

BOARD OF HEALTH MINUTES
WAYLAND TOWN BUILDING
BOARD OF HEALTH OFFICE
41 COCHITUATE ROAD
NOVEMBER 28, 2016

The meeting was called to order at 7:00 p.m. Present were Thomas Klem, chair (TK), Michael Wegerbauer (MW) John Schuler, M. D. (JS) and Elisabeth Brewer, M. D. (EB). Also present were Julia Junghanns (JJ), Director of Public Health and Patti white, Department Assistant.

7:00 p.m. **Public Comment-** there were none

7:05 p.m. **8 Glezen Lane Review revised plans for septic system repair, variance for upgrade/repair of a repair in a Zone I, Owners Frank and Karen Chase, Professional Engineer Bob Drake (BD).**

After discussions at last meeting, Mr. Drake has made revisions to the design after he met with Don Millett, Water Dept. Superintendent and the revised plans have been approved by BoPW. Changes include modifying from a single pump to duplex pump, the force main is to be run 500' with a pipe in a single piece run, 3' schedule 40 p.v.c. sleeve with 22.5 inch elbows (6), (drawing showing elbows) rubber boot with straps, if there is ever a rupture, it will run back into the pump chamber. The control panel for the pump system to be remote monitored (BoPW requested) to the Water Dept. office- will they pick up cost of remote. BD has not verified the cost. DPW will pick the design and maintain. Locations have been set due to limited site activity, refueling and stocking areas. JS: how to mark out the force main to protect it? BD: the design will include markers/monuments to keep anyone off the force main. Galleys are in a bed configuration, resembling a plastic Quonset hut, the galleys directly load the effluent to the sand, increased contact area which reduced the size of the galleys. Soil testing was done in 4 separate areas; 2 areas not so good, 2 areas were better, the I/A technology reduces the footprint into the better soils for best possible leaching. JS: can soils be improved? BD: regulations require if we encounter sand, to do intermediate layer (ideal for seating this type of system). JS: will there be seams? No seams in the force main and 2- H2O D boxes will be installed. BD: the BoPW had requested double lined tanks since they are located in the Zone1, I spoke with the suppliers and they can do the waterproofing and sealing of tanks at the factory and deliver the unit as a whole watertight (monolithic) tank, I am comfortable with this design as waterproof. MW: Do we need to extend the fence line? BD: there is a post and rail fence- they will be using (ballards) MW: we had talked about ballards, but had decided on extending fence line. BD: we can do that- just need to have a type of alert for drivers- JS: what type of p.v.c. pipe is being used? BD: HDPVC- force main has no joints and the sleeve will be schedule 40 pipe with rubber boots at the 22.5 degree elbows. At the deepest point it will be 7' deep, shallowest 3.5'. MW: we had heard it would be a min of 4'? BD: we were trying to keep d-box from being too deep, so it came up ½ '. JS: are the pumps being proposed reliable? BD: yes this company has been in business for 30 years. These are liquid only pumps and are set to be easily replaced at the time of normal wear and tear. JS: what do the alarms tell you? BD, there is a minimum depth inside the tank (submersible) when the water level rises to a certain level, it will activate the pump to work. If the first pump does not work, the second pump will be activated and will set off the alarm (sound and flashing light). The system will be inspected annually and the septic system will require pumping to be done according to use. When the system is inspected after the 1st year, the amount pumped will be evaluated and get recommendation from pumper.

TK: does something need to be done now? We are not aware of the system being in a state of failure and they have a plan designed. JJ: a title 5 has not been done. BD: per title 5 if system is failed, to remove the system from inside the Zone I if possible. In the planning process we had also looked at a fast system for denitrification, we were encouraged to look for options to re-site outside of the Zone 1, which has been done.

Karen Chase: we are not sure that we will be selling the house.

Mike Lowery (ML): to Bob Drake- you stated previously, there are two pumps (duplex pumps), that they will be configured to share, can you explain? BD: the pumps work on an alternative sequence, so the pumps will never set idle, that is not good for the working of the pump. ML: in reading the DEP guidance, if the system is in a zone 1 that by definition the system is to be considered failed. Can you request it be inspected and check the pumping history? JJ: I see in the records that the system was pumped in May 2016 and also 2015. BD: the whole system as it stands today, is completely in the Zone 1, any system in a zone 1 by definition is considered failed if there is a title 5 inspection to be done. If the house is not being sold they do not need an inspection. JJ: the Dep policy gives the BoH the ability to review the situations as they arise and make decisions based on the situation at hand and circumstances of the property/septic system, etc.. Can it be moved outside, use advanced technology? We have no information on this septic system, only that it has been pumped the last two years.

JJ: if the board approves the variance, we could request a title 5 inspection as part of that approval. BD: criteria for failure- pumping? JJ: if it is pumped 4 times a year or more it would be a failure.

Frank Chase : the house is being taken off the market next week, we will hold off and decide at a later time. We had a builder looking to add a bedroom, so we started to do a new design. MW: Julia do you have any recommendations? JJ: the existing system should be inspected, we would like to know what is there and if it's functioning properly, we have a plan from 1985, but no inspection, just pump slips. MW: are there indicators of a problem? JJ: there is a place for a memo on the pump slip where there are notes from the pumpers.

Karen Chase: Will you be doing this for all the properties inside Zone 1? TK: this property started the investigation into the properties that are inside Zone 1. MW: last meeting was discussed no part of the pipe would be less than 4' below the surface, does the plan referenced the force main to be at least 4' deep or insulation wrap? Will you wrap where not greater than 4' deep? BD: yes that is in the note section that we will wrap (pump notes).

We are also changing the size of the force main to a Schedule 80 pipe instead of using the standard schedule 40 pipe. MW: what is better 4' cover or insulation wrap at 3.5? JJ: I would default to the engineer's decision of what works best for this design. JJ: we will have the cover increased to 4'. There was a discussion and the decision that Bob Drake will discuss this with the Water Superintendent, and then with Health Dept. staff to work out the detail on this (amount of cover material/force main depth/insulation??). EB: if you take the house off the market, if the house goes back on the market, you have the approved septic plan. What is the estimated cost? BD: My preliminary cost would be \$50K. BD: the original design would have been about \$30K, the additional cost is for the "pork chop design"

BD: when the system is pumped in May of next year, the Health Department staff will come out and inspect when the system is opened up for pumping and accessible for staff to inspect the components.

TK: Motion to approve the variance for the tanks and piping to be inside the Zone 1 per plan for an upgrade/repair for the system at 8 Glezen Lane. Per the plans received November 14, 2016, to be revised for schedule 80 from schedule 40 sleeve. Whether the force main shall be 4' below surface or 3.5' with insulation wrap will be determined by consult with Bob Drake, the Water superintendent and Health Dept. staff. Upon next pumping approximately May 2017, Health dept. staff will inspect the condition of the existing system. second MW vote all in favor 4-0.

Dr. Brewer has left the meeting.

7:25 p.m. **31 Aqueduct Rd.- Use of passive innovative/alternative technology for new construction, Owners Merline and Ketan Bhukhanwala, David Schofield of Schofield Engineering Group**

Mr. & Mrs. Bhukhanwala are here to request the use of an I/A passive technology, (Presby) to allow them to do an addition of over 59% and to add one bedroom, the property is not in a Zone II. They are doing an addition of over 59% and will be upgrading the septic system using I/A technology. The renovations will include: a 22 X 24

addition to the back of the house to enlarge the kitchen and add a dining area and family room. The lower level of the addition will be a playroom with a ¾ bath (shower). TK: is there a direct exit from this lower level?

JJ: our policy requires I/A technology goes to the Board where it is triggered as in this case for new construction, this is a passive technology with no moving parts and is approved for general use by the state. This type is used to maximize the square footage in a small footprint.

MW: the policy was not to use I/A systems to add bedrooms.

There was a discussion; the new septic will be for 4 bedrooms (one more than they currently have) and they are not planning to add a bedroom.

JS: why is there a shower in the basement? KB: we were thinking that since we are doing the addition, we should add a bathroom.

JJ: When the previous system was installed in the front (1990) they needed variances due to the size of the front yard. The perc rate was 20 min per inch, it is slow and the I/A technology will allow for the system footprint to be a bit smaller.

MW: have you asked the designer to try to create a conventional system? Did David Schofield(DS) discuss with Darren MacCaughey(DM) (Health Agent/Sanitarian) to see if there is an option of using a gravity fed system . JJ: a conventional system design would be much larger due to the slow perc rate. TK: how much over the sq ft is the project? Merline B: we tried to redesign the addition to be under 59%, and we love the neighborhood and we want to stay in this house, but we want to have the house that works best for us.

TK: why not do an I/a system for 3 bedrooms? JJ: they are looking to maximize the repair of the system for possible future plans. KB: with all the work, we are just adding a smaller cost to enlarge the system (add bedrooms) as we are doing the repair already. MW: why is this being replaced? JJ: the new construction (over 59%) is triggering a new septic system. TK: if we say this has to be a 3 bedroom system? JJ: if the board does not want to approve the I/a system then we can ask the engineer to design for 3 bedrooms conventional. The I/A Policy is not a regulation, it is a guide for the BoH to make decisions in cases such as this. KB: to be able to show the primary and reserve areas, the best was to use the I/a technology to fit both in. MW: I would be ok with a 3br with and I/A system. MB: we have a 3 bedroom septic system and due to the addition, we are replacing the system, and for the small added cost we would like to enlarge the size of the system. The small cost to enlarge the system now, would be a benefit of a possible future sale of the house. They want to be able to improve the property to the best of their ability.

MB: the house next door at 33 Aqueduct, just did an addition, with bedrooms with a deed restriction (B Drake design).

JJ: we could ask for a conventional design meeting new construction for 4 bedrooms. JS: would that be less expensive? JJ: it would still require the tank and pump chamber, and the leach field would be larger, there might be a need for a retaining wall (due to the leaching field size and grading).

JS: this is a small house, this is not unreasonable, why can we not let them do the addition? TK: the policy was written to allow I/A systems to be used for septic repairs (where there were no bedrooms added and no "new" construction adding more than 59%) JS: that was a policy; not a regulation, that was set before I joined the board.

TK: was there a discussion between DS and DM regarding a conventional system? JJ: The conventional system would be much larger, because of the slow perc rate. It may be more costly due to this factor. The owners mentioned a project that was very similar that was approved by the Board at 33 Aqueduct. They remember their neighbors added a bedroom, put in a new septic and used I/A technology. They ask that the board review this project for comparison in reviewing their project.

TK: please take a look at 33 Aqueduct, and see what was approved and talk to David and Darren to see why a traditional system could not have been installed. JJ: looking at the existing system, there were variances

needed to install the existing system in the front. So there would probably be variances for a conventional system in the back yard (possibly?). There was a back and forth discussion of what to do. The board feels it is fair to approve something so the owners can at least begin to move forward with their project with no extended delays.

MW: Motion to approve the variance to use passive I/A technology for a new 3 bedroom septic system at 31 Aqueduct Road to support the floor plans dated received October 17, 2016 . Second TK , abstain JGS vote yes MW and TK

8:45 p.m. 122/124 Lakeshore Drive- Review paperwork and determine Financial Assurance Mechanism amount for shared septic system in case of future failure, owners: 122 Lakeshore Drive Realty Trust (Tom Zazzara, Trustee) and 124 Lakeshore Drive Realty Trust (James P Long, Trustee) Fred Mannix agent for Trustees and Professional Engineer Steve Poole.

The septic system has been installed; it is a shared system for 2 adjoining properties. DEP has delegated the approval process for shared system financial assurance mechanism to local BoH's. We have received guidance from the state regarding this type of situation. The state requests 15% of the system cost to be put into an "financial assurance mechanism" or escrow/performance bond for the future replacement of the system in case of system failure.

JJ: the question at hand is: in a shared system situation if the system was to fail in the future, how much money do we want to have them set aside for the new system? TK: why do we even need this? MW: not sure if this is necessary. There was discussion with the BOH regarding whether to require money set aside or not. We could just lien the property if needed also. JJ: as a guide for the BoH the state asks for 15%, this is not required of the local BoH's but has been provided to us as advice from the state.

TK: Motion to propose a Financial Assurance Mechanism in case of future failure of the shared septic system at 122/124 lakeshore Drive. As follows: 15% of the replacement system (estimated \$ 30,000.00) cost be put into an escrow account with the Treasurer for the Town of Wayland. MW second vote 3-0 all in favor.

9:15 p.m. 188 Commonwealth Rd Update on septic system and conditions in legal order

The engineer hired by the owner conducted a title 5 inspection on the septic system. JJ went out to do a site visit and view the system during the inspection process. The emergency 15,000 gallon tight tank is almost empty, if there was a problem, this could be utilized to avoid a heavy pumping schedule or breakout. The system at the time of the inspection was functioning at proper levels, with no sign of breakout. There are photos that were provided of some of the components. They are still proposing a soil air system; it would provide air to the leach field, and breakdown the biomat. They will add observation ports and alarm floats (in case of the event of hydraulic failure) will they continue to pump the tank quarterly. This is for consideration for the extension of their 12 month deadline. The staff of the nursing home will continue to conduct daily inspections, walk the grounds to verify there is no problem with breakout.

JJ: at this point the system is not breaking out; I think the suggestions are good preventive measures. The engineer was quite knowledgeable with the process we reviewed: there is a 15, 000 gal overflow tank. Some while back, they began switching back and forth between the two existing leach fields, which appears to have helped to prevent either one of the fields from becoming surcharged. They will continue to rotate the beds in this manner, add the soil air, observation ports and continued quarterly pumping.

JS: do you know how many patients are there now? We should find out if we need to adjust inspections regarding occupancy? We don't have the ability to limit occupancy, Town Counsel had been consulted on this.

JJ: I have discussed this current situation with Darren and potentially the water table could be the problem, if we have a wet spring and the water table raises, that could be one of the repeated problems there (it is close).

They are asking for a 1 year extension, to provide them with time to design a development project (new assisted

living facility and nursing home-they also purchased several surrounding residential properties that would be part of the development). The system passes title 5 criterion upon inspection, based on the conditions at the time of the inspection (the system is not in a water table), the reason it is considered a failed system is because they were(and are/have been) pumping 4 times a year.

MW: Motion to allow them a 5 month extension and check the status of the occupancy and reinspect the system at that time. TK second, all in favor 3-0

9:25 p.m. **Discuss BOH comment regarding possible new utility pole with “Hybrid Transport Network” by Mobilite, LLC at Boston Post Road and Pelham Island Rd.**

This article was withdrawn without prejudice from the BOS meeting this past week. This may need to be discussed again in the future for a possible different location. This type of technology is the new wave and is different than a typical cell tower.

9:30 p.m. **Authorize Health Director to sign Non-clinical affiliation agreement for intern.**

**TK: Motion for the board to authorize the Health Director to sign the non-clinical affiliation agreement
Second JS vote 3-0**

Director’s Report

JJ: Regarding the cleanup of an accumulation of paper files in file alley and preparation for the Town document shredding project; we have been going through many of our old records. We have been referencing the state records retention rules during our review of documents and we prepared a formal request with the State to obtain authorization for disposal of certain records (as allowed per the state records retention rules for BoH’s). We identified what we want to get rid of (via either recycling or shredding) and we have made sure that any items with confidential information are shredded. We have 15 boxes of documents to be shredded. The file alley cleanup is ongoing. Once the boxes are collected for shredding and the area is clear then we will move on to the next step of this project (more re-organizing and straitening in file alley).

Town center septic system, an engineer came in to the office and did research of the approved plans. The approved septic plans are now expired. We expect they will be re-submitting a septic plan for re-approval/permitting. We have heard that they are looking to do more development at town center and they don’t have additional gpd sewer capacity with the town treatment plant.

The I/A spreadsheet has been loaded to Google doc by MW to be shared. We will be looking into the Barnstable county database, they have a formal tracking process for O&M for all the different technologies (including performance tracking). Since the state is no longer tracking this information it may be a helpful tool.

9:35 p.m. Minutes of October 17, 2016

TK: Motion to accept the minutes as submitted, second JS vote 3-0 all in favor

December meeting dates; December 12th is a possible meeting date? Send email to BoH confirm.

9:40 p.m. Motion to adjourn second JS vote 3-0 all in favor.

Respectfully submitted
Patti White
Department Assistant
Health Department

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