City of Oak Ridge, Tennessee
* * * * REQUEST FOR QUOTATION * * * *

Page - 1
Date - 11/04/13
Order No. - 136506-000 OQ
Brn/Plt - 22145

Payment Terms:_____
F.O.B.:_____
Ship VIA:_____
Delivery Date:_____
Signature:_____
_____ VENDOR NAME:

SHIP TO City of Oak Ridge - Materials Management
100 Woodbury Lane / P.O. Box 1
Oak Ridge, TN 37830
(865) 425-1819 FAX (865) 482-8475
Lyn Majeski lmajeski@oakridgetn.gov

Ordered - 11/04/13 Freight - Default - Handling Code
Requested - 11/19/13 Taken By -
Delivery - Deliveries are accepted 8 a.m. TO 3 p.m.

Description / Supplier Item	Extension
MARINA PUMP STATION UPGRADE PER SPECIFICATIONS PROVIDED	

Total Order

CITY OF OAK RIDGE, TENNESSEE
Public Works Department
Attachment to Request for Quotation #136506

The City of Oak Ridge, Public Works Department, requires replacement pumps for a sewer pump station. The removal of the old pumps and installation of the new pumps will be completed by Public Works Department personnel. The new pumps must be a direct replacement for the existing Flygt C-3127 pumps and must not require modification to or replacement of the wet well components. An approved equal will be considered if the vendor can demonstrate the alternate pump is an exact replacement. Any parts or materials removed during the station upgrade remain the property of the City of Oak Ridge.

PUMPS

Please provide pricing and delivery of two (2) submersible non clog pumps and motors:

- capable of pumping sludge and municipal wastewater
- mountable in a semi-permeate configuration using the existing SS guide rails
- automatic connection to the existing base ell

The replacement pumps shall be equal to Flygt, model NP 3153.185 with 4" imp. The operating conditions are as follows:

• Pump Capacity (GPM)	300
• Total Dynamic Head (ft.)	85
• Pump Speed (RPM)	1,760
• Horsepower	15
• Motor Voltage	240 V, 3 phase @ 60 HZ

Each pump shall meet the following requirements:

- major castings shall be grey cast iron meeting ASTM 35B
- capable of passing a sphere of 4 inches in diameter
- motors shall be capable of carrying a full load continuously without injurious temperature rise at ambient temperatures of 40 degrees centigrade and carry a 1.15 service factor
- motors shall have duplex seals
- fifteen feet of SS lifting chain shall be supplied
- shall have a standard nameplate affixed in a conspicuous place showing model number, pumping rate, total feet of head and motor operating speed
- shall be fully tested on water at the manufactures plant with a copy of the certified test results supplied to the City prior to shipment of the pumps
- prior to shipment of the pumps, performance curves showing expected performance at points other than design conditions shall be supplied to the City.
    - These curves shall display head capacity, efficiency and horsepower.

CONTROL PANEL

Pricing shall also include the purchase and installation of the materials and supplies necessary for the upgrade of the existing Sta-Con control panel (serial #12-0324) with the following electronic items required for the control panel:

- 2 new Square D ATS-232 starters
- New Square D "H" frame breakers, vendor to size correctly

The existing Schneider Electric Twido Series Programmable Logic Controller (PLC), model #TWDLCDE40DRF shall be reprogrammed to communicate with the new starters via Modbus protocol. All other programming residing in the PLC is to remain the same.

All modifications to the control panel must be completed by qualified personnel allowing for the existing warranty to remain valid.