

**NATURAL RESOURCES COMMISSION**  
**Meeting Minutes**  
**February 3, 2021**

Pursuant to the notice filed with the Town Clerk, a virtual public meeting of the Natural Resources Commission was held on Wednesday, February 3, 2021 at 7:00 p.m, in accordance with the Commonwealth of Massachusetts Executive Order of March 12, 2020 Suspending Certain Provisions of the Open Meeting Law. The following Commissioners were present: Ed Nardi, Chair, Sarah Grimwood, Greg Higgins, Nick Pappas, and Judy Zaunbrecher. Natural Resources Director Delia Kaye, Assistant Natural Resources Director Colleen Puzas, and Natural Resources Administrative Assistant Karen Bockoven were also present.

<b>APPROVE MEETING MINUTES</b> <ul style="list-style-type: none"><li>December 16, 2020 and January 6, 2021</li></ul>
<b>DIRECTOR'S UPDATE</b>
<b>TO BE CONTINUED WITHOUT DISCUSSION TO FEBRUARY 17, 2021</b> <ul style="list-style-type: none"><li><b>WESTCHESTER COMPANY, INC.</b>, Lot 2A Keuka Road, CWB</li></ul>
<b>CONTINUANCES</b> <ul style="list-style-type: none"><li><b>MIDDLESEX SCHOOL</b>, 1400 Lowell Road, NOI</li><li><b>ALEX-SUN ENERGY SOLUTIONS, LLC</b>, 160 Range Road, NOI</li><li><b>GWIN</b>, 296 Bedford Street, NOI</li></ul>
<b>CLOSE and ISSUE</b> <ul style="list-style-type: none"><li><b>AUSTEN</b>, 26 Elm Street</li><li><b>BABCOCK &amp; CARLISLE</b>, 144 Upland Road</li></ul>
<b>CERTIFICATES OF COMPLIANCE</b> <ul style="list-style-type: none"><li><b>GLEASON</b>, 88 Southfield Road</li></ul>
<b>OTHER BUSINESS</b> <ul style="list-style-type: none"><li>50-foot No Build Policy Discussion</li><li>Neonicotinoid Discussion</li></ul>

Chair Nardi called the meeting to order at 7:00 p.m. He stated that the NRC meeting was being audio-recorded and requested that anyone from the public recording the meeting so inform the Commission.

**APPROVE MEETING MINUTES**

Commissioner Higgins moved to approve the December 16, 2020 NRC meeting minutes, as written. Commissioner Pappas seconded. **VOTE 4-0** by Roll Call Vote: Grimwood, Aye, Higgins, Aye, Pappas, Aye, Zaunbrecher, Aye, Nardi, Aye.

**APPROVE MEETING MINUTES**

Commissioner Higgins moved to approve the January 6, 2021 NRC meeting minutes, as amended. Commissioner Pappas seconded. It was **UNANIMOUSLY VOTED** by roll call vote: Grimwood, Aye, Higgins, Aye, Pappas, Aye, Zaunbrecher, Aye, Nardi, Aye.

## **DIRECTOR'S UPDATE**

- Director Kaye informed the Commission that she is in the process of interviewing ten applicants for the Land Manager position. She hopes to have the position filled by mid-March.
- The third forum regarding the White Pond beach and county road access improvements has been rescheduled to February 9<sup>th</sup>.

## **TO BE CONTINUED TO FEBRUARY 17, 2021**

### **Notice of Intent, Westchester Company, Inc., Lot 2A Keuka Road, CWB File #20-1**

Chair Nardi reopened the hearing seeking approval to construct a single-family home with garage, patio, driveway and associated grading within the 100-foot Buffer Zone to Bordering Vegetated Wetlands.

At the request of the Applicant, Commissioner Higgins moved to continue the hearing to February 17, 2021. Commissioner Pappas seconded. It was **UNANIMOUSLY VOTED** by roll call vote: Grimwood, Aye, Higgins, Aye, Pappas, Aye, Zaunbrecher, Aye, Nardi, Aye.

## **CONTINUANCES**

### **Notice of Intent, Middlesex School, 1400 Lowell Road, DEP File #137-1545**

Chair Nardi reopened the hearing seeking approval to improve existing playing fields including reorientation of the baseball infield; conversion of the relocated infield to an all-weather artificial surface; relocation of the grass football field; and conversion of two existing multi-purpose grass fields into an all-weather sports surface within the 100-foot Buffer Zone to Bordering Vegetated Wetlands.

List of plans and documents discussed at this meeting:

- Invasive Species Review and Management Plan prepared by Andrew Balon, Bartlett Tree, dated January 19, 2021;
- Toxicology Report prepared by Marie Rudiman, Weston & Sampson, dated January 19, 2021;
- Alternative Analysis prepared by Gale Associates dated January 21, 2021;
- Grading Drainage, & Utilities Plan prepared by Weston & Sampson revised January 22, 2021; and
- Planting Plan prepared by Weston & Sampson dated December 15, 2020.

Steve McKeown of Middlesex School, Ryan Chmielewski and Marie Rudiman of Weston and Sampson, and Sal Canciello from S3 Design attended tonight's meeting. Mr. McKeown explained that Mr. Canciello is an independent third-party reviewer who helped manage the alternative analysis.

Mr. Chmielewski said he recently drafted a town-wide athletic field master plan. A chart was done to show costs associated with field maintenance. The cost for an organic field can range anywhere between \$10,000 and \$22,000 per field. The cost for a topsoil field can range between \$10,000 and \$15,000. Sand-based high performance fields can range anywhere between \$25,000 to \$42,000. The cost for sand-based fields is higher because extra maintenance is needed. Chair Nardi requested

that this information be included in the alternatives analysis. Commissioner Zaunbrecher asked if sand-based fields were similar to grass root fields. Mr. Chmielewski replied that it depends on the type of grass and soil. The trade-off is that deep-rooted fields require more water and fertilizer. Director Kaye said she read that Marblehead did not experience reduced playability with their deep-rooted fields. They are treating organically without using pesticides or herbicides. Commissioner Pappas said that Middlesex School has stated that they have a high usage requirement. He asked if they will need more fields. Mr. McKeown explained that every student at Middlesex School is required to participate in team sports. If the grass fields are unplayable because of bad weather, the varsity games take precedent over the sub varsity games on the artificial turf fields. Mr. McKeown said their grass fields are very well maintained. Mr. Chmielewski explained that the type of sport being played is also a factor because the impacts are different.

Commissioner Zaunbrecher asked if a shock pad was necessary and what it is made of. Mr. McKeown replied that a shock pad is what lies underneath the infill. If someone were to fall, the shock pad helps absorb any impact. The shock pad they are proposing is a mix of foam and other materials.

Ms. Rudiman clarified that the term “pass” on the technical data sheets means within acceptable limits. Pesticide testing was probably done but she would have to go back to the manufacturer to confirm. Commissioner Zaunbrecher said the alternative analysis noted that the infill was organic. She asked if that meant there were no pesticides, etc. or is it because they are made from organic carbon-based materials. Mr. Chmielewski said they are probably made from carbon-based materials. Chair Nardi requested that they note actual numbers for the testing criteria because it would be helpful information when tracking.

Ms. Rudiman recommended analyzing groundwater for SVOCs which includes PAHs. The infill carpet does not contain them but it is plastic. Ms. Rudiman noted that Ecofill is a synthetic rubber material. She recommended that at least one background sample be taken before the synthetic turf is installed because PAHs can leach off asphalt and there are natural amounts of PAHs in the environment. It is helpful to understand what is there beforehand. She also recommended collecting quarterly samples to analyze for SVOCs. If nothing is detected, they can collect samples in the spring every year after that for as many years the NRC would like. With high water runoff in the spring, leaching typically occurs. Chair Nardi said it was his understanding that if SVOCs were going to show up they would probably show up in the first year.

Chair Nardi asked that any fill being brought on site be tested to make sure it is good quality. Ms. Rudiman replied it will be clean fill which does get tested. Mr. McKeown said they have not determined where they are getting the fill from yet.

Chair Nardi asked if microplastics will get caught at the catch basin in lieu of trench drains. Mr. Chmielewski said they decided to keep the trench drains. They will be installing hooded catch basin outlets that will catch any microplastics that get through. In addition, oil/grit separator tanks will take care of any floating material, as well as any material that sinks.

Chair Nardi asked if the school would consider testing for metals during the first year. The testing is relatively inexpensive. Mr. McKeown agreed to do. Ms. Rudiman asked that they test background samples for metals as well.

Chair Nardi reminded the Applicant they need to provide an invasive species management plan. Mr. Chmielewski replied that they will provide to staff on Friday.

Chair Nardi said that CPW had some additional comments regarding underground piping, etc. Director Kaye asked that the stormwater calculations be provided so CPW can review. Mr. Chmielewski said he did contact his civil engineer regarding that.

Sharon McGregor of 70 Williams Road said she could not find a comprehensive alternative analysis on the web site for public review. Chair Nardi said the alternative analysis when finalized will be more comprehensive.

Jane Hotchkiss, Select Board explained that there is moratorium in Town with regard to artificial turf fields. It would be good to have a comprehensive report on what is known and what is not known regardless if wetlands are involved. Projects like this affect the natural landscape of Concord. Ms. Hotchkiss said getting input from the Board of Health, Natural Resources Commission, Planning Board, and the schools may be helpful since there is already existing data. Commissioner Pappas stated this area of technology is constantly changing. Ms. Hotchkiss said this may be an initiative for the Select Board. Chair Nardi commented that the alternative analysis that Middlesex School will be providing is a good step.

Mark Myles of 298 Heaths Bridge Road asked if students had to participate in sports in order to graduate. He also asked what the school did prior to having synthetic fields. Mr. McKeown said that as part of their curriculum students are required to participate in sports, however, it is not a requirement to graduate. He explained that enrollment for the school has grown over the years. The school does not have any more space to add additional grass fields.

The Applicant agreed to continue the hearing to February 17, 2021 to allow additional information to be provided.

**Notice of Intent, Alex-Sun Energy Solutions, LLC, 160 Range Road, DEP File #137-1551**

Chair Nardi reopened the hearing seeking approval to construct an in-ground swimming pool, pool house, and patio within the 100-foot Buffer Zone to Bordering Vegetated Wetlands.

List of plans and documents discussed at this meeting:

- Wetland Permitting Plan prepared by Stamski and McNary, Inc. revised January 22, 2021.

Homeowner Christopher Winkelmann and Molly Obendorf from Stamski and McNary attended tonight's meeting. Ms. Obendorf said they have provided a planting list. Different symbols were used to indicate which trees will be stump ground, flush cut, or if the stump will remain. The existing and proposed tree lines are noted on the plan. Debris in the wetland and fencing will be removed. Feno markers will be installed to demarcate the mitigation area. They will list patio materials being used on the plan. Ms. Obendorf explained the mitigation area consists of mostly trees and tree debris. They thought a conservation seed mix would be sufficient. Staff has recommended planting 54 shrubs, which the homeowner has agreed to. Ms. Obendorf clarified that 12 trees in total are being removed, two of which are dead. They will leave the two dead trees as snags. They will plant 10 trees to replace the ones that are being removed. Ms. Obendorf asked for a recommendation as to what type of shrubs they should plant. They would like to close out the project tonight. Director Kaye stated the project cannot close until the final plans are submitted.

The Applicant should contact the person who flagged the wetlands so they can recommend appropriate plantings. New England Wildflower Society is another source.

Commissioner Zaunbrecher asked if the homeowner was keeping the chicken coop located in the back of the property. Mr. Winkelmann confirmed.

Ms. Obendorf informed the Commission that they are working on closing out the outstanding permits on this property.

There were no public comments.

The Applicant agreed to continue the hearing to February 17, 2021 to allow additional information to be provided.

**Notice of Intent, Gwin, 296 Bedford Street, DEP File #137-1553**

Chair Nardi reopened the hearing seeking approval to remove a portion of a barn slab; install a spa pool, wooden deck, bar, and utilities; and remove a portion of the existing house and replace with a two-story addition within the 200-foot Riverfront Area to an unnamed stream and the 100-foot Buffer Zone to Bank and Bordering Vegetated Wetlands.

List of plans and documents discussed at this meeting:

- Proposed Site Plan prepared by Landscape Architect Joshua Burgel revised January 21, 2021; and
- Permit Drawing prepared by Landscape Architect Joshua Burgel revised January 22, 2021.

Landscape Architect Joshua Burgel of 39 East Circle attended tonight's meeting. Mr. Burgel stated they have provided the waiver request, planting list, and reconciled both site plans. Erosion controls have been noted on the plan. They provided cut sheets for proposed lighting. Mr. Burgel also included a light installation detail. As requested, they will install amber lights. He explained that the step lights are for safety.

There were no public comments.

Commissioner Zaunbrecher moved to close the hearing and issue an Order of Conditions for DEP File #137-1553 with Findings A, B, C, and D, Standard Conditions 1-19, and Special Conditions 20-52. Commissioner Higgins seconded. It was **UNANIMOUSLY VOTED** by roll call vote: Grimwood, Aye, Higgins, Aye, Pappas, Aye, Zaunbrecher, Aye, Nardi, Aye.

**CLOSE AND ISSUE PERMITS**

**Austen, 26 Elm Street, DEP File #137-1549**

Chair Nardi reopened the hearing seeking approval to demolish an existing garage, construct a new garage, repair an existing driveway, and replace existing air-conditioning concrete pads within the 200-foot Riverfront Area to the Sudbury River and the 100-foot Buffer Zone to Bank and Bordering Vegetated Wetlands.

Commissioner Zaunbrecher moved to close the hearing and issue an Order of Conditions for DEP File #137-1549 with Findings, A, B, C, and D, Standard Conditions 1-19, and Special Conditions

20-48. Commissioner Pappas seconded. It was **UNANIMOUSLY VOTED** by roll call vote: Grimwood, Aye, Higgins, Aye, Pappas, Aye, Zaunbrecher, Aye, Nardi, Aye.

**Babcock and Carlisle, 144 Upland Road, DEP File #137-1552**

Chair Nardi reopened the hearing seeking approval to construct an addition within the 200-foot Riverfront Area to the Assabet River.

Commissioner Zaunbrecher moved to close the hearing and issue an Order of Conditions for DEP File #137-1552 with Findings A, B, and C, Standard Conditions 1-19, and Special Conditions 20-49. Commissioner Pappas seconded. It was **UNANIMOUSLY VOTED** by roll call vote: Grimwood, Aye, Higgins, Aye, Pappas, Aye, Zaunbrecher, Aye, Nardi, Aye.

**CERTIFICATES OF COMPLIANCE**

**Gleason, 88 Southfield Road, DEP File #137-1238**

Commissioner Higgins moved to issue a Certificate of Compliance for DEP File #137-1238. Commissioner Zaunbrecher seconded. It was **UNANIMOUSLY VOTED** by roll call vote: Grimwood, Aye, Higgins, Aye, Pappas, Aye, Zaunbrecher, Aye, Nardi, Aye.

**OTHER BUSINESS**

**50-foot No Build Policy Discussion**

Director Kaye said she believes there may be some ambiguity with the 50-foot No Build Policy, and what the NRC considers an existing encroachment needs to be clarified. She explained that when the policy was revised two years ago, it specifically stated that applicants couldn't expand beyond an existing encroachment. Director Kaye said that Commissioner Pappas has three points that she believes are helpful.

- The policy does not make any distinction for the type of existing structure that might qualify a project for an additional encroachment (house, patio, deck, or garage). What about a detached garage or retaining wall?
- There is no limit on the area that can be added to existing incursion provided no closer and appropriate mitigation is provided.
- Currently, approval to construct within the 50-foot NBZ requires 10:1 mitigation within the 100-foot Buffer Zone. The way the policy is implemented mitigation is provided within the 50-foot NBZ (as it should be). This point should be clarified. If mitigation is done within the 25-foot NDZ should the mitigation ratio go down?

Commissioner Higgins stated that the 50-foot area is referred to as the "No Build Zone". He said that even a structure as small as an irrigation head is not allowed. He commented that a stone wall or irrigation head is not a building. The Commission needs to define starting point that will set the distance. Commissioner Pappas asked about parking areas that are impervious. Commissioner Higgins said prior discussions were about dwellings. Chair Nardi said he would not want to see sheds or garages that are currently in the 25-foot NBZ be able to build closer. He believes garages attached to a house are different. Director Kaye asked if that would include any other structures

attached to the dwelling such as patio or deck. Commissioner Higgins said a deck may be part of a dwelling but not a patio. Chair Nardi recommended that the NRC define their terminology. Commissioner Zaunbrecher asked if the Commission should take a similar approach to what is done with Riverfront projects and not allowing more than 10% of what is already there and refer back to the original incursion. Commissioner Higgins suggested checking with the Planning Department since they have particular language with regard to zoning. Director Kaye will discuss with Town Planner Elizabeth Hughes for language. She will also review the Wetlands Protection Act.

Commissioner Pappas said that property owners are bound by how much mitigation area they have to work with. Commissioner Higgins said if someone owns a large lot and was willing to do extensive invasives removal in order to encroach into the NBZ that is something to consider. Commissioner Pappas said that may also be a benefit to the community. Director Kaye commented that the NRC would always encourage that, however, it would not be by right.

Director Kaye will provide revised language for the Commission to review.

### **Neonicotinoid Discussion**

Director Kaye said last year Article 49 was submitted to Town Meeting that would prohibit the Town from entering into new agriculture agreements with farmers who use neonicotinoids, but it was not included on the warrant schedule because of the pandemic. She explained that many farmers in Town are conventional farmers who use seeds treated with neonicotinoids. She informed the NRC that a few parcels are up for new lease agreements, including consideration of farmers who use neonicotinoid-treated seeds.

Last year, just before the pandemic struck, Director Kaye reached out to farmers who use Town land to ask what they would use in its place. Brian Cramer who is an organic farmer in Town, does not use neonicotinoids but was reluctant to have the Town implement a ban. Commissioner Grimwood said that Mr. Cramer was reluctant for a total ban but he supported Article 49. She said that Article 49 is not trying to totally ban neonicotinoids but is trying to avoid increasing the amount of land that could use neonicotinoids. Director Kaye said that farmers are trying to look at other options to reduce pesticide use which is why they use treated seeds rather spraying later in the season. Director Kaye is not sure what farmers would use if neonicotinoids are banned. She is not sure if there is an answer yet, and felt that it would be unwise to ban a product until there is a better known solution. Commissioner Pappas agreed. He said it disappointing that no one is offering alternatives. Commissioner Zaunbrecher said that UMass Extension Service may be able to provide information. Commissioner Grimwood said unless you are an organic farmer, the alternatives are not good. She said although treated seeds are better from a human perspective, neonicotinoids remain in the soil for a long time and eventually end up in the water. Commissioner Grimwood said her personal perspective is not to ban neonicotinoids but to keep control of the number of fields that are using it. Commissioner Zaunbrecher said if the Town implements a ban on neonicotinoids, that may push farmers into other towns. Commissioner Higgins asked if neonicotinoids are not used what will the farmers be allowed to use. He noted that the NRC shouldn't supersede Town Meeting. Commissioner Zaunbrecher was concerned that a ban would drive up the cost of locally grown food.

Steve Verrill of 415 Plainfield Road stated that the topic of neonicotinoids is very complicated. Research has been ongoing for many years and the use of treated seeds and technology has changed. Years ago seeds were put in a hopper and then insecticidal powder was placed on top. The

seeds would then drop down onto a seed plate that had holes and would rotate allowing the seeds to drop down. Vacuum feeders were subsequently used, and were very precise. However, powder in the feeder would blow out of the exhaust and onto the field. Today seeds are coated with only small amounts of neonicotinoids.

Director Kaye asked if neonicotinoids from treated seeds ever gets into pollen. Commissioner Grimwood said there is data showing that neonicotinoids are pretty much in all bee hives. Mr. Verrill stated years ago hemlock trees were getting infested with woolly adelgids. The trees were treated by spraying neonicotinoids. Mr. Verrill said he purchased 10 cans of spray which was only enough to treat one tree. He did not want to spend any more money to treat the other nine trees on his property and subsequently those trees died. Mr. Verrill said that treated seeds are better than spraying. Commissioner Grimwood said that Harvard conducted a study in 2016 which showed that nearly three-quarters of all honey tested across Massachusetts contained at least one detectable neonicotinoid. Mr. Verrill asked if the honey came from corn crops or hemlock trees. Commissioner Grimwood replied that she did not know. Mr. Verrill explained that hemlock trees are sprayed which is different from seeds directly treated. Spraying goes directly onto the ground and into the soil. Commissioner Pappas asked if other Concord farmers were using treated seeds. Mr. Verrill stated that other farmers were using treated seeds, and it is difficult to get untreated seeds, but companies are trying to find alternatives. The Massachusetts Pesticide Board will be meeting next month to consider making neonicotinoids a restricted chemical, which would allow use only by a licensed applicator. Commissioner Pappas said maybe a restriction could be put on non-treated seeds. Mr. Verrill said it is recommended that potatoes not be treated every year.

Commissioner Grimwood asked if there were any crops that Mr. Verrill could plant in the White Pond field that does not require treated seeds. Mr. Verrill said that most of the seeds he buys contain neonicotinoids. Commissioner Higgins asked what could be used in place of neonicotinoids. Mr. Verrill said they would have trouble buying seeds and many varieties would not be available.

Commissioner Zaunbrecher asked if the community gardeners were restricted from using neonicotinoids. Director Kaye stated that all community gardens are organic. People may not be aware that some seeds are treated with neonicotinoids. Commissioner Zaunbrecher suggested reminding the gardeners. Commissioner Higgins said it would also be good to inform the public especially since more land is owned by the public than what the farmers are using.

Mr. Verrill said there are two beekeepers on his property who have hives near his farm stand. Those bees are surviving. Commissioner Zaunbrecher said Marshall Farms has many bees as well.

Commissioner Pappas suggested getting input from the Agriculture Committee. Part of the problem is not knowing how much neonicotinoids are being used and to what extent. Director Kaye said that is what makes Article 49 challenging for Town Meeting.

Commissioner Grimwood said that the Pollinator Health Advisory Committee currently does not have a chairperson and they have not met that often. Last year they talked about contacting the Xerces Society to set up a workshop in order to provide education to the public. Commissioner Pappas said he reached out to them but then the pandemic hit. He believes it is important to provide information. Mr. Verrill said he will try to get this discussion on the next agenda for the Agriculture Committee. Commissioner Zaunbrecher suggested following up on the state level. Commissioner Higgins said it may be helpful to post a link on the Town's web site directing people

to information about neonicotinoids. Commissioner Grimwood said the Pollinator Health Advisory Committee put together a flyer providing good information. She will send the link to Director Kaye.

Commissioner Higgins noted that the NRC allows the use of chemicals for invasives removal. Rather than restricting the use for farmland, the policy should remain that only licensed applicators can apply chemicals, as is the current requirement. Chair Nardi suggested tabling the discussion after Mr. Verrill has had a chance to discuss with the Agriculture Committee.

Jane Hotchkiss commented that the discussion regarding neonicotinoids needs to be revisited.

Amity Wilczek, 24 Thoreau Court, introduced herself to the NRC. She explained that she is an ecologist and very interested in the neonicotinoid discussion, and would be happy to contribute to any research. The Commission thanked Ms. Wilczek.

Commissioner Pappas moved to adjourn. Commissioner Grimwood seconded. It was **UNANIMOUSLY VOTED** by roll call vote: Grimwood, Aye, Higgins, Aye, Pappas, Aye, Zaunbrecher, Aye, Nardi, Aye.

This meeting adjourned at 9:20 p.m.

Respectfully submitted,

Karen Bockoven  
Administrative Assistant

A video of the meeting can be seen by clicking this link or entering it into a web browser:

<https://www.youtube.com/watch?v=yjOfU15WWrk&list=PL1TTzrWEK00lmahd64BNDrCmG6lzsnlHS&index=36>