

Matthew Forir  
Registered Geologist (Mo)  
No. 2021034022  
4658 S Roubidoux Place  
Springfield Mo. 65804  
417-299-0670

To whom it may Concern,

This letter is to inform you that my services as a consulting geologist have been retained by owners of properties surrounding and adjacent to the proposed development. My investigation to date has included the collection of geological data, water well placement, construction methods and depth, and wastewater system information.

A comprehensive sampling of all water wells on the properties will begin to create a baseline database of organics, mineral content, and turbidity. This sampling will continue to from winter to fall to allow for seasonal fluctuations that may occur. In conjunction with sampling, we will be monitoring static water levels of all water wells. During sampling additional samples will be taken and analyzed for background levels of fluorescent dyes for water tracing and groundwater flow studies.

I have instructed my clients to have all wastewater systems inspected for leaks or issues with surfacing if applicable.

The above-mentioned investigation will create a predevelopment database in which we can monitor a number of environmental issues such as.

1. Contamination plumes from the numerous wastewater systems that will certainly be needed in a development of this size. The development will sit on a highly fractured and weathered Cotter formation (an Ordovician aged dolomitic carbonate rock) that can easily transmit surface and near surface contaminants into the aquifer.
2. Static water level decrease. The development will need numerous commercial style water wells to supply water to structures and any irrigated areas on the property. These commercial wells are drilled to much greater depths than the surrounding wells currently located adjacent to the property. A concern is that during high use these deep wells can and will lower static water levels and potentially render current wells useless during certain times of the year. The lowering of groundwater levels also can allow a quicker movement of contaminants to move into the aquifer and possibly adversely effecting water quality.
3. Clearing and disturbing the land will cause erosion, when coupled with thin soils and karst topography, this can cause fine grade sediments to create turbidity in surrounding wells.

In closing, if anyone has any questions about the investigation, findings, or other aspects of the project, please feel free to contact me.

Matt Forir  
Registered Geologist No. 2021034022

A handwritten signature in black ink, appearing to read 'Matt Forir', with a long, sweeping horizontal stroke extending to the right.