

Memo

To: Honorable Mayor & City Council, From: Utility Superintendent Victor Kane

CC: City Administrator Dylan Mulfinger

Reference: 20th Street Lift Pump.

Date: 03/04/2020

One of the lift pumps at the 20th Street lift station had a bearing go out and destroy the pump. We have received three quotes from Electric Pump Company. Repair the pump for \$13,326.00 A new Barnes for \$15,919.00 with a 5 to 6-week lead time. A new Flygt for \$34,168.00 with a 12 to 14-week lead time.

The pump damage is covered under our insurance policy. They agreed, minus the \$1,000 deductible to cover \$12,326 of the repair option. They did say we could add this to our own funds and purchase a new pump. For your information I have provided the service report of the old pump.

"Main lower bearing lubrication insufficient to prevent damage to balls and races. As more wear occurred this allowed the rotor and shaft to turn out of true this in turn began to damage seals and impeller and wear plate. Seal oil was allowed to escape and water infiltrated all housings compounding the failure. At some point during this process the impeller experienced sufficient abnormal force as to shear the impeller bolt and allow it to move axially on the shaft. All of these factors combined resulted in a catastrophic failure when the rotor finally spun into the stator shorting and grounding the windings."

Based on all the damage it incurred and the fact some parts will still be original once repaired I do not recommend the repair option. The Flygt is a premier pump but has a large cost difference and a long lead time. I found this to be true on parts as well and have shifted away from this pump over the years. We could literally purchase two Barnes pumps to one Flygt. When I subtract the \$12,326 insurance amount from the \$15,919.00 Barnes quote it actually will only cost \$3,593.00.

I therefore recommend we purchase the Barnes at a cost of \$15,919.00.

Thank you for your time.

Victor Kane Oelwein Utility Superintendent

> From the Desk of Oelwein Utility Superintendent Victor Kane