

**From:** [Stephens, Jesse](#)  
**To:** [Stephens, Jesse](#)  
**Cc:** [Perkins, Drew](#)  
**Subject:** Hillcreek Pump Analysis  
**Date:** Thursday, July 10, 2025 6:48:54 AM  
**Attachments:** [image001.png](#)

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Dear Board of Trustees:

The Hillcreek pressure sewer system has been a challenging system since its inception to maintain. Engineering analysis has been prepared by HDR engineering previously on this system, but it is my recommendation that a dynamic model be built as an extension of that system. Bartlett and West currently handles all of the water modeling by Consolidated Water in this area and has great data on the diurnal water usage patterns. They have the ability to produce a similar hydraulic model that will allow for comparison of multiple types in operation and be able to run more scenarios. The Hillcreek system currently uses predominantly Zoeller 815 pumps, which are progressive cavity pumps. The industry has largely been moving to centrifugal pumps with improved grinding mechanisms in lieu of progressive cavity pumps. Our history has proven that the progressive cavity pumps are not performing well. We have substituted three Barnes Razor OGP pumps in some of the most frequently problematic homes in the subdivision without getting call backs or any resulting pump failures. We continue to monitor, but I would like to start the process of switching out progressive cavity pumps where possible. I look forward to discussing this with you further.



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