

From: [John M. Lewis](#)
To: [Doug Neeley](#)
Cc: [Josh Wheeler](#); [Christina Robertson-Gardiner](#)
Subject: RE: Forest Edge Apartments Stabilization
Date: Monday, December 23, 2019 12:13:54 PM

Thanks Doug.

Your concerns are legitimate. 14 dewatering wells are already in and have been functioning in a real time test mode for over a year. Dewatering landslides is a common practice but typically they are installed horizontal and they drain by gravity. In this case the size and depth of the slide were the reason the pump system was the recommended option. This pump system is unique and as such we are looking at it very carefully. As you know the City uses a third party geotechnical consultant to oversee the work of the applicant's geotechnical consultant. I have also reached out to Scott Burns who is looking at this for us too.

Once we have professional consensus the next question is monitoring and what role the City should play on ongoing (forever) monitoring. Pumps can fail, power can fail. The pressure system could fail, and the system could simply not keep up. The current system as built includes redundancies but it's still a unique solution. And I also agree the downstream storm system at the discharge point is another area to address as it is also a concern.

I see both sides of this situation in that the current vacant buildings also represent a risk unless the slide is managed, and affordable housing is an ongoing need. The site also would benefit from better and renewed management of surface water and the improvements this applicant has submitted for approval will be a much needed improvement. The subsurface solution is the oddity but the current owner is indicating that they are planning to be a long term owner and they have hired a quality firm to design, analyze, and oversee the geotechnical solutions.

And the City Commission has called this one up and as such will hold the next public hearing on January 15, 2020. So I fully expect more public discussion.

Thank you for your concern. Feel free to reach out with other questions.

From: Doug Neeley [mailto:intstats10@gmail.com]
Sent: Saturday, December 21, 2019 3:07 PM
To: Christina Robertson-Gardiner <crobertson@orccity.org>; John M. Lewis <jmlewis@orccity.org>
Subject: Forest Edge Apartments Stalization

My understanding is that the apartments were built on a geological sag that has already proved unstable and that the applicants wish to build wells that temporarily hold water during storm events. It would seem me that this would result in the sag retaining more water than would normally be the case resulting in a greater chance of soil movement. The only way that I can see that this might be a successful way of reducing that chance is that the wells be emptied into a storm water system immediately after the storm event. This would require continuous monitoring by the City throughout the rainy season and may require the improvement of whatever storm water facility serves the development. It is not clear to me that even this

would be sufficient to reduce the chance of increased water retention during a large storm event.