Salem Conservation Commission Minutes of Meeting

Date and Time: Thursday, December 12, 2019, 6:30 p.m.

Meeting Location: Large Conference Room, City Hall Annex, 98 Washington Street Scott Sheehan, Malissa Vieira, Bart Hoskins, Tom Campbell Chair Gregory St. Louis, Dan Ricciarelli, Tyler Glode

Others Present: Brittany Dolan, Conservation Agent

Recorder: Stacy Kilb

Bart Hoskins calls the meeting to order at 6:30PM.

I. ROLL CALL

II. REGULAR AGENDA

A. Sewer Line at Willows Beach Repairs – Public Hearing – Request for Determination of Applicability for the City of Salem, 98 Washington St., 2nd Floor, Salem, MA. The purpose of the hearing is to discuss the proposed replacement of the existing timber pile supports and framing of the exposed sewer line on Willows Beach in the same general location within an area subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.

Presenting are:
David Knowlton, City Engineer
Bill Ross, New England Civil Engineering
Rebecca Dupont
Dave Smith, GZA

Mr. Smith describes the "Pipe Beach" Catchment project.

Bill Ross, NE Civil Engineering:

- Outlines the existing sewer pipe and desired landward reroute, which was not possible
- Borings in the beach were favorable
- Willow Ave. Trunk Sewer is described; timbers are heavily deteriorating as well as facing extreme loads from ice and the occasional sailboat washing over it
- They would eventually like to bury it along the beach but that is several years down the line; in the meantime, they plan to repair the pilings. This work is described; 100 total piles will be replaced
- David Smith from GZA notes that they evaluated the pilings; the date on the pipe is 1908 and there are some historic permit documents from 1933 for repairs
- Piles are described; their replacement would entail temporarily supporting the line on each side of a bent (which is one row of piles) then driving new ones adjacent and replacing the framing, while the pipe is in service
- Wave, ice and debris loads on the pipe were examined and adding additional piles on the seaward side will protect the pipe from damage and possible failure
- The pipe itself is sturdy but a cure in place liner will be installed as it can leak if it moves/undergoes deformation
- The only digging will be temporary, to remove the old piles

Bart Hoskins wonders about a contingency plan if the pipe breaks; the City does have such a plan involving hoses and pipes along the streets of the neighborhood

Tom Campbell asks about access to the pipe. This will be water access with a crane on a barge during high tide, though the pipe is underwater at that point. The barge would be grounded during work because of this. A secondary option would be to access it from the land side, but this involves equipment on mats on the beach; thus water access is less impactful.

Tom McMahon of 23 Willow Ave. notes that the project will be in front of his home. He objects to the additional piles being added, that would stand 8' above mean high water. They are meant to block boats from going over the pipe and ending up on the beach during extreme high tides. Currently high tide water hides the pipe so the new piles would impact sight lines. He also feels this is a lot of money to spend on a temporary fix; he is concerned it would become a permanent fix once done.

Dave Knowlton comments that removing the pipe is the ultimate goal and they will be undergoing the permitting process, hence the application that is the next item on the agenda. Mr. McMann feels the danger to the pipe is minimal. Bart Hoskins asks if some sort of horizontal reinforcement is possible but the third layer of piles must be high to accommodate high water. Bill Ross notes that piles could be replaced as they are currently but, would not provide additional protection from boats. Hoskins asks if the outside ones could be a little higher, to allow attachment of something at the crown of the pipe to prevent impact.

Existing piles only come to the bottom of the pipe; replacements come to the top of the pipe. The reason for the separate structure has to do with preventing boats, especially those with hanging keels, from washing over the pipe. All pilings would be spaced 12' apart.

The entire length in question is at risk. They feel they don't need an NOI just to replace in kind, but to do what they want long term, does require an NOI. A grant has been received but will not be enough to cover the project, just to get this far through permitting. The height of the 3rd row of pilings can be discussed with neighbors. Malissa Viera asks about the size of the boats that have washed over the pipe. These were 30' and 28' long, but only 10' wide. She notes that this could happen despite the new pilings, but the Applicant replies that they will provide blanket protection.

Jennifer Cunningham of 29 Green St. notes that boats do not go over during average tides. She is also concerned that this will become a "permanent fix.".

Louis Morin of 6 Glover St. wonders about the crack in the pipe that occurred 18-20 years ago. He notes that the pipe is tenuous at best. It is unknown if that was caused by a boat strike.

Meg McMahon of 23 Willow Ave wonders if the process for the relocation project can be expedited and if the money to be spent on this shoring up could instead be used for the relocation.

Dave Knowlton comments that he would like to do it as fast as possible, and Bart Hoskins notes that it is an extensive permit process; the Conservation Commission permitting is but one step, and the easiest

Mr. Smith outlines the process for this project alone:

- 1. Conservation Commission
- 2. DEP waterways regulation program license
- 3. Army Corps of Engineers permit for additional piles

The next filing, the Notice of Intent (NOI) along the beach, will involve all three of the above agencies plus an Environmental Notification Form (ENF) with the Massachusetts Environmental Policy Act (MEPA) office, all of which could take over a year to do. Members of the public wonder if that delay might still better than a temporary fix.

David Knowlton notes that it is uncertain if it will even be possible to relocate the pipe along the beach, as there are cost implications. It is exponentially more expensive to move the pipe than to repair in kind. He understands that the current project is not preferred and notes that the upcoming NOI is the ultimate intention. This project is a fallback in case there are hurdles that cannot be overcome. Bill Ross notes that it may have been a better idea to flip the two agenda items.

Jennifer Cunningham wonders if the second, relocation project would be expedited in the case of an emergency, such as if the pipe bust tomorrow. She wonders why this project cannot be completed as if it is a real emergency. Sheehan notes that this would come from the state, so for that to happen Ms. Cunningham would have to petition lawmakers. The City could put in a request and advocate, but the Mayor and City Council would have to fight for it.

Campbell notes that emergency authorizations are hard to come by, and usually concern life and limb property issues. An Applicant has 30 days to fix the problem and file an after-the-fact permit; that is not enough time to replace the whole thing on an emergency basis.

Sheehan notes that boats more than 8' wide are not common there and that 12' spaced posts may be too far. He wonders if a guard rail could be placed on the seaward or lower post. However, installing a wave fence or guard rail would allow waves to hit it and transfer load into the supports, which needs to be minimized. The piles are spaced 12' on center because is a replacement project. More supports would be better but are not necessary.

Hoskins asks about having something almost the same height as the pipe. Other options are discussed. Bill Ross asks if replacing with piles that don't top the height of the pipe would be acceptable; it would be.

Calculations regarding boats and loads are discussed.

Sheehan notes the Commission could condition the higher height for a certain amount of time, then cut them down if the other project falls through. Hoskins asks if something could be wrapped around the pipe. The structural liner installed inside would help but that is not part of this filing.

Hoskins comments that if the pipe cracked, it would not expedite the permit process for the next (relocation) project, but would just result in temporary pipes being placed along the street, and a barge would still be out there fixing it; that is not a tidy solution. Temporary emergency work is very limited in scope.

He also notes that replacing pilings at the existing heights would be a negative RDA and wonders how to move forward on the seaward supports. Sheehan comments that the Commission should issue the determination and see if the DEP objects. Hoskins notes that the Commission's toolbox is limited; an RDA requires that the impact to the resource area is such that no NOI is needed and allows repairs to get underway to avoid a catastrophic event. The only other option is to have the Applicant file an NOI, which would delay the work another month. Sheehan asks of adding the third layer of pilings still qualifies under the limited project/RDA not requiring NOI; it does.

Mr. Ross comments that, if the Commission is comfortable on ruling replacement to the height of the pipe, they can file an NOI later on the third, higher line of pilings. In the meantime, engineering options other than tall pilings can be explored.

Councilor Arthur Sargent, At Large, wonders how pilings will be driven in and the impact on nearby home foundations. They will be installed with a vibratory hammer rather than by impact. There is quite a distance between the work and the homes, for the most part. Vibration monitoring on a Gloucester project is going on; they don't have as much overburden of soil but the houses are much closer than here. Soil here is deeper before

hitting ledge, so impacts are not foreseen. There will be a preconstruction meeting covering all relevant aspects of the project. Dave Knowlton also notes they can meet in another context to discuss the project overall; residents should work with Ward 2 Councilor Josh to set that up.

Ms. Cunningham asks about impacts to seawalls on the beach; the material into which the Applicant is driving putting piles is not rigid so vibrations should not transfer. Photos of walls can be taken before and after. IT is not yet established whether refuse will go through Dion's Boatyard, but marine contractors have business relations with them. Residents would prefer it doesn't come up through the streets. Hoskins circulates photos of the current state of the pilings.

A motion to close the public comment period is made by Sheehan, seconded by Vieira, and passes 4-0

A motion to issue a Negative 2 and Negative 6 Determination is made by Sheehan, seconded by Campbell, and passes 4-0.

Special conditions:

Replace existing as designed and 3rd row may be no higher than other two. Can reconsider second part as needed.

B. Sewer Line at Willows Beach Relocation—DEP # 64-688 - Public Hearing — Notice of Intent for the City of Salem, 98 Washington St., 2nd Floor, Salem, MA. The purpose of the hearing is to discuss the proposed relocation of the pile-supported sewer line on Willows Beach between Dion's Yacht Yard and Glover Street within an area subject to the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.

Presenting are:
David Knowlton, City Engineer
Bill Ross, New England Civil Engineering
Rebecca Dupont
Dave Smith, GZA

Bill Ross notes that borings on the beach have shown that the relocation under the beach is feasible.

- The route of the pipe is described; it will be buried under the sand with steel sheet piles on either side, and surrounded by concrete
- An existing unsightly drain will be removed, and there is no drain at end of Willow Beach, so runoff will be treated and relocated. Sewer will also be eliminated from the beach
- Existing seawalls are shown; pipe would be underneath riprap at Dion's and underneath sand; it would not go upland except at the upper end of Willow St.
- Dave Smith describes the locations of manholes. Some new ones will be added
- A profile sheet shows a manhole sticking up, but that is a CAD error; it will not extend above the surface
- Bill Ross describes the current storm sewer outfall and sanitary sewer route. Drainage from Willow Ave. will be improved; currently it goes through a low spot in the seawall and erodes it. Logistics of putting the pipe through the seawalls is discussed; it will be tied into the existing sewer on Glover.
- Once connected timber piles from main and lateral lines will be removed, most likely by barge because that is easier, old pipe removed once new is installed and active
- Wave loads on pipe were examined; most will be buried but there is one area where the beach is low and pipe will be above the existing grade, however it will be encased in two rows of steel sheeting 8' into grade as excavation support, which will be tied together, pipe must be set at an elevation to maintain gravity. Concern is to make it as rugged as possible; future scour may be an issue so pipe will be encased in concrete between steel sheets, above and below. Riprap will be placed on the seaward

- side of sheet to protect the sheeting and provide scour protection
- The appearance of the pipe is described along its route

David Knowlton notes that this project is much better; while there will be no pipe on the beach, there are alot more permitting issues to go through.

Louis Morin of 6 Glover St wonders why not cover pipe with riprap where it is exposed? It will be encased in concrete and steel sheeting; additional fortification is not needed. Mr. Morin is concerned about aesthetics but it is pointed out that there will be stone placed on the seaward side so there will not be a vertical wall visible; if stone is put on top of the horizontal wall, it could wash off in a coastal event. Thus, there would be some issues to address the aesthetics. There will also be manholes that cannot be covered with riprap. Hoskins notes that even large stones tend to not stay put in an environment like this. This will be high density polyethylene pipe for longevity, it is more brittle than cast iron which is why it's encased in concrete.

Borings indicate the refusal limit; rock cores were not done but if they can't go down deep enough with sheets, either some ledge will be removed or mini piles could be drilled into the rock to attach the sheets. Flat stone will be placed for protection during overtopping to prevent scouring where the pipe is away from the wall/not flush with it.

Tom McMann of 23 Willow Ave asks about the location of the pipe. It will be 3' away from the wall; this will strengthen the seawall. No records of the walls were available on file; if the beach drops it will protect the wall. The beach varies so it is uncertain how much sand will be above the pipe but, it could be between 1' and 3'. Beach nourishment is not permitted for this project; sand movement is tightly regulated. Extra sand will be taken off site but it will be reset to preconstruction grade in applicable areas.

Jennifer Cunningham of 29 Green St. notes that one of the seawalls (the tall one) collapsed 15 years ago. Will putting the new pipe in disrupt the wall? In that case they are not excavating down except for driving the sheeting; concrete will butt up against the wall so will fortify it.

Tom McMann of 23 Willow Ave asks if Mr. Dion put pilings under the wall at Salem Depot. There are no records of this.

Division of Marine Fisheries (DMF) comments will come later in the process. Other permits such as ENF and Chapter 91 will notify DMF so there are many opportunities for their comments.

A motion to close the public hearing is made by Sheehan, seconded by Campbell and passes 4-0.

A motion to issue an Order of Conditions with standard conditions is made by Sheehan, seconded by Vieira, and passes 4-0.

C. 79 Columbus Avenue Home Reconstruction – DEP # TBD – Continuation of Public Hearing – Notice of Intent for Eric Cormier, 20 Cutter Street, Waltham, MA. Purpose of hearing is to discuss proposed reconstruction of a single-family home at 79 Columbus Avenue, within an area subject to protection under the Wetlands Protection Act MGL c.131§40 and Salem Wetlands Protection & Conservation Ordinance.

Note: Meeting anticipated to be continued pending receipt of site plan from Proponent and issuance of file number from DEP.

Mr. Cormier is present. There is no DEP file number yet; this item has been continued several times. A Plan has

been provided tonight.

Mr. Cormier describes the reconstruction process. Demolition was begun without permission, and later permitted. He has appeared before the Conservation Commission, before the Building Department three times, and the Historical Commission four times, leading to lots of delay. Hoskins notes that the project in in Land Subject to Coastal Storm Flowage (LSCSF). A silt sock has been placed around the property. There is no need for compensatory storage when filling a basement in such an area.

Tom Devine is present and is consulted as to how to move forward. The DEP does not have the drawings. Orders of Conditions have been issued if the steps needed to be taken are merely administrative.

Driveway logistics are discussed. The process for submitting plans to the DEP is described. Vieira notes that this item has been continued since July, and wonders about the difference in timing of having to wait from July to December, vs. having to now wait until January. The Applicant notes safety issues and complaints from neighbors. The house next door is for sale, and Mr. St. Pierre wants the job to be done. There is concern about water lines from the street into basement freezing/flooding. Weather can also be an issue, though it is good to build over the winter and have it ready for spring.

A motion to close the public hearing is made by Sheehan, seconded by Campbell, and passes 4-0.

A motion to issue an Order of Conditions with Standard conditions, subject to receipt of a DEP File Number, no later than 10 days prior to the next meeting (thus, by Jan. 11, otherwise the Applicant should come to the next meeting) is made by Sheehan, seconded by Vieira, and passes 4-0.

It is noted that the DEP can overrule the Conservation Commission if they don't agree; standard conditions can be obtained from Brittany Dolan, the Agent.

III. OLD/NEW BUSINESS, cont'd

A. Salem State University – Request for changes in Triannual Monitoring Program of former GTE/Sylvania site.

Tara Gallagher, Salem State Safety and Environmental Sustainability Coordinator, presents. She notes that stewardship is important, but so are financial resources. In the 4th quarter they verify integrity, and for 3 quarters they monitor. Reports are all the same each time, noting no seasonal or annual variability. The university has spent \$28,600 per year on this, which seems expensive for what it is. The Executive Summary of the most recent report from Oct. 28th is provided. Its conclusion is backed by more data; this is briefly outlined. She sought advice from DEP Mark Fairbrother, who clarified that it is a local decision but said if issued today, it would have been for monitoring twice a year. She is requesting once or twice per year for some relief.

Hoskins wonders why monitoring three times per year was conditioned. This was conditioned in 1993. It is uncertain if monitoring started in 1993 or 1996. It has not yet been discussed with TetraTech. Hoskins notes that normally monitoring is done because current conditions are acceptable, just to make sure the situation has not become unacceptable; in this case there has been no change for many years. The ballfield is next to the marsh and there are sampling wells around the ball field. Surface water, groundwater and sediment are sampled. The marsh is tidal. Surface water sampling of ocean water means that picking up contaminants would be extremely unlikely. Groundwater may be sufficient for monitoring as it is where contamination would be most likely to be found. It is asked whether this was a DEP 21E site as these do not seem like Conservation Commission conditions. The area was previously a landfill.

The Commission suggests dropping monitoring of sediment surface water, and only monitoring groundwater

once a year in the summer, followed by a review the plan after the 2023 summer sampling. The Applicant can then request a Certificate of Compliance. Sampling was supposed to occur for 30 years. The Commission feels this is/was excessive and would like to look up original Order to see why it was prompted as necessary. They must come up to a decision before the next sampling round so it can be skipped.

A motion to amend the Order of Conditions to suspend further sampling for 60 days, pending a decision on whether to modify or discontinue sampling altogether, is made by Campbell, seconded by Vieira, and the motion passes 4-0.

B. Collins Cove Living Shoreline - Update and request for assistance with storm damage repair

Barbara Warren of Salem Sound Coastwatch presents. Two storms plus a bomb cyclone have decimated this project. Plants had become established, but the coir log and blanket for protection have failed. Repair costs will be \$20,590 for labor, materials and additional sand. Sumco EcoContracting will share the financial responsibility as the system was installed differently than it was designed. The designer was present for the beginning of work, but not the rest of the project. The cost will be split, meaning Salem will have to pay approximately \$11,545. This will be a one-time request as the next grant round is not available until August. Grants and timing are discussed. Coir logs are biodegradable but need to stay in place for 3-5 years. Ms. Warren is hoping the edge will be more stable, but the upper marsh will be more stable than the lower. They have not lost many plants.

Fencing will be reinstalled along the bike path; this was meant to be taken down in the winter but, we did not expect nor'easters in October. The Commission feels this is a lot of money for a temporary item. Ms. Warren notes that the City could explore encumbered funds and other options, and that the Developer is donating \$9,000 worth of coir logs. Tom Devine notes that the contractor views this as a "portfolio building project," and has stated that they are doing it at a loss. There is no other way to bridge the gap between now and the availability of grant funding.

A motion to grant \$11,545 in aid to this project is made by Vieira, seconded by Sheehan, and passes 4-0.

Salem Sound CoastWatch will put in for the grant for next winter, if it's not used, they will give it back.

IV. APPROVAL OF MINUTES: November 26, 2019

Postponed.

V. ADJOURNMENT

A motion to adjourn is made by Campbell, seconded by Sheehan, and passes unanimously.

The meeting ends at 9:14PM.

Know your rights under the Open Meeting Law M.G.L. c. 30A §18-25 and City Ordinance Sections 2-2028 through 2-2033.

Respectfully submitted, Stacy Kilb Clerk, Salem Conservation Commission