

January 20, 2026

Mr. Steve Kuretsky
Hughes Creek Golf Course

Dear Steve,

Thank you for your time discussing the irrigation pump station at Hughes Creek. This assessment of the pump station will help clarify and explain the issues found with the pump station, which is clearly in urgent need of replacement.

Visually, the skid and piping are extremely rusted and corroded. What you can see on the outside is indicative of what the inside looks like too. Most piping that looks like this has already started developing pinhole leaks or has structural issues. We use a product called fusion bonded epoxy; it's applied like a powder coat to the inside and outside of the entire station and piping to keep the station looking like new for a long time.

The most critical issue is the vertical piece of pipe on the discharge header. This is acting like an air over water pressure tank or surge tank. This piece of pipe has the same potential to blow up as a larger pressure tank. When these fail, it is violent and life-threatening to anyone in the pump house. This is not just a pump station issue, but a legitimate safety concern and business liability.



Most of the damage to the skid and outside of the piping is from the leaking packing at the pump shaft. This is likely the result of maintenance neglect to the existing system. This damage alone makes the existing system beyond reclamation. Nuco uses mechanical seals that keep all water inside the pump and do not require daily maintenance. This will keep your new pump from ever facing a similar issue.

Additionally, the existing station does not have any way to control or relieve the pressure going to the system. The controls are very basic and can only turn a pump on or off at full speed. This stresses the entire

irrigation system and pump station, especially one of this age. There isn't a pressure relief valve, which is standard equipment on our new pump station. This feature would allow for any overpressure that might arise from situations like valves opening or closing too quickly to be gradually dissipated. This not only protects the pump station, but also significantly reduces the likelihood of irrigation head blowouts and other damage throughout your entire irrigation system network caused by surging.

A Nuco station would use VFD per motor/pump. These soft start the pumps and vary the speed of the motor to precisely maintain the irrigation system's required pressure set point. The VFD's also typically reduce the electricity usage by a conservative 20%. Nuco recently had a customer report savings of \$8,000 in 2025 on a system that was installed in late June 2025.

Further, the flow meter on the existing system is not in the correct location and cannot possible function accurately the way it is installed. Inaccurate flow measurement impacts the timing of the pumps turning on and off, which in turn makes it impossible for the system to run efficiently.

Additionally, there is no pressure maintenance pump in the existing system. This is a small pump used to maintain constant pressure at a set point between irrigation cycles and to keep a main pump from cycling on during non-irrigation times.

Finally, virtually all parts and components from the existing system are obsolete and unavailable.



A new station solves all of these issues for a long time (conservative useful life is 15-20 years). With a new station, Nuco includes remote access which provides monitoring and notifications of all system alarms and faults to our service and factory personnel. This is the equivalent of Hughes Creek having a person on staff monitoring the station. Our field service personnel, factory technicians, and key staff members at Hughes Creek receive the same notifications at the same time.

Our strong recommendation is to replace this station as soon as possible.

Thank you,

Andy Jones