which may prove unenforceable under any law shall not affect the validity of any other provision hereof.

Revised February 2019

NP 3171 HT 3~ 455

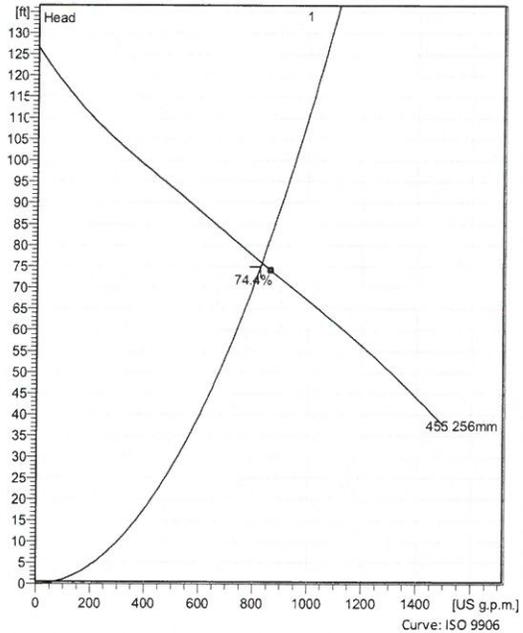
Patented self cleaning semi-open channel impeller, ideal for pumping in waste water applications. Possible to be upgraded with Guide-pin® for even better clogging resistance. Modular based design with high adaptation grade.



Technical specification



Curves according to: Water, pure [100%], 39.2 °F, 62.42 lb/ft³, 1.6891E-5 ft²/s



Configuration

| | |
|--|---|
| Motor number N3171.860 25-27-4IE-W IE3 25hp | Installation type P - Semi permanent, Wet |
| Impeller diameter 256 mm | Discharge diameter 3 15/16 inch |

Pump information

| |
|--|
| Impeller diameter 256 mm |
| Discharge diameter 3 15/16 inch |
| Inlet diameter 100 mm |
| Maximum operating speed 1775 rpm |
| Number of blades 2 |

Materials

| |
|------------------------------------|
| Impeller Stainless steel |
|------------------------------------|

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NP 3171 HT 3~ 455

Technical specification

Motor - General

| | | | |
|--|-------------------------------|--------------------------------|-----------------------------|
| Motor number N3171.860 25-27-4IE-W IE3 25hp | Phases 3~ | Rated speed 1775 rpm | Rated power 25 hp |
| Approval No | Number of poles 4 | Rated current 55 A | Stator variant 7 |
| Frequency 60 Hz | Rated voltage 230 V | Insulation class H | Type of Duty S1 |

Motor - Technical

| | | | |
|--|--|---|-----------------------------------|
| Power factor - 1/1 Load 0.90 | Motor efficiency - 1/1 Load 93.8 % | Total moment of inertia 0.217 kg m ² | Starts per hour max. 30 |
| Power factor - 3/4 Load 0.87 | Motor efficiency - 3/4 Load 94.4 % | Starting current, direct starting 420 A | |
| Power factor - 1/2 Load 0.80 | Motor efficiency - 1/2 Load 94.3 % | Starting current, star-delta 140 A | |

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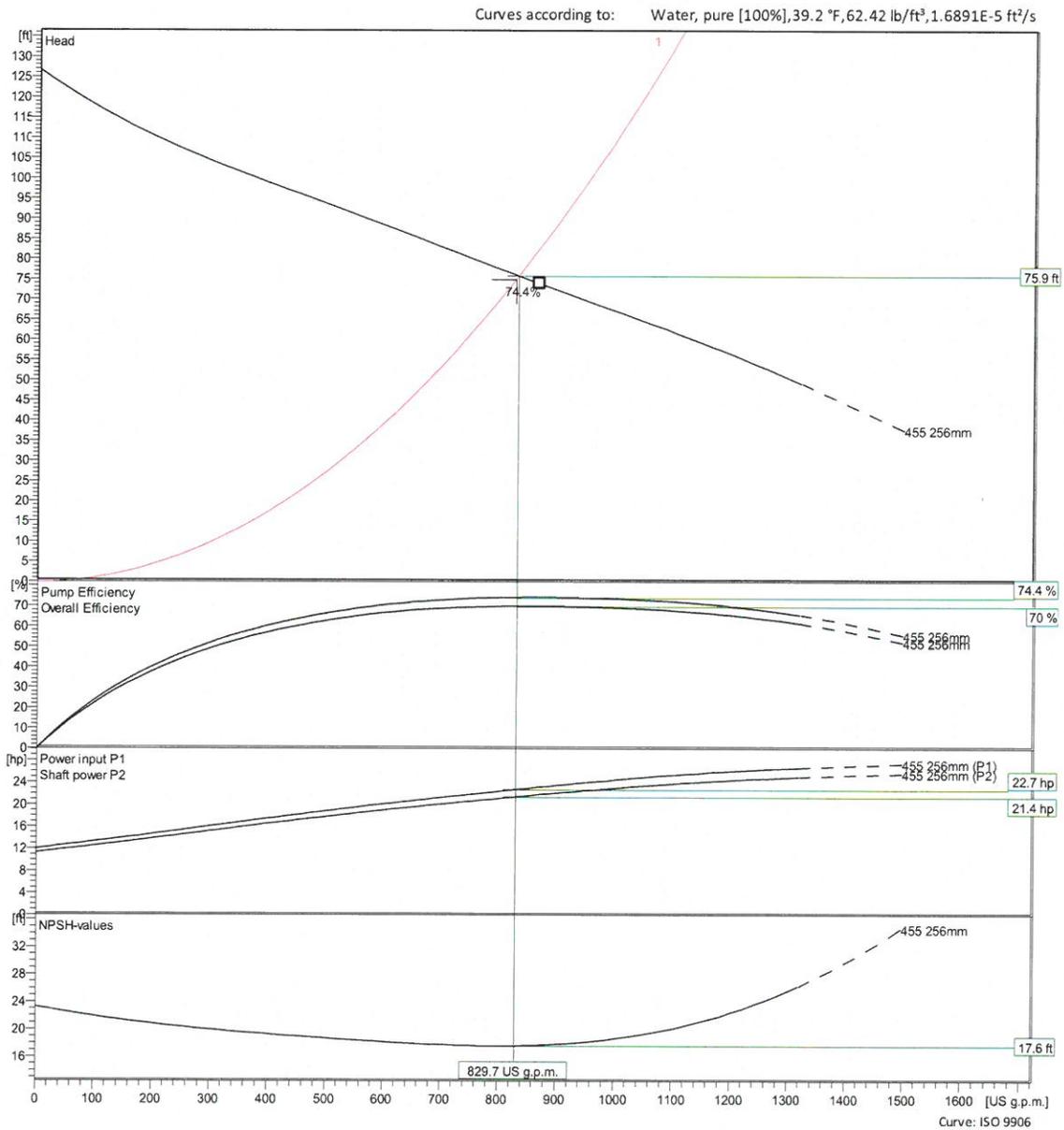
Performance curve



Duty point

Flow
830 US g.p.m.

Head
75.9 ft



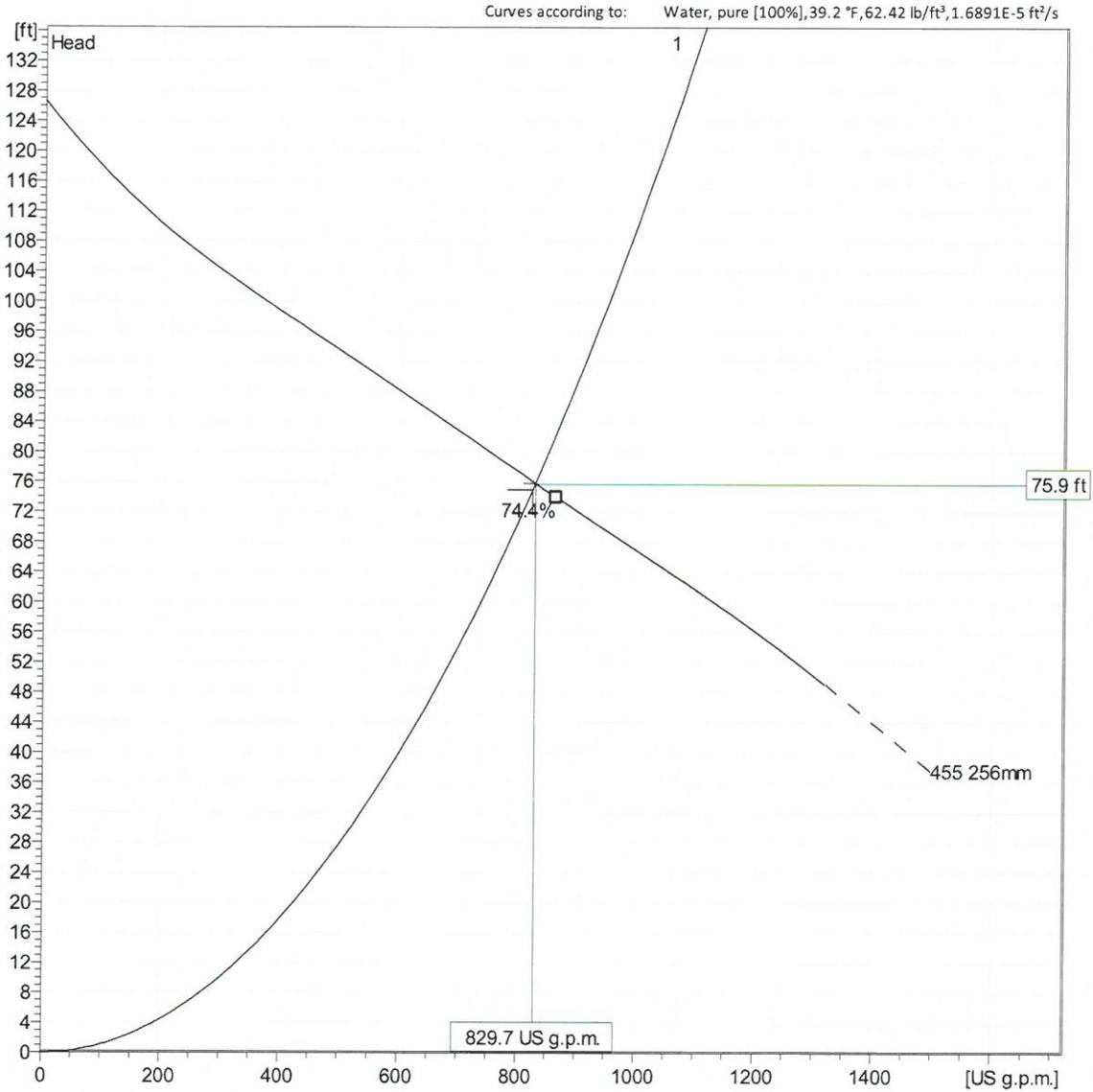
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Duty Analysis



Curve: ISO 9906

Operating characteristics

| Pumps/Systems | Flow | Head | Shaft power | Flow | Head | Shaft power | Hydr.eff. | Specific energy | NPSHr |
|---------------|---------------|---------|-------------|---------------|---------|-------------|-----------|-----------------|---------|
| 1 | 830 US g.p.m. | 75.9 ft | 21.4 hp | 830 US g.p.m. | 75.9 ft | 21.4 hp | 74.4 % | 340 kWh/US Mc | 17.6 ft |

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