Conservation Commission Meeting Virtual Meeting June 1, 2023

This open meeting of the Sharon Conservation Commission was conducted remotely consistent with An Act Extending Certain COVID-19 Measures Adopted during the State of Emergency, signed into law on June 16th, 2021, and as amended and extended through March of 2025. These provisions allow public bodies to meet remotely if reasonable public access is afforded so the public can follow along with the deliberations of the meeting. For this meeting, the Conservation Commission convened by video/teleconferencing via Zoom, and members of the public were provided with access information so that they could follow the meeting remotely. All votes were conducted via roll call.

The remote meeting was called to order at 7:30 pm.

Conservation Commission Chair, Peg Arguimbau opened the meeting by reviewing the ground rules for the meeting. Roll call was taken of members and staff present and included: Chair, Peg Arguimbau, Vice Chair, Meredith Avery, Susan Drisko and Stephen Cremer. Keevin Geller, Alan Westman, and Jon Wasserman were not present. Staff present included Josh Philibert, Conservation Administrator.

7:37 PM Continued Public Hearing NOI 715 & 715R South Main Street, DEP# 280-650 Ninety-Five LLC, Ardent Group, Shawn Callaghan

Shawn Callaghan of the Ardent Group and Attorney Bob Shelmerdine were present on behalf of the applicant, David Spiegel of Nine-Five, LCC. Callaghan began the hearing by sharing his screen showing the NOI Supplement consisting of 18 comments in a formal response to the commission's requests from prior hearings regarding the project located at 715 and 715R South Main Street, DEP# SE280-0650.

- The first point discussed in the NOI Supplement addressed the Upper Pond and a portion of the bog area which needs to be conveyed to the Conservation Commission via Conservation Restriction or easement. The Conservation Restriction and/or easement is awaiting finalization. Shelmerdine added that since the May 25th meeting, the Conservation Commission was able to perform a site visit with Shawn Callaghan. Town Counsel is aware of the timeline and Philibert will follow up with drafted language next week. There was consensus in support of the plan.
- 2) The second addressed concern regarded a collapsed metal billboard on the property with a concrete balance. It will be removed as part of the project.
- 3) Next, in identifying the hydrologic connection between the southern and middle planting beds, elevations will be added to the plans. The applicants have a survey planned for Monday, June 5th to gather information relating to water connections and structures for updated plans. Previously, the Conservation Commission had asked for removal of the three CMP pipes that don't have water control structures or boards. Callaghan proposed lining the pipes with PVC liners. The suggested method would create less disturbance.

The alternative suggestion was conceived after the site visit, the commission was not aware of the idea until the meeting. Avery confirmed with Callaghan that he was

suggesting a slip line with PVC to reinforce the equipment instead of removal. She noted she did not mind the disturbance for the purpose of creating an open channel. Avery also expressed concerns that a pipe could become blocked. Arguimbau asked for the pipes' diameter, and Callaghan answered that they are between 18 and 24". Philibert asked for general locations of the pipes on the plan, Callaghan replied that they have not yet been formalized on an updated plan. Philibert and Arguimbau discussed the condition of the pipes and how they may vary and/or decay at different rates over time. Avery added that the cross berm is necessary for providing hydrology to the rest of the wetland area. Philibert expressed his preference for a permanent solution.

Callaghan confirmed the members were suggesting total removal of the piping and implanting rip rap. He deciphered that utilizing rip rap to stabilize the slopes would be better than seeding. Avery noted that because there is not a large gradient and there is mostly limited flow, rip rap is acceptable. Callaghan agreed to update the plans accordingly.

- 4) Callaghan provided members with information regarding the southern sand area and the eastern most planting bed. The area has good hydrology and there are no structures bringing water there. In the ditches surrounding the area, it is just groundwater influence. He confirmed that the hydrology will support wetland vegetation without the need for structures and/or boards.
- 5) On May 15, 2023 it was confirmed that there is no culvert on the property.
- 6) Callaghan noted the depths of 8", 10", and 12" will be used for estimated excavation depths in the phragmites removal areas. Specifics will be added to the plans.
- 7) On the site walk, an important control structure was identified between Lower Pond and the central planting bed. It will be added to the plans.
- 8) The control structure between Middle and Lower Pond is in poor repair and there was no information about it in the plans. Fred Bottomly, the former bog operator joined Callaghan and the commission members on the most recent site walk. He said the structure previously maintained a hydrologic connection although it no longer typically carries flow. While removal is not an option as it would destroy the banks and shores, the older structure will be filled in place and no longer used. Arguimbau, Cremer, and Philibert discussed the location and size of the control structure as well as the materials there. Cremer voiced concern about the possibility of voltaic cell creation as aluminum oxide could result from mixing aluminum and steel. Bottomly had also expressed concern about aluminum boards as they might be vulnerable to theft. It was decided pressure treated wood might be the best option as they have an anticipated 30 year lifespan.
- 9) Callaghan discussed the hydrology changes in the area in regard to a two downstream CMP control structures. He suggested creating an upland area with native wild seedlings instead of attempting to facilitate a wetland area.

Arguimbau asked about the potential for creating a hydrologic connection. She expressed concerns about Callaghan's response, stating a hydrologic connection between Middle and Lower Pond would be undesirable as they water was coming in from the northeast. Arguimbau restated the commission's priority: a bog; and encouraged Callaghan and members to think of ways to get some kind of appropriate hydrology there.

Philibert noted that in 2004 on Google Earth, the area was completely forested and that Old Post Road continued to be there, which did not convince him that there was much hydrologic input coming from the site. He spoke to Arguimbau's suggesting for considering ways to establish hydrologic connection in that area. Looking at spot elevations, he surmised it may be possible to raise control structure boards and potentially flood the bed. Arguimbau suggested the meeting return to this point and continue with the next point in the NOI Supplement.

10) Callaghan discussed establishing a wetland hydrology while pulling up the site plan to identify the proposal to work with vegetative growth currently present instead of making the whole site a PEM. He suggested creating zones based on water regime and plants already growing in those locations such as Red Maples. He also addressed the commission's previous request asking for more trees on the planting plan.

Drisko asked about increasing hydrology in the area. Callaghan responded with a potential plan to remove material, perform a deep excavation, and connect Middle Pond to Lower Pond making new ditches. Drisko followed up asking if that work would dry up other places on the land. Callaghan agreed that would be a concern and reiterated his suggestion to work with growth already on site. Philibert suggested bringing up the water level with control structure boards instead of excavation noting that turning a dry area into an upland doesn't seem like much of an accomplishment.

- 11) Callaghan informed members the plan calls for a variety of wetland development on site including PFOs, PSS, and PEMs.
- 12) Native planting plans include shrubs, herbaceous species in phragmites areas, and a 14" estimated removal depth. Philibert questioned whether 14" of excavation will be successful in removing phragmites roots and what methods would address future phragmites growing in standing water. Callaghan ensured the members and Philibert that all roots will be removed and there would not be any regrowth, stating his willingness to dig beyond 14" if needed.
- 13) Callahan noted that the planting plan utilizing a variety of seed mixes in the northern and southern beds would be shown as separate areas on the planting plan as requested.
- 14) Additionally, Callaghan explained that the proposals include sand area removal, additional site investigations and assessment. He stated work in the northern beds may include removing 2-3" of sand and replacing it with 50/50 screen loam and organic compost with wildflower seeds, native trees, and shrubs. Philibert confirmed Callaghan has no plans to remove any of the native vegetation already on site.

- 15) Callaghan stated that per the commissioners' requests, the water control structures will be added to the plans.
- 16) Updated plans will include an increase in detail and number of plants proposed.
- 17) Callaghan addressed the commission's previously expressed concerns about the size of the pit and mound area. He offered two possible solutions for increasing the square footage: adding more mounds as the commission had previously suggested, or enlarging the areas already identified.
- 18) Lastly, Callaghan discussed performance standards which include supporting a free flow of water with hydrology supporting planned vegetative communities. Additionally, specifics on measuring success in plantings and seeded restored areas. After one growing season: 70%. After two growing seasons, 80% would indicate success in conjunction with 50% vegetative cover of native vegetation in the pit and pound areas after six months.

Drisko asked for clarification as to what would happen if the 50% threshold was not met. Callaghan informed the meeting that in the pit areas the plan is to give the native seed bed that's underlying in the peet a chance to grow. If growth is not deemed satisfactory, then a native seed mix would be planted. He believes there is a possibility that growth from the seed mix dating back to the 1800s will survive. Callaghan assured the members that he is a double-seeder and that after a year if the desired outcome did not come to fruition, he would reseed the area. Drisko asked that these specifics be added in the performance standards. Callaghan agreed.

Callaghan informed members of his plan to provide a second NOI Supplement and updated plans after the surveys scheduled for the coming Monday.

Avery brought up the letter regarding limited project provisions of the Massachusetts Wetland Protection Act that allows a project to exceed 5,00 square feet of alteration. She asked about other permitting requirements noted in the letter and if this activity will likely trigger any additional review outside of the Conservation Commission's jurisdiction. She praised the work done on the site visit and Callaghan's responses to the commission's questions. She believes the Conservation Commission needs to understand that there are forested areas present on the land that will turn into uplands if the hydrology does not support wetland vegetation. Avery noted there will be boggy wetland and a variety of growth and a Conservation Restriction to prevent development of any potential uplands on site.

Callaghan addressed Shelmerdine about the possibility of adding language into the Conservation Restriction that land cannot be developed in perpetuity. Arguimbau stated that Town Counsel and Sherlmerdine will address these concerns.

Agruimbau also asked members for confirmation that as the commission had previously discussed in the meeting, consensus regarding lining old piping was to remove the structures and place riprap in its place. Callaghan was in agreement as well.

Philibert shared his screen showing the most recent Google Earth overlay and the efforts to maintain wetland vegetation hydrology. He also identified another place where more plywood may be under water affecting hydrologic connections near Billings Brook. Avery asked Callaghan for a numbered system identifying the control structures. Arguimbau suggested evaluating the redesign and sand removal at a later date.

Sharon resident, Laura Neslon of Edge Hill Road, addressed the meeting. She thanked members who visited the site with Callaghan and praised the part of the plan removing the rusted billboard. She requested milkweed be planted to support monarch butterflies. Callaghan agreed and noted pollinators were planned for the northern area. Avery agreed with those plans as well.

There were no other comments.

Motion: Motion to continue the hearing to the June 15, 2023, meeting. Cremer moved. Drisko seconded. Avery – Aye, Cremer – Aye, Drisko – Aye, Arguimbau – Aye 4-0-0 Motion Passed

8:30 PM Discussion Item Camp Everwood/LMAC South Cove Proposed Low-dose Alum Treatment, Debbie Tatro

Debbie Tatro of the LMAC addressed the commission about the proposed changes to DEP# SE280-0425 the aquatic management plan for Lake Massapoag. Main concerns include invasive weed growth and cyanobacteria blooms.

Cyanobacteria blooms have increased globally and locally in New England in recent years. During 2021 public beaches, as well as Camp Everwood on Lake Massapoag, had to close in response to blooms. The LMAC and Camp Everwood are working together to formulate a multifaceted approach to reduce cyanobacteria blooms which result from nutrients present in the water, and warm water mixed with sunlight and stagnant water. Global warming contributes to cyanobacteria growth over other phytoplankton. Phosphorous presence is a key factor in cyanobacteria blooms. While general consensus is that levels over .025 mg/l promote cyanobacteria growth, levels in the South Cove of Lake Massapoag average at .035 mg/l. It is believed septic inputs are a contributing factor.

Part of the strategy in addressing the cyanobacteria in the South Cove proposes reducing the amount of phosphorous in the water. Implementing the use of Eutrosorb Filter Socks is one of two strategies recommended by TRC Companies Matt Ladaway. He recommended first using Eutrosorb Filter Socks, filters containing a material that intercepts soluble phosphorous from moving water. The Eurosorb material is safe for aquatic life. The material does not dissolve

and is removed after eight weeks. Each 25 lbs of filter removes .25 lbs of phosphorous which can support 125 lbs of algae growth. The applicants are currently investigating the composite of the material as it is proprietary and the website for Eutrosorb Filter Socks does not provide information as to its composition. Tatro shared her screen identifying locations for five Eutrosorb Socks which would be staked in place to intercept flowing water. There were various configurations identified.

TRC's second recommendation involved Alum (aluminum sulfate). When added to the lake water the compound forms aluminum hydroxide which is safe for humans and aquatic life. The active ingredient is found in many antacids and the chemicals form a flocculent material that can absorb phosphorous. The LMAC is currently researching two strategies involving adding Alum to Lake Masspaog. A high dose in the deep hole part of the lake could prevent the stratified water in the warmer months from becoming anoxic. When the water in the deep hole becomes anoxic the sediments bind to iron altering the status of the iron and releasing phosphorous into the water. Future plans may call for the LMAC to come before the Conservation Commission asking for permission to administer a high dose of interference which would settle at the bottom of the deep hole, forming a blanket that separates the area from a water column. More data is necessary at this point.

Concurrently, a lose dose of alum treatment is being considered to remove phosphorous in the water column of the South Cove. The proposal includes a low dose of alum treatment in places that are more than five feet deep.

Alum is non-toxic and would be brought in by a tanker truck and then delivered to the water via a johnboat. Two compounds are mixed in the tanker truck and injected into the water column. The applicants are hopeful to perform the application this season. Camp Everwood would fund the Eutrosorb Socks which would also be utilized this season. The same company, Water and Wetland, LLC would perform both strategies. Scott Brody from Everwood Day Camp confirmed the camp's willingness to cover the \$20,000 cost of the Eutrosorb Sock installation and praised the LMAC, Conservation Commission, and Philibert for their work on the matter.

Drisko, Philibert, and Tatro discussed high dose alum treatment noting the longer anticipated timeframe and \$100,000-\$200,000 potential cost. More data is needed. Philibert noted the expected effectiveness of a high dose treatment is ten years. Cremer discussed gathering data in April as opposed to starting in May as they levels are already high in May and seem to already begin dissipating by September and October. Tatro answered another one of Cremer's questions regarding the source of the phosphorous affecting the effectiveness of the treatment. The source is mainly septic and fertilizer. Arguimbau noted that many cesspools around the lake have been upgraded and their effects should be lessening. She also noted the possibility that fertilizer use may be increasing and there is a need for increase public awareness. In the 1980s and 1990s there was an education campaign aimed at residents of the Lake Massapoag Watershed District to consider choosing laundry detergents lower in phosphorous. Philibert mentioned that Kevin Davis at the DPW will be talking to licensed landscapers about not using phosphorous in town.

Cremer discussed further educational pushes. Tatro noted that Laura Russell of the LMAC has addressed the Sharon Men's Club on the matter. The LMAC also has social media posts regarding the issue and a presence on Sharon Day and Sharon Green Day as well as a new

website: LakeMasspoag.net. Avery agreed about the importance of controlling input as a way to quell cyanobacteria growth. She also noted her intrigue regarding the use of Eurtrosorb Socks in eight week periods.

Arguimbau instructed the LMAC to return on June 15th for a public hearing regarding amending the current OOC, DEP# SE280-0425, which will need to be advertised.

9:05 PM Discussion Item Diamond Estates Exp. OOC & Rep. Area Enforc. Order

Philibert shared his screen discussing the Enforcement Order and mitigation sequencing of an existing NOI for work proposed at 61 Eisenhower Drive, DEP# SE-280-0588. He noted that the NOI describes the work as a buffer enhancement plan. Arguimbau stated the permit holders need to address the requirement that work be completed per plan. Philibert explained that the applicants' wetland scientist proposed work beyond the plan like placing plantings up stream to continue the cover. There is no vegetation where the forest ends and the part of the construction zone begins where they installed a culvert. He commended the idea of planting trees and shrubs in that area. There was also discussion with the permit holders about fixing the grading post-construction in a ditch at the far side of the property. Some areas currently only have herbaceous vegetation and they will get shrubs and other plantings.

The commission agreed to issue the Enforcement Order and noted there will be a signature page at Town Hall.

Motion: Motion to issue an Enforcement order to the property owner of Diamond Estates

Drisko moved. Cremer seconded. Avery – Aye, Cremer – Aye, Drisko – Aye, Arguimbau – Aye 4-0-0 Motion Passed

9:05 PM	Discussion Item	Lake Update
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Philibert notified members that fish kill was concerning this year. He reached out to the Department of Fish and Wildlife who attributed it to the stress this time of year and called it a "natural occurrence." Layers in the lake have not full oxygenated yet and this puts stress on the spawning species. The dead fish were only one class size of one species: 5-6" white perch; no sun fish or bass or others. The Recreation Department arranged for someone at the DPW to clean up Memorial Park Beach.

Lake levels were still high so Philibert opened the gate to let out some water. He also noted that water samples showed tiny flecks of cyanobacteria, nowhere near "bloom" levels. Neurotoxicity was not a concern. He is hopeful cool temperatures and rain will flush the organisms out of the lake. Avery asked about what will happen when removing phosphorous and still having high temperatures. Philibert noted the phosphorous removal may be the only factor that can be affected at this time.

9:10 PM Discussion Item Conservation Administrator Update

Philibert discussed cranberry bog restoration and his conversations with the Massachusetts Department of Ecological Restoration and the company Beals and Thomas. Arguimbau, Avery, and Philibert discussed upland hydrology. Philibert mentioned the possibility of raising water levels with control structures to result in what could be considered as an emerging wetland. Avery noted that would be a managed wetland in that case and not a natural wetland. Philibert suggested leaving in some boards randomly to attempt to create wetlands. Together they listed the priorities as: removing phragmites and sprinkler systems.

9:15 PM Other Business Approve Minutes for April 13, 2023; April 13, 2023 Executive Session; April 27, 2023; May 3, 2023; and May 18, 2023

For the April 13, 2023 meeting there were not enough members present who attended that meeting so there was no vote taken.

For the April 27, 2023 meeting there were comments made and members voted to approve the minutes as amended.

Drisko Moved Cremer Seconded Avery – Aye, Cremer – Aye, Drisko – Aye, Arguimbau – Aye 4-0-0 Motion Passed

For the May 5, 2023 minutes, members voted to approve the minutes as amended for word choice.

Drisko Moved Avery Seconded Avery – Aye, Cremer – Aye, Drisko – Aye, Cremer – Aye. 4-0-0 Motion Passed

9:20 PM Other Business Knollwood Update

Peter O'Cain is checking in on the project located on Edge Hill Road as part of Knollwood Cemetary. Prior to the Conservation Commission overseeing the Stormwater Bylaw, there was a vote on the project. Philibert noted there is a \$1,000 filing fee in the bylaw. Arguimbau at the very least would like to invite the property owners to explain the project. Cremer would like the commission to discuss what its role is in stormwater management at a future meeting as well.

Avery and Arguimbau discussed the lack of plan review before the work started as nothing was ever submitted. Arguimbau encouraged members to drive by the parcel to review the work already begun.

9:37 PM Other Business Lake Cleanup and July and August Meetings

Drisko informed members the Neponset River Watershed Association and the Sustainable Sharon Club have organized a lake clean-up for June 10th.

Members decided the July meeting would take place on July 13th and the August meeting would tentatively take place August 10th.

9:37 PM Motion to Adjourn

Motion: Motion to adjourn Cremer moved. Drisko seconded. Avery – Aye, Cremer - Aye, Drisko – Aye, Arguimbau – Aye 4-0-0 Motion Passed