



Date: July 24, 2019

To: Darrel Pyle, City Manager

Through: Kenneth Komiske, Director of Utilities *KK*

From: Geri Wellborn, Manager Water Treatment *GW*

Background:

The Vernon Campbell Water Treatment Plant (WTP) is able to treat 17 million gallons a day (MGD) at peak demand. This capacity allow for redundancy during normal operations. The redundancy is required by DEQ and important for the facility to produce sufficient supply of drinking water if equipment failures occur. The WTP has two large clarifiers and two small clarifiers. Each of the large clarifiers can treat up to 10.5 (MGD) and each of the two small clarifiers can treat up to 3 MGD.

Currently, the plant is going through the Phase II Water Treatment Plant Improvements and the one of the small clarifiers is out of service due to the capital project. At this time, one of the large clarifiers has a damaged inlet piping and impeller and requires repair. This situation is an emergency due to the lack of redundancy for water production. These clarifiers are critical equipment and repair needs to be done to ensure the facility can produce sufficient quantities of water during the peak summer months.

Chapter 8, Article II, Section 8-204 (b) (5), provides an exception to competitive bidding for 'Supplies, materials, equipment, or contractual services whose purchase is approved by the Council as necessary for the immediate preservation of the peace, health, or safety'. It is necessary to make repairs quickly to ensure drinking water to the community during peak demands.

Discussion:

Discussion with engineers and consultants on pipe material provided information on alternate materials to replace the inlet pipe. The choice was made to replace the 30-inch steel inlet pipe with comparable material that meet the WesTec specifications, WesTec are the designers/manufactures of the clarifier. The proposed repair will ensure the clarifier will perform as designed. Three written quotes have been obtained from contractors to remove and replace the impeller and replace the 30-inch inlet pipe on clarifier #3.

Discussion with the WesTec and contractors provided two options for replacement of the impeller.

1. Cut the fins off of the impeller and take it under the skirt of the clarifier, weld and balance it in place.
 2. Use a crane to lift the deck off of the clarifier, pull, and replace the impeller.
- Option 1 was chosen due to the complexity of removing the deck and because Option 1 was used when the previously on clarifier #4 when the impeller was damaged. The work went smoothly and the impeller is in service today.

Recommendation:

Staff recommends authorization to complete emergency repair work to clarifier #3

repairs as discussed above. Staff recommends transfer in the amount of \$79,200 from Outside Water (031-5534-461.31-23) to Machinery & Equipment Parts (031-5534-461.32-04) to fund the repair.


Approved by Darrel Pyle, City Manager

Cc: Anthony Francisco, Director of Finance
Ken Komiske, Utilities Director
Mark Daniels, Utilities Engineer