

THE INLAND WETLANDS COMMISSION OF THE TOWN OF AVON HELD A REGULAR MEETING AND PUBLIC HEARING ON TUESDAY, SEPTEMBER 3, 2019, IN THE TOWN OF AVON SELECTMEN'S CHAMBER.

Present were Chair Clifford Thier, and Vice-chair Michael Beauchamp; and Commissioners Bob Breckinridge, Martha Dean, Michael Feldman, and Dean Applefield. Absent was Commissioner Jed Usich. Also present was John McCahill, Planning and Community Development Specialist/Wetlands Agent.

Chairman Thier called the meeting to order at 7:00 p.m.

John McCahill suggested that The Connecticut Water Company make its presentation first, regarding notification of wetlands encroachment during water main replacement activities on Ox Box Drive and Woodhaven Drive right-of-ways, prior to the public hearing for Appl. #764. This would allow for the arrival of a one of the applicant's presenters this evening.

OTHER BUSINESS

Connecticut Water Company notification of wetlands encroachment during water main replacement activities on Oxbow Drive and Woodhaven Drive right-of-ways.

Present on behalf of The Connecticut Water Company was Kevin Schwabe, Developer Services Coordinator.

Chairman Thier recused himself from the Commission review of The Connecticut Water Company matter. Chairman Thier requested that Vice-chair Beauchamp actively conduct this portion of tonight's meeting.

Mr. Schwabe stated that as part of the water company's capital efficiency plan, there is a multi-layered approach to the determination of and process for replacing water mains; based on age, materials, main break history, and the proximity to critical infrastructure. This water main leads down Ridgewood Road to one of the tanks. There is a nearby well which is the source of the water supply. It provides water pressure to approximately 100-150 homes at a sufficient elevation where adequate pressure can be maintained for the homes. A new water main is planned for Rockledge Drive to Surrey Lane. The water main for Ox Bow Drive is undersized; it is currently a 6-inch cement main and will be replaced with an 8-inch ductile iron main. The activities will be within the 100' upland review area and the water company will also be digging in the wetland area. The main source of complication will be crossing under a 24-inch drainage pipe at Ox Bow Drive. A Dirtbag is a commercial sediment removal system. It will pump discharge water into the filters, the sediment will be kept and the water will be released. This area will also be surrounded by hay bales. This system has been established for many projects. The Connecticut Water Company is open to other suggestions that the Commission may have for this project. The project is planned to begin in early October of 2019. It should take approximately one day to cross under the pipe. Silt fences will be installed along the wetland areas in order to control the sediment as much as possible.

Commissioner Feldman inquired if the new water main was to be installed in addition to the main replacement; and if the project is one that requires approval by the State of Connecticut.

Mr. Schwabe responded that the project would entail only water main replacement. He responded in the affirmative regarding the State of Connecticut approval and also the approval by the State of Connecticut Public Utilities Regulatory Authority.

Commissioner Feldman inquired of John McCahill if the Commission had any jurisdictional discretion related to this project.

John McCahill responded that his memorandum to the Commission, dated August 23, 2019, discussed relevant issues related to the regulatory nature of this project. There is an exemption for water companies that is cited. The Town's review process was communicated to the Town Attorney. In the past, The Avon Water Company had prepared applications for submission to the Commission with the possible determined outcome that the water company did not need a permit. This Commission has historically granted permits in the past. The Connecticut Water Company would like to take a different approach in first requesting that the Commission determine that a permit is not required. The Commission is charged to determine that there is no permit and the water company is allowed to proceed as an allowable use. The language in the regulations gives the Commission the authority to make that determination.

Commissioner Feldman stated that the water company already has the State's approval and there does not appear to be a need for the Commission's approval and the Commission's discretion to deny the project does not seem to exist.

Commissioner Applefield stated that the approval from the State of Connecticut is not related to the authority of the Inland Wetlands Commission. The Commission does not have any document to act upon. The Commission does not have a letter of request for exemption from The Connecticut Water Company.

John McCahill stated that the Commission received a letter, dated August 9, 2019, from the water company requesting that the Commission make a determination that the replacement is not a regulated use.

Commissioner Applefield inquired where the request was specified in the letter. He did not believe that the letter specified a request. He did not believe the water company was exempt, and that it would be required to apply for a permit.

Commissioner Breckinridge referred Commissioner Applefield to the second paragraph of page two of the letter for the applicable verbiage.

Mr. Schwabe indicated that this section of the letter referenced an excerpt from the, *State of Connecticut Department of Public Utility Control (DPUC) "Docket #95-08-34: DPUC Investigation of the Process of and Jurisdiction over Siting Certain Utility Company Facilities & Plant in Connecticut, dated October 30, 1996: Section V – Conclusions & Orders..."*

Commissioner Applefield stated that Section V is an excerpt from a 22-year old DPUC proceeding and he questioned its current validity. He did not see a reason why The Connecticut Water Company should not apply for a permit. He did not believe that the Inland Wetlands Commission regulations provided the language for the exemption of a permit for the specific activities proposed by the water company.

John McCahill stated that historically there have been differing opinions of the members on the Commission as to whether or not a permit for water main replacement activities should be required. It would be a determination by the Commission based upon a majority rule.

Mr. Schwabe stated that he would be able to speak about the project; however, he would not be able to provide information on legal requirements.

Vice-chair Beauchamp inquired of Mr. Schwabe what he, as a representative of The Connecticut Water Company, was asking the Commission to decide that evening.

John McCahill indicated that the Commission needed to make a determination whether the proposed activities of the water company were regulated activities or activities as of right, whereby the replacement activities could be executed without a formal permit.

Commissioner Applefield stated that The Connecticut Water Company had not made a formal request for its intentions.

John McCahill stated that he was not speaking for the water company. However, in previous conversations with the water company, it was clear that the intention was to present the information tonight in order to allow the Commission to make the determination regarding the requirement of a permit or the proposed activities are as of right. It is apparently not clearly indicated in the letter.

Commissioner Feldman stated that Commissioner Applefield raised a valid point, after reviewing the language in the Town's regulations.

Commissioner Dean stated that the water company is maintaining something that is permitted as of right. It is clear that the State of Connecticut intends for the water company to consult with the Commission.

Commissioner Feldman stated that the maintenance section of the regulations relates to a drainage pipe, and the proposed activities do not involve a drainage pipe.

John McCahill indicated that it is a water distribution pipe.

Mr. Schwabe stated that the activities would involve crossing under a drainage pipe.

Commissioner Dean inquired about the definition of water impoundment.

Commissioner Applefield commented that it sounded like the meaning of a dam. A dam impounds water. The pipe involved in the proposed activities distributes water to houses.

Commissioner Breckinridge inquired of John McCahill regarding outcomes that the Commission has concluded in the past.

John McCahill responded that the Commission has had conversations in the past based upon presentations by The Connecticut Water Company. The water company has taken the approach that a decision could be made fairly quickly given its construction timeline in place. The water company has typically presented an application before the Commission, in the hope that the Commission would determine that it did not need an application. It has typically been the consensus of the Commission that if there is already an application before the Commission, it would be processed as an application.

Commissioner Feldman raised the hypothetical scenario that if the regulations exemption does not apply, and the water company needs the Commission's approval, what would be the process before the Commission?

John McCahill responded that the water company would present the exact same information being provided now, and possibly further information. The Commission would need to process the application like any other that is presented before the Commission. The information in the application would not substantially change. There are measures in place to protect the wetlands and watercourses. He was confident that the erosion and sediment control plan was adequate. He and representatives of the water company spent a great deal of time talking about the erosion and sediment control measures that would be in place.

Commissioner Applefield inquired of John McCahill how this application would differ from those in the past. In the past, the Commission has required the water company to submit applications for approval in order to ensure that the maintenance projects are enforceable. Something that occurs as of right is less clearly enforceable, especially if there are problems during the project.

Commissioner Breckinridge did not believe that the Commission always required water company applications in the past.

John McCahill responded that it had always been The Avon Water Company taking the lead to ensure that the water company went through the Commission process in a timely manner for its project deadlines. The water company would prepare a permit application and present its finding to the Commission that it is exempt as of right. If the Commission did not make that determination, there would be a permit approval for the water company to fall back upon.

Commissioner Dean commented that the language she was reviewing in the *Inland Wetlands and Watercourses Regulations, Town of Avon, Section 4 – Permitted Uses as of Right & nonregulated Uses, 4.1, d.*, related to construction and operation of dams, reservoirs, and other facilities, and other facilities necessary to the impounding storage withdrawal of water. She

raised the question to Commissioner Applefield of whether the proposed activities of the water company were indeed part of a facility necessary to impounding storage withdrawal of water.

Commissioner Applefield responded that he believed the language which comes after the word "necessary," in part d. was most relevant. He reviewed the wording of part d. aloud in order to determine that the verbiage was relevant to the issue at hand. The pipe would not be withdrawing water, as in a pipe taking water from a reservoir, the pipe would be distributing water.

Commissioner Dean stated that it was the pipe from which the homeowners were withdrawing their water through the public system.

Commissioner Applefield stated that the language could be viewed as such but did not agree with this interpretation.

Commissioner Dean commented that the regulation clearly stated construction and operation, and these activities seem to be all-encompassing of what the water company does.

Commissioner Applefield stated that the regulation did not specify construction and operation of a water company. If that language were included, he would agree with Commissioner Dean.

Vice-chair Beauchamp requested clarification of whether Commissioners Dean and Applefield would be in favor or requiring a permit from the water company.

Commissioner Applefield concluded that, in his opinion, the water company should apply for a permit; and he believed that once the water company applied for a permit, the permit could be approved.

Commissioner Feldman concurred with Commissioner Applefield. The word "pipe" or "maintenance," or phrase of "water main," could have been included if that was the intended meaning of the regulations.

Mr. Schwabe stated that 40% of the water company's storage is within the water mains.

Commissioner Feldman commented that the language at issue is within the Town's regulations. He inquired whether or not the Commission is allowed to change the language.

John McCahill stated that the regulation being discussed does come directly from the Connecticut State General Statutes. It would be permissible for the Commission to change the Town's regulations.

Vice-chair Beauchamp called for a Commissioner to make a motion.

Commissioner Applefield made a motion for The Connecticut Water Company to obtain a permit in order to conduct the proposed activities, as referred to in its letter dated August 9, 2019. Commissioner Feldman seconded the motion. The motion passed by majority of 3-2, with the following members voting in favor: Vice-chair Michael Beauchamp, and Commissioners

Dean Applefield and Michael Feldman; those members voting opposed were Commissioners Martha Dean and Bob Breckinridge. Chairman Thier was recused on this motion.

Mr. Schwabe inquired whether an application process would be required for a Town sewer replacement involving the upland review area of wetlands.

John McCahill responded in the affirmative.

PUBLIC HEARING:

APPL. #764 – The Estate of Donald L. Cole c/o William K. Cole, owner/applicant: Requests for regulated activities within wetlands and/or within the 100 foot upland review area: 1) Wetlands crossing #1, proposed driveway (approximately 1551 linear feet) with culverts and fill. 2) Wetlands Crossing #2, proposed driveway (40 linear feet) with culverts and fill. 3) Construction of driveway (470 linear feet), house, septic system, well, utilities, and related grading within 100 foot upland review area. 4) Excavation in upland review area to provide compensatory flood storage volume for driveway fill. Location 70 Sunrise Drive, Parcel 4190070.

Present on behalf of the applicant were William K. Cole, owner/applicant; David F. Whitney, of David F. Whitney Consulting Engineers, LLC; and Michael Klein, biologist and Registered Soil Scientist, of Davison Environmental, LLC.

Mr. Whitney identified the property address of the application as 70 Sunrise Drive. It is a 12-acre site with an existing house, located off of the cul-de-sac at this address. The site is shown on the survey map by Neriani Surveying, Inc., of Avon. There are considerable wetland areas shown on the map which were delineated by Michael Klein. The wetland flags were located by Neriani Surveying, Inc. The representation as shown on the maps is accurate. There is an existing pond, approximately .75/acre, located north of the existing house; part of the pond is located on a property to the east, owned by the Volpe family. There are several intermittent watercourses that come down from the south to the pond; there is a spillway at the pond that flows to Big Brook. Haynes Road is to the north of the site. There is a series of single-family houses on both sides of Haynes Road, with several homes adjacent to this site. The total wetlands on the property is 6.38 acres, which is 51% of the site; the total area of non-wetlands is 6.02 acres of the site, which is 49% of the site. Originally, the potential to access the property from Haynes Road via a vacant lot owned by the Brighenti family was explored. This is the reason the survey map shows the two properties; however, the Brighenti lot is no longer a part of the application, so the subject site is the estate property of Donald L. Cole, shown in orange marker ink. The plan for the “Site Development Plan” is a scale of one inch to 40 feet. The wetland areas have been shaded with green marker ink, to differentiate between wetlands and non-wetlands areas. The existing house has an area of non-wetlands of 1.4 acres. There are two knolls on the site of non-wetlands; the eastern knoll is .8 acres, and the western knoll is .6 acres. A large area along the northern portion of the site is non-wetlands, and is a total of 3.3 acres. However, if the area of non-wetlands is discounted, the area that is proposed for the construction of the house consists of 2.4 acres of non-wetlands. The proposed space for the house construction will fit into a decent sized area of non-wetlands. The application is also for the construction of a driveway. The driveway entrance will be off the cul-de-sac of Sunrise Drive. The driveway will continue down to the west and

curve through wetlands, over a knoll, and then through a more narrow section of wetlands and to the knoll where the house will be located.

Chairman Thier inquired of Mr. Whitney, for clarification, if the knolls were within the 100' upland review area.

Mr. Whitney responded in the affirmative. There is a non-regulated portion of land, shown with magenta marker ink, which is the 2.4 acres where the proposed house will be located. He specified the portions of the land within the upland review area on the map, including the existing house and existing septic system at the front of the property. The only portion of the site outside of the upland review area is the small area by the cul-de-sac where the proposed driveway will be begin. The driveway will be approximately 875 feet long, from the cul-de-sac to the garage. Both of the existing house lot and the proposed lot, as this is a two lot re-subdivision, are rear lots as defined by the zoning regulations; the lots do not have the required frontage distance in feet. They are proposed as oversized lots. The Avon zoning regulations require that the maximum driveway distance to a house on a rear lot cannot exceed 1000 feet; the proposed driveway meets that regulation. The driveway will have to cross approximately 155 feet through an area of wetlands; that is noted as Wetlands Crossing #1. The driveway will then cross approximately 40 feet through another area of wetlands; that is noted as Wetlands Crossing #2. The disturbance of Wetlands Crossing #1 is 3,900 square feet, which includes the driveway, the shoulders, the slopes, and the area where the silt fence will be installed along the sides. The disturbance of Wetlands Crossing #2 is 1,040 square feet. Therefore, the total disturbance of the wetlands is 4,940 square feet. A site walk of the property occurred on July 2, 2019. The group of Commissioners walked along the flagged route of the proposed driveway, on boards over the wetlands. The intermittent watercourse was noted during the site walk. The group continued the walk up to the knoll and crossed over Wetlands Crossing #2, noting an intermittent watercourse, and continued onward to the knoll which was staked for the proposed location of the new house.

Commissioner Feldman stated it appeared on the map that there were several intermittent watercourses. He sought clarification for the lines on the map denoting the intermittent watercourses.

Mr. Whitney indicated that the lines on the map for the intermittent watercourses were seen in dark blue marker ink. He highlighted one of the intermittent watercourse that comes from off-site and leads to the pond; there is water seepage from the ground below the existing house which forms a small intermittent watercourse that joins the larger watercourse running down to the pond. At the second wetlands crossing, there is an intermittent watercourse. The entirety of this watercourse is not drawn on the plan. There are a total of two intermittent watercourses running through the property. The area of the property proposed for the house location is on a knoll of well-drained sand and gravel. Soil tests were conducted for the area of the proposed septic system, witnessed by Chief Sanitarian Dianne Harding of the Farmington Valley Health District (FVHD). Percolation tests were conducted and showed that the soil was well-drained. Ledge rock, hard pan, or high water table on the knoll were not indicated, which means there was a lack of areas of special concern, according to the health code. The septic system can be relatively small, and would not have the problems associated with, for example, slowly drained clay sites. The system can be installed entirely under the ground. Fortunately, a lot of fill would not have to

be brought in for the system, as is the case in other septic system situations. Soil tests were also conducted on the lot of the existing house, which is proposed Lot #1; it will be approximately 3.4 acres. Any time a property is to be subdivided, one with an existing house and septic system, the public health code requires that the property is demonstrated to have adequate area and soil remaining with the existing house lot for a future reserve area if necessary. There are no problems with this existing septic system. However, as per public health code, soil testing is required for that reserve area. A memorandum forwarded by Hiram Peck, Town of Avon Director of Planning and Community Development, from the Dianne Harding of the FVHD, dated August 30, 2019, and confirmed that the plans of this application (with latest revision date of August 27, 2019) were reviewed by Ms. Harding. In the memorandum, she indicated that Lot #2 has a code-complying septic area and it has a suitably proposed location for well water. She commented that on Lot #1, if the septic system reserve area is to be utilized, a pump would be required. The approval from the FVHD is typically required at the time an application is presented before the Planning and Zoning Commission. By gaining advance review and approvals, the intention is to provide the Inland Wetlands Commission with assurance that there would not be any issues with the septic systems. Regarding the flood elevations, Big Brook comes down from the west side behind some of the houses on Haynes Road, and continues through the property of 81 Haynes Road where it crosses underneath an existing driveway with two culverts, and then continues down and to the east. Big Brook, in most of this area, is a relatively shallow brook. Its floodway is wide, however, at approximately 70' in one area. With regard to feasible and prudent alternatives, the applicant had negotiated with the Brighenti family to potentially purchase the property in order to allow for construction of an entry into the lot from Haynes Road. The negotiations occurred prior to the current plan of the driveway with two wetlands crossings. There would be a shorter wetlands crossing on this side of the lot, approximately 70 to 80 feet in length, as opposed to the wetlands crossings of the long driveway at the other end. The initial plan was to obtain two lots from the nine acres, leaving four acres for the house. The difficulty with that plan, due to the very wide floodway, is that no activity is permitted within a floodway. Fill is permissible in the flood fringe only but not within the floodway. The floodway is that area in which the majority of the water in any large storm passes through. Culverts cannot be installed according to current Town regulations, even though the practice was allowed in the past. A bridge approximately 100 feet in length would have been necessary, and this would be impractical. The new bridge construction over the Farmington River at Old Farms Road was allowed because the State of Connecticut is exempt from the rule barring floodway activity. Public sewer and water could have been accessed from Haynes Road, but the utilities are not available at Sunrise Drive. This alternative was reviewed, and it would have been more expensive, but ultimately did not seem practical.

John McCahill requested of Mr. Whitney the title and date of the referenced plan, and a copy for the record.

Mr. Whitney responded that the title of the plan is Alternative Sketch #1, dated November 20, 2018.

Chairman Thier requested that Mr. Whitney expand on the conclusion that the plan of Alternative Sketch #1 was impractical.

Mr. Whitney responded that the plan was impractical because of the combined cost of the bridge construction and the purchase of the lot.

Chairman Thier sought confirmation that the plan was not practical from a financial position, as opposed to an engineering position.

Mr. Whitney responded in the affirmative. With regard to the feasible and prudent test in Alternative Sketch #1, it was feasible to build the bridge but not prudent. The cost of the bridge would be approximately \$200,000.00. It was an economic issue under the category of prudence. Alternative Sketch #2, dated May 10, 2019, was a plan for a three-lot subdivision (as was Alternative Sketch #1). In this plan, a common driveway would have served two rear lots. Town regulations dictate that the driveway would have to be 12 feet wide instead of 10 feet wide, in order to serve the two lots. The problem is that one driveway is not allowed to serve three rear lots. Bill Cole approached the Volpe family, at 68 Sunrise Drive, to see if land could be acquired in order to move the driveway for the existing house, to allow the new driveway to serve two houses. However, the option was not viable since the owners did not want to sell the property.

Commissioner Applefield stated that he had walked the site and there is a gap between the existing driveway and the area where the proposed driveway would be.

Mr. Whitney responded that according to the survey, a portion of the driveway of the existing house, built in 1965, actually overlapped onto another property. When standing on the property, it appears feasible to build a 12-foot driveway. However, under the Town's zoning regulations for rear lots, the practice of two lots per driveway is prohibited. In Alternative Sketch #2, the relocation of the existing driveway is shown for the existing house and it would have its own driveway. There is a proposed common driveway that would be wider for the two rear lots. A driveway shared among three houses is prohibited under the Town's zoning regulations.

Commissioner Breckinridge understood Commissioner Applefield's confusion and indicated that the other map appeared to show two driveways.

Mr. Whitney stated that the current driveway for the property, which is partly situated on another property, would be relocated and its direction would be altered.

Commissioner Breckinridge commented that the first part of the driveway would be for only one house. He questioned whether two driveways would be possible in that area.

Mr. Whitney confirmed that the first 30 feet will be for one driveway. The construction of two driveways would not be possible in that area.

Commissioner Applefield inquired why the existing driveway would need to be moved.

Mr. Whitney responded that if the re-subdivision will be approved, the existing house will be for sale. If the driveway partially rests on another property, it may be a legal problem.

Chairman Thier requested that John McCahill clarify the Town's regulations on shared driveways. He inquired how the proposed shared driveway in this application was different from the current regulations on a shared driveway.

John McCahill responded that the Town no longer allows shared driveways. There would be a 30-foot access to that rear property, and then the existing driveway will be a stand-alone driveway. He sought confirmation of his understanding from Mr. Whitney.

Mr. Whitney responded that the first 30 feet will be a shared driveway. Rear lots are allowed to share a driveway.

Chairman Thier requested the clarification, thinking of an example that came to mind where it was forbidden.

Mr. Whitney responded that he was unaware of an example of a forbidden shared driveway for two rear lots. He had met with Director of Planning and Community Development Hiram Peck and discussed that where two rear lots share one driveway, one of the lots can have an easement over the other. The applicant will present before the Town of Avon Planning and Zoning Commission for a re-subdivision application and for a special exception application for activities within the flood fringe. The Commission will hear these issues. Big Brook has a floodplain associated with it and has Federal Emergency Management Agency (FEMA) flood elevations along its length. The 100-year flood elevation in the vicinity of the proposed house is elevation 290', shown in dark blue dashes. The "Inland Wetlands and Watercourses Map, Town of Avon, Connecticut" shows the flood line lower than the plan's map. However, the Town's maps can be approximate only. The flood line was drawn accurately according to the measurements of Neriani Surveying, Inc. The accurate flood line extends to a greater distance, therefore activities will be conducted in the flood fringe, and not in the floodway. When Big Brook floods, it floods well past the pond to the wetlands area. In crossing the brook, three 15-inch culverts will be installed in one area and two 15-inch culverts in another area to handle the intermittent watercourse. There will also be fill for the driveway. Whenever there is fill for a driveway within a floodplain, excavation is required elsewhere to compensate for the loss of flood storage. There will be excavation outside of the wetlands and up to the 190' elevation contour, and excavation in another area up to the 187' elevation contour. The dirt will be taken out to provide storage capacity for the flood water displaced by the approximate two feet of fill placed to construct the driveway. Under 2,000 square feet of area will be excavated and replaced with top soil. The (A) horizon soil will be taken out of the wetlands and put it in the bottom of the excavation area, where plantings will be installed. One of the benefits of the required excavation for compensatory flood storage will be the creation of some additional wetlands.

Commissioner Feldman inquired if the excavated area would ultimately look like land or water.

Mr. Whitney responded that it would look like *wet meadow*. It will be closer to the water table.

Commissioner Feldman inquired if the water table would be sufficiently low to absorb some of the runoff and act as compensatory water storage.

Mr. Whitney referenced Sheet 2, "A Detailed Plan of Wetlands Crossings." He explained the two cross sections which show the water crossings. The cross sections show a depth of two to three feet at a maximum; the volume for each is approximately 150 cubic yards. There will be fill and excavation below the flood elevation, so there is no net loss in flood storage.

Commissioner Applefield requested that Mr. Whitney show where the non-wetlands are located on one of the maps.

Mr. Whitney explained the map which shows the wetlands areas shaded in green. He pointed to an area that will be excavated and become wetlands. He referenced a memorandum from John McCahill, dated May 29, 2019. He had submitted both a response letter to that memorandum and a revised response letter along with the revised plans. John McCahill's initial comments are in black italic ink, and the latest response comments are in green.

Chairman Thier asked if any member of the public would like a copy of the response letter.

Mr. Whitney reviewed aloud the comments that were most relevant to the plans and those which reflected his presentation this evening. He remarked that item #12 referenced a post-construction and inspection protocol, as noted on page three in Michael Klein's letter, dated August 27, 2019. The CT Department of Energy and Environmental Protection Natural Diversity Data Base (CT DEEP NDDB) mapping in small scale shows shaded areas of restriction. Michael Klein has enlarged the maps to indicate that the property site is outside of the CT DEEP NDDB restricted areas. The plans were submitted seven days ago, as requested.

Mr. Klein stated that he flagged the wetland boundaries on the site. The flags were located and marked by Neriani Surveying, Inc., and shown on the plan in green ink. The watercourses are shown in blue ink. The plan shows the original conception of the project design. There is a section of wetlands between Big Brook and Haynes Road that probably consists of fill from the time when Haynes Road was built. There is a wetland along the northern property line which is associated with Big Brook. The brook flows along the rear of the properties with addresses on Haynes Road and crosses over the Brighenti family property. There is a much larger wetlands system that drains easterly and then north easterly. This system encompasses much of the rear of the property. That wetlands system was flagged on the site and accurately surveyed on the map titled, Sheet #1 "Site Development Plan." The wetlands on this sheet have been shaded in green; the wetlands system associated with Big Brook, and the larger wetlands system that drains down to the pond, are also shown. Both wetland systems are contiguous just off of the north eastern corner of the property. They are wooded wetlands, classified by the wetland scientific term of *wooded swamp*. In the southeast New England region, the wooded swamp is dominated by mature red maple trees, spice bush, skunk cabbage, and cinnamon fern understories. The wetland knoll furthest to the southeast has an intermittent watercourse running through it. In addition to the main rivulet, there is also a side rivulet that is just east of the western limit of this wetland section in the vicinity of the proposed driveway crossing. This section is comprised of a typical wooded swamp, as mentioned earlier. There is a relatively minor invasive element present. The other proposed driveway crossing is more confined and narrow. The vegetation is similar but the water table is not as high, and the characteristic is not as swamp-like, as in the other wetlands portions to the east and southeast. This location is much more amenable to a standard wetland

crossing with the culvert size and fill approved by an engineer. This activity would be easy and straight forward without any adverse effect beyond the small area of wetland loss associated under the fill. The wetland further to the south, also known as Wetland Crossing #1, along the crossing that is near the property line, and referred to in the Davison Environmental report revised copy dated August 27, 2019, is in a much flatter swamp-like area. In this portion of the wetland, in addition to the intermittent watercourse and side rivulet, there is also ill-defined, diffuse ground water seepage that moves from southwest to northeast toward the pond. In this area, additional measures were recommended to allow for continuation of the ground water seepage movement. The culverts will provide for the surface water movement but this wetland is more seepage-dominated, and the additional measures will avoid interruption in its function. In terms of functions and values, Big Brook is important in flood conveyance. The southern portion of the wetlands system is more significant in terms of flood storage and wildlife habitat. The pond is highly eutrophic, which means it is nutrient enriched water from weeds and algae. A eutrophic characteristic adversely effects water quality, as seen by the depletion of oxygen. This is typical of small residential ponds. Often when there is construction in a wetland, and in this case, the system will want to return to a wetland state. There is not enough water to maintain high water quality in the pond. Recommendations were made at the start of the original plans to minimize adverse effects to the maximum practical extent. The alternative access from the north as opposed to the south would require a very expensive structure that in all likelihood would exceed the value of the lots. It does not appear to be prudent, although this alternative would be technically feasible. The goal is to make the two crossings have as minimal of an impact as possible. The northerly of the two crossings can be constructed in a conventional manner. Recommendations were made for the southerly crossing. One was the use of bank run gravel wrapped in geotextile, otherwise known as an envelope fill. It allows for the seepage of water to continue uninterrupted from the southwest to northeast through the system, preventing adverse impacts to the shallow environment in that area. In addition, there is a small rivulet along the side of a knoll. It is recommended that an additional culvert be placed there. The culverts in the center should be located precisely in the field to match the existing channel conditions. Those recommendations have been incorporated into the plan. The compensatory flood storage area is in a non-wetland area, immediately to the adjacent east of the wetland boundary shown in green. The elevations in the bottom of the area are such that the area will have a seasonal high water table similar to the adjacent area. In addition to providing compensation for lost flood storage, it could also serve as compensation for some of the wetland areas that are proposed to be lost. Regarding responses to the Town staff memorandum, as indicated in the Davison Environmental letter, dated August 27, 2019, #8 references the provision of copies of any correspondence with the Army Corps of Engineers. There is no correspondence since the CT General Permit issued by the New England District under Section 404 Clean Water Act was renewed in August of 2016, for five years. The CT DEEP and the Army Corps of Engineers has a number of permits in New England states. As long as the project meets the criteria, the permit exists as a self-implementing permit. The only requirement is to submit a Self-Verification Form prior to the start of construction. It is a standard practice that the firm has done many times in the past, and the form will be executed for this project. Comment #10 required a cross-section drawing for the flood storage area, along with planting details, shown in "Cross-Section B.B" on Sheet #2. The flood storage is immediately adjacent to the existing wetland, as mentioned previously. It indicates the planting recommendations for seeding this area with wetland plant mix. Any of the recommendations noted in the Davison Environmental report have been included in the plans, as

indicated by the response to comment #11. The response to comment #12 references the protocol for soil scientist post-construction inspection and reporting for the compensatory flood storage/mitigation area, over the period of three years, which is attached to the Davison letter. It requires a pre-construction meeting, additional soil testing to confirm the elevation of the seasonal high water table, which may mean that grades have to be adjusted by a few inches. It is standard practice to conduct final testing in wetland mitigation areas to determine the level of the water table. Significant differences other than the measures which the design is based upon are not anticipated. Upgrading of the compensation area should be confirmed by the wetland scientist prior to installing wetland topsoil from the wetland crossing areas, since soil will be removed from the wetland crossing and relocated. Seeding is an inexpensive process to be implemented in the area in addition to the anticipated germination of existing natural components of the relocated soil.

Commissioner Applefield sought clarification of the area of discussion on the map. He requested clarification that the excavation would compensate for the material removed from that area.

Mr. Klein responded that one of the notes states that the final storage volume would be less than what is required by the civil engineer. If for some reason it would not be feasible to utilize the soil, a contingency plan specifies the use of a synthetic wetland soil mix. The final grading and top soil installation should be inspected by the soil scientist prior to seeding. Post-construction inspections are scheduled for one week and one month after the final seeding has taken place. A report will be generated at the end of year zero, and there will be additional inspections in a total of four years. A response to comment #14 indicated that the property areas are outside of the CT DEEP NDDDB areas on the map. This map is not a precise enlargement. It is from the UCONN Connecticut Environmental Conditions Online (CT ECO) website, which uses natural resource compilation data layers. It shows the NDDDB polygons in cross-hatched areas over house lots and roads. This map is from several years ago yet the lot outlines have not changed since the time of the mapping. Therefore, the NDDDB map shows that no state or federally listed species are found at the site. The wetlands and watercourses at the site have been altered by previous development, but still provide moderate to moderately high quality functions and values for the development of a single family home on the proposed new lot, and would require the two wetlands crossings as shown on Sheet #1 of the plan. His recommendations to mitigate and minimize the impact on these resources have been incorporated into the plans. It is his professional judgement that the proposed activities will not have significant impact on the wetlands and watercourses at the site.

Commissioner Thier asked if there were any comments or questions from the public.

John McCahill stated for the record that the Commission had received an e-mail from Ashish Arora, of 87 Haynes Road, dated August 28, 2019, which expressed concerns related to the application activities. The Commission also received an e-mail from Matthew Shultz, of 81 Haynes Road, dated June 26, 2019, which provided a summary of concerns regarding the activities. The applicant and his engineer have also received copies of those e-mails.

Matthew Shultz, of 81 Haynes Road, stated that a total view of the situation was not being presented on the map. The map gives the impression that the wetlands stop after the boundaries of the map. There are numerous areas of wetlands on numerous Haynes Road lots. The runoff

that will be caused by the work, will flow into the pond, which will continue into the floodway. All of the areas need to be examined. The pictures submitted in the e-mail show the conditions at 81 Haynes Road under extreme weather conditions. The photos show what happens under conditions of heavy rain and the stress put upon the existing culverts. It has been a deteriorating situation since owning the property over the past 12 years. He asked that the Commission not only consider what will happen in the areas discussed tonight, but elsewhere in the neighboring areas. He inquired how the grading and the change of elevations will impact the areas of adjacent wetlands.

Chairman Thier requested that those submitted images be distributed to the Commission.

Commissioner Applefield inquired if Mr. Shultz lives in the house that is also depicted on the map.

Mr. Shultz responded in the affirmative.

Commissioner Applefield requested clarification for the location of the culvert that Mr. Shultz just mentioned.

Mr. Shultz responded that two or three culverts run underneath the driveway at 81 Haynes Road and carry the water associated with Big Brook. A broader view of the impacts which will occur as a result of the proposed development must be considered.

Commissioner Applefield inquired of Mr. Shultz if he was concerned that greater amounts of water will accumulate on his property.

Mr. Shultz responded in the affirmative. He commented that the proposed development plan might look good on paper now, but the actual circumstances in the field might prove differently five years in the future.

Carol Griffin, of 95 Haynes Road, stated that she lives two houses from the Shultz family and indicated the location on the map. 95 Haynes Road abuts and crosses over Big Brook. She stated that in over 50 years residing at her property, there have been three or four major floods. The runoff from the many developments upstream empties into Big Brook and it has added to the natural water flow. All of the drains on the uphill portion of Haynes Road deposit runoff into the brook. There is sand runoff into the brook from the treatment of winter roads; the effect is a major buildup of sand at the back property of 95 Haynes Road. The level of water has risen significantly during major weather events over the years. The property at 95 Haynes Road slopes down to Big Brook, and the house is therefore not at the greatest risk from rising water levels; however, the water level is rising farther up the slope and has washed out some garden planting areas. Each time there is construction development, it impacts the brook's water capacity. Financial gain should not be the purpose of the development, or encroaching on other people's safety and property values.

Ashish Arora, of 87 Haynes Road, spoke of his experience working with the FEMA regulations in reclassifying his property lot out of the flood zone. He understands how difficult the process is

and also asking the Town for assistance in the process tonight. He shares the same concerns as his neighbors who have spoken this evening, regarding the proposed clearing of the land, the effects on the topography, and its impact on Big Brook's water levels.

Ms. Griffin inquired about the location of the second septic reserve area for the proposed house. She stated that the location for the primary septic system has already been shown on the map. She questioned if the septic system would be compromised if the brook were to rise.

Commissioner Applefield sought clarification from Mr. Klein regarding the CT DEEP NDDDB UConn map based on an overlay that is several years old.

Mr. Klein responded that the referenced map is the attachment to his August 27, 2019, response letter to the Town memorandum. The CT DEEP NDDDB data is updated every six months, and this map reflects current data. However, the property lines data is several years old. In this case, the parcel configuration matches the data. The biological data is the most current data available, from either June or July of 2019.

Commissioner Applefield inquired of Mr. Klein whether or not he had contacted CT DEEP to see if staff would concur with his conclusions.

Mr. Klein responded that since the CT DEEP NDDDB areas do not intersect the property, there is no process to seek confirmation from CT DEEP.

Commissioner Applefield indicated that someone can ask CT DEEP regarding a particular area and staff could either confirm or refute the conclusion.

Mr. Klein stated that there is a process if the site is in a CT DEEP NDDDB area, an application must be submitted to CT DEEP.

Commissioner Applefield considered the areas drawn on the map to be fairly close in proximity.

Mr. Klein responded that the polygons are generally 2,000 feet in diameter over a single location. The actual site is randomly within that polygon; however, that polygon encompasses that area and a large area surrounding it. This is the best and most accurate information available. The polygon does not intersect the site of proposed development. If the area were close on the enlarged map, one would submit an application and CT DEEP would return a determination of whether or not there would be an impact. If the subject site is outside of the polygon area, submission of an application is not required.

Commissioner Applefield inquired if Mr. Klein's conclusion was based on UConn's map, and why he had not used CT DEEP's mapping.

Mr. Klein responded that it is CT DEEP's mapping. CT DEEP sends the GIS data files to Connecticut Environmental Conditions Online (CT ECO); and CT ECO, in conjunction with the Center for Land Use Research at UConn, hosts a website that makes the information available to the public. The same data can be acquired from CT DEEP and it can be plotted independently,

but that leaves some people to question the veracity of the work. Therefore, the data that is utilized comes straight from CT DEEP, and that is served through the CT ECO website.

Commissioner Applefield inquired that if he were to look at the CT DEEP website, at the GIS layers but not the UConn website, would the same conclusion be reached.

Mr. Klein responded that the property lines might be visible.

John McCahill stated that he made his own conclusions by analyzing the CT DEEP website. After looking at the data, he concluded that the areas of the site were not within the CT DEEP NDDDB mapping. The resultant map was printed and kept in the staff office. He felt confident that the map was interpreted correctly. However, it was important that if the same conclusion was made by the applicant's soil scientist, that it be presented to the Commission.

Mr. Klein stated that it is the same information but at a smaller scale, and therefore harder to interpret, which is why the conclusion is reached by using a property overlay onto a larger scale. It is then a much more precise representation. There are no NDDDB areas on the property.

Commissioner Applefield stated that one of the recommendations is for three years' worth of monitoring on the property. In the example where the property is sold within that time period, and the new property owner will not allow access onto the property for monitoring. How is that enforced? How is a permit issued to the estate of Donald L. Cole enforceable against a future property owner within the monitoring period? This condition is not on the land records.

Chairman Thier stated that even if it were a deed requirement, staff would still need to enforce it.

Mr. Whitney stated that if the Town wants the restriction, enforcement of it would be the Town's responsibility.

Chairman Thier raised the question of whether the restriction would be the Town's responsibility as the interested party.

Mr. Klein stated this would be the case if the monitoring period were a condition of application approval.

Commissioner Applefield stated that he did not see how a condition of a permit can become a deed restriction. There is a deed restriction and there is a permit. The permit is enforceable against the entity that holds it. The new land owner will not hold the permit. He raised the issue for the Commission to question whether or not a three-year monitoring program is enforceable against an owner. Clearly, the intention is that this land will be sold and the monitoring program may not be enforceable against a future owner. He requested that either Mr. Whitney or Mr. Klein explain the typography associated with the excavation in the mitigation area.

Mr. Whitney responded that the area is higher by four feet and is visibly noticeable. The mitigation area contour line in that area is 294', and the contour line by the wetlands is 290'. It is a 15% slope up to the driveway. The excavation will not go into the wetlands. It is the area

labeled "Cross-Section B.B" on the plan. The illustration is not a cross-section of the driveway. The wetlands are not of equal elevations. The mitigation area is not a water retention basin to store water from the development. When Big Brook rises from a big storm, and the water level comes to the flood fringe line, it will fill with water.

Commissioner Applefield inquired regarding the elevation of Big Brook relative to the location of the excavation.

Mr. Whitney responded that Big Brook is at elevation 280'. When it floods, it floods by ten feet, or the 100-year flood. It floods to elevation 290'. It only rises in one direction, in the other direction the land is flat. The water will follow the contour. The existing house is higher. All of the water will flow to the pond. The pond and Big Brook are basically at the same elevation, yet Big Brook is a little lower in one section and is the reason that the spillway falls into this area. The pond elevation is 280.2'. The plan incorrectly had 180'. There is no doubt that Big Brook carries a great volume of water, and that is the reason the flood fringe is wide.

Commissioner Applefield inquired if the small mitigation area is meaningful if water is coming from a far distance.

Mr. Whitney stated that it is more the case that the amount of compensatory fill is insignificant. It is a matter of the Town's regulations which state that the water-holding capacity of the 100-year floodplain shall not be reduced. The flood zone is defined as the floodway and the flood fringe. The issue in this discussion is not a requirement of the Inland Wetlands and Watercourses Regulations, but one under the Town of Avon Zoning Regulations. It will be revisited in the application to the Town's Planning and Zoning Commission. The reason why the issue is being discussed before this Commission this evening is because of the particular location for excavation.

Commissioner Applefield requested that Mr. Whitney further describe the wetland crossings designs. He requested confirmation that there will be culverts that will allow for continuation of the water movement. He inquired what structure would go over the intermittent watercourse.

Mr. Whitney responded that three culverts will be parallel to the watercourse, and at a ninety-degree to the paved driveway. There will be approximately two feet of compacted fill on top of the culverts, which will be embedded in approximately two feet of stone. The structures will need to hold the weight of large emergency vehicles, oil trucks, loaded moving vans, etc. The culverts are categorized as classified concrete culverts, which means there are extra steel reinforcements contained within the concrete. Mr. Klein had mentioned that underneath there would be over-excavation by one foot and replaced with bank run gravel to allow the ground water to continue to flow throughout the entire crossing. The result is that the water will not have to be funneled. It will be of standard culvert construction.

Commissioner Applefield requested that Mr. Whitney display the map which shows the shaded wetlands. He inquired why the area referred to as the first knoll, when moving along the driveway, was not chosen to construct the home.

Mr. Whitney responded that the area of the first knoll is only approximately .8 of an acre. The idea is that the home and everything around it should be kept at a far enough distance from the wetlands in order to provide a buffer. The grading around the house would extend right to the wetlands.

Commissioner Applefield stated that it is feasible and may be prudent, depending upon someone's view of the wetlands.

Mr. Cole stated that the septic system and well would be within the 100' upland review area. There would not be adequate space.

Commissioner Applefield believed the area would be large enough to support the same size house and a large enough yard.

Mr. Whitney responded that the septic system will need to be kept 25 feet from the house. The size of the house would actually be very small and there really is not adequate space. The current plan shows the ideal place for the house, including adequate area for a yard, for a buffer to the wetlands and to the neighbors.

Commissioner Applefield stated that this alternate plan would avoid the second crossing altogether. It would appear feasible to place the house, yard, septic stem, and well on the first knoll when analyzing the map as drawn. It is a flat area.

Mr. Whitney responded that the second crossing, at 40 feet in length, was not significant. The feasible alternative that was just mentioned would be implausible due to the amount of activities next to the wetlands. He offered to draw a sketch of the alternative plan for a house and present it to the Commission at the next public hearing, if continued. On site, the wetlands on the property do not appear as bogs or marshes, so possibly the alternative would seem feasible if one were not considering where the actual wetland areas are located. It may look like there is more development space than in actuality.

Commissioner Applefield requested that Mr. Whitney address the issues raised by the neighboring property owners regarding the possibility of water flow from 70 Sunrise Drive onto the Haynes Road properties.

Mr. Whitney stated that there are no cuts and fills anywhere near that property. The contour around the house is an elevation of 300'. The proposed house will be constructed at the current grade, at the existing elevation. The concrete will be at a height of 1.5 feet above the current elevation. The top of the foundation will be at 301.5' and the ground will be at 300'. The driveway will slope down to a low point, as shown on the map. The water will not flow toward Haynes Road, it will flow along the existing topography toward the wetlands.

Commissioner Applefield inquired about the water flow at the rear of the proposed house.

Mr. Whitney responded that the water from the rear of the proposed house will continue to flow to the north, as it does currently. A ditch could be built to direct the water to the pond, but this

would not be necessary. The foundation drains and the roof leaders from the house will be directed to a point, as shown on the map. The house itself will discharge any rain water to the south and not to the north.

Commissioner Applefield sought clarification that the area in back of the proposed house is forested.

Mr. Whitney confirmed that the entire referenced area is forested. The cleared area is .8 of an acre.

Commissioner Applefield asked the hypothetical question of whether the amount of water or speed of water flow toward Haynes Road would increase if a property owner were to replace the forested area that exists now with a grass lawn.

Mr. Whitney responded that there would be a theoretical increase. Any time forest litter is replaced with grass, there is a theoretical increase; however, it is a small area with well-drained soil and the actual flow would be negligible. There is an existing driveway at 81 Haynes Road that has two 30" culverts. They are undersized. It is not surprising that the culverts create backwater problems and flooding situations during storms. That type of culvert construction is now prohibited, and the existing problems are a result of the construction that was allowed years ago. This project will not create that type of situation. The activities of this project are downslope from the two neighboring houses discussed this evening. There will not be any backwater effects.

Commissioner Applefield inquired if, due to development activities, there would be any increase in water flowing to Big Brook from the area in back of the proposed house.

John McCahill inquired if Mr. Whitney could provide a runoff calculation for the two variables of the area forested vs. grass installation.

Mr. Whitney responded that the runoff coefficient would raise from 1.5 or 2, which is 15% or 20%, to something like 2.5%. It is a small area and will produce a flow under one cubic foot per second (cfs). That flow is negligible. A swale could be constructed at the rear of the house to direct water in a particular direction. This was a solution done in a different application, but it was determined years later that the measure was unnecessary. If the soil were not as well drained on the knoll, the situation might be different.

Commissioner Applefield inquired whether or not the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities applied to residential properties.

Mr. Klein responded that he did not believe that the permit applied to a site of this small size and with this amount of disturbance. The referenced permit does not apply to disturbances that are less than one acre. It is different than the Army Corps of Engineers permit.

Mr. Whitney responded to some of Mr. Shultz's comments with regard to showing a complete picture in the presentation. The wetlands shown, which run slightly off the property on the plan,

are specific to the applicant's property. Wetlands delineation on neighboring properties is prohibited. The mapping shows a complete picture of the subject site. With regard to a reserve area for the septic system, the area indicated on the map is equal in size to the proposed septic system, which is shown for a four-bedroom house. It is in an area where the soil tests were conducted. It is in an area that is approximately 80 feet from the pond, and approximately 100 feet from Big Brook. The minimum separation distance from a septic system to a waterbody is 50 feet. The proposed septic system is farther away. This septic system shown on the plan complies with the public health code.

Commissioner Feldman restated Mr. Whitney's comment that he was not able to delineate wetlands on neighboring properties. However, when looking at Sheet #1 of the plans, the wetlands lines do seem to run onto the rear parcels from the subject property, and it seems to indicate that there are wetlands on the other side of that line which would be the rear of those Haynes Road properties.

Mr. Klein responded that stakes are placed at intervals of every 25 feet in the field to mark the property boundaries. When property boundaries are not clearly marked, the side of caution is erred upon and the delineation may be extended by some feet. The last two flags extended past the property boundary. Another flag in the corner of the property is slightly short of the boundary. Wetland flag WL0 is two or three feet past the property line.

Commissioner Feldman inquired whether the area that has been extended beyond is wetlands.

Mr. Klein responded in the affirmative.

Commissioner Feldman questioned whether or not the wetlands on neighboring properties were of concern.

Mr. Klein responded in the affirmative. However, he was not able to enter neighboring properties to conduct surveys. It was his opinion that there would be no adverse effects either on the subject site or on the immediately adjacent wetland areas.

Mr. Whitney speculated and illustrated on the map, based on his existing data, how the wetland boundaries are likely located on the adjacent rear properties. Haynes Road was built pre-wetlands legislation; it was a 1962 subdivision. The construction of all of the existing houses that are very close to Big Brook would be prohibited today.

Commissioner Feldman stated that at the beginning of this evening's presentation, it was said that the proportion of wetlands to non-wetlands was approximately 50-50. He inquired if the entire site would be regulated area, including the upland review area.

Mr. Whitney responded in the affirmative with the exception of two small areas, one in the front and another, as indicated on the map.

Commissioner Feldman inquired about the proposed landscaping plan for the site. At the site walk, two months ago, it appeared that most of the area is densely wooded. He inquired how the landscape will change.

Mr. Whitney responded that within the limit of clearing, it is probable that the majority of trees will be removed, unless there is a specimen tree to retain. Typically, those areas are planted with grass seed. The remaining landscaping is at the homeowner's discretion. The limits of clearing are narrowly defined though the wetlands, approximately 25 feet wide, and with just enough space to build a driveway.

Commissioner Feldman referenced Commissioner Applefield's earlier comment regarding a future property owner and restrictions. He inquired about the measures that would be in place to prevent a future homeowner from clearing wetlands in order to alter the property to create a unified landscaping area, including more lawn.

Mr. Klein responded that this practice is largely prevented by the complaints of neighbors regarding owner activities. Otherwise, it is the Town's responsibility to enforce the regulations. It is very clear from the precise words of the CT General Statutes and case law that the upland review area is regulated only to the extent that an activity within it can be demonstrated to have an adverse activity on a wetland. It is not preserved in its own right. He concurred with Mr. Whitney that the activities proposed on the subject site would have no adverse effects. All of the runoff collected from the impervious surfaces will be directed away from Big Brook.

Commissioner Applefield stated that the Commission reviewed uses as of right earlier this evening. There is a use as of right, in this case, for uses incidental to the enjoyment and maintenance of residential property. In relation to Commissioner Feldman's question, he inquired why the new owner would not be able to remove areas and claim that activity as a use incidental to the enjoyment and maintenance of their property, as an activity permitted as of right.

Mr. Klein responded that based upon experience, that exemption is very narrowly interpreted. There is also a Town regulation regarding clear cutting. Clear cutting is defined in the Town regulations as removing vegetation greater than two inches in diameter and at chest height. The Commission has the authority to enforce any of the Town's wetlands and watercourses regulations with regard to regulated activities.

Mr. Klein responded that the exemptions are not self-actuating. An owner is required to present before a commission and request a review that an exemption applies in a particular case and seek the concurrence of that commission. Otherwise, the activity would be subject to enforcement.

Commissioner Feldman inquired about the portion of wooded property in the upland review area that would be clear cut. He requested that Mr. Whitney show this portion on the map #1. Commissioner Feldman requested confirmation that the clear cutting of the area would not affect the surrounding wetlands.

Mr. Klein responded in the negative. He stated that the particular wetland still has important function values and was not totally degraded by all of the clear cutting on the properties to the north at the time that Haynes Road was developed.

Commissioner Feldman referenced the portion on the map known as the compensatory storage area. He questioned what would happen to the excavated materials. He sought confirmation that the excavation from the compensatory area would be used as fill for the driveway construction. The wetland materials from the driveway excavation would be placed in the compensatory storage area. This would create a new wetlands area.

Mr. Whitney responded in the affirmative. The nutrient-rich soils will be utilized.

Commissioner Feldman inquired whether or not the newly created wetlands would be adversely affected by the runoff from the driveway, possibly including car oil and pet waste.

Mr. Klein responded that the purpose of the newly created area is for compensatory flood storage. It will meet the zoning regulations. It is fortuitously adjacent to the wetland and the required elevation will bring it down to the water table level. Wetland hydrology will develop in this area, and it is one of the reasons why it was decided to reseed it with a wetland soil mix. The wetland (A) horizon soil material will be advantageous. The driveway will not have an effect on the area.

Mr. Whitney responded that the runoff into the wetlands is a small possibility. However, it is the purpose of wetlands to rehabilitate the pollutants.

Mr. Whitney proposed a possible solution to the concern which would be to move the driveway farther away from the newly-created wetland area, and toward the knoll. This would create both a buffer and a non-wetland area to receive any runoff from the driveway. The runoff would seep into the ground prior to reaching the newly created wetland area.

Commissioner Feldman raised the issue related to ground water and surface water from the left part of the map toward the right side. He inquired about the two knolls, and whether or not water would run off toward and beyond the driveway. He also inquired whether the runoff would be impeded by the driveway location.

Mr. Whitney responded that the runoff would move in the direction of the arrows, as marked on the map.

Mr. Klein responded that the envelope fill will be installed for that reason.

Mr. Whitney responded that if a compact, impervious type of fill were to be used instead, then the situation of a dam would be created. Instead, the culverts are provided for the surface runoff and the gravel will be utilized for unimpeded groundwater flow.

Commissioner Dean inquired about the purpose of the inspections mentioned in Mr. Klein's letter, from Davison Environmental, and what issues the inspections would raise.

Mr. Klein responded that the inspections would ensure that the grades, top soil, and seed mix were installed correctly.

Mr. Whitney responded that the inspections in this case would ensure that the (A) horizon soil was installed properly at the bottom, and that grass seed was not installed on top of sand. Commissioner Dean inquired why the inspections would take place over three full growing seasons, and inquired whether or not any problems would be apparent at the outset and corrected at that time, and whether or not the number of inspections would be necessary.

Mr. Klein responded that the additional inspections are industry standard to ensure that the area continues to perform as expected.

Commissioner Dean inquired regarding the "NOTES" on sheet #3 referencing, #9. All stumps shall be chipped on-site and used as mulch, or taken off-site for disposal. No stumps shall be buried on-site." She inquired why there was no description of where the chips would be placed on-site. Since most of the site is a regulated area, it would be a regulated fill.

Mr. Cole responded that the practice of burying stumps on-site has not been allowed for a long time. The tree materials would be hauled off-site and recycled by the contracted company. Usually, everything is taken off-site.

Commissioner Dean wondered if the removal of chips should be specified on the plans since it is a regulated area.

Mr. Klein responded that wood chips are often a valuable resource to be used on the site, in terms of short-term erosion control, the creation of berms, or coverage over bare soil. The manner in which Mr. Cole and his tree company decide to relocate the chips would be their decision. It might be preferable to have the chips stock-piled on-site to deal with any unexpected events.

Commissioner Dean recalled two cases where property owners intended to utilize the wood chips for erosion control, but the CT DEEP required that the chips be removed from the site.

Mr. Whitney stated that the plan can be modified to indicate that the stumps will be taken off-site. However, he noted for the record a property in Avon, owned by Hutch Haines of Avon Self Storage, where wood chip berms were successfully created by the tree clearing of the site at the time of construction. The berms can make sense depending upon the desired results. Berms were not proposed at the site of 70 Sunrise Drive, therefore the note on the plan will be amended.

Commissioner Dean requested clarification regarding the purpose of the geotextile creating the fill envelope and whether or not the material would trap sediment and block the flow of water.

Mr. Klein responded that the purpose is to prevent the migration of fines from the common fill on top and from the wetlands soils that is adjacent to it from migrating into the gravel and clogging the pores. The proper fabric must be used. This is a typical standard practice for a wetland crossing and the fabric acting as a trap has not been an issue.

Commissioner Dean referenced Mr. Klein's statement that the wetlands are of a moderately high value, and as noted, they are outside of the CT DEEP NDDDB mapped areas. She inquired if he had seen any of the species, listed in the natural diversity database, on the site.

Mr. Klein responded in the negative.

Vice-chair Beauchamp stated that there were many parts to the application. Many of his questions had been answered. His concerns were alternative areas to construct the driveway and an alternative area for the proposed house. He thought that the currently proposed location might be the best place for construction of the building. He stated that all of the questions regarding his concerns had been answered.

Commissioner Breckinridge commented on the relationship between the pond and Big Brook. He inquired if the pond flows into Big Brook or the reverse, and what happens when there is flooding.

Mr. Whitney responded that Big Brook could flow into the pond during flooding.

Mr. Cole responded that the invert of the pond outflow is a spillway and is 280' at the bottom of the four-foot structure. The pond elevation is approximately 284' and Big Brook is at 280'. Mr. Cole indicated that it was highly unlikely that the pond and Big Brook would flood four to six feet high and travel upland. Big Brook has a very wide floodway.

Commissioner Breckinridge requested a visual demonstration of what would happen in a 100-year flood. He requested an explanation of what happens to the water flow on the left side of the map.

Mr. Whitney demonstrated the flow of water utilizing the map.

Mr. Cole stated that the two seasonal streams flow into the pond, then down and into Big Brook.

Commissioner Breckinridge inquired whether or not the pond ever overflowed into the spillway.

Mr. Cole responded that there have been signs of overflow, but not to the point where the dam has washed out.

Commissioner Breckinridge inquired whether or not the pond was categorized as a dammed pond, which would have associated regulations if it is over three feet. Inspections would be required as well. This issue arose on a land trust property. John McCahill sent notification to the trust that it was not a dam; however, the State of Connecticut sent notification that inspection would be required if it were a raised dam above three feet. He requested that the applicant look into the structure of the pond and whether or not the regulation applied. He was concerned about the consequences downstream if the water flow changed, and the dam were to break.

Mr. Whitney stated that the spillway is .75 of an acre.

Chairman Thier stated that the focus of the application was the regulated activities in relation to the driveway construction.

Commissioner Breckinridge stated that he the issue was on-topic in the context of the application, based on the resultant flow of water to the pond.

Mr. Whitney stated that the regulation may be for four feet of impounded water, but he was uncertain as to the criteria.

Chairman Thier requested a letter or an e-mail from the appropriate state official with regard to the issue's requirements and whether or not the issue needs to be addressed.

Mr. Whitney stated that he would seek official review if necessary.

Mr. Klein stated that this issue may not be under the jurisdiction of the Commission.

Chairman Thier indicated that the applicant would need to return before the Commission to answer further questions that were posed this evening and submit additional documentation.

Ms. Griffin inquired whether construction over the reserve septic system would be allowed. She also inquired whether that would be enforced.

Mr. Whitney responded in the negative with regard to construction over the system. He stated that a detailed site plan would need to be submitted for the system and that the plan would be enforceable. There is a 25-foot restricted area around a septic system which prevents any building in that area.

Ms. Griffin inquired about a 100-year storm and the possibility for a water level rise of ten feet. She inquired if the driveway would have any water on top of it under those circumstances.

Mr. Whitney responded that it depends on where the level is measured. He responded that the situation would not occur. According to Avon's zoning regulations, any inhabitable space, including the garage and driveway, must be constructed using the 500-year flood elevation. FEMA has a regulation of 100-year flood line; however, Avon's regulation is beyond that measure. It is the reason why there will be fill above the pipes, etc., to raise the height above the 500-year level. The existing natural ground elevation in the area for the driveway is at 180' and the level requirement is at 190', therefore only two feet of fill will ensure the 100-year requirement is met. An additional three to four feet of fill will be installed, depending upon where the level is measure on the ground, in order to meet the 500-year flood line.

Commissioner Applefield inquired about the applicant's view of placing the conservation restriction on the property.

Mr. Cole responded that he may be willing to put in place a conservation restriction of ten feet along the Haynes Road side to ensure that there will be a buffer. He stated that there is also the tree cutting limitations in place that the Town actively enforces.

Commissioner Applefield thought that the conservation restrictions on the site were related to the wetland areas and not the back of the property. He requested that the applicant be prepared with a decision and response for the Commission at the next meeting.

Mr. Whitney responded that the revised set of plans will include any conservation restrictions or easements that is decided.

Chairman Thier stated that the next meeting is scheduled for October 1, 2019.

Commissioner Applefield stated that he did not find the verbiage related to the fill in his reading of the application. He inquired whether the language related to fill, including the amount of fill should be added to the plan.

John McCahill stated that the encompassing term of grading is included in the application, Page 2, in the "Proposed Regulated Activity and Location column," #3.

Commissioner Applefield read the language aloud, "Construction of the driveway (470 l.f.), house, septic system, well, utilities and related grading within the 100' upland review area."

Mr. Whitney responded that he believed items #1 and #2, related to the two wetlands crossings and proposed culverts and fill, were clear.

Commissioner Applefield inquired if the fill was to be placed only in the area of wetlands.

Mr. Whitney responded in the affirmative. There would not be any fill for the house or driveway in the construction area.

Commissioner Applefield stated that it would be helpful to state the level of fill in the upland review areas, including the area where the driveway first abuts the wetland area; from that point until the Wetlands Crossing #1.

Mr. Whitney responded that outside of the wetlands areas, the land would be cut, and within the wetland areas there will be fill, as proposed and outlined in the plan. The only fill will be located at the two driveway crossings.

Chairman Thier inquired about the linear distance of the fill.

Mr. Whitney responded that the proposed distance for Wetland Crossing #1 is 155 feet, and for Wetland Crossing #2 is 40 feet.

Commissioner Applefield stated that there would be fill in upland review areas as well.

Mr. Whitney responded that from the Wetland Crossing #2 up to the house, the driveway level would be at grade, with no cuts and fills. There also would be no fill at the first knoll.

John McCahill stated that this activity is encompassed by the term *related grading*.

Chairman Thier stated that the applicant would provide the Town with additional information, including a revised map, at the October 1, 2019 meeting.

Commissioner Dean made a motion to continue the public hearing on Appl. #764 to the next regularly scheduled Commission meeting on October 1, 2019. Commissioner Applefield seconded the motion. All were in favor with none opposed.

Chairman Thier stated that if any person wished to submit information to the Commission for the continued public hearing, the submission deadline would be seven days in advance of the meeting.

STAFF COMMENTS

John McCahill delivered an update regarding the pending litigation related to the Blue Fox Run Golf Course; Nod Road Preservation, Inc. was granted intervenor status. At a previous meeting, the Commission had expressed interest in meeting with Town Attorney Kari Olson. She was contacted for her availability to meet prior to the October 1, 2019 meeting, and staff is awaiting her response.

Commissioner Feldman inquired if the Town Attorney could send written comments instead of having a formal meeting regarding the Town's strategy.

John McCahill responded that he would inquire with Kari Olson on the appropriate manner for the transmission of confidential communication.

Chairman Thier stated that Kari Olson wrote an effective memorandum and the Blue Fox Run Golf Course applicant rescinded its call for the Commissioners' depositions.

APPROVAL OF MINUTES

Chairman Thier inquired if there was a motion to approve the minutes.

- Minutes - July 2, 2019 – Special Meeting for a Site Walk: Commissioner Beauchamp motioned to approve the minutes as submitted, and Commissioner Breckinridge seconded the motion. Commissioner Applefield abstained from voting. Five commissioners were in favor, with none opposed, and the minutes were approved.
- Minutes - July 2, 2019 – Regular Meeting: Commissioner Breckinridge motioned to approve the minutes as submitted, and Commissioner Feldman seconded the motion. Commissioner Applefield abstained. Five commissioners were in favor, with none opposed, and the minutes were approved.
- Minutes - July 17, 2019 – Special Meeting for a Public Hearing: Commissioner Dean requested a correction on page 4958, paragraph 3, to strike the word *starting* and replace with *enlarging*, if indicated in the audio recording. Commissioner Beauchamp motioned to approve the minutes as corrected, and Commissioner Breckinridge seconded the motion. Commissioner Feldman abstained from voting. Five commissioners were in favor, with none opposed, and the minutes were approved.

NEXT REGULARLY SCHEDULED MEETING:

The next regularly scheduled meeting is Tuesday, October 1, 2019.

There being no further business, the meeting adjourned at 9:50 p.m.

Susan Guimaraes, Clerk
Inland Wetlands Commission
Town of Avon Planning and Community Development