Karen Witherspoon

From: Chris Merritt <chris@olyeng.com>
Sent: Friday, November 1, 2024 3:07 PM
To: Jeffrey Landrum
Cc: Karen Witherspoon
Subject: Riverside Draft Hydrant System follow up
Attachments: Riverside Subdivision Drafting Hydrant Analysis.pdf; Developing-Water-Supplies-pamphlet-2011.pdf; Rural Water Supply Standard D-003 03-2022.pdf; TP23-001 Private Fire Protection Water Supply Tanks and Hydrants for One and Two Family Dwellings 020223.pdf

Follow Up Flag: Follow up
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Good afternoon, Jeff. I am following up on the letter from our outside consultant, Todd Krause, PE, that I believe Karen had forwarded to you last week regarding the feasibility of a draft hydrant system (see attached). As you may know, Todd is a very respected professional engineer and specializes in water system designs. Additionally, there are two other professional engineers, including myself, that are in agreement that a draft system is feasible for this project.

There are several other agencies that have more or less the same design standards/requirements as to what we are proposing (e.g. storage tank, auto fill, vent, 4" discharge, fire department connection with 2.5" NPT). I've attached a few of these for reference to help show that what is being proposed is commonplace.

Lonnie Goble had mentioned to me in-person last May that he pulls water from a few storage tanks in the High Valley neighborhoods and he thought it would be easy/inexpensive to replicate that. I had subsequently shown him an example (one of the attachments to this e-mail) and he said it looked good.

I want to emphasize that adding a pump to provide pressurized water to fill a tender truck would be a very costly endeavor as we believe the pump, controls, generator, etc. would need to be UL listed since it pertains to fire suppression. I'm not up on fire/building code requirements but I believe the fire pump and transfer switch cannot be located in the same room, the transfer switch needs to be listed for fire pump service, etc. Basically, it opens up a can of worms and would also result in additional design and construction costs of approximately $68k (verbal estimate provided by American Pump and Drilling and NWS). This would create an undue hardship and very likely kill the project. For reference, the currently designed water system construction costs, including the cost of the installed well, is approximately $44k.

Lastly, as you know, our project is limited to 5,000 gpd of water withdrawal. I have concerns that we may exceed that rate when the storage tank is emptied. Lonnie mentioned that he would let us know when he pulls water from the tank but I think it may be better to install a flow meter to keep track of the fire suppression usage so we have documentation to provide to Ecology, if needed. Do you have any thoughts on this?

I am very hopeful that Lewis County will agree that a draft system is viable so we can continue moving forward with the project. I look forward to hearing from you soon!

Thanks,

Chris Merritt