

TOWN OF AMHERST
Conservation Commission

March 8, 2023

APPROVED

In attendance: Rob Clemens – Chair, Jared Hardner, Rich Hart, Frank Montesanto, John Harvey (remote), Bill Widmer, Peter Lyon – Board of Selectman Ex-Officio, Steve Lutz - alternate, Christian Littlefield - alternate, Lee Gilman, Mark Bender - alternate
Staff present: Kristan Patenaude – Recording Secretary (remote).

Chair Rob Clemens called the meeting to order at 7:00 pm.

ADMINISTRATIVE:

1. Chair Comments

Rob Clemens noted that the Commission will review officer elections in April. He asked Commissioners to consider positions or nominations of interest.

2. Minutes: January 11, 2023 and February 22, 2023

Jared Hardner moved to approve the meeting minutes of January 11, 2023, as presented. Seconded by Frank Montesanto.

Vote: 7-0-0; motion approved.

Frank Montesanto moved to approve the meeting minutes of February 22, 2023, as presented. Seconded by Lee Gilman.

Vote: 5-0-2; motion approved [B. Widmer and J. Hardner abstaining].

3. Planning & Permitting

Steve Lutz explained that at its last meeting, the Planning Board considered extending the site permit approval for Resin Systems. The current view is that this cannot be extended, but this will be reviewed with Town Counsel. This will be considered by the Board at its March 15th meeting. If this is denied by the Planning Board, Resin System will need to seek new Conditional Use Permits (CUPs), which will come before the Commission. The Curran project was continued to April 5th. Regarding the Jacobsen project/TransFormations, the Planning Board will hear two parallel CUPs at a future meeting, one including workforce housing, and the other for a reduced density 33-unit project. There was discussion regarding this project containing a significant amount of land, with cautions to limit the wetland intrusions. The next Planning Board meeting agenda includes tree trimming along Christian Hill Road and two CUPs for properties near Baboosic Lake.

Rob Clemens explained that Resin Systems has had approvals granted, modified, and extended since 2005 in order to expand the property. The company is now seeking an additional five-year extension for this work, but the Planning Board stated that it does not believe it has the authority to grant this. This was brought before the Commission in 2014 and the group had no comments at this time. He stated that he was surprised by that, as the property backs up to Ponemah Bog and the project proposes some impacts and or encroachments on wetland buffers in that area.

March 8, 2023

APPROVED

There is concern from the applicant that a new application would mean new reviews and comments from boards/commissions. Steve Lutz stated that his sense is that the Planning Board is interested in trying to grant an extension, if at all possible.

Rob Clemens stated that the audience was not able to see the TransFormations plans, due to computer issues during the meeting. Updated plans should be available through the Town website. Some of these plans may have reduced density proposals. These plans will need to come before the Commission for CUPs. Neither plan option considers Pennichuck Water.

Bill Widmer noted that the Commission has approximately \$11,600 worth of budget funds to spend for the year.

a. Replacement of the Thornton Ferry 1 Bridge over Beaver Brook – Joe Ripley and Kimberly Peace, Hoyle Tanner Assoc..

Joe Ripley, Hoyle Tanner Associates, explained that Thornton Ferry Road I has an ongoing project to install a temporary bridge in order to reopen the road. A full 75-year replacement bridge is proposed to be installed on the site. Thornton Ferry Road I primarily runs east to west. Beaver Brook is highly fragmented on the upstream side, with flow running from north to south. The Brook has a very wide floodplain, with multiple river channels. There is a Town-owned, Conservation Commission managed, parcel immediately adjacent to this project in the northeast quadrant, the Minot J. Ross Memorial Bird Sanctuary. The existing bridge contains two corrugated metal pipes, 9'7" spanned by a 6'6" rise. This qualifies in the New Hampshire DOT vernacular as a bridge. The project is eligible for State Aid bridge funding. The existing roadway is 22 feet'. The proposed permanent bridge is a 50' wide, clear span bridge. This project modifies the vertical alignment by raising the road approximately 12" to allow for adequate roadway drainage and flood design. The proposed bridge will be slightly wider, at 24', to facilitate the NHDOT geometry requirements. Beaver Brook, in this location, is an NHDES Tier 3 stream, meaning that it has a watershed area of greater than one square mile. The design and the bid phase services of this project are through the New Hampshire DOT State Aid bridge program. This means that the State pays for 80% of all the engineering and the Town only pays 20%. This project was also selected for 100% federal funding for construction through the MOBIL program. This funding is reimbursable, the only caveat is that this funding requires an even more stringent right of way process.

Joe Ripley continued to explain that, in 2018, the existing headwall became unstable and partially collapsed, so a temporary fix was installed. The permanent bridge will have a rip rap stream simulation material included. It will provide an open bottom structure with wildlife benches on both sides. Most of the impacts from this project to the stream bed will be temporary. Removing the existing corrugated metal pipes and installing a span structure will restore a lot of the streambed in this area and help to convey the 50 year and 100-year flood flows. This will alleviate any concerns for roadway flooding at this site. By opening up the span, this bridge will not be a barrier to sediment or aquatic organisms. The project looks to utilize the same detour route currently in use.

March 8, 2023

APPROVED

Kimberly Peace, Hoyle Tanner Associates, stated that New Hampshire Fish & Game have identified potential habitat for a couple of wildlife species, but, through coordination, she does not believe there will be any concerns for either one of those species. Some invasive species were identified during the field work and the contractor will prepare an invasive species plan to make sure those are managed appropriately. During the cultural resources review with New Hampshire Division of Historical Resources, it was noted that the bridge is lumped into the Common Post 1945 Concrete and Steel Bridge structures. The project will adhere to typical erosion and sediment controls. The project requires a New Hampshire DES Standard Wetland Permit and an Army Corps Permit. It also requires a New Hampshire DES Shoreline Permit by Notification. The bridge will have a slanted rip rap material, with a bit of space on the inside to allow for wildlife passage. Wildlife will be able to go under the bridge instead of over the road.

Jared Hardner asked about the proposed wildlife benches. Kimberly Peace stated that there will be a smooth rip rap material above the water for the wildlife to come through.

Joe Ripley stated that hydraulic modeling was done which shows that there should be no local scour based on the proposal. The size of the new structure will reduce flood velocities through the structure.

Rich Hart asked if this would result in any change in the water level upstream. Joe Ripley stated that it will not reduce the normal water elevation, as this is essentially contained by beaver activity downstream. The water surface elevation is pretty uniform throughout this river reach. The proposal will reduce the 100-year and 50-year flood levels and, more importantly, the 100-year upstream flood elevation. At the conclusion of construction an analysis will be completed, and a LOMR (Letter Of Map Revision) to reduce the upstream floodplain will be filed. This proposal will not increase the downstream flood elevation.

Kimberly Peace stated that there are 4,225 s.f. of temporary impacts proposed to allow room for the contractor to work. The permanent impacts proposed are 187 s.f. In comparison, this project creates 1,734 s.f. of new streambed. The shoreland impacts are fairly small. There is also a small change in the impervious area, due to DOT requirements.

Jared Hardner asked where the impervious surfaces drain to. Joe Ripley explained that the site contains sheet flow off the edge of pavement, which is treated through the side slope vegetation. This project will maintain the existing stormwater flow lines. There is a low point of the bridge profile where water could potentially collect, and catch basins are proposed. A stone pad is proposed in the upland for slowing down water flow and removing sediment. There is a minimum slope to make sure that any water flowing is traveling as slowly as possible.

Joe Ripley stated that a temporary easement is needed on the Town-owned parcel for constructing the bridge. The proposal also includes the removal of two trees which are growing on top of the existing headwall. These two trees are actually within the Town's right of way but within the view scape of the bird sanctuary. Any disturbance within the sanctuary will be loamed

TOWN OF AMHERST
Conservation Commission

March 8, 2023

APPROVED

and seeded upon completion of work. This parcel was deeded to the Conservation Commission in 1977. An in-house easement specialist reviewed the easement and determined that the easement could be modified with permission of the Commission. There is also an existing unmaintained narrow path at the bottom of the roadway slope. This project will require lengthening of the guardrail and potential reconstruction of this trail. This would introduce an S-curve to tie into the existing trail. An additional easement is needed for this tie-in.

The Commission noted that there may be better options for an access point in this area. The group agreed to let the bridge be built as proposed and to consider this access point later.

Kimberly Peace stated that the MOBIL funding requires that the project adhere to the federal EPA review, to determine environmental impacts. This project will go through the Federal Highway Administration (FHWA) process, including a 4F Resource. This deals with Section 4F of the National Transportation Regulations which requires a hard review of any project that would impact a conservation land, such as the bird sanctuary. This requires an additional piece of paperwork to be filed, showing that Hoyle Tanner came to the Commission for permission for the temporary easement to construct the project and that the Commission agreed that the project will not have either a permanent or temporary alteration of the use or preservation of this land.

Rob Clemens suggested that Commissioners review this location. He stated that the Commission would then review and consider signing the letter.

Joe Ripley explained that the fiscal year for construction of this project is 2025, meaning that construction can begin in 2024. He hopes to have paperwork completed by this spring. He stated that he would send a draft letter to the Commission for its review.

Rich Hart asked how the design of this bridge will govern flows in this area. Joe Ripley stated that a thorough hydraulic analysis showed that this project will reduce the flood velocities immediately downstream. The downstream impacts are negligible because the flood elevation downstream converges back to existing conditions within 100' of the bridge. The project will reduce the elevations upstream, which is a benefit for FEMA flood insurance. The flow in this area is 7-8' per second at the 100-year flood flow. This is not a significant velocity.

Kimberly Peace noted that the Beaver Brook corridor is a large marshy system. It has the natural capacity to hold and absorb volumes. This bridge will let the system balance itself out. There are great existing buffer areas on both sides of the road to hold the existing volume.

John Harvey noted that this whole system was created by beavers likely 100 years ago. If the beavers are left to remain, the 100-year flow will take care of itself, and the beavers will gradually expand the wetland.

Rob Clemens noted that a number of trees in the path area have been chewed down by beavers. He asked about the impact of moving from culverts to the free span bridge on beaver activity. He noted that there have been complaints about dams downstream of this culvert flooding out

March 8, 2023

APPROVED

properties. Kimberly Peace stated that she does not believe this project will affect beaver activity.

Will Ludt, Chair of the Heritage Commission, stated that this road is one of the major arteries leading into the Historic District. He asked about a hybrid bridge that does not look quite so urban to soften the look of the bridge. Joe Ripley explained that the Manchester Road bridge included coloration on the abutments to make them look more like granite blocks, staining on the sides of the deck beams to make them brown, and powder coating on the rails to be brown instead of the silver. These are all options which could be explored with FHWA. The FHWA is okay with this, they may pay for the changes, or it will likely cost the Town \$50,000-\$75,000.

Will Ludt asked about a wooden bridge. Joe Ripley explained that FHWA requires a minimum 75-year design life bridge. There would be no federal money supplied for a wooden structure. Rob Clemens asked about a covered bridge. Joe Ripley explained that this likely would not be approved as the bridge is not currently covered.

Jared Hardner noted that users cannot actually see the sides of the bridge and only the guardrails are really visible. Joe Ripley noted that powder coating of the guard rails would likely cost approximately \$20,000.

Rob Clemens asked about water quality concerns associated with sedimentation and erosion. He asked if there is any baseline water quality monitoring associated with the project. Kimberly Peace stated that this is not required.

Rob Clemens noted that Beaver Brook is an impaired water body in the Town in at least one section. There is E.coli present and this water body is directly downgradient of a current PFAS problem in Town. He asked about baseline water quality monitoring in terms of understanding impacts from the construction project. Kimberly Peace stated that this is not required. While this is a nice opportunity to get that information, it also becomes a barrier to getting the project completed. The application will note that this is an impaired water body but that the project will not contribute to those impairments. Erosion and sediment controls will be put in place to make sure there are no turbidity releases.

Rob Clemens stated that the Commission will review the draft letter and the consulting party letter.

TOPICS

4. Other Business

Rich Hart stated that he would like to hold another tree pruning workshop on March 25th and 26th at Lindabury Orchard. Lee Gilman noted that he would likely not be available that weekend.

Rich Hart stated that he would consider dates and advertise the event once decided on.

TOWN OF AMHERST
Conservation Commission

March 8, 2023

APPROVED

The Commission discussed the pruning done by Currier in Lindabury Orchard. Todd Wilkins will come to clean up and chip the pruned branches in the spring.

John Harvey stated that he heard from the Town Librarian that the Library has run out of stewardship brochures. He explained that UNH Cooperative Extension puts out eight different trifold, colorful brochures. These are related to key items within the Wildlife Action Plan. He has received 20 of each, which he will send to the Library, along with a link to the Commission's website. Rob Clemens asked John Harvey to keep track of how quickly these brochures are taken. Rich Hart reminded the Commission that July 4th is coming up and the Commission usually likes to have similar brochures to hand out during the event. Rob Clemens noted that the habitat cover map for Amherst, generated by the Cooperative Extension, could also be updated for the event.

Steve Lutz stated that the Amherst Garden Club presented the Nature Steward program at its last meeting and in their newsletter. He suggested an official sign-up form that advertises the program. John Harvey stated that he would help to work on this item.

Lee Gilman stated that the UMass Extension Program will be hosting an invasive plant management certification program via four zoom sessions, two weeks apart, over the next month. He stated that he would send a link for the event to Commissioners. He noted that, in Massachusetts, every town is required to have a Tree Warden by State law.

Bill Widmer stated that the Town-wide Clean Up Day is scheduled for May 6th. Supplies will be given out at locations around Town and collection sites are still to be determined. He has approached six organizations regarding co-sponsoring and received firm commitments from four of them. He is expecting to have a zoom or conference call with the co-sponsors in April. He spoke with someone at DPW regarding signage for the event.

Christian Littlefield explained that he has found an edge mowing contractor for a few properties in Town, including Lindabury Orchard, Joppa Hill, and Dodge Road/Austin Road. The work at Lindabury Orchard will likely cost approximately \$2,600. He suggested that edge mowing be placed into the mowing schedule for future work.

In response to a question from Lee Gilman regarding if any treatment to stop regrowth on invasive species has been considered, Christian Littlefield stated that this contractor does not do anything for spraying or pesticides. He will grind down to the root structure and then lay grass seed.

John Harvey stated that margin mowing is mostly of value for fields that are in production for hay or corn. Lindabury is the only location mentioned that has that requirement. Fields used for grasslands or wildlife habitat need to have brush around the edges. Trees should be removed, and the brush should be kept. The brush is helpful for cover and food.

March 8, 2023

APPROVED

Christian Littlefield stated that there is some concern that there will not be any fields in ten years. This edge mowing will likely not be needed at Lindabury for the next five or ten years, maybe even longer, depending on how the field is mowed in the off seasons. This suggestion is to make sure that open spaces do not turn back into forested areas. John Harvey stated that he agrees with this but does not want to wipe out existing wildlife habitat.

Lee Gilman stated that, at locations such as Lindabury Orchard, it is sometimes helpful to mow ahead of an invasive species treatment to stop undesirable species from regrowing because mowing alone increases the stem density of undesirable invasive species. John Harvey stated that he does not disagree in terms of invasive species treatments, but he would like to see trees removed and brush kept as much as possible at other locations in Town.

Jared Hardner stated that edge will continue to creep and there should be a reset occasionally to deal with that. Once the thicker diameter vegetation has been removed and the area reset, the regular mowing in the fields can be readjusted to allow brush to grow on the edge. John Harvey agreed with this proposal, noting that he does not want habitat edge to be lost.

Lee Gilman noted that species desired to be protected should be flagged in these areas, prior to mowing. Christian Littlefield stated that he spoke to the contractor regarding walking these properties prior to mowing.

John Harvey stated that, regarding the proposed cuts at Dodge Road/Austin Road, 1–2-acre clear cuts in small meadows have almost no wildlife benefit. Three acres or more are needed to get any serious wildlife benefits. He stated that he would prefer if this project dealt with Lindabury Orchard only at this time.

Bill Widmer moved to expend not to exceed \$3,000 from the Land Account to fund boundary trimming, as discussed. Seconded by Jared Hardner.

Discussion:

The Commission discussed other properties to include as part of this project.

Bill Widmer called for the vote.

Rob Clemens stated that he would also like to consider cleanup along the stone walls in the upper Orchard if funds are available.

Vote: 7-0-0; motion approved.

The Commission agreed that it would like this work done as soon as possible.

5. Adjourn

Jared Hardner moved to adjourn at 9:20pm. Seconded by Frank Montesanto.

TOWN OF AMHERST
Conservation Commission

March 8, 2023

APPROVED

308 **Vote: 7-0-0; motion approved.**

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310 **The meeting adjourned at 9:20pm.**

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313 *Respectfully submitted,*

314 *Kristan Patenaude*

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316 *Minutes approved: April 12, 2023*