

**REQUEST FOR PROPOSAL
CITY OF GRANTS PASS WATER RESTORATION PLANT
PUMP AND MOTOR REBUILD PROJECT**

The City of Grants Pass, Oregon, is requesting **quotes** to rebuild one immersible sewage pump and motor to remanufactured condition.

Pump, a 10 X 5, model H5K-MH-HEUC4, Wemco Hidrostral screw centrifugal pump.

Material: cast iron with high chrome iron liner and stainless-steel impeller.

Conditions: 1460/2400/1050/400 GPM.

Against: 185'/115'/325'/70' TDH.

At: 1750/1750/1750/900 RPM.

CW rotation viewed from the top of the motor. Vertical dry-pit pump support base sole plate and 10" suction elbow with clean out.

Motor, an immersible motor, 110 HP, 1780 RPM, HEUC4 frame, explosion proof enclosure, internal moisture probe, oil bath tandem mechanical seals, 3 phase, 60 HZ, 460V, motor service factor 1.10 with 40' of power and control leads, bearing temperature sensor and float switch, 120V moisture detector relay.

The unit is located at the City's Water Restoration Plant, 1200 SW Greenwood Ave, Grants Pass, OR 97526 but is from a pump station.

Copies of the Scope of Work and City of Grants Pass Professional Services Agreement may be obtained on the City of Grants Pass website under 'Request for Proposals', www.grantspassoregon.gov or by calling Wendy Higgins at 541.450.6110.

Quotes are to be submitted on proposal form included within the Scope of Work in an envelope.

Proposer is to include with quote a list of Wemco Hidrostral screw centrifugal pumps rebuilt within the last five years. The list is to include size of pump, pump application and pump owner reference contact information. The length of list is to be sufficient to demonstrate rebuild expertise.

The deadline for submission of the proposal in response to this RFP is December 15, 2022, before **3:00 pm** local time. The proposal submittals should be labeled and directed to:

City of Grants Pass
WRP Pump and Motor Rebuild Project
Attn: Karen Frerk, City Recorder
101 NW A Street
Grants Pass, Oregon 97526

For additional information please contact Gary Brelinski, Water Restoration Plant Superintendent, at 541.450.6122 or Kevin Smith, Water Restoration Plant Maintenance Lead, at 541.450.6124.

SCOPE OF WORK

Water Restoration Plant Pump and Motor Rebuild Project

Rebuild vertical immersible pump and motor. Provide start-up assistance, vibration frequency, performance testing, and ensure the unit is working correctly. Warranty the pump for a period of 1 year from date of start-up.

City of Grants Pass staff will remove the unit and ship it to the contractor's facility at the City's cost. Contractor will ship the completed unit to the WRP at the contractor's cost. WRP staff will unload it from the contractor's truck and reinstall it prior to start-up.

Contractor will be responsible for rebuilding pump and motor to "remanufactured"^a condition. The work will include, but is not limited to: replacing O-rings, bearings, both mechanical seals, testing of the conductivity probe, motor float switch, and thrust bearing temperature switch, dip and bake motor, rewind if needed and re-balance rotor. Additional work that may be required may include replacing impeller, replacing impeller liner, pump shafts, and other parts. Any additional work or parts will be confirmed with WRP staff before ordering or installation. Additional parts pricing shall be listed on the attached **Proposal Form**. All components that are to be reused shall be free of any residual contamination. Additionally, contractor will properly prepare the unit and apply a protective matched coating of paint so that the unit will look new. **All replaced parts must be returned to the City for disposal.**

The pump will be available to the Contractor for inspection prior to bidding for the rebuilding process. This will be at the WRP staff's convenience and the Contractors expense.

After rebuilding the unit, Contractor is responsible for shipping back to the treatment plant (WRP). The contractor will be responsible for being present during startup, performing vibration and frequency testing/balancing to ensure the pump operates at ≤ 1 mils peak-to-peak displacement as measured at the top of the motor and ensuring that the pump and motor perform within their rated parameters. Some pumps have a frequency resonance range and this vibration standard shall not apply in those zones.

Units shall be painted completely with a quality, industrial enamel paint. Color should match the existing color. Motor bearing oil will be Shell Pella A, Gulf Mineral Seal Oil 896, or Mobil Velocite #6.

^a The unit is completely disassembled. All components are cleaned and inspected. Bearing locations are checked to specification. Electrical testing shall include but not be limited to: hipot (megger) and surge comparison test. Parts that are not within manufacturer's specifications and cannot be repaired are replaced with new. Parts that can be used again are to be refurbished to meet manufacturer's specifications. All "wear" components (bearings, seals, and O-rings) are replaced with new. Unit should function as well or very close to new.

Contractor shall warranty the pump and motor in writing for a period of not less than one year from date of start-up.

Work shall be completed within **90** calendar days after Notice to Proceed, subject to parts availability.

Pump/Motor will be available for the rebuild process immediately.

Quotes are to be submitted on the attached **Proposal Form** as stated on page 2.
No faxed proposals will be accepted

A sample Professional Services Agreement is attached for reference.

DETAILED PUMP INFORMATION PUMP/MOTOR

WEMCO-HIDROSTAL MOTOR DATA SHEET

Synchronous Speed		1800
Motor Model 460 V		HEUC4
FULL LOAD PERF DATA	HP	110.0
	RPM	1790
	Efficiency	91
	Power Factor	86
	Input KW	91
Amps (460V)		140
75% LOAD PERF DATA	HP	82.5
	RPM	1791
	Efficiency	89
	Power Factor	79
	Input KW	69
Amps (460V)		118
50% LOAD PERF DATA	HP	55.0
	RPM	1793
	Efficiency	84
	Power Factor	73
	Input KW	49
Amps (460V)		93
Start Amps (460 V)		840
NEMA/NEC Code Lett		G
Cable Type (460 V)		XE1A91
Cable OD		2"
Cable Leads (# X mm)		4 X 50
Locked rotor/run torqu		2.5
Wiring Diagram		98-EL 5808E

Customer: Redwood SSD
WEMCO S.O.: DW02650
Customer P.O.:

Note: This motor data has been calculated from preliminary tests. Updated data sheet will be released when testing is complete.

These motors have a thermal control cable with 2 leads of 1.5 mm (5/8" OD) and a bearing temperature, float switch and moisture probe control cable with 4 leads of 1.5 mm (5/8" OD).

BRD 3-22-00

