

# Administrative Services & Economic Development Central Services Division

160 Lake Avenue Palm Coast, FL 32164 386-986-3730

# NOTICE OF INTENT TO SOLE SOURCE

**Project Number: SS-18-44** 

**Project Name: Concentrate Pump and Motor** 

**Date:** April 13, 2018

The City of Palm Coast intends to waiver the solicitation process and approve a sole/single to Tom Evans Enviornmental Inc. for the purchase of Concentrate Pump and Motor.

Interested vendors (firms or individuals) that can provide the goods/services can respond with an alternate solution that overcomes the sole/single source reasons stated on the sole/single source documentation, along with sufficient detailed convincing documentation, regarding their ability to supply eqivalent commodities or services. Responses or questions seeking additional detail regarding the procurement, specifications, terms, conditions, requirements, etc are directed to contact: Kelly Downey at KLittle-Downey@palmcoastgov.com prior to 2:00 PM on Tuesday, April 24, 2018. The City reserves the right to require the responding Vendor to submit additional information as it may deem necessary, and may consider any evidence available to it of the financial, technical, and other qualifications and abilities of the responding vendor.

This is <u>not</u> a request for bids or proposal and there is no solicitation available. The City will not consider any responses as a proposal, bid or quote. Any responses received as a result of this Notice of Intent shall be considered solely for determining whether bona fide competition exists.

If it is determined by City staff, after reviewing any information received from responding vendors, that sole/single source justification stands and that the commodities or contractural services are available only from a sole/single source, the City shall prepare a recommendation to the City Commission requesting approval to waive the solicitation process and proceed with the sole/single-source purchase.

# **Scope of Services**

# **Concentrate Pump & Motor**

# PART 1 -GENERAL

#### 1.01 DESCRIPTION

#### **SCOPE**

The scope includes the furnishing of a Peerless Vertical Turbine pump and driver, Model 12LD pumping system. Peerless Vertical – 12LD, 3 Stage Bowl Assembly, Material Group R, Flanged Column 8/1.5, L6, Suction Bell, Flanged Discharge Bowl, OLS.

### 1.02 QUALITY ASSURANCE

Pumps shall conform to the applicable requirements of ANSI/AWWA E101. Pumps shall be designed, fabricated, installed, and tested in accordance with the requirements of the Hydraulic Institute and the specified standards.

### 1.03 ACCEPTABLE MANUFACTURERS

Currently this facility has in service 2 – Peerless Vertical – 12LD. The only manufacturer accepted will be Peerless to match existing pumps. The specifications listed in the scope under section XXX, Products.

#### 1.04. SUBMITTALS

The following product data shall be submitted by the pump manufacturer for review and approval by the city prior to the fabrication of the system:

- 1. Manufacturer's specification data and descriptive literature.
- 2. Bearing loads and stresses.
- 3. Performance curves showing capacity verses head and pump horsepower from 0 to 130% of design capacity.
- 4. Motor efficiencies and power factors at 50%, 75%, and 100% at full load.

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5. The following data shall be submitted for the motor:

Manufacturer's Designation No. of phases

Horsepower Output Voltage

Time rating Full load amperes

Temperature Rise Code

RPM at Full Load Design Letter
Frequency Service Factor

- 6. Drawings showing general dimensions, connections, and wiring diagrams.
- 7. Procedures for proper installation.
- 8. Manufacture's guarantee.
- 9. Information about the nature and location of parts, service crews, and repair facilities.
- 10. Factory certification that bowl assembly meets the specified requirements.
- 11. Shop drawing submittals shall be complete in one submittal.

#### 1.05 OPERATION AND MAINTENANCE MANUALS

1. Detailed operation and maintenance (O&M) manual for the system shall be provided by the manufacturer. A total of two (2) copies of O&M manuals are required.

#### **PART 2 – PRODUCTS**

# 2.01 TURBINE PUMPS AND DRIVERS

Pumps shall be equipped with mechanical seals. The Concentrate Disposal Pump shall be designed to operate at any point on the curve defined by the following operating points.

Item	Value
Pump Size, inch	10
Design Operating Capacity GPM	200 - 600
Design TDH (ft.), 1 pump running @ 200 GPM	12

Design TDH (ft.), 1 pump running @ 400 GPM	30
Design TDH (ft.), 1 pump running @ 600 GPM	57
Assume Efficiency (%)	80
Motor Horsepower required (HP)	50
Variable Speed Range (RPM)	950 - 1770
Voltage (V)	480
Phase	3
Frequency (Hz)	60

Note: The pumping unit shall consist of clip-on type basket strainer, bell type suction, bowl assembly, discharge column, line shaft, discharge head assembly, and driver.

#### 2.02 SUCTION STRAINER

A basket pattern suction strainer constructed of 316 stainless steel of approved design shall be attached to the bottom bowl assembly to prevent any material from entering the pump bowls that will damage the pump. The suction strainer shall have a net area of at least (4) times the suction pipe area. The maximum opening shall be not more than 75% of the minimum opening of the water passage through the bowls or impellers. Suction strainers shall be designed as vortex suppressors.

### 2.03 BOWL ASSEMBLY

- 1. Pump bowls, suction and discharge cases shall be closed grained 316 stainless steel, without imperfections, accurately machined and fitted to close dimensions.
- 2. The pump bowl interior shall be uncoated stainless steel. The suction case and intermediate bowls shall be fitted with replaceable babbitted carbon lateral wear rings. Wear rings shall have the minimum practical clearance

to the matting cylindrical surface of the impeller to provide adequate sealing to restrict the leakage flow at impeller skirt independent of vertical positioning of the impeller. The impeller shaft shall be supported in the bowl by babbitted carbon bearings.

- 3. The suction case bearing constructed of SAE 660 bronze shall be greased packed with provision for grease circulation from a reservoir in the suction case hub. A sand collar of rubber bronze ASTM B505 Alloy 836, shall be provided to protect the suction case bearing from abrasives in the liquid pumped. The discharge case shall have vanes to deliver the flow of water with minimum turbulence.
- 4. Impeller shall be of the enclosed type, cast of 316 stainless steel, accurately cast, machined, perfectly balanced mechanically and hydraulically and filed for optimum performance and minimum vibration. The design shall be non-overloading for capacity of the motor selected. The impeller shall be double keyed to the impeller shaft with Type 316 stainless steel keys.

#### 2.04 DISCHARGE COLUMN PIPE

The discharge column to be furnished under these specifications shall be 316 stainless steel with a minimum wall thickness of 0.279 inch and be supplied in one piece for setting of the bowl assemblies. The upper end of the column pipe shall be flanged connected to the underside of the pump discharge head. The pump column section shall be flanged top and bottom and provided with and integral bearing retainer with a babbitt carbon bearing. The bottom section of the column pipe shall have a smooth transition to match the transition area bowl to the top bowl. Spider bearing retainers shall be 316 Series stainless steel and the line shaft bearing inserts shall be nitrile neoprene.

#### 2.05 LINE SHAFT

- Line Shaft Bearings: The column assembly bearing guides shall be 316 stainless steel. The bearing guides shall be threaded into the pipe couplings and retained by the butted pipe ends. Each bearing guide shall contain a water lubricated, EPDM bearing designed for vertical turbine pump service.
- 2. The line shaft shall be of 316 stainless steel ground and polished with a surface finish not to exceed 40 rms. It shall be of ample size to operate the pump without distortion or vibration and shall be capable of carrying the maximum horsepower that may be generated by the motor. The butting ends shall be machined, faced and recessed square to axis of the shaft. To ensure accurate alignment, the shaft shall be straight within 0.005 inches run-out. The ends of the shaft shall be accurately machine threaded for connection. Shaft couplings shall be bored and threaded from solid Type 303 stainless steel bars designed with a safety factor of 1-1/2 times that of

the shaft. The treads shall be left handed to tighten during pump operation. The couplings shall be without vent holes. The length of the shaft shall be such as to match properly the length of the discharge column. The shaft shall be furnished in interchangeable sections not over five (10) feet in length. Pump line shaft shall be 1 - 15/16" diameter.

# 2.06 DISCHARGE HEAD ASSEMBLY

- 1. A suitable pump head of high grade fabricated 316 series stainless steel shall be provided for mounting a vertical electric motor and supporting the pump column, bowls and suction pipe.
- 2. The outlet shall be equipped with a 150 lb. class, flanged above grade discharge elbow, provided with a raised face and drill to match ANSI A21.10 Class 150 steel flanges. The discharge head shall be provided in a minimum thickness of 3/8" and shall have 1" NPT drain and pre-lube connection provided. The discharge head shall have mechanical seals.
- 3. The design shall permit the drive shaft to be coupled above the stuffing box to facilitate easy removal and replacement of the driver.

#### 2.07 DRIVER

- 1. The motor shall be designed for 230/460 volt, 3 phase, and 60 hertz operation. The pump manufacturer shall select the motor so that during normal conditions, the motor will operate the load continuously, without operating in the service facto range.
- 2. The pump motor are to be IEEE, Part 31, INVERTER DUTY RATING, premium efficiency, totally enclosed fan cooled, for corrosive environments. Motors shall have 1.15 service factors for sine wave power and 1.0 SF for inverted power. Motors shall be provided such that the motor shall be sufficient to operate the pump anywhere on its performance curve without operating in its service factor.
- 3. A thrust bearing of ample capacity to carry the weight of all rotating parts plus the hydraulic thrush shall be incorporated into the driver as an integral part of it. The bearing shall be of such size that the average life rating is no less than five (5) years continuous operation.
- 4. A top drive coupling shall be equipped with a non-reverse back-stop.
- 5. Provide motors with oversized conduit boxes, NEMA 4 construction, NEMA 4 accessory box with 120 VAC, 200 watt space heaters, thermostats imbed in motor windings, wired to the accessory box, grounding lug in the conduit box, stainless steel drains and breathers, stainless steel motor hardware and fasteners, and complete motor tests with certified reports.



# NON-COMPETITIVELY BID (SOLE SOURCE) FORM

Department Contact Information		
Contact Name:	Department:	
Jim Hogan	Utility / Water Operations	
Telephone: (386)		
986-2374		
FAX: (386)	Mailing Address:	
E-Mail:	400 Peavy Grade Palm Coast, FL 32137	
jhogan@palmcoastgov.com	·	
Required (Vendor/Contractor/Consultant) Information		
Namo:		

Name:

Tom Evans Environmental, Inc.

Address:

3605 Ventura Drive East, Lakeland FL 33881

**Price Quotation: \$119,676.00** 

Brief description of the acquisition, including all goods and/or services:

# Concentrate Pump & Motor

Pump Model: Peerless Vertical - 12LD 3 Stages, Nom. Speed: 1770 RPM, 60 Hz Electric

Impeller No.: 2649365 / LC, Material Spec. Group: R - B: 316 ss; I: 316 ss

Electric Motor VSS, USEM 50.0 hp, 1781 rpm, 3 ph., 60 Hz, 460 V, Frame 326VP Encl. TEFC Flange size Nominal 8

1). Why is this good or service the only one that meets the specific needs or will produce the desired results? If the good or service will be used with existing equipment, please state in response and provide details.

This pump system must be identical to the existing pumps already in place and in operation to ensure consistency in the pumping requirements. This system has already been designed and the pump must comply with established standards written in the contract documents which already have been approved. Changing manufacturers would compromise the continuity of the project.

2). What research was conducted to ensure that this good/service is the only one that meets the specific needs or will produce the desired results?

Due to technically constraining factors associated with the project, using another pump may not ensure the validity of the underlying or existing project.

3). How was it determined that this vendor is the only supplier of this good or service? If the vendor has exclusive distribution rights, please attach documentation. If there are special circumstances related to this purchase, please explain and attach any supporting documentation.

Peerless pumps were contacted. A proprietary letter stating that Tom Evans is the sole supplier and/or distributor of Peerless is attached to this sole source letter.

4). What other goods/services/vendors were examined? Please attach any documentation.

We already have the pump system designed and in place. The requirements have been standardized and meet the specifications in the contract. Holding an extra inventory of parts for a different pump would not be cost, space or time effective. In addition, the pump system has the specific physical design characteristics that match the existing infrastructure already incorporated. Another type of pump will not satisfy the specification and/or aesthetic requirements.

5). Please explain why the price of this good/service should be considered reasonable? Please attach any supporting documentation.

If one of the existing pumps fail, we will not be able to operate the facility at full capacity. A new operational protocol was established back in March 10, 2015 that involves the operation of both concentrate pumps operating continuously. The idea of having this new pump available will be a circumstance that will allow us to serve the public with water even at times of high demand. The cost is reasonable if compared to having a situation where we cannot meet the demand for water during peak

6). What efforts were made to get the best possible price for this good or service?

Contacted the manufacturer to find out who the distributors are for the State of Florida.

In my professional opinion, this is the only good or service that can reasonably meet my requirement(s)/specification(s) and this is the only supplier who can provide the good or service. I further attest that the above is true and correct to the best of my knowledge and belief, that I am independent of, and have no conflict of interest in the supplier recommended above and that the Sole Source Justification would withstand any audit or supplier protest.

Peter Roussell		
	4/6/2018	
Requester's Signature	Date	
Department Director's Signature	Date	

(Rev 8/30/07) 2



**January 18, 2017** 

City of Palm Coast Water Utilities 400 Peavy Grade Palm Coast, FL 32137

Attn: Mr. Robert Hubbard

Dear Mr. Hubbard,

Please accept this letter as formal notification to the City of Palm Coast that Tom Evans Environmental, Inc., by contract is the sole supplier for Grundfos Pump Divisions including Peerless, Yeomans Chicago, Morris and PACO products in the Florida municipal market and for your account.

The Grundfos product line includes vertical and submersible turbine, horizontal split case, end suction centrifugal/ANSI process and non clog sewage pumps. Please contact Tom Evans Environmental, Inc. for all your pumping needs which includes pumps, parts, factory reconditioning and service.

Thank you for your consideration and continued support of Grundfos/Peerless products. Please do not hesitate to call us if we may be of further service.

Respectfully Submitted,

Gary Reid

Gary Reid Regional Sales Manager-Municipal/Wastewater Grundfos/Peerless Pump

Cc: Tom Evans Environmental, Inc.