MINUTES

CONSERVATION COMMISSION

1 JUNKINS AVENUE PORTSMOUTH, NEW HAMPSHIRE EILEEN DONDERO FOLEY COUNCIL CHAMBERS

3:30 p.m. January 10, 2018

MEMBERS PRESENT: Chairman Steve Miller; Vice Chairman MaryAnn Blanchard,

Members Allison Tanner, Barbara McMillan, Samantha Collins, Adrianne Harrison, Kate Zamarchi; Alternate Ted Jankowski

MEMBERS ABSENT: Alternate Nathalie Morison

ALSO PRESENT: Peter Britz, Environmental Planner/Sustainability Coordinator

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I. ELECTION OF OFFICERS

A. Chairman

B. Vice Chairman

Vice Chairman noted that she enjoys the Vice Chair position. It makes her look at the city differently.

Chairman Miller questioned if anyone else was interested. This is an opportunity. It shouldn't be assumed that the Committee is moving ahead the same way. There is value in the diversity of the Commission. Chairman Miller made sure that the Commissioners knew they had the opportunity to step up if they wanted.

Ms. McMillan moved to re-elect Chairman Miller and Vice Chairman Blanchard to their respective positions for another year, seconded by Ms. Collins. The motion passed unanimously in a 7-0 vote.

II. APPROVAL OF MINUTES

1. December 13, 2017

Ms. McMillan pointed out that her name was spelled incorrectly throughout the minutes. Ms. Zamarchi pointed out a spelling error on page 8.

Ms. McMillan moved to approve the minutes as amended, seconded by Ms. Zamarchi. The motion passed unanimously in a 7-0 vote.

Ms. Collins recused herself because she was absent from the December 13, 2018 meeting.

III. CONDITIONAL USE PERMIT APPLICATIONS

A. 1850 Woodbury Avenue
Goodman Family Real Estate Trust
Nancy L. Goodman, Trustee
Map 239, Lot 9
(This applicant has asked to postpone to the February 14, 2018 meeting.)

B. Martine Cottage Road

Carolyn McCombe Revocable Trust of 1998, Elizabeth Barker Berdge Revocable Trust of 1993, and Tim Barker, owners Assessor Map 202, Lot 14 (This applicant has asked to postpone to the February 14, 2018 meeting.)

Items A and B will be heard at the February 14, 2018 meeting.

C. 212 Walker Bungalow Road
Martin F. Kurowski and Cristina Galli, owners
Assessor Map 223, Lot 21

John Chagnon and Steve Riker from Ambit engineering spoke to the application. Mr. Riker noted that this is a Conditional Use Permit and DES minor impact application for site improvements on the property. The existing conditions plan shows the tidal wetland and the Sagamore Creek shaded in blue. The green area to the northwest is the fresh water wetland. The house, a portion of the existing garage, the asphalt driveway and the patio are all in the buffer. There is one small area that is outside any buffer. The owners purchased the property September 29, 2017. The owners hired a local architecture company to help plan the site improvements. No structure or living space will be moved closer to the creek. The plan is to keep a small deck and screened-in porch. The intent is to keep the structure sandwiched equidistant between the two buffers. The detached garage will be replaced with a new attached garage in a similar location. The goal was to minimize grading on the site. A new AOS advanced systems septic tank is being proposed in the plans. That would tie into the existing forced main. The plans for the proposed improvements show a buffer impact exhibit. The purpose is to show where there is existing impact. It depicts the existing driveway, house, garage and deck. The septic tank swale and proposed rain garden are outlined there as well. The new addition to the house is in the orange shaded area. The plan is to keep the existing building and add on to that. There is currently no storm water treatment on the property, so included is a proposed storm water treatment plan. There is a 6-inch clay pipe that leads from the wetland area to the side of the existing garage and under the driveway. The pipe ends within a couple of feet from the fence line. It is conveying the storm water from that wetland area into Sagamore Creek without treatment. This proposal includes eliminating the clay pipe and replacing it with a vegetated drainage swale. Then the water would be treated. There is a storm drip edge around the proposed addition and some of the existing house. Half of the storm water from garage will go

to driveway and other half through a rain garden. The applicants have added a buffer planting to the plan. The proposed buffer planting plan includes slopes of the rain garden and shows the planting schedule for the native species. The species are native to New England and New Hampshire. The shrubs are about 10 feet from each other. The entire green area on the plans will be seeded with a grass mix. The buffer planting plan includes the removal of invasive species and replacement with native species. This proposal is trying to keep the improvements to what is currently graded lawn or asphalt. The only vegetated area that will be disturbed is an area with invasive species. The storm water treatment in the buffer was incorporated in the plans. It's all in the buffer there is no other place to put the treatment. Pervious pavers were considered, but the soils on the site are not conducive to them. That's why there is sloping to direct the water to the rain garden. There is a slight reduction of impervious surface. It is a 15 square feet reduction. The vegetated swale provides treatment; the clay pipe does not. The applicants stated they could add a note to the plan about fertilizers. The lot size is 1.4 acres. The house that exists there now is small compared to other houses in the neighborhood. The proposed addition is comparable and consistent with other recently built houses in the neighborhood.

Chairman Miller questioned when this house originally built, and questioned why the plan references say it's not recorded. Mr. Chagnon clarified that it means the plan was not found in the registry of deeds. Chairman Miller noted that he has seen this be used against the City before in legal battles. Is this actually a reference or just something that was thought up? Mr. Chagnon responded that a lot of things could lead to a plan not being recorded. They are doing the due diligence to try to find those plans from other surveyors. It shows everything that was used to come up with boundary decision.

Chairman Miller noted that it says the parcel that was partially located in the flood hazard zone was removed from the flood hazard area via a Letter of Map Amendment (LOMA). Mr. Chagnon responded that the LOMA is a process through FEMA that regulates the flood hazard program. Chairman Miller questioned if that meant that the property has been removed from that because owner doesn't want it there. Mr. Chagnon responded yes but clarified that the maps are made for the whole country. The map for this area doesn't always correspond to the ground, so a property owner can do the LOMA to take out properties that shouldn't be mapped as flood zone. Chairman Miller commented that this is a tidal river and the house is between 9 and 10 elevation. That brings up concerns of flooding with the sea level rise and storm surges. Mr. Chagnon responded that the flood hazard area is flood elevation nine. The new maps will be coming out to reflect that.

Vice Chairman Blanchard questioned when the construction of the house was. Christina Galli, the property owner, responded that the house was built in 1920. Chairman Miller noted that it looks great for a 1920 house.

Ms. Collins requested the applicant explain the benefits of the AOS septic system. Mr. Chagnon noted that currently there is a conventional septic tank system, which has a pump tank that pumps contents after processing to the leach field. Typical technology is that the waste flow comes into the tank and the solids settle. The liquids that come out are clearer and provide treatment of the contents. The AOS system has an extra tank. The second chamber has plastic balls inside the chamber and allows air in. This provides a huge surface area for the bacteria to

live, grow and digest the contents. The air that is brought in turns the tanks from anaerobic to aerobic digestion. After that there is a settling chamber, then it goes to the leach field. The AOS reduces suspended solids, nitrates and other things before it gets to the leach field. The leach field that's required with an AOS system is only 100 square feet. Which is much smaller than what is required for a conventional tank. A conventional septic has a high level of treatment in the field itself, so it needs a larger area to digest the strength of the waste. Ms. Collins questioned if the tank was bigger than the current tank because the leach field can be smaller. Mr. Chagnon responded that was correct. The existing tank is a 1000-gallon tank. The new one will be about 1400 gallons. It will be installed behind the garage.

Vice Chairman Blanchard commented that this system has to be pumped every two years. What is the access for that? Mr. Chagnon pointed out the cover locations on the handout.

Mr. Britz questioned if the applicants still needed approval from the subsurface bureau. Mr. Chagnon responded that they looked at records with the City and DES and were unable to find whether or not the current system was ever state approved. The state didn't approve systems until 1969, so that could be why. It could have been replaced since then and the state was not notified. The reviewer is requiring the project to come up with an operational approval. First you get design approval, then the operational approval. The problem is it can't be verified that the leach field was put in properly. Unless the applicants can come up with the operational approval, then a new leach field will have to be constructed. Chairman Miller noted that it was not clear that the leach field was going to be reduced. Mr. Chagnon responded that the intent is to reuse the leach field. The Applicants had an inspector look at field and was told it was in good working order. Chairman Miller clarified that the plan would be to change the distribution box. Mr. Chagnon responded that the plan was to change the distribution box because a header pipe will be added to the distribution box. Right now the system pumps up to the distribution box and can tend to cause issues having the water come out in a single stream. The detail for the new box has a diffuser so it comes out through a series of holes instead of a single stream. The plan was just to replace that. However, if the applicants can't come up with previous state approval, then a portion of field will have to be replaced.

Chairman Miller questioned if the leach field would be too close to the wetland. Is it adequate distance? Mr. Chagnon responded that given the advanced treatment it is adequate. Most of the treatment is in the tank not in the field. The state is requiring that a new 100-foot section leach field be put in. The rest of the old leach field will be left alone. Chairman Miller responded that the leach field would just add even more treatment. Mr. Chagnon confirmed that was correct. There is a vertical separation as well. It is 6 feet above the adjacent ground. Chairman Miller responded that was good.

Ms. Harrison questioned if the tank would impact the ground water if there would be a rise in the ground water table. Mr. Chagnon responded that the tank is properly sealed, so it would not let ground water in. This can be added to the notes in the plan to make that clear. Vice Chairman Blanchard questioned if the tank was concrete. Mr. Chagnon confirmed that was correct. Vice Chairman Blanchard clarified that it is porous. Mr. Chagnon responded that it is water tight with a coating.

Ms. Harrison questioned if the area outside of the buffer planting will be lawn. Mr. Riker confirmed that was correct. It is a lawn area now. Ms. Harrison questioned what the distance between the building and buffer planting was. Mr. Riker responded that it was 19 feet. Mr. Chagnon commented that the goal was to look at this site and determine what was best to do. The rain garden was the appropriate method of treatment. It is not any larger than it had to be. It was sized by measuring the contributing area. It's in an area that is currently paved; that pavement will be removed. The rain garden goes a little closer to buffer, but the applicants feel it's appropriate.

Ms. Tanner questioned how far the current garage was from the edge of the fresh water wetland. Mr. Riker responded it is 20 feet. Ms. Tanner noted that it appears to be further away than the 18.2 feet of the proposed garage. Mr. Chagnon confirmed that the new garage is a tad closer.

Ms. Tanner questioned why three trees were being removed. Mr. Riker responded that they would be very close to the proposed addition. Mr. Chagnon added that they are large pines. Recently a large limb fell off one of them and the owners are concerned about their integrity. Ms. Tanner noted that she did not see a replacement for them on the plans. Mr. Chagnon confirmed that replacement trees could be added.

Chairman Miller questioned what the buffer planting width was going to be. Mr. Riker responded that it would be 10 feet. Chairman Miller questioned if this area would be mowed. Mr. Riker responded that is not the intent, but it can be added to the plan to ensure that it would not be. Chairman Miller noted that it should not be mowed.

Chairman Miller appreciated the coloration of the map but noted that it gets busy trying got figure out what the site will look like afterwards. Chairman Miller asked for clarification on the impervious surface. Where is the reduction? Mr. Riker responded that there is roadway there. Some properties extend to a private road. That area was included in the calculations. The driveway is also a private road. The owners and neighbors have deeded rights of the driveway. Mr. Chagnon pointed out that the purple area shows the existing paved area. This will be replaced on the lower end by a rain garden and the patio area will be taken out.

Vice Chairman Blanchard clarified that the patio area in site photo 4 would be removed. Mr. Riker confirmed that a portion will be removed and the other portion will be part of the addition.

Mr. Jankowski questioned what the future lawn maintenance would be. Ms. Galli confirmed they don't use pesticides.

Mr. Britz noted that the specific plantings in the swale and rain garden were not specified. Can the same seed mix in buffer be used there? Mr. Chagnon confirmed that would be fine. Mr. Britz questioned what the lowest elevation of the addition was. Mr. Chagnon responded that it is 11 feet elevation on proposed addition. Mr. Britz confirmed that was two feet above the flood zone. Mr. Chagnon responded that was correct.

Ms. Collins questioned if a shoreland permit was needed in this circumstance. Mr. Chagnon confirmed that was correct. Ms. Collins questioned if that was the wetland application. Mr.

Riker responded that it's a separate application. Mr. Britz added that they just get notified on those. The Conservation Commission doesn't have a role on that.

Ms. McMillan questioned what the plantings are for the rain garden and swale. Mr. Riker responded that those would need to be specified. Ms. McMillan noted that the plan says it would be wetland vegetation, so that should be clarified.

Ms. McMillan questioned how the invasive plant removal was going to be done. Mr. Riker responded that some could be done by hand. Machinery may be needed. Ms. McMillan requested that the management inspection and maintenance plan talk about the buffer planting and rain garden maintenance. It should be edited to make it clearer. The mulching should be clarified. Homeowners tend to mulch too much. Mr. Riker confirmed that a note could be added to ensure the mulch does to not cover the stems. Ms. McMillan noted that most of the time plants die because it is not the right conditions. The plants that die should be replaced with plants that are surviving.

Vice Chairman Blanchard noted there is a great deal of lawn area on the property. Have there been any conversations about drainage and filtration? The land is really compromised by the proximity to the wetlands. This is still a significant increase to the buffer. Mr. Riker responded that they are in discussions with the owners. The goal is to do some landscaping to screen the leach field.

Ms. Harrison noted that the owners recently applied for a dock on this property. Is there a path to the dock? Mr. Riker confirmed it is just grass there now. Ms. Zamarchi questioned if that is why there is a break there on the plan. Mr. Riker confirmed that was correct.

Ms. McMillan requested clarification on where the trees that will be cut down were on the plans. Mr. Chagnon pointed out where the trees were on the plans. Ms. McMillan confirmed that they had already discussed replacing them.

Chairman Miller confirmed that he saw one pine that is to be removed, but requested clarification on where the other two that would be removed were. Mr. Chagnon responded it as just the two trees to the right of the one Chairman Miller had pointed out.

Mr. Jankowski clarified that the concern about the pines is that they are too close to the house. Mr. Chagnon responded that was correct and they are very tall. Ms. Galli added that a portion of one of them has already fallen over. Mr. Riker commented that the pines are susceptible to wind damage.

Chairman Miller questioned if the applicants had any additional information to give for the state permit. Mr. Riker responded that there was no additional information. Chairman Miller noted that the application was not complete. Mr. Riker responded that the Commission was provided a draft and it has since been filed with the City. Chairman Miller noted that there was missing information. Mr. Chagnon responded that the numbers were filled in for the filing. Chairman Miller noted that it is frustrating to not have all of the information. Mr. Britz added that the packets went out before it was filed with the clerk. Mr. Riker noted that the impact totals were

2,359 square feet of temporary impact in the buffer and 2,131 square feet of permanent impact. Mr. Britz confirmed that's what the application said.

Ms. McMillan clarified the trees that are being removed will be replaced. Ms. Harrison confirmed that it was talked about it as a condition. Ms. McMillan questioned if they would be in the same spot? Mr. Riker replied that they could be.

Ms. Zamarchi commented that she made notes on conditions that came up. There should be a no mowing zone in the buffer planting area. The trees that are being removed need to be replaced with new trees. Chairman Miller added that they can be anywhere on the property. There are a lot of areas that could benefit from trees and they should leave it up to the owners for the replacement location. Mr. Britz questioned if the tree types should be specified. Ms. Zamarchi clarified that the trees should be native to the area. Ms. Tanner added that it should be a type that is not impacted by beetles. Ms. Collins questioned if it should it be stipulated that the new trees be put in the 100 foot buffer zone. Chairman Miller agreed with that.

Ms. Zamarchi added that the rain garden maintenance schedule should include mulch depth. No fertilizers should be used on the lawns. Mr. Jankowski added that a certified organic lawn specialist should establish an organic lawn maintenance program for the property. Ms. Zamarchi noted that additional planting detail should be added to the plan for the rain garden and swale. The invasive plants shall be physically removed rather than by chemical. Ms. Collins questioned how maintenance plans are passed to new property owners. Is it recorded? Mr. Britz responded that it could be a stipulation that it's recorded.

Vice Chairman Blanchard agreed with that stipulation because it's connected with Mr. Jankowski's organic lawn maintenance program. This should be tied to the whole lawn maintenance area. It is appreciated that this plan includes replacing the septic. Ms. Collins questioned if the organic stipulation should be added to the existing storm water management plan. Mr. Britz confirmed that it should. It can either be added before the Planning Board meeting or the Planning Board can stipulate it and review it later.

Mr. Britz questioned if the 100 square feet for a leach field could be added to the plan before the Planning Board meeting then the applicants would not have to come back to the Conservation Commission. Is that ok with the Commission? Chairman Miller confirmed that was fine. Mr. Riker confirmed the plan would be updated.

Ms. Zamarchi appreciated all work that was done around the water treatment.

Chairman Miller agreed that it is certainly a challenging site because almost all of it is buffer. Chairman Miller appreciated discussion about septic, and the addition of shore plantings. This is a hard site to think about getting improvements. Chairman Miller supported the application

Vice Chairman Blanchard noted that she was supporting it with the stipulations because it gives further support to the buffer.

Ms. Tanner moved to recommend approval of the application to the Planning Board as presented, seconded by Ms. Zamarchi with the following stipulations:

- 1. The applicant will include an organic lawn maintenance plan with the overall property maintenance plan and will file this plan with the Rockingham County Registry of Deeds.
- 2. The applicant will not mow the proposed wetland buffer planting area.
- 3. The applicant will provide the same number of native trees in the 100' wetland buffer as the number removed for this project.
- 4. The applicant will update the site plan and maintenance plan to insure that the mulch proposed for the rain garden is limited to the minimum amount necessary.
- 5. The applicant will provide a planting plan for the raingarden and stormwater swale.
- 6. The applicant will provide a plan showing the impact in the inland wetland buffer for the proposed septic system.

The motion passed unanimously in a 7-0 vote.

IV. STATE WETLANDS PERMIT APPLICATIONS

Standard Dredge and Fill Application
212 Walker Bungalow Road
Martin F. Kurowski and Cristina Galli, owners
Assessor Map 223, Lot 21

Chairman Miller requested the applicant speak briefly speak to this application.

Mr. Riker noted that the impact in the tidal buffer zone were 2,359 square feet of temporary impact in the buffer and 2,131 square feet of permanent impact.

Ms. Zamarchi motioned to recommend approval of the application to the State Wetlands Bureau as presented, seconded by Ms. McMillan with the following stipulations:

- 1. The applicant will include an organic lawn maintenance plan with the overall property maintenance plan and will file this plan with the Rockingham County Registry of Deeds.
- 2. The applicant will not mow the proposed wetland buffer planting area.
- 3. The applicant will provide the same number of native trees in the 100' wetland buffer as the number removed for this project.
- 4. The applicant will update the site plan and maintenance plan to insure that the mulch proposed for the rain garden is limited to the minimum amount necessary.
- 5. The applicant will provide a planting plan for the rain garden and storm water swale.

The motion passed unanimously in a 7-0 vote.

V. OTHER BUSINESS

- A. Renewal of dues New Hampshire Association of Natural Resource Scientists \$20.00
 - a. Mr. Britz confirmed that no motion was needed. This was just an announcement.
- B. January 22, 2018 Land Steward Program Work Session, 12:00 p.m. 1:00 p.m.
 - a. Mr. Britz confirmed this meeting would be upstairs.
- C. January 25, 2018 Discussion on outreach Organic Pesticides, 3:30 p.m.
 - a. Mr. Britz confirmed this meeting would be in conference room A.
- D. February 7, 2018 Land Steward Program Presentation, 3:30 p.m.
 - a. Mr. Britz confirmed this presentation would be in conference room A.

Ms. McMillan received a letter from Jay Diener. Mr. Diener organizes a collaboration of different seacoast Conservation Commissions. The letter was looking for other Conservation Commissions to support the bill for wildlife trafficking from state to state.

Chairman Miller confirmed that he would forward Mr. Diener's letter to everyone. If we can do a letter as a Commission, then that would be great. Mr. Britz noted that the City has a legislative sub-committee that this should go through if the Commission were going to send something. The members can send something as individuals if they wanted. Chairman Miller confirmed that he would forward the letter the next day and the members could act accordingly. Mr. Diener holds a round table quarterly that everyone is invited to attend. It's a chance to talk to peers on the coast.

Vice Chairman Blanchard noted that the Commission should respond to this bill. It is not inappropriate to send a communication on it. This has to cross the senate floor. It is important to have a presence when there is a debate. Mr. Britz noted that he could help the Commission get together in front of the legislative sub-committee.

Ms. Harrison questioned when the public meeting to review the Climate Change Vulnerability Assessment on Historic Portsmouth presentation was going to be. Mr. Britz responded that it would be February 22, 2018 in the City Council Chambers. It was postponed to February because they got additional money to do some modeling on the floodwaters. The meeting will be held at 6:30 pm.

Chairman Miller added that he was going to hold a meeting with other Portsmouth groups who are working on conservation efforts. The goal is to have an informational meeting for all the groups to present what they are working on. This will help to avoid duplicate efforts. It should be open to the public, so they are aware of all that is going on.

Ms. Tanner wondered how many people know they have property that would be impacted. Ms. Harrison talked with Mr. Britz to ask people to complete a questionnaire and have them go online to see current and future sea level rise. Then they would have to acknowledge that there is risk at their property.

VI. ADJOURNMENT

Vice Chairman Blanchard motioned to adjourn at 5:12 pm, seconded by Ms. Collins. The motion passed unanimously in a 7-0 vote.

Respectfully submitted,

Rebecca Frey Conservation Commission Recording Secretary

These minutes were approved at the Conservation Commission meeting on February 14, 2018.