

TOWN OF LINCOLN

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Capital Planning Committee Meeting Minutes

Tuesday, January 12, 2021 – 7:30 p.m.

*Virtual Meeting Pursuant to Governor Baker's March 12, 2020
Order Suspending Certain Provisions of the Open Meeting Law*

Present: Jaki Apsler, Jonathan Dwyer, Jim Henderson, Pete Hussey, Audrey Kalmus, Rich Rosenbaum, Dan Pereira

Absent: Adam Hogue, Pete Montero

Guest: Jim Hutchinson (Water Commission)

Ms Kalmus opened the meeting at 7:32pm and welcomed Jim Hutchinson, chair of the Water Commission, and provided context that CapCom does not have authority over Water Department capital projects. The department is funded by an enterprise fund with revenue from charges for water consumption. Mr Hutchinson added that he is here to take advantage of Lincoln's best practices for communication, project review, and advice from FinCom and CapCom processes. He noted that the Water Commission has approved what he will present.

Water Commission is considering long term options for sourcing its water, investigating the financial and logistical challenges of joining MWRA versus maintaining its own water treatment facility. It is not clear that MWRA will accept Lincoln, and Lincoln would be the first town to join for economic reasons and not for a lack of clean water. The water sourcing and treatment equipment is expensive, and with only 1800 customers in our small town, the multi-million dollar fixed costs are spread over a small user base. Joining MWRA would still require Lincoln to maintain its distribution system, requiring 1/2 of the current staff. The town awaits a report from consultants, due last month, that will enable the Commission to better understand the choices.

Project #1: New Town Well, \$420,000

Built in the 1940s, with work done through the years. Recently, the screen around the bottom of the well gets clogged very quickly, about every month or so, reducing the flow rate of the well. Multiple consultants agree there is no way to fix the current well.

Amount requested is still in flux, with vendors adjusting the bill of work to enable a more equal comparison between them.

If the town will not join MWRA near term, it will be best to maximize the use of well water to dilute the levels of trihalomethane (THM) in the water delivered to consumers. THM is a chemical created when organic matter interacts with chlorine. The levels of THM has been increasing over recent years, and has exceeded the state Department of Environmental Protection (DEP) limit. The town's wells do not have THM, so the more we use well water the more we can dilute overall THM levels.

Mr Hutchinson described the thinking process exercised by Water Commissioners, considering whether a new well is truly needed since there is a plan to reduce THM levels by installing equipment this summer that removes organics from the water. A new well is needed because 30-40% of the water used in the town is sourced from the well. It is a major contributor, and the current well clogs so frequently that it cannot maintain the desired flow rate. The previous superintendent and the plant manager want a new well soon. Perhaps the project could be deferred a few more years, but could be a problem in summer.

Project #2: Water Treatment Plant Residuals Handling and Neutralization Systems Upgrades, \$350,000

Equipment will be installed this summer to extract organics from the water, but regulations require treatment of the organics before they can be disposed of (dumped to percolate into the ground). The estimate, from Tate & Howard, is ballpark and not supported by an evaluation project. It is not a construction estimate. This upgrade would be required if the town does not join MWRA.

Mr Rosenbaum asked if chloramine was considered as a substitute for chlorine, as a way to lower THM levels. It was. Mr Hutchinson indicated that it was considered, but water treated with chloramine cannot be mixed with water treated with chlorine. The town's back-up water supply from Wayland is also treated with chlorine.

Project #3: Compressor replacement, \$25,000

The compressors enable automated manipulation of valves and controls in the plant, and have been in use since the 1990s with many hours. Maintenance costs have been escalating, and are about \$6000 per year. The plant has two compressors for redundancy. Original request was to replace both compressors, but Commissioners learned that one was heavily used and the other had many fewer hours. The heavily used compressor would be replaced, with the back-up remaining in place. It is rare to need both of them, and the equipment could be operated manually, if necessary.

Project #4: Interconnect Evaluation with Wayland, \$13,600

This is an engineering study. If Lincoln was unable to source water from the pond and the well, a connection with Wayland would be used. Currently, the untested plan is to connect a Wayland hydrant to a pump connected to a Lincoln hydrant. This study would define what a construction project would look like, should the Commission decide to construct a persistent connection.

Project #5: Water Audit, \$38,000

A water audit determines the amount of loss — leaked water — in the system. It compares the number of gallons pumped from water sources with the number of gallons delivered, as indicated by water meters. DEP has a leakage limit of 10%, but Lincoln has been above the limit since 2012 and has been higher than 20% in the past. Leakage last year was 12%. DEP requires the town to file a plan for reducing leakage below the limit, which the Department has made a concerted effort to achieve in the recent past by detecting and fixing leaks and better record keeping of gallons lost when hydrant flushing.

Mr Dwyer asked if there are gates and meters in the network to create sectors to better discern where leaking is happening? Mr Hutchinson noted that staff can trace water from the major junctions, but is unaware of intra-network meters.

Mr Henderson asked about the types of pipes used in the system, e.g. wooden, iron, etc. Mr Rosenbaum asked if the lead pipes will be replaced. Mr Hutchinson indicated that the system has every type of pipe, and it costs \$1 million per mile to lay new pipe. Mr Henderson asked if the pipes can be lined. Mr Hutchinson will ask staff about types of pipes, if any are made of wood or lead, and about lining.

Project #6: Storage Tank Evaluation, \$39,000

The Bedford Hill storage tank to be evaluated to determine its condition and if a back-up tank is needed. A 2018 study concluded that the tank is in 'ok shape' - not obviously leaking or looking like it will collapse any time soon. Mr Hutchinson wants the town to be prepared for this big asset's replacement when needed. The tank is actually larger than necessary, possibly 2x larger. Perhaps a smaller back-up tank is needed with a week's capacity to allow the big tank to be taken offline for repairs, or in an emergency deploy bladders that sit on the ground and can hold day, as suggested by Mr Henderson.

Having finished presenting upcoming projects. Mr Hutchinson inquired about the Committee's advice and standards regarding vehicle management. The Commission envisions replacing vehicles after 10 years. The oldest vehicles are a

2010 Ford Ranger (to be replaced with Ford F150), and a 2017 vehicle. The other two vehicles are leased. Typically, most offsite work requires only 1-person, so there is roughly 1 vehicle per distribution staff member, or 5 vehicles for the department. Basically the fleet will be from 2017-2021 model years. The committee's advice was to stretch the replacement schedule to 1 vehicle every 2 years, to pay attention to the condition of the leased vehicles to avoid penalties for damage upon return of the vehicle to the leasing agency, and to track maintenance and repairs of owned vehicles.

Ms Apsler moved to adjourn the meeting. Mr Henderson seconded the motion. The motion passed unanimously by roll-call vote.

Submitted by Jonathan Dwyer