**GUNSTOCK ACRES VILLAGE WATER DISTRICT**

***AGENDA***

 **Meeting Date: July 12, 2022**

**Location of Meeting: GILFORD TOWN LIBRARY- LOWER-LEVEL MEETING ROOM or BY ZOOM**

**Time: 5:30pm**

 **Call to Order:**

**Topics:**

* 1. **Elsemarie deVries Mullins from EFC (partially funded by EPA) to Discuss Water Rates**
	2. **Horizon Engineering Report – Mike Duffy, Jon Warzocha**
		1. Progress Report on Tank & Building for Pump Station 1
		2. Status of Pump Station 7 Redesign
		3. Six Million Dollar SRF Funding Progress – Loan Forgiveness
		4. Possibilities?
		5. GIS Mapping Map Submitted to Luis Ardino – Can we get a copy
		6. What size Expansion Tank Do we need at Pump Station 3?
		7. Why are we placing a 50,000 gallon tank at Pump Station 1 when

we have already have had the existing 50,000 gallon concrete tank go dry this past July 4 th. Is there any way we can keep the existing 50,000 Gallon tank and build the new station someplace else. This we would effectively yield 100,000 gallons storage here.

 **3. Motion To accept previous months minutes.**

 **4. Customer Input**

1. **Operators Report: Lakes Region Water**
2. Joe Geraci to address Lakes Region
3. Inventory of Spare Motors and Pump
4. Cost of well level sensors from Zell with lightning Protection

 Please quote the installation of stilling tubes for the remaining

 Wells at pump 7. I believe at least one or both pumps along

 Poor Brook Farm, Wells 7 C & 7 D has a stilling tubes and or level

 Sensors. If they are working the level sensors are working at 7 C or ,, D, I do not know.

1. Brian McCall do you remember anything about this?
2. Opening the Valve on Silver to reduce workload at Pump 1

Pros and Cons especially on holidays once we have the storage

 Tank at Pump 7 in place and we can determine the health of wells.

1. Work toward common Pump in our Pump Station to minimize spares.
2. The Expansion Tank Bladder at Pump Station 3 is defective.

this causes the wild pressure swings. It was sized before Variable Frequency Drives were put in place. Now that VFD’s are in place it the expansion tank will be a lot smaller. Really nothing more than is

used in residential homes if placed properly.

Copy the technique used a Pump Station 6. It is used on the output side before the Jockey and Booster Pumps. It is limited to 40 PSI and has a meter on it. Pump 6 appears to be an Amtrol Therm -X- Control ST-12, 4.4 expansion tank. It is a Carbon Steel Shell with a stainless-steel Connector, used for Domestic Hot Water Heaters. Perfectly fine for a Booster Pump Stations but not for a station with wells. Since Booster Pump Station 3 is a duplicate of Pump Station 6 you could go with the ST-12 or the next size up. This is a self-standing model, ST-25 V which is a 10.3 gallon expansion tank. I do not believe it can hurt to use a larger expansion tank.

If we do not replace the expansion tank the resulting

water hammer will eventually cause a break. But then again this has been the case for several years now.

The difference now is that it is pressure swing is much faster. Who knows, this could even be the source of the “ghost” in the programming at Pump Station 6.

1. SCADA Software you would like to see new software, why ?

Please note to re-program the whole system to a new SCADA Software other then an updated Citec would cost about $50,000 which is the maximum allowed by a cyber security grant (to be further discussed).

1. There is a lot of Trash around the upper well fields at Pump Station 7.. I thought it was understood that all trash would be removed by the installation personal. Please take the stuff you want and place it on the left side of the wells.

Also, the Pump Stations have Pine Needles on them that should be blow off as part of Routine Maintenance of the buildings per the contract.

 **6. Dominic Carelli Report**:.

1. Remote Monitoring of Propane level by SCADA progress
2. General Progress Report
3. Cost to program two VFD’s and integrate with SCADA at Pump Station 7
4. Possibility of installing electric gate valve on Silver Street and controlling it remotely via the SCADA System.
5. Status of 7-10 foot alarm for the tank at Pump 1.

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 **7. Treasurers Report – Todd Watson, Karen Goss**

  **8.** **Projects Report – Howard Epstein:**

1. Investigation revealed all Booster Pumps are on VFD.

 The only pump station that is not on VFD which are

 more efficient are the two 10 HP single phase booster

 Pumps at Pump Station 7. This is because one cannot

 get a Variable Frequency Drive (VFD) on a single

 phase device by the very nature of the VFD.

 The 10 HP Jockey at Pump 7 is on a VFD already

 Therefore, to place the Booster Pumps on VFD will require

 a three phase motor on two booster pumps plus the spare.

 In addition, two VFD’s are required.

 I am working towards getting Estimates for three 3 phase

 motors and two VFD’s.

 Eversource will give us $1000 toward this project.

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 The EPA Will run a program and give us the payback at

no charge once I input them with the existing motors and new motors which are much more efficient.

 If we can get our money back in two years it is worth it. This is

 because I do not see the storage tank at Pump Station 7 going

 in before 2025, even if we ordered it in 2024.

 Our other option is to wait for fall and apply for Energy Audit

 & Implementation Energy Grant.

 Please note I applied last year but was rejected because

 we did not have an Asset Management Grant in place.

 Also note that Luis Ardino is not sure the State will offer an

 Energy Audit & Implementation Grant this year.

 I have on order a spare Franklin Three Phase 10 HP

 Jockey from Premier Pump for Pump Station 7. It has

 been about 3 week so it is still 6 to 11 weeks out.

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 In any event our first priority should be a 150,000 gallon

Expandable to 200,000 gallons at Pump Station 7. Yes Joe this large is barely one day storage. Especially if we feed pump station 1 in high peak demands. Should we finance this on our own we will have to hire an engineer. I suggest at a minimum we send out on bids to Horizion’s Engineering, Arie’s Engineering and Tata & Howard Engineering. All parties have already toured our system and agree that the first priority should be the tank at Pump 7 to increase storage which should increase the life of our booster pumps along with acquiring three Phase Booster Pumps on VFD’s. There are many other engineering companies such as Compressive Environmental

that have not toured our facilities.

 Next up is the existing 20,000-gallon tank. Personally, I do

**Not** think we should reline if it needs be. Nor the 5,000 tank at Pump station 7.

This would take the tanks out of the Pump Station 7 and prevent the possibility of flooding in the event of failure.

 This is exactly what occurred at Pump Station 6 where all the

 electrical equipment had to be replaced about 3 years ago. This

 is because the seal on the tank burst.

Take the money and place it into the Aquatore Tank at Pump Station 7 and purchase a larger expandable tank.

In said event the booster pumps will have to be redesigned because we are changing the head which is a measure of force exerted by water expressed, in feet.

 All of the above needs to be taken into consideration based on

the inspections which will take place in the fall now. This is because LRW wisely, recommended they do it in the fall when less people are around.

 **9. Projects Report – Joe Geraci**

i. Request for Hook-ups

ii .Please investigate the old Waite Property. Carol

 Johnson current owner claims she get receives her water from

 a well. Joe you were suppose Investigate this several

 months ago according to Carolyn who basically hung up on

 me! Please look at!

iii. Joe Geraci to get competitive bids for NHPrimex Coverage.

  **10. Projects Report – Kurt Houston**

 I. Pump Station 7 – Status of updated Excel Spread of breaks.

 **11.** **Brian Mccall – Comments !**

 **12. Motions**

 **a). Motion – Howard Epstein – To pay the Michell Group $**

 **$45 for legal opinion by e-mail.**

 **b) Motion – Howard Epstein – To pay Arthur Pybuurn &**

 **Sons $790 For Leak Detection**

* 1. **Motion – Howard Epstein – To pay Laconia Daily Sun $85 to publish as approved by all in the June minutes to end the water ban.**
	2. **Motion – Howard Epstein – To pay Horizons for invoice number 27709 the amount of $1,104 for design**

 **Of Pump Station 1.**

* 1. **Motion – Howard Epstein – To pay Horizons for invoice number 27710 the amount of $4,416 for Construction services**
	2. **Motion by Joe Geraci to pay $ XXX dollars for Invoice XXXX to LRW Water Services.**

* 1. **Motion by Joe Geraci To Pay Liberty Taxes**

 **$200 Dollars for Book Keeping Services**

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 **13. Discussion on Rates Based on Elsemarie deVries**

 **Mullins Recommendations**

 **14. New Business**:

 **i. Cyber Security Grant**

1. I am Working on a Cyber Security Grant which will give us updated Citec with telephone support for one year, a firewall

Backup to the cloud for one year we will have to maintain that

at an estimated cost of $150 per year plus a second computer mirrored to our Primary Pump Station but off line, in a box

and stored at another pump station. In the event of a cyberattack we could download a clean copy from the cloud of a past backup and be online. It also serves another purpose as we will have a whole second computer system in the event there is a crash on the primary computer.

It is not easy as it is a multi-step process.

 1.0 – Initial Interview with Consulting Group for EPA

 2.0 - 65 Question Assessment with the EPA

 3.0 - Apply for Funding with the State

 I expect the total project will be around $13,500 - $14000

 the match I Intend to specify is $750.00- $1000.

 I should have further input on the time of the meeting

 As I have Microsoft Team Meetings on July 7 and 8 with

 the EPA.

 They freely provide their service. I learned about the

 EPA while I attended a conference in Concord from 9:00 – 4:30

 Which was excellent.

* 1. **Motion for Howard Epstein to secure a Cyber Security Grant as discussed above estimated total Cost $13,500 - $14,000 our contribution $750-$1400 Max.**

**Grant maximum is $50,000 they expect a 7 -10 % Match.**

**If we switched Software we are looking at a $5000 capital outlay max and a $50,000 grant. There is nothing saying the grant will be successful. Any software proposed would have to provide authentication of the user by either cell phone or e-mail. Also the more you ask for the less likely you will receive a grant.**

 ii. **Local Source Protection Grant**

 a) Since the Aquastore Tank for Pump 1 is due at the Factory

 September 26, 2022 it will not be installed into middle October.

 The Local Source Security Grant for Fencing is due November

 1, 2022. If somebody can get bids and write the grant in

 This short time frame please let me know.

 Barring this I have requested a diagram of the proposed

 security fence from Mike Duffy so I can get estimates for

 fencing sooner. This is the only way I can see it happening.

 b) The Local Water Source Protection Grant also allows for

 Community Relations and I am open to any suggestions

 as I obviously have my hands full.

Adjourn at \_\_\_\_\_\_