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**MEETING OF THE ORLEANS  
BOARD OF WATER/SEWER COMMISSIONERS  
May 18, 2022**

The Board of Water and Sewer Commissioners held a Hybrid meeting on Wednesday, May 18, 2022 to conduct regular business:

Those present were Alan McClennen, Robert Rich and Herbert Kinney of the Board; Len Short and Mark Berson, Associate Members of the Board, Todd Bunzick and Susan Brown of the Water Department, Tom Daley, Director of Public Works and Natural Resources, Amy Hunter and Tim Harrison from AECOM, Lynn Bruneau, liaison from the Finance Committee and Kevin Galligan, Select Board liaison. Absent was Richard Hartmann and John Meyer of the Board. Len Short and Mark Berson acted as voting members in their absence.

Alan McClennen called the Board of Water and Sewer Commissioners meeting to order at 1:00 p.m.

MINUTES

**On a motion by Leonard Short seconded by Mark Berson, the Board voted to approve the minutes of the meeting of April 20, 2022 as submitted.** The vote by the Board was 5-0-0.

WATER DEPARTMENT REPORT.

DRINKING WATER AWARD

The Orleans Water Department was the recipient of the 2021 Massachusetts Public Water System award for outstanding performance. Tom Daley, Calvin Sutton and Todd Bunzick received the award at a ceremony on Tuesday May 10, 2022.

RESIDUALS PROJECT

John Kelly submitted a notice of intent to award the \$1,469,765.40 contract to Robert Our and asked if they would hold their price until the Fall Special Town Meeting.

CANAL WATER MAIN PROJECT

The 6" on Canal Rd from Jones Rd to Wendy's will be completed and pressure tested on Friday May 20<sup>th</sup>. After satisfactory bacteria samples have been received, Robert Our will begin the process of connecting water services. Most likely beginning the end of May.

MEMBRANE FILTER REPLACEMENT

The filters for the first two racks were received on April 13, 2022. Lance Benjamin, Pall Corporation sent a request that was approved by John Kelly to provide assistance with the filter change-out and a site visit at no charge (savings of \$8,450) in exchange for the old filter cartridges which they plan to recycle.

## FLUSHING

Flushing was completed on Monday May 9<sup>th</sup>.

## ROUTE 28 BRIDGE SUPPORT PROJECT

The contract was awarded to EM Lofgren of Hull, MA in the amount of \$39,393.05. Due to this being a State Road, work will not begin until after Labor Day 2022.

## EYE ON WATER

Susan reported that Sara Eaton was holding Community Workshops on navigating the new Town Website and assistance with signing up for Eye On Water in the Crane Room at Snow Library on May 13<sup>th</sup> & 20<sup>th</sup> and June 3<sup>rd</sup> & 17<sup>th</sup> from 10:30-12:00.

## NEW BUSINESS

### COMMITMENTS/ABATEMENTS/REFUNDS

**A motion was made by Leonard Short seconded by Herbert Kinney to commit for the month of April 2022 to rate \$408,850.16, to installations \$0.00, to services \$880.00, to usage \$0.00 and to added billing \$173.98. The vote by the Board was 5-0-0.**

### STANDBY, 10 AREYS LANE

**A motion was made by Leonard Short seconded by Herbert Kinney to approve standby status for account #5095 at 10 Sparrow Lane. The vote by the Board was 5-0-0.**

### TOWN WORK ORDER

A standby charge was inadvertently added to an account created specifically for work-orders not assigned to a specific account.

**A motion was made by Leonard Short seconded by Robert Rich to abate \$10.00 from account #0. The vote by the Board was 5-0-0.**

### REFUND, ACCOUNT 4664

Mr. Sheehan mistakenly sent a \$2,460.00 check intended for ATR Landscape to pay his water bill in the amount of \$58.42.

**A motion was made by Herbert Kinney seconded by Leonard Short to refund \$2,401.58 to Walter Sheehan in Westfield, MA. The vote by the Board was 5-0-0.**

## OLD BUSINESS

### SEWER USE RULES AND REGULATIONS

Susan Brown provided the Board with proposed changes to Section 2B and Notes 1. Of the Sewer Use Rules and Regulations for review.

## WASTEWATER

See attached by AECOM for the minutes related to wastewater.

## ADJOURNMENT

**On a motion by Herbert Kinney seconded by Robert Rich the Board voted to adjourn the meeting at 2:42 pm.** The vote by the Board was 5-0-0.

## LIST OF DOCUMENTS USED

1. Draft Minutes April 20, 2022
2. April 15, 2022 letter from The Massachusetts Department of Environmental Protection regarding notification of Drinking Water Award for 2021.
3. Photograph of Calvin and Todd accepting award
4. Notice of intent to award WTP Lagoon upgrade/Replacement Project to Robert Our
5. April 26, 2022 email to John Kelly regarding proposal from Lance Benjamin of Pall Corporation.
6. Commitments April 2022
7. Standby request, 10 Sparrow Lane
8. Abatement request, Account #0 Town of Orleans
9. Refund request bill #261173
10. Proposed changes to Sewer use Rules and Regulations page 43 and page 66.
11. Copy of May 11, 2022 Tighe & Bond presentation

The next regular meeting is scheduled for June 15, 2022 at 1:00 pm.

Secretary, Board of Water/Sewer Commissioners

**Board of Water/Sewer Commissioners  
Meeting Minutes**

**Part VI. Sewer Update**

**Meeting Date**  
May 18, 2022

**Meeting Location**  
Nauset Room, 19 School Road, Orleans, MA 02653  
Webinar: <https://us02web.zoom.us/j/82864206038>

**Project No.:** 60587515

**Attendees**

BWSC Members: Alan McClennen, Robert Rich, Leonard Short, Herbert Kinney, Mark Berson  
Town of Orleans: Todd Bunzick, Susan Brown, Lynn Bruneau, Kevin Galligan  
AECOM: Tim Harrison, Amy Hunter, Nicholas Broderick

**Time Meeting Convened** *(by Alan McClennen)*

1:00 PM

**Time Meeting Adjourned** *(by Alan McClennen)*

2:44 PM

**Summary of Discussions** *(Prepared by Nicholas Broderick)*

**1. Background**

- a. The purpose of Part VI of the Board of Water/Sewer Commissioners (BWSC) meeting was to provide an update on the Town of Orleans sewer work including contract 2019-01 Wastewater Treatment Facility and Effluent Disposal and contract 2019-02 Downtown Area Collection System and Pumping Stations.
- b. This was posted as an open meeting beforehand, and the public may attend if desired.

**2. Discussion**

- Tighe & Bond Quarterly Update – Ian Catlow
  - Ian Catlow: This is the May quarterly update for progress with the collection system and treatment facility upgrade project. We're doing pretty well with respect to progress here we're at 75% of budget on the treatment plant and 73% on the collection system. These numbers are catching up with the amount of contract time expended. We're at 95% of the contract time on the plant, and 81% on the collection system. There is obviously still a considerable amount of fee to be expended in a relatively small amount of time at the treatment plant. And you know there'll be more on this in subsequent slides. But it's clear that we are going to go past our contractual end date and right now we're estimating that that will probably have us finishing up in September or thereabouts. Collection system conversely is doing really well and they'll finish before their contractual end date, which is actually in September. There's been limited change orders to date actually I'm only reporting out on change orders at the treatment plant during this last quarter. We'll talk about those in more detail shortly. And then, as usual, just kind of kudos to Amy and Tess over at AECOM and the folks over at the town who make the website updates possible there is a new town website so I've updated the address here for folks who might want to check in on it and are watching it. So, we'll move on to collection system progress. First, gravity sewer is now essentially all complete in

terms of main line sewer installation. I believe there might be a few services still going in. Nearly all of force main is complete. If not all of it as of this week and paving is ongoing. There will be some paving that really ends up occurring in the fall, due to that 90 days that needs to occur after trenches are dug for things to settle out. But making great progress on the pipeline work. Pump stations, we have kind of some similar comments across all 3 pump stations here. Progress since the last update at Pump Station one includes the generator that has been set but we're waiting on some, variable frequency drives for the pumps. These are drives that allow the pumps to have been at different speeds and have kind of a varied output. If you're not familiar with that at pump station 2 over to the library the generator has been set there along with the control panel. And again, we're waiting on variable frequency drives for that site. At the right of this slide I'm showing a landscape plan that AECOM recently finalized for the library. And yeah, you can see the pump station is now moved into this nicely little landscape, I almost call it like a landing area for equipment. And pump maintenance and now there's kind of a small meandering path that is ADA accessible and goes down to the lower area here. That's gone through the select board and I believe AECOM is going to be putting some posters to this out at the library, so patrons can check it out as well. Pump station 3, the generator is set there as well and again, we're waiting on variable frequency drives. So, and I know AECOM has been looking into this with Robert B. Our and they're trying to evaluate some alternate suppliers for these drives enough so we have everything ship shape and ready to go in time for an August pump testing/startup. Moving over to the wastewater treatment facility. The roofing is complete on all buildings on the site then siding work is in progress. There's really a lot of work going on inside the buildings now, which isn't really shown quite as well from these great aerial photos that Daniel O'Connell's has been providing, but that interior work includes a substantial amount of plumbing, electrical and HVAC work, as well as process piping. Kind of a notable milestone here is that, if you look at the picture lower, right, pretty much all of the electrical switch gear has been landed, and as of last week the electrician was pulling conduits out to a transformer and over to the backup generator. That was great to see. This kind of the ongoing equipment review and coordination that we've had you know, throughout the project. But instead of focusing solely on shop drawings and RFIs, now we've really moved on to coordinating startup activities. So, what I've highlighted here is this been kind of ongoing series of meetings around the Scada system. This is the computer and control system that makes the pumps run when they're supposed to and adjusts blowers that make the process work. There's also a better amount of coordination with Ron Collins over at the town to make sure that the access gates and alarm system are working as intended, and you know, accommodate the emergency service personnel. The same story we've reported in the past about minor delays largely related to supply chain issues remains true from here. And actually, it's a lot of the same things you know the over control ducts that we were reporting on last quarter. They have finally shown up along with a number of HVAC items. But it's kind of the delay has occurred, and it's you know it's impacted things. so that it's tough to make that time up at this point. There's a design that's been going back and forth between AECOM and O'Connell's as well that seems to be resolved and moving forward there in this you know some other small things that have contributed to delays. But overall I feel like the contractors have been putting in a good effort to try to anticipate problems before they occur. And make sure that the materials he needs, and the labor needs are there. One last building at the treatment plant site. Here is the equipment, storage facility, this is a picture from last week in the upper right, as you can see, the building is pretty much fully clad in siding garage stores are open windows are in the stone veneer is on, it's waiting on a little cupola for the roof, I believe, but it's in pretty good shape on the outside. On the interior some heating rough in work that's been completed but they're still waiting on dry wall and a bunch of other electrical work that's in progress. Across the site looking at the sequence batch reactor or SBR tanks, we got a picture in the lower right here of the miscellaneous metal subcontractor. I believe he's putting on some railing there that work is ongoing. And Daniel O'Connell's has been essentially providing a rob and grind finish on the concrete. And this kind of gets rid of a bunch of these form lines that you see in the photo here at right. It gives it a remarkably smooth looking finish. I think they've done some commendable work in that regard. Cycling through the kind of time sequence of photos that we often do for the quarterly update. This is back to February of 2021 or just coming on the hole here and putting a map foundation in. April of last year we had foundation walls up. July of last year, there was more foundation walls and some first floor slab, and you can see the equipment, storage, facility, background, thanksgiving of

last year. Again. Equipment, storage facility was starting to come out of the ground, as was the main treatment plant building. Back in January we had a roof on the treatment plant, building and the equipment storage, and here we are today. The roof on everything. Then, as I said, things are getting pretty well closed up, pretty weather tight, and the work has largely moved inside, with the exception of some siding. Moving up to the Wick well site, last time I presented I think we were kind of doing a lot of hand dragging because contractor had been on site for about 6 to 8 weeks, and he had only successfully installed one Wick Well, and we said if he continues at this pace this is going to be a schedule killer. Shortly after that time contractor mobilized this piece of equipment down in the lower right here, which is called an oscillator. And this was kind of a game changing piece of equipment to have on site, and it essentially acts as almost a pair of vice grips that can grab one of these large pieces of well casing and it can kind of turn it from side to side simultaneously while it lifts it. Which the other equipment on site just kind of lacked the power to do that. This machine had it. So once this piece of equipment was brought on site production really increased, and at this point all 5 wells have been installed. And of the monitoring wells that will ultimately be used around those wells for measuring compliance essentially. Those have also been installed. and There's been some rough site grading and restoration work in progress. Contractor still has a fair amount to do in terms of getting everything tidied up. But this is great news there's actually I believe testing going on this week on at least

- o Todd Bunzick: They started putting water down the well for testing this morning.
- o Ian Catlow: Yeah. So, in terms of a construction update, we had a change in the value of contracts 2019-01, which is the wastewater treatment facility contract. We'll talk about that in more detail in the next slide but the value of contract number 2 for the collection system work remains static as we didn't process any change orders this period. we're still carrying roughly, 2.5% of project cost in terms of available contingency funding, which seems good at this point in the project. We're out of the ground, a lot of the risk associated with digging the whole and installing those which well seems to have passed at this point. I guess you know the change from last time to this time is has dropped our contingency from about 2.7 to 2.5% of project value. So, we're still in in good shape here. Looking in more detail at the change orders that that we've processed change order 7 on the wastewater treatment facility project was approved in the last 3 months here. that had a net increase of just under \$80,000. It included deduct actually for, some drain changes. But that was more than eaten up by cost increases, associated with septage, receiving garage overhead door, and a change there. There was some gable and sheathing that was submitted from the original plans that was installed on a time and materials basis. Through this change. The bathroom wall tile that was added to kind of make the fit out in the bathroom a little more consistent across the space. And then there's a Bay ridge force main extension that was also included in that. There are a few pending change orders that we're still keeping our eye on. some are we have a rough order magnitude on, and some are still waiting on more information from the contractor. There's some site drainage and entrance gate changes that we think could be around \$20,000. The driveway grading in front of the plant is getting modified slightly that could be more substantial at around \$80,000. And then there's kind of some feedback from the contractor that the wick well installer or the well driller maybe looking for changes, but those values are still to be determined, and I believe, the general contractor is looking for some change money for changes to the cupola on top of the equipment storage facility, and think more importantly, the process building. So those will be something we'll be keeping an eye on over the next few months here. In terms of the collection system, again no change orders process. This period some pending change orders one associated with library law improvements around \$20,500 There's a small upgrade to the control panel at pump station one that's under consideration. That was just under \$14,000. And then this item for Pump Station 2 vent relocation, this has been essentially settled, I think for far less, if anything. This was, about having the vent as close to the street as it is, and it being somewhat of an eye sore, but I think this was ultimately mitigated, you know, in concert with that landscaping plan and some other changes that AECOM made to reduce cost. So, moving on to essentially last slide, our contract operations procurement process kind of ran its course, and selected Suez, which was subsequently bought out by Veolia water North America. So, we're getting all the same folks that we met during the interview process. But they were in different t-shirts now that they've been bought by Veolia. The operator for Veolia has been on site, and he's observing pumps and blowers, and you know

other pieces of process equipment and HVAC gear and electrical gear that are going in and it's been good he's kind of seeing how everything fits together and providing feedback where he thinks something might be better if it was altered a little bit or if it was done slightly differently. There's been a lot of ongoing coordination, and we'll continue to be over the next 3 months related to planning activities that Veolia needs to do under their contract. One of those things includes development of a safety plan. We want to make sure that that's in place before they start taking water into the facility. They're developing an asset inventory of every piece of equipment inside the plant, so that they can log it and make sure that they're oiling it or adjusting it in accordance with manufacturers requirements for service. There's ongoing state of coordination that I mentioned earlier, where the operators are participating now in meetings with the system integrator to make sure that control systems meet their needs. And then there's work on emergency operations plan. Overall equipment startup is tracking a little behind. Maybe where we want it to be, but I think they, as we move into June and permanent power, is livened up at the facility, will probably start testing out some of the mechanical equipment at that time.

- Mark Berson: You mentioned the computer system that essential runs the system, are there any provisions as the cyber security of that system?
- Ian Catlow: Yes, there's been coordination with the town's IT department to make sure that it meets the town standards in terms of access. There's you know, everything ends up being password protected. Obviously, the operators work through a system of having each operator has his own login credentials or her own login credentials, so that they can see who changed what and when. I open it up to Tom Parece to say, where did we end up in terms of kind of remote visibility on things versus remote control of things within the plan?
- Tom Parece: They're still working on that there are some firewalls that are also to be added, in addition to the password protection that Ian had talked about, and there's some discussion on what things can be done remotely. I guess I'll say and not physically at the plant. Again, either dialing in or going on for the computer to operate certain pieces and key pieces of equipment. The remote stations were one that Veolia brought up. Is it like to be able to go in there and if they see something abnormal going on, they can then go online remotely and trying to pump on it trying to pump off on that type, of stuff. So, they're in the midst of working all those details of which ones and which level of security in order to operate those things and make sure somebody that shouldn't be getting into it can't get into that.
- Alan McClennen: At weekly meetings, there's a list that Dan O'Connell's presents to us, where every piece of equipment is, and how many days there are before it comes on site. You can tell when you've got a problem on a piece of equipment that's going to impact other things as well. So I don't know where it will be tomorrow but mid-august to late August is where everything is supposed to be there. We've got our fingers crossed and sort of they've been doing a great job of bird-dogging stuff.
- Water & Sewer contractor approved list procedures
  - Tom Daley: In the last month or two, we started to get requests from contractors to be on the approved list. Contractors are listed in the wastewater rules and regulations, which got us thinking about it a little bit, moving forward. Let me just back up with a little history and I'm going to give you a short term, medium term, and long-term recommendation on how to proceed. And obviously it's up to you guys how you want to proceed. We were doing the sewer use rules and regs (SURR) a couple of years ago, and one of those things was we need a list of approved contractors similar to the water department, and so we incorporated it into the SURR. We wrote these rules and regs and talk about how, if you are a contractor, you need to be on our list. We modeled that somewhat after other communities. I got a copy from Sue the requirements to be licensed for water work. And then I compared that to our SURR. So, we have the same insurance requirements. They need to be the same, they have to submit certificates of insurance. That's all the same that's great, let's see what else. Todd goes out, inspects the equipment, you know we get an equipment list and Todd goes out, inspects that and we're already doing that for the wastewater contractors. Wastewater requiring a \$20,000 annual bond, protect the town against as it says the town against damage to existing public roadways or property. We do not do that in a water department. Okay? We do in

wastewater require them to submit their cdl licenses and their hydraulics licenses. So far, we don't do that in the water department. The water department does check references even though it's not in the rules and regs. They do go out and check references, and we also require that in the wastewater. And then the last thing is on the wastewater we require a \$100 application fee, if you want to be on the drain ways list, it's a \$100 application fee. There's no charge from the water department. So where we begin now is, we have an existing list of contractors that have been on the water list, you know, for years, or whatever, and they haven't had to pay a fee, to get on, and this and that, they do annually re up. They have to submit insurance to stay current. Now recently Dig-it came in, and I have, we're going to talk about their application later on the agenda which is ready to go. And they wanted to get on the list, and we sent them the requirements and Ed from Veolia and I put together, a checklist, basically an application form for drain layers. They filled it out, they submitted their insurances, they submitted the bond, they submitted the \$100 fee and we went out, inspected the equipment, checked the references, etc., ready to go. So, what happens now? The wastewater rules and regs come January one. You need to renew your license. So now what do we do come, January one? We've got contractors who've been on the list for years, never paid a fee whatever. What do we do? How do we work our way into the process? So, my 2 cents, and I'm glad AECOM is here to see if Tom has any experience in other communities. You know my 2 cents is, we welcome the contractors, we've got a few at this point who have submitted. We go through the process, they get on, then come January 1, we tell all our contractors on the list, if you want to be on the wastewater list, we need a bond, we need a \$100 fee, and you need to re up the application. You know your insurances, etc., and then we'll do that for everyone. So then, at that point the playing field is all the same, and that brings up a couple of questions, and one is, do we want two lists long term? So, I just give you the short term, my recommendation. Long term, do we want two lists? I mean are contractors going to want to do both. I think most would want to be able to do both some might not want to. I don't know. So I guess that's what we need to talk about. And you know I'm not putting you really on the spot Tom, if you know of any other recommendations on how to handle it. If they go in the same list, or even if they are on separate lists, do we have the same criteria for all of them? What we've asked from the wastewater side is pretty typical in other communities who do wastewater. Do we want to bring the water side up to the same criteria every year? I guess that is the question. That's the long term.

- o Todd Bunzick: So as far as fees and whatnot for an annual, that'd be fine. As far as the equipment goes, you're going to find that there's far more contractors out there that are established, doing sewer work then doing sewer and water work. The equipment required for water work is very particular so might disagree with you on them doing both. I think you'll find they'll be more contractors interested in doing sewer work.
- o Mark Berson: Yeah, a couple thoughts. First of all, I think \$20,000 is pretty light in terms of taking up road, sidewalks. I don't know what the insurance is in connection with liability. But I would want some kind of provision that there's a certain minimum of viable liability insurance that is required. And the last comment I have, or just quick observation, is there a process where they can appeal or ask for review if you turn them down, because when you start doing stuff like this on a grand scale, maybe, I mean I'm not familiar with how many contractors are on the Cape, and what the need is, but you can get into some very interesting antitrust problems when you start turning people down for work when you don't have any process to review their application in connection with the denial.
- o Tom Daley: Just on the insurance side, it's a 1 million dollar general liability required, and a 1 million dollars on the auto. I think it's half a million on workman's comp, so it's standard insurance amounts that the town uses it ultimately is actually up to I mean I won't be turning them down because it actually comes to the Board of Water and Sewer. You guys are the ones who bless them getting on the list. You have to have a good reason to turn someone down.
- o Todd Bunzick: Say, in general I will bring anybody in doesn't pass when it comes when it gets to here generally speaking. Usually when I've told people that then they can't they won't be able to make it, it's due to the fact that they don't have equipment and/or experience. More often than not they're like well, we want to dig the trench and put the plastic in from the curb, and we're going to hire someone else to tap the water main and get to the sidewalk. No, no, with some such thing.



## Meeting Minutes

### Board of Water and Sewer Commissioners Meeting May 18, 2022

- Alan McClennen: Okay, other thoughts here? Tom, you want to do you have anything to add that is different, based on your experience?
- Tom Parece: You can have one list, but just 2 columns so you can keep all the names twice, and just whether they're capable of water or wastewater, and it also depends I guess on the wastewater, whether they're just doing services or they're going to do an extension or something. So that's another whole unique discussion and I'll say that's even part of the water department as far as these concerns.
- Todd Bunzick: My concern with all these sewer hookups is the depth. These contractors, many of them are not prepared as far as the shoring goes. It's a must, So I would say you'd certainly want someone out there looking at making sure that they've got the equipment that makes so they can safely do that piece of the puzzle.
- Tom Daley: I have one comment, one of the things maybe we should have done or not, so I've already received a few applications for this work and a \$100 check. It's like maybe I should have just said 50 bucks, because it's really only going to be a few months, but we've already started so we will see what happens, you know, play it out. There's a lot of work to be had in the town of Orleans, you know, to me, so I don't think that'll break a contractor back in the initial run for the first few months. I'm sure they'll make it up.
- Tom Parece: What you do also want to tell them is someone applies now, like Dig-It, you approve it, it's good until September 31<sup>st</sup> 2023. So you give them the extra few months.
- Tom Daley: That would align them up with everybody else. Yeah, that's a good idea, thank you Tom.
- Alan McClennen: So do you want to come back with final recommendation?
- Tom Daley: Yeah, we can put it back on the agenda and I can update the board, with where we're at. Sure.
- Alan McClennen: You know, if you think about it, you're going to have downtown, you're going to have 2 or 3 connections a day in one year to meet the schedule, it's going to be busy.
- Dig It-application for approved contractor
  - Tom Daley: Dig-It did apply, April 15 they applied. You know, everything was there, the certified bond, the check, the insurance certificates of insurance, the references Ed from Veolia checked the references, check the equipment, etc., has made a recommendation to approve. So ultimately we put them on the agenda to bring it to you to see if you're okay, you know approving them to add them to the wastewater list.
  - Alan McClennen: Alright, you're recommending we do so could have motion to approve please.
  - Moved by Len Short. Second by Bob Rich. All those in favor by roll call. Unanimous approval. Dig-it is added unanimously.
- 60 Daley's Terrace
  - Alan McClennen: I mentioned 60 Daley Terrace. We have a request that we consider 60 Daley's Terrace in regard to the phase 2 of the town sewer construction. In the plan that Tom showed, Ironically, because of this advanced planning work, we are not currently planning to extend north on route 28. Above, Finlay Rd. So we're not heading up towards Daley Terrace. So, in response to this letter, that part of the project is not on the books anymore. It's been delayed because we have to deal with other things.
  - Cameron Oliveira: Brian unfortunately couldn't make it to today's meeting. We are representing the owners of 60 Daley Terrace. And I've had a couple of conversations with Tom along with Brian and he also mentioned that in the phase 2 construction that property is not supposed to be involved at this point what we're more likely looking at this point is to see if there's anything that we can do to connect to the nearest point where you are going to do construction, pump stations, etc. Unfortunately, we have not had any engineers look at these possibilities. More of the fact that we want to see if that's even a viable option before we move forward with contracting engineers and

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getting them on board. But we would like to be able to connect to town sewer quicker than we would be expecting to if the construction was to reach that address. Just because we are getting close to the point of having to redo our septic system at that property. And it would be beneficial to use the resources financially and connect to town sewer instead.

- Alan McClennen: With Eldredge parkway two, which we're now looking at, we are connecting to Eldredge Parkway and one of the questions would be, whether or not Daley Terrace can connect to that system, to Eldredge Parkway.
- Cameron Oliveira: Yes, so my request. Do you have any types of drawings or schematics that we could have to in order? So we can provide those to engineers that we bring on board, so we can start to look at this a little bit more.
- Alan McClennen: Yes, we do. Once you work with Tom Daley, he can get you whatever you need.
- Cameron Oliveira: Yes, that works. Thank you guys so much for letting me join. And hopefully, we can get on a on town sewer that would be nice.
- Tom Daley: So where they are right now is in Eldredge 2, which is God knows when at this point. There is no real set idea. The closest connection at this point, even if they do Eldredge one, the closest connection is still going to be meetinghouse pond. Basically on Pond Road. Okay, kind of if you're coming in from 28, you climb the Hill. So probably just beyond the hill would be the closest possible connection. So basically, they would have to pump from their location and they would have to pump down 28, and then up pond to come to a location.
- Alan McClennen: We will through Tom Daley let you have whatever drawings you need. So your engineers can look at the options and the time schedule.
- Tom Dale: And for Cameron's benefit, Mr. Chair, we would probably go online right now with meetinghouse Pond and what fall of 2025, that's when probably the earlier should become available.
- Kevin Galligan: Thank you for recognizing me on this, even though it's out of my league. But I saw the request in the packet for 60 Daley Terrace. Could I confirm through you with Cameron that it also includes their property owned at 52 Daley Terrace, I believe so. Yes, Tom Daley, you might want to take that into consideration. There could be some other alternatives. Thank you.
- Alan McClennen: Hey, Kevin? Is that the parcel that fronts on 28?
- Kevin Galligan: With just one easement, right? It would get him right to Finlay
- Collection System Update- Alan McClennen
  - Alan McClennen: We are at the stage where, within probably 2 weeks, 99% of the work of Robert B. Our will be finished. It's been a good run and actually I'm going to miss seeing them around town.
- Treatment Plant Update- Alan McClennen
  - Alan McClennen: As far as the treatment plant is concerned, if you haven't been there there's a lot of activity. All the subs are there, and there's a lot of stuff moving pretty fast. So, it's exciting to see that as well. In each of those contracts I would note we have one or two issues dealing with parts that are somewhere where they shouldn't be. We're trying to figure out how to solve the problem and we'll make it so.
- Meetinghouse Planning
  - Alan McClennen: Okay, what I'd like to do now is I asked Tom Parece to sort of summarize the material that he presented to the Board of Selectmen last week, their update. And just so those of you that could not be there Select Board voted to go ahead and add the 6 properties at Uncle Harvey's pond into the Meetinghouse project. And what we'll do is we'll include that in the bid process as an alternate, so we'll understand what the exact price is. They also voted to go ahead and do the necessary work to file an application for the intended use plan which must be filed in

mid-august, and that is, for the work related to the possible construction of a new fire station on the elementary school property, and the decision on that has to be made by about August. The decision on that has to be made by August, so that it can go to a special town meeting or not. And because that project requires sewer connection, we have to be prepared to file an application with the SRF in mid August, in order to have that project come online in time, for the fire station to come online if it is voted to be put at that location. That is something that Tom can talk about here, because it relates to a 11 or 12 other parts of the next phase of wastewater work in Orleans. The vote on Meetinghouse Pond was at town meeting 71%. 281 to 114, and at the polls yesterday. It was 654 to 248, which was 71.2% and that margin at the polls is really consistent with what we've been getting at the polls with 9 different votes. Now it's between 70 and 75% generally. So the one time we had a debate which was the downtown pipes. It dropped down to 66% but aside from that we're in the seventies. So I wanted Tom just to give us all an update on the various moving parts as we move beyond the consensus agreement, because there are a lot of planning efforts that are being undertaken by AECOM and the towns subconsultant, Wright Pierce, Mike gig to figure out what happens when, as we move forward. So, Tom, thank you.

- o Tom Parece: Thank you Mr. Chair so again. As Alan has said, I've taken the slides that were presented from to the select board last week, and the week before that was with Wright Pierce to get them up to speed on what's been happening since they were involved with the town. So, this is a short list of about half of those slides I'll say, I really want to focus on some of these wastewater expansion areas and the impacts that it may have to the existing infrastructure that's either under construction or that will be in a construction relative to meeting House Pond. We identified these 8 areas, and I've took the first shot of kind of breaking them into, you know various components. That's why you see Eldredge parkway area one and two, and Tonset at one and two. And obviously it is the Uncle Harvey's Pond area that Alan had mentioned, and then the crystal pilgrim with the freshwater ponds and then Rock Harbor area. So, these are the ones that were, you know, asked us to identify, to look at and see what they cost. Maybe, how much flow is coming from them, and how they may or may not impact the existing infrastructure. I think this is a good you know engineering flow chat I guess I'll say of the areas obviously the up towards the middle here you can see the oval in way pump station with septage receiving and there's the aquafer for recharge. So, the wick well that Ian was just talking about, and obviously residual disposal. Look come from it, coming from two geographic areas, a downtown and a Meeting House Pond. The other ones in purple are the other 8 areas that you saw in the previous slide, and where they tie into the various infrastructure. And from that we then took that next step of saying, Okay, well we do identify flows, and then the cost and work with those costs to say, Hey, when does it make sense to expand some of these areas and go on? And how does that impact a debt, and do we break them into either smaller components? And this was the first shot at this. it is absolutely by no means to be this is the final set we're working with Mike G., right now to look at the with these flows, and how much nitrogen comes from each of the subareas specific relative to pleasant bay with the watershed permit. But also the other areas and we're very close of having some data to give back to Mike, so he can come up with those projections. We utilize the 2014 and 2015 water use data which we had done previously to be consistent with that, and again took 95% of the of that water usage in order to get the wastewater projections. We do recognize, obviously in 2,018 we updated some of the water records and noted actually it's a small number and that's not necessarily an anomaly. That's those ups and downs of water flows as you go through the years. I think what's going to help the town is with the new water meters now in place, and especially leading them quarterly versus biannually, is also going to help us with those projections and see where we stand. In each of these geographic areas for these expansion areas. it's all based on again, density. We did not sit there and say, hey, what happens when you build out, and it's not a lot of those areas that have a lot of build. Oh, potential in them, anyway. I guess I'll say one thing and number 2, those geographic areas of all within the existing CWMP approved areas. So we have not gone outside of those locations. And then on the right-hand side is just some of the infiltration in flow the additional flows we need to add to the system. And then obviously one of the standard engineering books that we utilize what we call TR-16 to do the peaking factors as size, pipelines, and equipment, etc. So, this table gives you an idea of the overall flows. And to put it in relationship of this, these total, some 113,000 gallons worth of flow, the downtown area with existing flows is about 150,000, and Meeting

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House Pond is about 60,000. So, Meeting House Pond, we project to building out to 110,000 in the downtown area, was actually to build up to about 234,000. So you can see it's about a third of the overall flow from the bill, though from the downtown. The Meetinghouse Pond areas, but kind of gives you a relationship of the size of those areas. You know, Tonset area 2 and Eldredge Parkway 2. Obviously the 2 of the larger ones right, as you can see in the slide. And then the next was, say, Okay, so what's going to cost to do these we assumed each of these will stand along project unlike for instance, Uncle Harvey's Pond that went out, but include as part of Meetinghouse Pond. We priced this out as an individual project. We took the average of all the bids of came in back in 2020. We then inflated them to 2022 dollars, based on engineering news records, that added about 10% to that average bid. And the one thing we can't predict is the whole covid 19, the supply chain, and Ian mentioned that couple of times during his presentation. It's an unknown right now I guess I'll say it's just out there. We see something's getting better and other things seem to be getting worse. One of the things we try to do with these costs, is we add a 30% contingency to it. I would say normally for a planning level it may have only been 20%. So, we added a little bit factor on that. And then we also had some of the percentage packages for engineering services legal town administration stuff, and then obviously traffic control that we needed. and we've done some of the lessons learned from a downtown and the amount of staffing we needed, and adjust those accordingly. So on this slide you can see the same. obviously same descriptions will be out of the number of abutters that would be connected to it. The number of abutters right now what a 30,000 foot look that would need to have pumps. So, for instance, out of the Eldredge Parkway, 2 area, 234 abutters, and 6 of those would need to have pumps, and then off to the right hand side, the 2022 dollars of what the cost with each of these individual projects. That total is about \$80,000,000. Once a schedule is identified as far as what may happen, in what order and what time frame, we can take those from 2022, and then inflate about to the particular year, and put that in the capital improvement plan. And so that does get us into that conceptual phasing here. This was after the first shot at it. There is some rhyme and reason for some of the locations, obviously one in two is a Meeting House Pond, the downtown area that's ongoing. Now we're going to add Uncle Harvey's Pond into it. And the next one, I added, was Eldredge Parkway, one and Alan related to that because of the fire station, and I do have a next slide to kind of summarize that, and that seems to make more sense. There are other ones that I kind of standalone that don't impact anything else such as Rock Harbor that ties in a Jones road area. Pilgrim you can't do until Crystal is done. Crystal you can't do until Eldredge parkway 2 is done. So, there's some order of magnitude like that Tonset 1 and 2 areas tie into meeting house pond. So once Meetinghouse Pond is up and running they could be connected into it. and the other one is Eldredge Parkway, one, as I mentioned, with the fire station that that ties into the tributary area for pumpstation One of the downtown areas so once we're up and running, capacity is available there. I put together two schedules to see how they overlapped each other and then put it on some words here to make it go forward so yes, and this middle August we'd have to do what they call a project evaluation form again the grading form to be able to get on the fundable list. As Alan said, we were successful for meetinghouse pond and now, with the town meeting vote and the voter approval at the election yesterday. We can then send that certified vote to the State. By June 30th of 2022 for Meeting House Pond, but it falls the same process here, with the one exception in the last projects we've gone to going to town meeting at the design funding and then you come back later, on do the construction funding. Well, in this case in order to meet schedules. That's a special town meeting in October you would have to appropriate money for design bidding and construction at the same time, in order to be able to submit that certified vote next year to the State. Then fall through what they call the SRF Loan assistant application, which goes about the middle of October this year for meeting house pawn is due October fifteenth. Would then get a bidding phase for both projects. Again a year apart, January to March, of 2023 for Meeting House Pond, and 2024 for the Eldredge Parkway One and State does have a deadline for starting construction. You know, by June 30th of that year, and then obviously construction sometime and spring of 2024 and through the fall of 2025. The fire station follows a similar pattern to some degree, and they would be ready sometime in the summer of 2024 to be on site to do their activities at that point. We will have gotten the cross county intercept done and be out of their way and be working on some of the other streets to finish up the rest of that work. And then the other one that kind of drove this wastewater master planning was making sure that we we're not doing something now that has to be done in 2 years from now

or 5 years from now and again, Is that any impacts to the downtown area, the meeting house pond area? There was a little bit in Meetinghouse Pond, and nothing significant, and at the select board meeting they agreed to make the couple of changes. But to give you an idea where some of the flows come in, you know there's Uncle Harvey's Pond, and we've actually added in those 6 lots now that is shown here and expanded the meetinghouse pond area. We have Tonset one coming, in over to Uncle Vic's. And then over a Meetinghouse Road, coming in from Tonset 2 and ultimately flowing over to the pump station. That's right here at Town Hall a couple of these lines in here. We increase in size in order to be able to accept the flows from Tonset area one and Tonset area, 2. And then the other change we did was down in this area. Here we eliminated about 18 properties as part of Meeting House Pond, because they were all going to be low pressure connections. Once we started looking at Eldredge pathway 2 connecting in to this area, and then Crystal and Pilgrim Lake, it made sense to put a pumping station somewhere right about here, and this all then become gravity which means those 18 properties are having a low pressure pump would then have, you know, gravity connections, and that could be happening with the next. You know, 5 to 6, 8 years, etc. and that was one of the driving forces, I'll say, of any of these layouts was try to minimize the number of pumping stations the town has to build and maintain. And then number 2, the number of low-pressure sewers and individual property owners may need. And then the last slide here was to kind of group all the flows together and see what the impact at the treatment plant. Obviously the first 3 in red, all the flows we know about, and these are all. What we call average daily flows there's a 150,000 gallons of flow I mentioned from downtown area and the 60,000 for Meeting House Pond right couple of slides below that a couple of rows below it, and always the 16,000 gallons of average of septage and that all totals up as we come across here, and if you look at the right hand side, it talks about how much remaining capacity is at the treatment facility. So when we start off, and all the connections are made between meetings on and all the connections that made for downtown area, and nobody expands it properties or additional flows etc. It says that the town has allocated 78,000 gallons worth of excess capacity at the existing facility; that they be able to divvy out as a first come first serve basis per the sewer rules and regulations. Again, I did not put these in any particular order. I just put them in the order we had originally, and I said, Okay, what happens if Eldredge Parkway one ties in while that capacity that goes to some 66,000 gallons, and as you see go as you go down eventually, you over capacity. One of the things that the MA DEP requires for operating facilities is once a facility reaches 80% of its capacity for 3 consecutive months, they want the municipality to start a planning process. So, in this case the town has already done that they have an approved CWMP: so they already know where the flows are coming from, and what it may be. Eventually and again the CWMP flows with 680,000 gallons of average daily flow. Secondly, as part of the design of the wastewater plant, and you've probably heard me say this before we've had it laid out that you could mirror image the SBR's and before you go from a 350,000 gallon per day facility to a 700,000 gpd facility, with some additional buildings and pumpage and equipment, etc. But that would then get you to the full build out or the full CWMP proved areas, and obviously would be well within these numbers that you see here. So with that I'll open up all the questions and comments.

- o Tom Daley: Mr. Chair. If you don't mind, I want to go back to the big meetinghouse plan thing, and this is important, because I think at this point in discussion, I think I need to plant a seed for future planning. So as part of good capital planning for community we just don't look at say, wastewater that we're talking today, we look at water, we look at pavement management, we look at reconstructing the roadways after. So we have been you know, working out pavement management plan a bit around wastewater, so that you know we don't pave the road that dig it up. Okay, now, with the Meeting House Pond Project with starting the concept work now, and I've been telling people we're not going to do any work on Main Street until meetinghouse is done. Okay, well meetinghouse on Main, if you look back at the map, is from School Road right here all the way down. Alright, but that leaves Main down to Academy Place and as part of that planning for Main Street. We're looking at the intersection of the traffic signal in a section of Tonset, and also Tonset extension and we're looking at all this for a number of reasons. One, there are a lot of locations here that came up. Through the complete streets program and planning that are reporting to the community. For example, new signals that you know Tonset and main, there's a discussion about the signal at 28 and Tonset extension at the police station. And quite honestly I've been getting

pressure I'll say from the bike and pedestrian community to begin this now. This work, now a sidewalk work from academy down to the cemetery. Okay, you know the issue with that is I'm not going to spend money twice, you know we're not going to go and do the work now and then come back and rip up the streets and do it again later. That's my opinion. So, my plug is as part of our planning process. We should really, I think look at Tonset one because of the reconstruction of Main St. I think it's just important that's a factor in the discussion. So if meeting House is done in 25, I was planning initially. Well, I could probably redo Main Street at, you know, start, you know, construction in 26, but the reality is, we get Tonset one in there too.. Maybe we do Main street in 2 phases right that's probably what will happen. I'll be quite honest when it being done in 2 phases. However, you know, people want to see the sidewalk in Tonset one area done. Now you know, so that's a good capital planning. I want to throw it out there now, that might step up tonset one. I don't think that steps it up ahead of Eldredge one, but I think it's important to plant that seed out there. That's an important, I think. material road reconstruction for this community. Thank you.

- Herb Kinney: Yeah, Tom, if you go back to the slide showed the different phases coming in. What you're saying is about the time we finish up Eldredge Parkway One if we go down the order that they're listed that's when we run out, or we hit 80% capacity. So, we're not far away from having to increase the capacity of the plant.
- Tom Parece: Well, Eldredge Park will bring you up to 81%. And let's put a let's put Uncle Harvey's pond in there. That only changes by you know, .4% and then again. If Tom says well let's put in tonset area one you know that puts it another 5% so you're up at 86% of capacity I'll say at that point. You're 81% at Eldredge Parkway one and then if you add in Uncle Harvey's, which is going to be part of Meeting House Pond that brings you 81.5%, and then you add another, like 5% for Tonset one area, So again, you'll be at 86-87% total.
- Herb Kinney: And the State starts moving on our plan at 80%.
- Tom Daley: They look at the numbers at 80% right. But I said you've already done. the plan and the CWMP is done and that is the plan they're looking for. And then the other one is to say, Okay, you know, how are we going to phase these in to be able to say when do we have to start to build a plan to expand it? It really depends on I'll say the town with debt service on you know how you start to eliminate the debt service for the Downtown Meetinghouse Pond areas, and then how much more debt you want to continue to include, to try to end up with a level base on your tax rate.
- Herb Kinney: But in considering these options, we're going to hit capacity fairly soon.
- Tom Parece: You potentially could hit it fairly soon. Correct.
- Alan McClellan: So, Tom, if you go back to the cost values you had for the various sections. So as Tom just said one of the tricks or challenges here is to figure out also when it is most cost effective to plug a new project in. Because with the approval of meetinghouse pond yesterday, and everything today, we have a 107 million dollars of sewer project underway now. And we've got state grants to reduce it and we've got I think it's about 83 million that we're actually paying off. So we're beginning to pay down our sewer debt at somewhere around 2.5 million dollars a year. So we've sort of got to the point where we've got the maximum debt for sewer now, and we're starting to pay off. So the challenge is what do you plug in when, so that you don't actually increase your debt. So that's just another piece that you got to look at here because you might say, Well, let's wait another year on X project, so that our debt has dropped off a little, more. So, there are a whole bunch of moving parts here that that are significant. And you see that Eldredge Parkway, 2 and Tonset road 2 are significantly larger than anything else up there.
- Herb Kinney: There is a major fallacy with what you're saying though It's a difference in how you look at it one is that when you do a special project like a sewer or fire station, something like that the town votes to do that assumes the debt to do it, that's the project pays off the debt that level goes down. You're talking more in terms of, well we have this debt level as we pay it off. Then we can maintain the same debt level and take on the new projects. That's a decision that the towns people have to make and of course, Finance Committee is heavily involved in that. It's a basic difference in philosophies. but what this is saying is, when we hit Eldredge parkway One essentially that's when the issue of doubling the size of the treatment plant begins to come up and that's

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something that the townspeople should be very openly informed of. I'm not saying they shouldn't go ahead with it, and a lot of other things too. I'm just saying that's where we hit it. It's coming soon.

- Alan McClennen: And actually it's ironic, because, as Kevin Galligan will note in 2023, we have to give a full report on where we are in implementing our CWMP. and all of this is coming together at the same time. So. Yes, we're celebrating downtown a Meetinghouse Pond, but we got a lot of thinking a lot of work to do to figure out how you go through the next phase that's why I wanted Tom to present this today, because this is a lot of fascinating advanced planning, and it relates to other things like Tom Daley's talking about .
- Kevin Galligan: Yeah. Alan, and thanks for mentioning that it's really not in 2023 the secretaries order to Orleans requires it by January, 1, 2023. We have 7 months to package up that amended CWMP.
- Tom Daley: Just to get back to Herb's Comment, which is valid about plant expansion. But bear in mind this is an estimate you know they're all estimates on the flow. But once we now go online, get some experience with actual flows over the next couple of years, then we'll be able to fine tune that a little tighter but it's a good discussion and planning exercise.
- Alan McClennen: And I think here sitting here is water and sewer commissioners now the decision that was made several years ago to replace the water meters as an impact on this as well because all of a sudden we're finding usage is down and it's more accurate. And the numbers that are all on these charts is 2015 and 2016 water use. You see? So there may be some extra capacity in there that we don't know about yet. Okay, any other questions, Tom, I appreciate that. That's a nice summary thank you very much.
- Contract Operations
  - Alan McClennen: The last item on our agenda is contract operations. Ian gave you an update on what's going on. Suez was bought out by Veolia. We have met with them there the shirts were different the talent was the same. And we're moving ahead. They will have a person on site again within the next week or 2 and begin to ramp up in their advertising for staff. But we were told that their local staff they now have 2 out of the 3 operators that they intended to have and at least one of the operators was trying to by a condominium in Orleans to be close to the job so that's a good sign.

Meeting Adjourn by unanimous consent: 2:42 pm. Moved by Herb Kinney, seconded by Bob Rich.