



TOWN OF LINCOLN

WATER DEPARTMENT

MIDDLESEX COUNTY

MASSACHUSETTS

TOWN OF LINCOLN
WATER DEPARTMENT
16 Lincoln Road
Lincoln, MA 01773-6353
Phone: 781-259-2669

Water Commissioners Zoom Meeting

April 7, 2020, 9:00 AM

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

Pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, G.L. c. 30A, §18, and the Governor's March 15, 2020 Order imposing strict limitation on the number of people that may gather in one place, this meeting of the Lincoln Board of Water Commissioners was conducted via remote participation to the greatest extent possible. Specific information and the general guidelines for remote participation by members of the public and/or parties with a right and/or requirement to attend this meeting can be found on the www.lincolntown.org.

Zoom Meeting: <https://zoom.us/j/212533341?pwd=dy95L1hPOHhaRytZVG5JT2lhdGNkdz09>

Meeting ID: 212 533 341

Password: 010970

Dial by your location

+1 646 558 8656 US (New York)

+1 312 626 6799 US (Chicago)

Attendees:

Ruth Ann Hendrickson, Chairman

Jennifer Glass, Commissioner

Michelle Barnes, Commissioner

Colleen Wilkins, Finance Director

Jim Hutchinson, FinCom

Tom Sander, FinCom

Ryan Neyland, Tata & Howard

MaryBeth Wisner, Water Superintendent

Monica Kacprzyk, Administrative Assistant

Chairman Hendrickson called the meeting to order at 9:12 AM. She stated that this meeting will be recorded and posted on www.lincolntown.org for future reference.

1. Approve the minutes of February 25, 2020 – vote expected

Commissioner Glass made a motion to approve the minutes for the February 25, 2020 meeting as amended.

Commissioner Barnes seconded the motion. Roll call vote: Hendrickson, Aye; Glass, Aye; Barnes, Aye.

2. Approve the minutes of March 10, 2020 – vote expected

Chairman Hendrickson requested that all track changes mark-ups are shown when the meeting packet is sent out to the group. Commissioner Glass made a motion to approve the minutes for the March 10, 2020 meeting as amended.

Commissioner Barnes seconded the motion. Roll call vote: Hendrickson, Aye; Glass, Aye; Barnes, Aye.

3. Discuss Annual Consumer Confidence report - vote expected

Chairman Hendrickson asked Superintendent Wisner to display the most recent version of the Annual Consumer Confidence report with edits from Ms. Hendrickson and Ms. Glass. Ms. Wisner displayed the document on the Zoom meeting screen. Ms. Hendrickson suggested deleting a repeat sentence on the second page: "The Water Commission is committed to providing safe, reliable, and high-quality water service for its customers." Next, under the section titled "Lincoln's Drinking Water – A Well-Protected Source," Ms. Hendrickson suggested editing the second sentence to read, "Flint's Pond is the primary year-round supply and the Tower Road Well is a secondary source used as needed." Lastly, Ms. Barnes recommended editing the section on turbidity to read "Turbidity itself has no health effects." As there were still editorial changes to be made in merging the comments from Glass and Hendrickson, the Commissioners authorized Commissioner Hendrickson to review and approve the final document.

Commissioner Glass made a motion to appoint Ms. Hendrickson as the final arbiter for edits and comments from the group. Commissioner Barnes seconded the motion. Roll call vote: Hendrickson, Aye; Glass, Aye; Barnes, Aye.

4. Discuss Lincoln Water Department Rules and Regulations – vote expected

Superintendent Wisner displayed the most recent version of the 2020 Lincoln Water Department (LWD) Rules and Regulations on the Zoom meeting screen. On page 34, Superintendent Wisner requested the Water Commissioners' approval to raise the prices for after-hours work and water service operation fees to cover wages of the highest paid employee for call-out. She added that the new price would be \$250 per staff member for the first hours outside of normal work hours, and \$70 per hour per person for every additional subsequent hour. The Water Commissioners approved the fee increase, effective April 7, 2020.

Ms. Glass inquired if there are any requirements regarding notification for fee increases. Ms. Hendrickson responded that there are no requirements, but it would be considerate to put a notification on the LWD webpage regarding the fee increases. Ms. Wisner agreed to post a notification on the webpage once the fees are finalized. Next, Mr. Hutchinson recommended changing the usage levels on page 33 to "All usage levels." On page 32, Ms. Glass recommended adding an explanation of how the base charges are applied to end users in multi-unit dwellings. She added that Ms. Wisner could use the language from Annual Consumer Confidence report for reference.

Commissioner Glass made a motion to appoint Ms. Hendrickson as the final arbiter for edits and comments from the group. Commissioner Barnes seconded the motion. Roll call vote: Hendrickson, Aye; Glass, Aye; Barnes, Aye.

5. Discuss to authorize the Water Superintendent to sign on behalf of the Board of Water Commissioners Board of Water Commissioner's approved contracts during COVID-19 – vote expected

Superintendent Wisner requested guidance from the Water Commissioners on the new process for signing warrants and contracts amid COVID-19 social distancing protocols. Mr. Hutchinson suggested that each Water Commissioner review and sign the necessary documents, and then scan and email them to Ms. Wisner. Ms. Wilkins commented that the law states that one designated person can sign for the Water Commissioners, but the designated person needs to report back to the Commissioners in a meeting. She added that the signing of contracts and signing of warrants are governed by different regulations. The Water Commissioners agreed to have short Zoom meetings for the approval of contracts that require signatures, and as a follow-up, each Water Commissioner will send a signed copy of the contract via email to the Superintendent Wisner.

6. Discuss Water Department Operations during COVID-19

Superintendent Wisner provided an update on Water Department operations during COVID-19. Ms. Wisner shared that the department has one operator per day at the water treatment plant due to social distancing protocols. She added that another operator is doing distribution work, but both operators are on a staggered work schedule to avoid in-person interaction. Ms. Wisner also shared that sampling protocols have changed due to less access to certain sampling sites. She added that the department is seeking guidance from the Massachusetts Department of Environmental Protection (DEP) and

Environmental Protection Agency (EPA) on sampling protocols. Ms. Wisner continued that the department has a protocol for customer inquiries, including a list of questions to ask customers in case an operator needs to do an emergency house visit. She added that the department is trying to help customers as much as possible through remote troubleshooting and talking over the phone or email. Ms. Wisner commented that she received 10 N95 masks from the police department that the operators will use if needed, and each Water Department vehicle is equipped with a disinfection kit. Lastly, she added that the operator on duty sends a daily email update to the whole department so that everyone has the most up-to-date information.

Mr. Hutchinson asked if the operators know how to use a N95 mask. Ms. Wisner responded that she showed one person how to use the mask, and she plans to send a how-to video to the other operators. Next, Ms. Barnes asked if requirements were waived by the DEP or EPA regarding having more than one person onsite at the water treatment plant. Ms. Wisner responded that EPA is requiring all water supply systems to submit sampling on time. She added that the department's reduced staffing plan was approved by the Section Chief at MassDEP. Lastly, Ms. Wisner mentioned that the DEP is encouraging all operators whose licenses had expired on December 31, 2019 to reapply for their licenses and be available as back-up operators in case any town's system is short-staffed.

Commissioner Hendrickson commended Superintendent Wisner for implementing a thorough operations plan to see the Water Department through the COVID-19 pandemic.

7. Discuss Source Protection for Flint's Pond COVID-19

Superintendent Wisner shared her concerns about people kayaking and canoeing on Flint's Pond, the main drinking water supply for Lincoln. She noted that there are more cars parked on Sandy Pond Road near the pond and there have been more incidences of people trespassing since the weather is nicer and COVID-19 social distancing protocols began. Ms. Wisner asked the group for suggestions on how to better address source protection at this time.

Mr. Hutchinson recommended enlisting help from residents and putting out a public reminder in LincolnTalk or the Lincoln Squirrel. He wondered if we should enlist residents' help with informing anyone who is inappropriately accessing the pond of the rules. Ms. Wisner noted that the police recommend not confronting anyone and to instead notify the police. Ms. Hendrickson commented that this is a perennial problem and we're never going to fully keep this under control. She added that the best we can do is minimize the number of visitors and spread awareness about the no trespassing policy.

Mr. Hutchinson and Ms. Glass agreed that the department should post reminders to residents and emphasize that this is for everyone's health and safety. Ms. Barnes added that the Trustees of Reservation have closed all trails during this time and put up physical barriers to reduce traffic. She offered to talk to the Conservation Commission about putting up more signage and reducing people's usage of the pond. In addition, Ms. Hendrickson offered to write an article for LincolnTalk and the Lincoln Squirrel. Ms. Barnes mentioned that these publications will only target residents and some are visitors from out of town. She added that the best we can do is put up larger signage and barriers to access the pond.

8. Jim Hutchinson to discuss the SCADA system – vote expected

Mr. Hutchinson asked Superintendent Wisner to display his overview regarding the evaluation of the SCADA (Supervisory Control and Data Acquisition) system replacement project. Mr. Hutchinson stated that Tata & Howard presented a proposal to the LWD to upgrade the water treatment plant's SCADA hardware and software, but the estimated cost of \$400,000 seemed high considering the large expenditures on capital projects already occurring in the Department. With permission from the Water Commissioners, Mr. Hutchinson spoke with Ms. Wisner, Mr. Neyland, Matt Palardy from R.E. Erickson, and Lincoln's water treatment plant operators to identify a lower cost option, potentially in the range of \$55,000-\$60,000. This lower cost plan would be enough to 1) secure spare hardware units this summer that could be swapped in if current units fail, and 2) reprogram the existing SCADA software to adequately address the current challenges for the water operators. He added that if we could pursue this approach for the next two years, then we could defer the bigger investment until after we've decided on a longer-term plan for LWD. Mr. Hutchinson requested the Water Commissioners' permission to continue discussions with vendors regarding this lower cost approach.

Mr. Hutchinson highlighted the current SCADA issues:

- 1) There were too many people editing the software over the past few years that resulted in software inconsistencies and an increased cost to fix the software. He added that it's still possible to fix the software for an increased price.
- 2) There is a problem with the backwash process that was largely fixed by Dupont. Ms. Wisner added this issue is not completely fixed yet.
- 3) There is a fragile approach for controlling pH. Currently the SCADA system controls pH by setting the flow rate of sodium hydroxide based on readings from a pH meter. This works fine if the pH meter gives correct readings, but it can go haywire quickly if the pH meter fails or is mis-calibrated. Mr. Neyland pointed out that to satisfy DEP reporting, operators are required to bench test the water pH daily and should recalibrate the continuous pH meter appropriately, but he agreed that a "flow to pace" approach is more robust and thus preferred. Mr. Hutchinson shared that Mr. Palardy said that this can be done with a programming change.
- 4) Currently the setpoint for the turbidity alarm is set high (above 1.0) to avoid triggering alarms on these spurious readings, but this level should be lowered so appropriate alarms will get triggered during periods when the water treatment plant is online. Mr. Hutchinson shared that Mr. Palardy says that he can adjust the programming so that the alarm is conditional on the water treatment plant being online.
- 5) Alarms are handled inconsistently and are difficult to reset. Mr. Palardy recommended rerouting 22 "old alarms" that are normally sent to Lexington Alarm and sending them to the main PLC for more consistency.
- 6) There is not enough documentation on what the alarms mean, and inconsistent terminology used in various SCADA screens. Clean-up work is needed on the handling of alarms and alarm explanations.
- 7) The operators shared that it is time-consuming to manually extract data needed for monthly state reports. Ms. Wisner noted there is a spreadsheet that helps record necessary readings, and she believes this issue likely doesn't need any action other than getting all operators to follow the current procedure. Superintendent Wisner explained that there is already an easy method to extract the data to Excel that streamlines this activity. She will train the operators on how to use it.
- 8) The SCADA program for the Tower Road Well has no documentation and needs to be rewritten for the well and tank, but this will be done as part of the existing upgrade project for the Well.

Mr. Hutchinson requested the Water Commissioners' permission to continue discussions with Mr. Palardy and Mr. Neyland regarding his lower cost approach. He added that he already received a proposal from Mr. Palardy at R.E. Erickson for about \$40,000, but Mr. Palardy used retail pricing and included warranties on the parts, which may not be valid. Mr. Hutchinson said that he priced out all the equipment on the used parts market for a total of ~\$3,000 for 14 items, and he hopes that the total project cost could be less than \$60,000. Mr. Neyland expressed his reservations about using used parts and explained that R.E. Erickson might not want to be involved if used parts are used due to company policies or contractual restrictions which may then prohibit them from being able to guarantee their work.

Mr. Hutchinson argued that if we could live with this approach for the next two years, the \$27,500 - \$30,000/year cost would be similar in magnitude to the \$26,667/year amortized cost of the full replacement project, assuming a 15-year usable lifetime. Ms. Barnes commented that the \$60,000 could be wasted nonetheless if the department is trying to create a bridge to the Massachusetts Water Resources Authority (MWRA). She added that more financial analysis is needed to determine the cheaper net present value of the various long-term solutions (repair the water treatment and delivery system, replace it or switch to MWRA) and capture the economic benefit of using MWRA in two years' time if that is the route we are likely to choose. Ms. Hendrickson asked Mr. Neyland when the MWRA analysis will be completed. Mr. Neyland responded that the MWRA evaluation is scheduled for FY21 and the agreement starts in July 2020. Mr. Hutchinson recommended not making bigger capital investments than needed at this time due to the uncertainty about the long-term solution and to the number of recent requests made by the Water Department. Ms. Glass asked if it's possible to separate two pieces of the project – the programming component and the spare parts. Mr. Hutchinson responded that it might be better to keep the two parts as one project so that they could better negotiate costs with R.E. Erickson, who will be doing most of the work.

Commissioner Glass made a motion to authorize Mr. Hutchinson to continue investigating his lower cost option and report back to the Water Commissioners. Commissioner Barnes seconded the motion. Roll call vote: Hendrickson, Aye; Glass, Aye; Barnes, Aye. Mr. Hutchinson added that the list of software changes needed shown in his written evaluation

will be a starting point for a second round of discussions with the water treatment plant operators, and the actual plan should prioritize software changes based on their feedback.

9. Discuss the Safe Handling and Storage of Chemicals at the Water Treatment Plant bid results (2018 Sanitary Survey Deficiency)

Mr. Neyland shared the bid results for the Safe Handling and Storage of Chemicals at the Water Treatment Plant. He said that Tata & Howard received two sub-bids for electrical and plumbing. He added that the general bids came back with prices higher than expected, so they asked the bidders for a price breakdown. Mr. Neyland explained that the increased cost came from a few components that were added to the project scope: sodium hydroxide system, containment coating/liner in case of a leak, new coding system, new emergency shower and electric water heater, and additional electric costs for miscellaneous items. In addition, for some projects, the bidders would have to build two systems side-by-side: one temporary system and the other permanent system. Mr. Neyland said that they can reduce costs by eliminating the need for multiple temporary systems. He added that the Water Commissioners have two options: 1) request additional funding for the project, or 2) modify the project scope and rebid. Mr. Neyland added that the bid specifications were designed as efficiently and frugally as possible. He added that there is nothing that Tata & Howard included in the project scope that is not required by the Sanitary Survey, DEP, or OSHA. He reminded the group that the original appropriation for this project was \$500,000 including \$79,400 for engineering. He added that the bid pricing range received was \$532,000 - \$698,000.

Mr. Hutchinson asked about the impact of COVID-19 on the contractors' workloads. Mr. Neyland responded that work is ongoing for public water systems and there is no cost impact of COVID-19 on the contractors as far as he knows. Mr. Hutchinson also asked for how long the current bid is valid, and Mr. Neyland responded that normally bids are valid for 30 days, but they can request the general bidders and sub-bidders to hold the bid price for longer if needed. Ms. Glass noted that Town Meeting is scheduled for no earlier than May 30, and the Water Commissioners cannot accept a bid until they get Town Meeting approval for additional funding. Mr. Hutchinson added that the only option available until a town meeting was held would be reducing the project scope and rebidding. Ms. Wisner noted that nothing in this project is a "nice to have" and everything is required except for the caustic system. Mr. Neyland advised against rebidding because D&C Construction was the low bidder in this round, and they don't know who will bid again. He added that all bids are public, so the bids in the second round may be skewed.

Ms. Barnes asked if the cost of labor has increased with social distancing protocols. Mr. Neyland did not comment on the cost, but he said that this was not an issue at the time of the bid. Mr. Sander asked about the costs of rebidding, and Mr. Neyland responded that the bidding process itself costs between \$5,000-\$6,000, so the total cost including design modifications to the proposal would be \$10,000-\$15,000. Mr. Hutchinson asked if Tata & Howard would do the additional work without increasing the price since the bids were higher than Tata & Howard estimated. Mr. Neyland responded that this is not typical practice for Tata & Howard, and he would need to consult with the President of the company. Mr. Hutchinson asked about staging the bulk tank and day tank replacement for a later date. Mr. Neyland responded that it would double the cost of the tank replacements and it's more cost efficient to do it alongside the larger project.

Ms. Glass commented that in the long term, the Water Commissioners plan to look at the larger capital projects from a whole system perspective and weigh whether we should build a new plant, join MWRA, fix up the old system, etc. She wanted the group to consider what the monetary tipping point is such that the LWD has spent so much money that it's committed to one path. Ms. Barnes asked what in this project is required by regulatory authorities, and Ms. Wisner responded that everything but the day tank and bulk tank replacement is required. She added that this project is overdue, and we need to send a letter to DEP for an extension.

Ms. Barnes asked if we could take money out of retained earnings if we accepted the bid and asked the bidder to remove the tank replacements. Mrs. Wilkins responded that you would still need approval at Town Meeting to take funds out of retained earnings. She added that you can't accept a bid until you have money appropriated. Ms. Glass commented that it's the same amount of time to rebid as it is to wait until town meeting for more funding. Mr. Hutchinson recommended

reducing the scope and rebidding and he offered to review the scope with Mr. Neyland. He added that additional funding from the town is not guaranteed, and appropriating more money is still on the table regardless of whether we rebid or not.

The Water Commissioners accepted Mr. Hutchinson's offer to review the scope with Mr. Neyland and Ms. Wisner with the intention of rebidding to bring us to the current project budget. In addition, Mr. Neyland and Ms. Wisner agreed to ask the lowest bidder to hold their bid. Mr. Neyland noted that to rebid, \$10,000-\$15,000 would need to come out of the current project funding, so the requested bid total would be less than the original amount. Mr. Hutchinson recommended rebidding if we have reasonable feeling that we will be below the budget minus the cost of rebidding. He added that there needs to be significant enough projected savings to make it worthwhile to go through the rebidding process. Ms. Glass recommended asking for a bid price extension until the next Town Meeting, currently scheduled for May 30, 2020. Mr. Hutchinson recommended the Water Commissioners meet on April 14, 2020 at 9:00 AM to continue discussions on this project.

10. Other Business

Ms. Barnes asked the Water Commissioners to consider equity issues around the rate increases considering the current COVID-19 climate. Ms. Glass noted that there is a state circuit breaker program available to homeowners over the age of 65 that takes property taxes and water bills into account. Ms. Barnes recommended adding a link to the state program on the Water Department website. Ms. Glass agreed to send the appropriate links to Ms. Kacprzyk to post on the rates webpage.

There being no further business, the meeting adjourned at 11:49 AM. Motion made by Commissioner Glass, seconded by Commissioner Barnes. Roll call vote: Hendrickson, Aye; Glass, Aye; Barnes, Aye.

The next meeting of the Water Commissioners is scheduled for April 14, 2020 at 9:00 AM.

Respectfully submitted,

Monica Kacprzyk, Administrative Assistant