



Board of Aldermen Request for Action

MEETING DATE: 11/1/2022

DEPARTMENT: Public Works

AGENDA ITEM: Resolution 1145 – Approve replacement of a back wash pump with Mid-America for \$16,917.34

REQUESTED BOARD ACTION:

Motion to approve Resolution 1145, approving the replacement of a back wash pump with Mid-America for \$16,917.34.

SUMMARY:

Water Plant staff noted an issue with the operation of one of the back wash pumps. Mid-America pulled the pump and completed an inspection (report attached). The report found the bearing housing was “welded” to the shaft thus the shaft moves inside the rotor and the rotor is partially melted. The possible cause was a lightning strike or voltage spike of some kind at some time. The pump needs to be replaced.

We received two quotes:

Mid -America	- \$16,917.34
JCI	- \$24,249.00

PREVIOUS ACTION:

N/A

POLICY OBJECTIVE:

Infrastructure Maintenance

FINANCIAL CONSIDERATIONS:

This expense is accounted for in the FY23 Utilities Maintenance Budget.

ATTACHMENTS:

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Ordinance | <input type="checkbox"/> Contract |
| <input checked="" type="checkbox"/> Resolution | <input type="checkbox"/> Plans |
| <input type="checkbox"/> Staff Report | <input type="checkbox"/> Minutes |
| <input checked="" type="checkbox"/> Other: Proposals / inspection report | |

RESOLUTION 1145

A RESOLUTION APPROVING THE REPLACEMENT OF A BACKWASH PUMP WITH MID-AMERICA PUMP IN AN AMOUNT OF \$16,917.34

WHEREAS, City of Smithville provides residents with drinking water; and

WHEREAS, Inspection of a backwash pump revealed that the pump is no longer working and needs to be replaced; and

WHEREAS, The City received two quotes for the replacement of the backwash pump with Mid-America Pump providing the best pricing in an amount of \$16,917.34.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF SMITHVILLE, MISSOURI:

THAT the replacement of the backwash pump with Mid-America pump for an amount of \$16,917.34 is approved.

PASSED AND ADOPTED by the Board of Aldermen and **APPROVED** by the Mayor of the City of Smithville, Missouri, the 1st day of November, 2022.

Damien Boley, Mayor

ATTEST:

Linda Drummond, City Clerk



SUBMERSIBLE PUMP REPORT

SKP # 7622 Date 10-10-22 Account Manager RICH S Mechanic BRAD

Customer SMITHVILLE Location WTP Pump # TW0 (2)

Manufacturer FLW Model # 3153 Serial # 1610005

Voltage 460 Phase 3 Amps 26 HP 20 Impeller Size/Code 433 RPM 1755

Discharge Size 6" Thermals 1211 Leak Detection: Top Cap / Stator / Seal 1211

Temperature Probe: Upper Bearing N/A Lower Bearing N/A

Meg to Ground: R 1/2 B 1/2 W 1/2 Ohms: R-B 495 R-W 15.5K B-W 14.96K
Stator Lead Ohms:

12 Lead:

UI-U2 (1-4) Blown VI-V2 (2-5) Blown WI-W2 (3-6) Blown U5-U6 (7-10) Blown

V5-V6 (8-11) Blown W5-W6 (9-12) Blown

9 Lead:

UI-U2 (1-4) Blown VI-V2 (2-5) Blown WI-W2 (3-6) Blown U5-V5-W5 (7-8-9) Blown

6 Lead:

UI-U2 (1-4) Blown VI-V2 (2-5) Blown WI-W2 (3-6) Blown Notes:

Power Cable: Qty 1 & Length 50' Sensor Cable: Qty N/A & Length N/A

Power Cable: Good Bad Spongy/Swollen Cut Other N/A

Sensor Cable: Good Bad Spongy/Swollen Cut Other N/A

Cable Grommets: Good Bad Strain Reliefs/Cable Entries: Good Bad

Impeller:

OD 433 Type: Non Clog Semi Open Vortex Material: CI SS Bronze Steel
Condition: Good Slight Wear Severe Wear Cavitation Skirt(s): Good Bad
Castles: Good Bad Vanes: Good Bad Qty _____
Nose: OD N/A Good Slight Wear Grooved Material: CI SS Bronze
Bore: Good Bad Notes: .085 CLEARANCE

Volute: Discharge Face: Good Bad Body: Good Bad Cut Water: Good Bad
Machine fits: Good Bad Wear Ring: ID N/A Material: CI SS Bronze
Total Clearance of Wear ring and Impeller Nose: .085 - Good Bad

Stator Plug Contaminants: N/A Water Oil Grease

Oil Contaminants: N/A Water Debris

Lower Mech. Seal: Type FACTORY Material of Elastomer: Buna Viton Other DOUBLE CARTRIDGE
Stationary Face: Slight Wear Smeared Grooved Cracked Material: SC
Rotating Face: Slight Wear Smeared Grooved Cracked Material: SC
Elastomer: Good Bad Spring: Good Bad Drive Collar: Good Bad Seat: Good Bad

Upper Mech. Seal: Type FACTORY Material of Elastomer: Buna Viton Other _____
Stationary Face: Slight Wear Smeared Grooved Cracked Material: SC
Rotating Face: Slight Wear Smeared Grooved Cracked Material: SC
Elastomer: Good Bad Spring: Good Bad Drive Collar: Good Bad Seat: Good Bad

Lower Bearing(s):

Good Rough Broken Contaminated Bearing # N/A Fits: ID _____ OD _____

Upper Bearing:

Good Rough Broken Contaminated Bearing # N/A Fits: ID _____ OD _____

Rotor/Shaft:

Key Way: Good Bad Lower Seal Area: Good Bad Upper Seal Area: Good Bad

Rotor: Good Bad TIR: Key Way .024 Lower Seal N/A Lower Bearing N/A

Stator: Good Bad Blown Ties Melted **Contaminated:** Yes No **Core:** Good Bad

Stator Leads: Good Bad **Crowns:** Good Bad Notes:

Condition of all O-ring Fits: Good Pitted Corroded Marred

If damaged, which one(s): _____

Other (Controls, Stand, Housings, ETC.) BEARING HOUSING IS WELDED
TO SHAFT - SHAFT MOVES INSIDE ROTOR & ROTOR
IS PARTIALLY MELTED

PRIMARY CAUSE OF FAILURE

POSSIBLE LIGHTNING STRIKE OR VOLTAGE
SPIKE OF SOME KIND



5600 Inland Drive
Kansas City, Kansas 66106
Phone 913-287-3900
Fax 913-287-6641

REPAIR PROPOSAL

SKP: **7622**
Customer PO #:
Prepared By #: **Brad Saul**
Date: **10/13/2022**

Ebara Replacement: **\$16,447.49**
Wilo Replacement: **\$16,917.34**
Estimated Delivery:

Customer Information

Bill To:

Contact Info:

Ship To:

Company Name: City of Smithville
Address: 107 W. Main Street
City: Smithville
State/Zip Code: Missouri 64089-
First Name: Bob
Last Name: Lemley
Phone: (816) 532-0070
Fax: (816) 532-8331

Company:
Address:
City:
State/Zip Code:

Description of Problem

This is for teardown and inspecting a Flygt pump from the WTP, offering two different replacement pumps as the Flygt pump is beyond economical repair.

Pump Information

Pump Make: **Flygt**
Model: **3153**
Style: **Submersible pump**
Pump RPM:
Motor RPM: **1800**
☒ Seal
☐ Packing
Serial No: **1610005**
HP: **20**
Voltage: **460**
Coupling:

Repair Description

Ebara Replacement Option to include:
1ea - 150DLFU615 -460V - Same flow and head as the Flygt pump
1ea - Flygt 6" guide rail adaptor
1ea - Ebara leak/thermal relay
Labor to inspect the Flygt pump
Labor to install the new pump and perform start up
Truck and MLS charges

****Lead time on the pump is 12-16 weeks****

****Does not include FREIGHT or anything else not listed above****

Wilo Replacement Option to include:
1ea - FA15.52E with Motor T20.1-4/22KEx 460V - Same flow and head as the Flygt pump
1ea - Flygt 6" guide rail adaptor
1ea - Wilo leak/thermal relay
Labor to inspect the Flygt pump
Labor to install the new pump and perform start up
Truck and MLS charges

****Lead time on the pump is 6-8 weeks****

****Does not include FREIGHT or anything else not listed above****

Application Information

Pumpage: **1100**
Head: **52**
Flow:
Temp:
Viscosity:
Specific Gravity:
☐ Hazardous ☐ Rotation Left
☐ MSDS ☐ Rotation Right

Terms and Conditions

1 Freight Charges Not Included
2 Taxes Not Included
3 Expedite Fees Not Included
4 Payment Terms - Net 30
5 Warranty Period - 90 Days
6 Proposal Vaild for 30 Days
7 Teardown/Inspection/Field Service Hours/MLS
will be charged if Equipment is Not Repaired or
Replaced through Mid-America Pump



JCI Industries, Inc.
1161 SE Hamblen Rd.
Lee's Summit, MO 64081
Tel: 816-525-3320

www.jciind.com

Tuesday, October 18, 2022

Smithville MO, City of
Smithville City Hall 107 West Main
Smithville, MO 64089

Phone: 816 532-0577

Attention: David Schuerger

Subject: Flygt 3153 Replacement

Quotation #: SEQT-11323TWIL
Please refer to this number when ordering

Item	Description	Qty	Unit Price
1.00	Flygt 3153.185-0643 <ul style="list-style-type: none">• Impeller Style: N (semi-open vane)• Impeller Code: 433• Installation Type: P (guide rail mounted)• 6" Discharge• 20HP• 460V• 3Ph• 50' Power cable• FLS Included	1	\$24,249.00

Trever Wilson

Trever Wilson
Service Engineer
JCI Industries, Inc.

Paul Ryals

Paul Ryals
Account Manager
JCI Industries, Inc.
816-500-2193

Terms & Conditions	
Lead Time 12 Weeks After Receiving Order	Payment Terms Net 30
Shipping Method Best Way From Sweden	Shipping Terms Prepaid and Added to Invoice
Due to current market conditions, please confirm pricing at point of order	



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STANDARD TERMS OF SALE

1. **Applicable Terms.** These terms govern the purchase and sale of the equipment and related services, if any (collectively, "Equipment"), referred to in Seller's purchase order, quotation, proposal or acknowledgment, as the case may be ("Seller's Documentation"). Whether these terms are included in an offer or an acceptance by Seller, such offer or acceptance is conditioned on Buyer's assent to these terms. Seller rejects all additional or different terms in any of Buyer's forms or documents.
 2. **Payment.** Buyer shall pay Seller the full purchase price as set forth in Seller's Documentation. Unless Seller's Documentation provides otherwise, freight, storage, insurance and all taxes, duties or other governmental charges relating to the Equipment shall be paid by Buyer. If Seller is required to pay any such charges, Buyer shall immediately reimburse Seller. All payments are due within 30 days after receipt of invoice. Buyer shall be charged the lower of 1 ½% interest per month or the maximum legal rate on all amounts not received by the due date and shall pay all of Seller's reasonable costs (including attorneys' fees) of collecting amounts due but unpaid.
 3. **Delivery.** Delivery of the Equipment shall be in material compliance with the schedule in Seller's Documentation.
 4. **Ownership of Materials.** All devices, designs (including drawings, plans and specifications), estimates, prices, notes, electronic data and other documents or information prepared or disclosed by Seller, and all related intellectual property rights, shall remain Seller's property. Seller grants Buyer a non-exclusive, non-transferable license to use any such material solely for Buyer's use of the Equipment. Buyer shall not disclose any such material to third parties without Seller's prior written consent.
 5. **Changes.** Seller shall not implement any changes in the scope of work described in Seller's Documentation unless Buyer and Seller agree in writing to the details of the change and any resulting price, schedule or other contractual modifications. This includes any changes necessitated by a change in applicable law occurring after the effective date of any contract including these terms.
 6. **Warranty.** Subject to the following sentence, Seller warrants to Buyer that the Equipment shall materially conform to the description in Seller's Documentation and shall be free from defects in material and workmanship. The foregoing warranty shall not apply to any Equipment that is specified or otherwise demanded by Buyer and is not manufactured or selected by Seller, as to which (i) Seller hereby assigns to Buyer, to the extent assignable, any warranties made to Seller and (ii) Seller shall have no other liability to Buyer under warranty, tort or any other legal theory. If Buyer gives Seller prompt written notice of breach of this warranty within 18 months from delivery or 1 year from acceptance, whichever occurs first (the "Warranty Period"), Seller shall, at its sole option and as Buyer's sole remedy, repair or replace the subject parts or refund the purchase price therefor. If Seller determines that any claimed breach is not, in fact, covered by this warranty, Buyer shall pay Seller its then customary charges for any repair or replacement made by Seller. Seller's warranty is conditioned on Buyer's (a) operating and maintaining the Equipment in accordance with Seller's instructions, (b) not making any unauthorized repairs or alterations, and (c) not being in default of any payment obligation to Seller. Seller's warranty does not cover damage caused by chemical action or abrasive material, misuse or improper installation (unless installed by Seller). THE WARRANTIES SET FORTH IN THIS SECTION ARE SELLER'S SOLE AND EXCLUSIVE WARRANTIES AND ARE SUBJECT TO SECTION 10 BELOW. SELLER MAKES NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE.
 7. **Indemnity.** Seller shall indemnify, defend and hold Buyer harmless from any claim, cause of action or liability incurred by Buyer as a result of third party claims for personal injury, death or damage to tangible property, to the extent caused by Seller's negligence. Seller shall have the sole authority to direct the defense of and settle any indemnified claim. Seller's indemnification is conditioned on Buyer (a) promptly, within the Warranty Period, notifying Seller of any claim, and (b) providing reasonable cooperation in the defense of any claim.
 8. **Force Majeure.** Neither Seller nor Buyer shall have any liability for any breach (except for breach of payment obligations) caused by extreme weather or other act of God, strike or other labor shortage or disturbance, fire, accident, war or civil disturbance, delay of carriers, failure of normal sources of supply, act of government or any other cause beyond such party's reasonable control. Seller shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future epidemic, and Buyer shall not be entitled to any damages resulting thereof.
 9. **Cancellation.** If Buyer cancels or suspends its order for any reason other than Seller's breach, Buyer shall promptly pay Seller for work performed prior to cancellation or suspension and any other direct costs incurred by Seller as a result of such cancellation or suspension.
 10. **LIMITATION OF LIABILITY.** NOTWITHSTANDING ANYTHING ELSE TO THE CONTRARY, SELLER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER INDIRECT DAMAGES, AND SELLER'S TOTAL LIABILITY ARISING AT ANY TIME FROM THE SALE OR USE OF THE EQUIPMENT SHALL NOT EXCEED THE PURCHASE PRICE PAID FOR THE EQUIPMENT. THESE LIMITATIONS APPLY WHETHER THE LIABILITY IS BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY.
 11. **Miscellaneous.** If these terms are issued in connection with a government contract, they shall be deemed to include those federal acquisition regulations that are required by law to be included. These terms, together with any quotation, purchase order or acknowledgement issued or signed by the Seller, comprise the complete and exclusive statement of the agreement between the parties (the "Agreement") and supersede any terms contained in Buyer's documents, unless separately signed by Seller. No part of the Agreement may be changed or cancelled except by a written document signed by Seller and Buyer. No course of dealing or performance, usage of trade or failure to enforce any term shall be used to modify the Agreement. If any of these terms is unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect. Buyer may not assign or permit any other transfer of the Agreement without Seller's prior written consent. The Agreement shall be governed by the laws of the State of Delaware without regard to its conflict of laws provisions.
 12. **Credit Approval:** If at any time information available on Purchaser's financial condition or credit history, in JCI's judgment, does not justify the terms of payment specified herein, JCI may require full or partial payment in advance, or an acceptable form of payment guarantee such as a bank letter of credit, or other modifications to terms of payment.
- Backcharges: JCI shall not be liable for any charges incurred by Purchaser for work, repairs, replacements or alterations to the Products, without JCI's prior written authorization, and any adverse consequences resulting from such unauthorized work shall be Purchaser's full responsibility.