

August 16, 2023

To: Chairman Wetzel and members of the Public Works Commission

From: Peter Hartz – Water Systems Manager

Re: Water Systems agenda items for August 22, 2023

Water Systems:

1. Review and take possible action – Establishing native prairie plantings at several large open areas owned by the water & wastewater utilities.

The utilities own and mow approximately 40 acres of grass throughout the city at our wells (9), treatment plants (3 water / 1 wastewater), and lift stations (18). We only have one part-time employee during the summers and one staff member during the year to tend to our landscape work around all properties scattered around the city. After a discussion with staff, we sought out alternative solutions to take care of the property. Native prairie plantings offer a wide variety of plants and flowering species that attract pollinators, and many other beneficial insects and make for a more aesthetically pleasing impression of open spaces. This would be a 2–3-year transition of the land from mowed grass to a living prairie. A perimeter will be mowed around the properties chosen so as to retain the manicured look as the grass around the buildings and perimeters will continue to have grass mowed. We would like to start with 5 remote areas, the west st. water tower site (0.5 acres), the northeast water tower site (3.5 acres), the water booster station site (0.5 acres), and the hill at the wwtp (2.7 acres). All sites have been approved for the new native landscaping allowed in the city following the rules and requirements.

2. Review and approve – Wastewater Department; purchase 2 new spiral heat exchangers from Gooch Thermal Systems, Inc. for the anaerobic digestion treatment process for a total of \$93,500.

Wastewater staff during normal plant operations found that our closed loop hot water heating system was leaking water. After spending several days isolating the system, we discovered a water leak inside one of the spiral heat exchangers. After discussion with the manufacturer regarding the location (internal) and size of the leak it was determined that the leak is not something that can be repaired due to the nature of the spiral heat exchanger being a rated and certified hot water pressure vessel – it would no longer be safe to operate. Water is heated to 125 degrees by the boilers and circulates in the heat exchanger with sludge to heat the anerobic digesters – the heat transfer is critical to operate the digesters as the sludge needs to be maintained at about 96 degrees. Sufficient funds are available in the wastewater capital account due to the pause placed on the UV disinfection system upgrade. That project cost came in 1 million overestimate and is now part of the facilities plan update under review by ATI.

Sincerely,

Peter Hartz

Water Systems Manger