



City of Arts & Innovation

City Council Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL **DATE: MAY 1, 2018**

FROM: PUBLIC WORKS DEPARTMENT **WARDS: ALL**

SUBJECT: RIVERSIDE WATER QUALITY CONTROL PLANT – PREVENTATIVE MAINTENANCE SERVICES AGREEMENT WITH HOWDEN ROOTS, LLC OF SPRINGFIELD, MISSOURI, FOR PREVENTATIVE MAINTENANCE SERVICES OF FIVE TURBLEX VARIABLE VANE HIGH SPEED TURBINE TYPE BLOWERS FOR A TERM OF 90 WORKING DAYS – IN THE AMOUNT OF \$47,913 AND CHANGE ORDER AUTHORITY UP TO \$20,000 FOR A TOTAL AMOUNT OF \$67,913

ISSUES:

Approve a Preventative Maintenance Services Agreement with Howden Roots, LLC. of Springfield, Missouri, for preventative maintenance services of five Turblex variable vane high speed turbine type blowers at the Riverside Water Quality Control Plant in the amount of \$47,913 and authorize change order authority up to \$20,000 of 41.7% for an amount of \$67,913.

RECOMMENDATIONS:

That the City Council:

1. Approve the Preventative Maintenance Services Agreement with Howden Roots, for preventative maintenance services of five Turblex variable vane high speed turbine type blowers at the Riverside Water Quality Control Plant, in the amount of \$47,913 for a term of 90 working days, under Purchasing Resolution 23256, section 702 (c);
2. Authorize a \$20,000 or 41.7% change order authority, for a total amount of \$67,913, for additional parts or services due to unforeseen conditions for the five Turblex variable vane high speed turbine type blowers; and
3. Authorize the City Manager or his designee to execute the agreement with Howden Roots, LLC, including making any minor non-substantive changes.

BACKGROUND:

The City of Riverside Public Works Department, Wastewater Division, is responsible for the collection and treatment of wastewater for over 93,000 customers within city limits. The facilities consist of over 800 miles of gravity sewers, 19 wastewater lift stations, and the Riverside Regional Water Quality Control Plant (RWQCP) which has the capacity to treat 46 million gallons per day.

Additionally, the RWQCP provides wastewater treatment for the Edgemont, Jurupa, and Rubidoux Community Services Districts, and the unincorporated community of Highgrove.

The aeration system at the WQCP utilizes five Turblex variable vane high speed turbine type blowers (Blowers) to provide air for the biological treatment of wastewater. Four of the five Blowers were originally placed in service in 2005 as part of the Aeration System Upgrade Project. That project included automated controls to provide set levels of dissolved oxygen (DO) to maintain optimum process treatment levels and energy efficiency. As part of the Phase 1 Plant Expansion Project, an additional blower was installed along with additional air diffusers to meet the needs of the new MBR system. These units run 24/7 and are a vital part of the treatment process. Proper maintenance requires service every 16,000 hours of operation. Four of the five units are overdue for service due to challenges of reaching an agreement with Siemens, the previous owner of Turblex. The service consists of a complete tear down of the units, inspection of all components, and replacement of key wearing parts including O-rings, bearings and shims.

DISCUSSION:

Turblex was purchased by Howden Roots, LLC and is the current manufacturer and only authorized service provider and supplier of replacement parts. The Blowers are very complex with tight operating tolerances and require special training, tools, and intimate knowledge of the units' internal systems and design to provide proper service. Howden Roots, LLC has the experience and expertise to perform the maintenance service on the Turblex Blowers at the RWQCP.

In the event that during the course of the major service it is determined that additional parts (not included in the preventative maintenance agreement) must be replaced, the Public Works Department is requesting change order authority up to an amount of \$20,000 for the necessary parts and labor to minimize the possibility that the Blowers are off line for a prolonged period of time, which could impact the RWQCP's operations. While there is no way to determine which parts may need to be replaced until the units are disassembled and inspected, based on past experience, staff estimates \$20,000 for additional repair costs will be sufficient.

The Purchasing Manager concurs that the recommended action to award complies with Purchasing Resolution 23256 Section 602(c).

FISCAL IMPACT:

The total fiscal impact of the action is \$67,913. Funds are available in the Sewer Equip Replacement/Const account number 4125400-462210.

Prepared by: Kris Martinez, Public Works Director
Certified as to
availability of funds: Adam Raymond, Chief Financial Officer/Treasurer
Approved by: Al Zelinka, FAICP, Assistant City Manager
Approved as to form: Gary G. Geuss, City Attorney

Attachment: Agreement with Howden Roots, LLC