



Control Number: 52299



Item Number: 914

# Knob Hill WATER System

## Knob Hill Emergency Preparedness Plan:

ID# 0610068

2021 NOV -1 AM 11:54

### Identification of Critical Systems:

- \* The Knob Hill Public Water System supplies 78 residential connections, fed by two well systems with directional interconnectivity. These well systems consist of two deep wells, three 2HP booster pumps, and one 5HP booster pump. With quality control from 4 metering pumps, 2 per system, injecting sodium hypochlorite and polyphosphate.
- \* Average daily consumption is below 16,000 gallons pumped, per day, from the main well; with a historical peak of 23,000 gallons pumped in one day. The smaller of the two wells pumps below 4,000 gallons, every two days, on average. *Two storage tanks are 18,000 and 15,000 gallons.*
- \* In the event of a prolonged critical power loss, the larger of the two well systems can supply enough to maintain adequate pressure and quantity for customers. A reversible, double-check valve is in place to provide continuous service in the event of either well system becoming inoperable. This would require minimal intervention from the operators.

### Steps Required upon Sustained Power Loss:

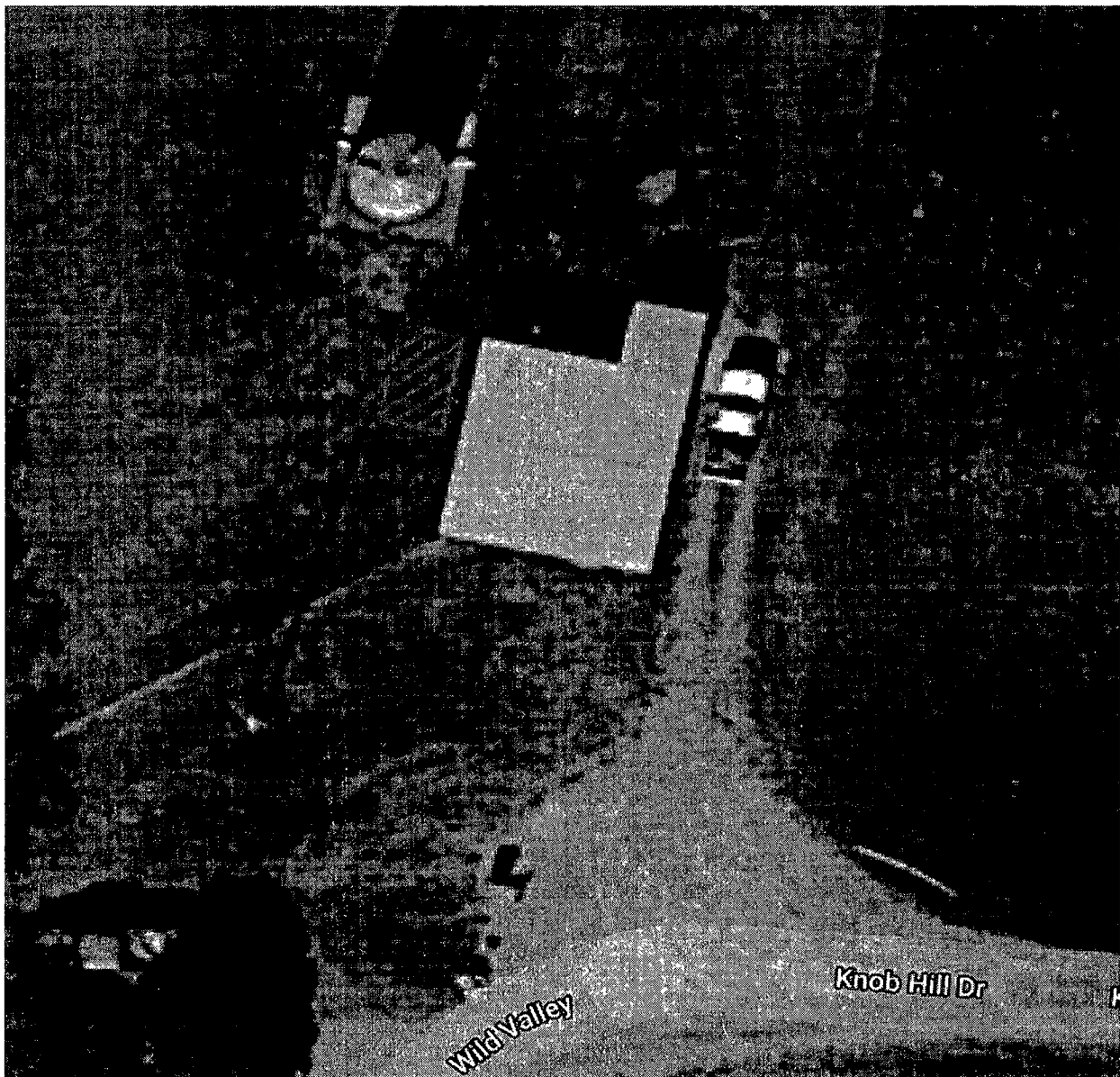
- \* With the addition of an on-site, back-up power generator; there would only be two steps required to ensure continuous service.
- \* The double-check valve would be reversed using 2 gate valves. This would normally allow the smaller well systems to supplement the bigger system in event of failure, but when reversed allows the big system to feed all connected customers at once. This would need to be done first to avoid loss of water pressure for the limited number of service connections attached to the smaller well.
- \* With the whole system being supplied by the big well, a manually-operated, backup generator of 35,000watts would be sufficient to allow complete operation during critical power loss.

### Building Plans:

- \* Attached is a preliminary representation of building plans to be implemented by the required date.

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- \* An 8'x10' concrete foundation will be laid for a permanent backup generator. This is to be placed to the side of the building, apart from buried well supply and injection lines.
- \* A four post, metal shed will be built on top of this foundation. This will provide sufficient coverage of the generator from the weather, and ensure ease of maintenance.
- \* A backup diesel generator of at least 35,000watts will be required to handle the excessive startup load from the deep well, 5HP, and 3HP booster pumps.
- \* A manual switch-over panel will be installed within the well house. After starting the generator, a simple switch allows complete disconnection from service main lines to the back-up generator.



Knob Hill WATER SYSTEM  
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 contact: Karen Long-Desmet 24-hr emergency # 214-536-7942

From: Jessica Cox jcox@coserv.com  
Subject: Knob Hill Water  
Date: Oct 18, 2021 at 9:10:57 AM  
To: kdesmit@sbcglobal.net

Karen,

Please accept this email as confirmation that your accounts are listed as "Critical Load" with CoServ Electric.

Thank you

**Jessica Cox**

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