

THE INLAND WETLANDS COMMISSION OF THE TOWN OF AVON HELD A SPECIAL MEETING ON WEDNESDAY, JANUARY 30, 2019.

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

Present on behalf of the application were Carla and James Bridgewater, 87 Litchfield Road, Unionville, CT 06085; Brian Cunningham, Professional Engineer of Robert Green Associates LLC; James M. McManus, MS, CPSS, Certified Professional Soil Scientist (No. 15226) of JMM Wetland Consulting Services, LLC.

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

**NEW APPLICATION**

**APPL. #757** - James and Carla Bridgewater, owners/applicants: Request activities within the wetlands/watercourse and within the 100-foot upland review area: 1) construction of a single-family dwelling, related grading, driveway, septic system and pump chamber, and installation of utilities (in regulated setbacks); 2) installation of a sewer force (temporary disturbance in wetlands/watercourse); 3) installation of septic system and related grading (in regulated setbacks); 4) demolition and removal of existing dwelling; and 5) abandonment of an old septic system. Location: 159 New Road, Parcel 3280159.

John McCahill stated for the record, as mentioned at the previous meeting, there was discussion about adding two regulated activities. Originally, there were three regulated activities and we now have the fourth, including demolition and removal of the existing dwelling, and the fifth being the abandonment of the old septic system.

Mr. Cunningham indicated that since the last meeting, his firm was asked to set aside areas for wetlands preservation, and they are shown as shaded areas on this plan. The existing house has been located on the plan and some records were found for the existing septic system, septic tank, and leach field. It runs along the north side of the house. There was also question regarding the life expectancy of the PVC pipe to be used, to pump the waste from the house, underneath the stream to the leach field in the back. A document that had been submitted to John McCahill refers to European studies done on a pipe installed for over seventy years. The pipe was dug up and looked new. The industry calls it a 100-year life expectancy; and after the results from studies in Europe at seventy years, it is thought to be longer. A 100-year life expectancy will be used. A detail on Sheet 4 shows a 4-inch sleeve for the installation of the pipe under the wetland. A pit will be dug on either side of the stream, the 4-inch pipe will be pushed under the stream, and a 2-inch pipe will be pushed through the 4-inch pipe. The 2-inch pipe specified comes in 100-foot rolls and longer. The crossing is 40 feet, and the pump chamber to the leach field is approximately 170-feet. Joints in the pipe will not be seen. It would be a one-piece pipe from the pump chamber under the stream. Depending on the manufacturer, some longer rolls without joints exist.

Commissioner Usich requested confirmation of the pipe measurements.

Mr. Cunningham confirmed that the 2-inch pipe comes coiled in a 100-foot roll and some manufacturers make them longer.

Commissioner Usich asked for confirmation of the pipe material.

Mr. Cunningham confirmed that it is a plastic pipe. It will be PVC ASTM Schedule 40 or equal pipe.

Commissioner Usich requested clarification on the proximity of the septic tank and leach field.

Mr. Cunningham pointed to those areas, including the proposed house, on the submitted plan.

Commissioner Applefield requested explanation of how the length of the pipe would be installed.

Mr. Cunningham stated that the pipe will be pulled through a trench; a machine will pull the pipe through the area. A 4-inch device will be pushed through the ground, under the stream a couple of feet down, and as the machine advances it also pulls the pipe. A 4-inch sleeve will be put in place, so that the 2-inch pipe can be pulled through the sleeve and into the pump chamber. This way, if there is a problem in the future, the pipe could be pulled out and another would be put in its place.

Commissioner Applefield inquired whether the sleeve would remain in place.

Mr. Cunningham affirmed that the sleeve would remain in place.

Commissioner Applefield inquired about the length of the sleeve.

Mr. Cunningham was not certain that it was shown on the sheets.

John McCahill commented that it was shown on Sheet 4.

Mr. Cunningham confirmed that it was shown in the details of Sheet 3.

John McCahill commented that the detail on Sheet 3 was at a 10-inch scale, so the sleeve was approximately 20 feet from one side of the brook to the other. The brook is narrow. It is approximately four to five feet wide. Therefore, to put the sleeve in and not have to disturb the brook at all was the Town's recommendation. The same operation was conducted under Hollister Drive. Bill Ferrigno has been putting in lines underneath Hollister Drive for the project called Statford North which the Commission had approved. There were three to four lines under this road done in this manner. It is an easy and appropriate process, and it can be done without disturbing the brook.

Mr. McManus stated that it is very common practice in sewer systems and natural gas systems, where the land cannot be disrupted and the sleeve goes underneath the watercourse.

Commissioner Applefield inquired how the trench will be drilled to receive the 4-inch sleeve.

Messrs. McManus and Cunningham indicated that nothing is drilled. The sleeve is pushed through the soil.

John McCahill commented that the procedure involves pounding a rod through soil, and with it comes along a piece of pipe.

Commissioner Applefield sought clarification regarding the procedure.

John McCahill responded that they would tunnel the sleeve.

Mr. McManus described that a pipe called the sacrifice pipe would be pushed through the affected soil.

Commissioner Applefield inquired how deep underneath the brook the sleeve would sit.

Mr. Cunningham responded that the depth will be approximately two feet underneath the bottom of the brook.

Commissioner Applefield sought clarification that the depth will be two feet below the stream.

Mr. Cunningham responded in the affirmative. This way, a trench would not go across the stream and disturb the water.

Mr. McManus added that if it is deep enough, and if the sleeve is not exposed, erosion issues will be avoided.

Commissioner Applefield inquired about the water table below the stream.

Mr. McManus explained that the pipe will not float. It will be surrounded by pressure on all sides.

Commissioner Applefield questioned whether the pipe would be unstable.

Mr. McManus indicated that it should not be unstable. It will only be a small pipe; a 4-inch pipe with a 2-inch pipe inside. It is hard soil, but it is saturated soil.

Commissioner Applefield questioned what would happen if the water table recharged.

Messrs. McManus and Cunningham concurred that the pipe would not be affected adversely.

Commissioner Applefield stated that he was still not certain how the pipe would be stable. He moved on to question how the septic system will be abandoned, and what the issues were associated with that activity.

Mr. Cunningham responded that the tank would get pumped out and crushed.

Mr. Bridgewater indicated that the system had already been demolished. In order to have it demolished, the Farmington Valley Health District required that it be pumped out, by Suburban Sanitation Service in this case. A backhoe crushed the concrete container and the space was filled in with surrounding soil. A hole does not remain and therefore nothing can collapse. It will not be a hazard in the future.

Mr. Cunningham indicated that this was standard procedure.

Commissioner Applefield inquired about the removal of the house and how it was planned to be completed.

Mr. Cunningham indicated that a demolition permit was requested from the Town of Avon.

Mr. Bridgewater confirmed that he had already requested the demolition permit from the Town. The Town has required that the materials be tested for asbestos and other foreign elements. A large excavator will be brought in, and the debris will be placed in dumpsters and hauled away to a certified waste management company. The documentation exists for that. It was an old barn which had been converted to a house. Two old beams will be salvaged. Nothing else is worth saving.

Commissioner Applefield inquired if the basement foundation was below grade.

Mr. Bridgewater confirmed that the majority of it is below grade, however in certain areas it is approximately a foot above grade. The backside of the existing house is similar to a walk-out basement. The back portion has an old stone foundation, not concrete. There were some concrete additions which will get crushed up and taken away, but a portion will get crushed and put back into the ground.

Commissioner Applefield inquired if the topography gets leveled off.

Mr. Bridgewater indicated that it would be graded properly as part of the engineering site plan.

Commissioner Applefield asked if there were any other materials, other than asbestos, that were of note, such as shingles.

Mr. Bridgewater responded that the waste management company was concerned with only asbestos and the rest would be hauled away. It is a company certified for disposal.

Commissioner Applefield questioned the drainage on the map, indicating it was unclear and he had a hard time reading it. He asked if the black line was the proposed sediment control with hay bales, and requested confirmation of this.

Mr. Cunningham responded in the affirmative.

Commissioner Applefield inquired whether the flow is an open area, and commented it seems that the silt fence will encourage all of the flow to go to an area where the new junction box would be located.

Mr. Cunningham responded in the negative and clarified that the silt fence is designed to allow water to pass through it. The bottom couple of inches get buried in the ground and a small ditch is cut in the ground; the fabric is laid down, wooden posts are placed, and the ditch is back-filled. Water flows through the fabric. It does not redirect the flow, it actually slows the velocity.

Mr. McManus indicated that it is a pervious barrier. It holds back the sediment but does not impede the water.

Mr. Bridgewater indicated that the goal is to hold back the silt from the stream. Water will go through it, so it is like a fine colander.

Commissioner Applefield indicated that it seemed the flow was redirected in that area where there is no fence. However, he understands that the water is not impeded and the fence allows the water to go through it. He asked if the sediment should remain just in front of the silt fence.

Mr. Cunningham responded in the affirmative.

Commissioner Applefield asked about the reality, as opposed to the theoretical, of the intended function.

Mr. Bridgewater responded that in reality, after seeing many job sites, the silt build-up is evident. It works and does its job.

Commissioner Applefield inquired why there was an opening in the silt fence where the pump chamber will be.

Mr. Cunningham stated that equipment would be brought in to install the septic tank and pump chamber.

Commissioner Applefield indicated his understanding that it was an access way and not a drainage feature.

Commissioner Applefield stated that regarding threatened and endangered species, the applicant thought this concern was more off-site and that it did not impact this site.

Mr. McManus stated that the Natural Diversity Data Base mapping is associated with the Farmington River. The critical area is the floodplain forest, and that is 300 feet away from the

subject property. The Farmington River floodplain is nearby but not associated with the property.

Commissioner Applefield inquired where the river is in relation to the location map.

Mr. Cunningham stated that there was approximately 200 feet from the back of the property to the power lines that run along the river, and then another 100 feet beyond that to the edge of the river.

Mr. McManus referred to the United States Geological Survey, and that the critical habitat is associated with the Farmington River. He referred to the map and pointed directionally to the river.

Commissioner Applefield asked what species were indicated in the critical habitat.

Mr. McManus responded that he had not looked into it, however the critical habitat is the floodplain forest. Figure 3 shows a hatched area where the CT Department of Energy and Environmental Protection (CT DEEP) marks the floodplain forest.

Commissioner Applefield inquired on the likelihood that the species would move.

Mr. McManus indicated that the floodplain forest was the unique part of the area.

Commissioner Applefield sought confirmation that there would not be an impact to endangered species on the property.

Mr. McManus responded that, not at the present time due to the decades of farming and other activities.

Commissioner Applefield inquired about the distance from the edge of the deck to the edge of the stream.

Mr. Cunningham responded it was approximately 20 feet.

Chairman Thier sought confirmation that under the stream there would be a 4-inch diameter PVC pipe, and sitting inside this would be a two-inch diameter pipe. He inquired about the inside diameter of the 4-inch pipe.

Mr. Cunningham indicated that usually four inches is the inside diameter and there might be a quarter-inch thickness.

Chairman Thier inquired that with a 2-inch pipe sitting within a 4-inch pipe there would be a space.

Mr. Cunningham indicated there would be approximately one inch of free space.

Chairman Thier inquired about capping the end of the 4-inch sleeve due to a concern for animals, as rodents can destroy plastic.

Mr. Cunningham indicated it would be buried in the ground. There would not be much room.

Chairman Thier asked John McCahill about past iron pipes used.

John McCahill responded that those were much larger pipes, for an 8-inch force main.

Chairman Thier sought confirmation that they were metal.

John McCahill responded in the affirmative.

Chairman Thier inquired why metal pipe would not be used. It is safer than PVC.

Mr. Cunningham responded that PVC will not corrode over time, and a metal pipe will. PVC would be beneficial over time for the longevity of the sleeve and the force main. A project at Winding Trails involved a similar installation. However, it was a bigger stream, 10 to 15 feet across, and a PVC line was installed. The PVC sleeve and PVC pipe are commonly used.

Chairman Thier questioned that if there was defectiveness in the PVC pipe under the stream, would the PVC sleeve act as a fail-safe if it were sealed at the end.

Mr. Cunningham stated that the sleeve was to allow the ease of future maintenance.

Chairman Thier inquired if there was additional benefit.

Mr. Cunningham responded that he did not foresee one other than the single PVC 2-inch pipe going through the rest of the property to the leach field. A sleeve will not be utilized in the rest of the property.

Chairman Thier pointed out the sensitivity of the stream.

Mr. Cunningham stated that the sleeve should be done now rather than in the future, to save time and money in case of replacement in the distant future.

Chairman Thier inquired about the impact of warm water or air emitted from the PVC pipe to the surrounding soil.

Mr. Cunningham responded that he could not foresee a situation where the 2-inch pipe would alter the temperature.

Chairman Thier inquired about the distance below the stream bed and the rest of the system.

Mr. Cunningham responded that it will be at least two feet below the stream bed, and the rest of the system would be approximately four feet deep.

Commissioner Breckinridge inquired about the house and the driveway, and where the run off would travel.

Mr. Cunningham responded that there is a large swale along the existing driveway, and any runoff from the driveway flows over the land and toward the brook. In the future, there will be 20 feet on one side of the driveway and 30 feet on the other side. It is graded to flow down to the swale over the land and into the brook. It gets filtered naturally.

Commissioner Breckinridge asked about the roof and whether it will be shingled.

Mr. Cunningham responded that it will be a shingled roof.

Mr. Bridgewater indicated there would be a splash pad for all of the drain water. The roof gutter drain would go down to the splash pad and filter through the land, and then back to the brook.

Mr. Cunningham stated that roof run-off is considered clean without concern for contaminants from a dwelling.

Commissioner Dean inquired why the existing house footprint was not used as a starting point. She understood it was non-conforming, but thought building on a non-conforming existing footprint was a possibility. On the proposed house, the deck will be within 20 feet of the wetlands?

Mr. Cunningham responded in the affirmative.

Commissioner Dean mentioned that at the last meeting she inquired why the existing house location was not being used. How far away from the wetlands is the existing house?

Mr. Cunningham responded that the back corner was approximately 30 feet away from the wetlands, at the closest point.

Commissioner Applefield clarified that the position would be 20 feet from the watercourse, and not the wetlands.

Chairman Thier and Mr. Cunningham concurred that the position would be within the wetlands.

Mr. Cunningham commented that the wetlands are the same as the edge of the stream.

Commissioner Dean inquired further why the existing location of the house is not being utilized.

Mr. Cunningham commented that the front of the garage would be at the neighbor's driveway. There would be no place to park a car outside of the garage. In the proposed plan, there is space to park a car in front of the garage without interfering with traffic from the neighbor. We did not want to push the house back to get to the same proximity to wetlands.



Commissioner Dean inquired that if the footprint were flipped, then the structures would be further away from watercourses and wetlands.

Mr. Cunningham reiterated the problems with traffic flow and grading. It also keeps the living space further from the neighbor's side.

Mr. McManus pointed out on a map the house that was abandoned, the driveway, and the neighbor's home.

Commissioner Breckinridge commented that the slope of the particular hill on the property is steep down to the stream and neighbor's woods. You would have to bring in a ton of fill if the house were on that area.

Mr. McManus concurred and referenced Photograph 2.

Commissioner Applefield referenced Figure 2 of the December 4, 2018, report. It would seem there is more room on the west side. On Sheet 1 of 4, that western end is much smaller in size. It does not appear that you could fit the house on the western side. In Figure 2, it seems like the house could fit it in well.

Mr. McManus commented that Figure 2 is not a surveyed boundary, but a sketch to be used as an approximate location. It may be skewed.

Mr. McManus stated that the GIS mapping is not accurate.

Mr. Cunningham explained that at the far western boundary of the property, where the property abuts the State of Connecticut property, it is 71 feet long. Twenty feet of side yard exists and it opens as you move forward. If the house were back farther, then the discussion would turn to how to cross the driveway over the stream. The issue of how to fit a house and a septic system on the west side of the property would still exist. That is why the house is proposed closer to the road. The least impact is the pipeline across the wetland area. The imagery shown in Figure 2 is not really reflective of the actual survey. There is a wood line along the northerly border on the back half of the property that is actually just north of the subject property. The river is still 300 feet away.

Commissioner Applefield commented that the lines on Figure 3 are not that precise. They are not the kind of lines that can be drawn on the map to say where one habitat begins and one ends. It is appreciated that the survey map is accurate and the applicant's answer is understood.

Commissioner Applefield inquired of John McCahill if the 2-inch pipe broke, would the applicant be required to come back to the Inland Wetlands Commission.

John McCahill responded that the maintenance of the existing system would be as of right. The applicant would be able to replace it. The Farmington Valley Health District usually communicates with the Town on these issues.

Commissioner Dean questioned further the position of the house in relation to the wetlands and watercourse.

Mr. Cunningham indicated there would be one less curb cut on New Road and that the Town of Avon Planning and Zoning Department would prefer the proposed plan. The house is 38 feet overall but with an angle to make it fit. He stated that there is a 12' x 12' screened porch south of the 12'x 36' wood deck indicated on the plans.

Commissioner Dean inquired that if the house were flipped, it would be significantly farther away from the wetlands and watercourse.

Messrs. Cunningham and Bridgewater concurred that the wetlands would still be nearby and within 12 feet. There was discussion regarding the positioning of the driveway, and that it is a shared driveway.

Chairman Thier confirmed that the Bridgewaters would still have to provide the driveway, however maintaining it would be the responsibility of the neighbor.

Mr. Bridgewater commented that if the house were flipped, the master bedroom would be over the neighbor's driveway right of way.

Commissioner Breckinridge commented that what some of the Commission members were proposing, to put the wide part of the house on the narrow part of the property, would not work due to the steep drop-off. A great deal of property would have to be disturbed to build up the property in order to squeeze in the house.

Commissioners Applefield and Dean indicated that was incorrect. The idea was not to move the house over but keep the house in the proposed place and flip it in a mirror image.

Commissioner Breckinridge commented that even as such, it would not work because that area of the property is very steep.

Commissioner Dean commented that she did not know what the property drop-off had to do with protecting the wetlands.

Mr. Bridgewater indicated that part of the conservation area would have to be disturbed in order to create the walkout and to install the foundation of the house.

Commissioner Dean commented that the deck could overhang the steep part of the property.

Mr. Cunningham stated that the deck would be 20 feet from the stream in the current proposal.

Commissioner Dean expressed concern that trash from the deck might get into the stream.

Mr. Bridgewater confirmed that the living part of the proposed house would be approximately 40 feet from the stream, as well as other designated room locations.

Commissioner Applefield sought to confirm the room locations of the main floor living area.

Chairman Thier inquired as to where the dividing line was between the screened porch and the deck. It was not clear on their map. The rectangle encompasses both the screened porch and the outside deck. There is no distinction on this map.

Mr. Bridgewater stated that the screened porch and deck would be on the same level of the living space. This area overhangs the steep slope of the land. Underneath is the walkout basement. The design for a walkout was chosen to fit well with the contour of the property. The main level will not have stairs.

Chairman Thier inquired if a pin were to be placed in the middle of the house and it was rotated clockwise, perhaps 20 degrees, then the deck would be further away and the garage would still be in the desired position. Therefore, would moving the deck another 15 to 20 feet away, and not flip the design, be feasible?

Mr. Bridgewater stated that this was considered. However, there is a fine line in satisfying wetlands and zoning regulations. By doing that, the house would be closer to the road. It is a 60-foot setback. If the plan were to rotate more, it would impact the setback. He again addressed the issue of the house positioned further back and related to the contour of the land.

Chairman Thier surmised that architecturally it would double the distance between the house and the wetlands. Chairman Thier inquired of John McCahill whether the Commission was obligated to go with a feasible alternative, or the Commission was second to planning and zoning regulations. Could there be an adjustment based upon what the Commission finds?

John McCahill stated that the prudent and alternative challenges do not really come into play unless the Commission is dealing with a public hearing, where the application is deemed to be of a significant impact. At this point in time, the Commission does not have to go through that process.

Chairman Thier stated that the solution would not require flipping the house. The Planning and Zoning Commission might have to grant a variance. The Inland Wetlands Commission is not proposing much of a difference if the applicant has to go back to the Planning and Zoning Commission. The Inland Wetlands Commission is not concerned with the results of the Planning and Zoning Commission.

Commissioner Applefield noted that prudent and alternative measures are the criteria for all decision making. That criteria is not limited to situations where there is a public hearing. They are the criteria for all applications.

Mr. McManus indicated that if a pin were placed in the plan and the house were turned around, the deck would move away but the garage would be closer by diminishing returns.

Chairman Thier inquired about the garage distance based on the current plan.

Mr. Cunningham responded that it is the same as the house from the deck.

Commissioner Applefield stated, that in his mind, the watercourse was more of an issue than the wetlands.

Commissioner Dean inquired why the deck would have to be so close to the watercourse. Could the deck be placed at the southern end?

Mr. Bridgewater responded that the deck would be accessible from the master bedroom.

Chairman Thier inquired how far away the closest corner of the garage is to the stream or to the wetlands.

Mr. Cunningham responded that it was less than 30 feet from the house to the wetlands. Commissioner Applefield noted that the house is approximately 100 feet from the stream.

Mr. Cunningham concurred.

Chairman Thier commented that the deck is 20 feet from the stream.

Mr. McManus stated that the deck post is 20 feet from the stream. The actual deck would be nowhere near the wetlands. The post would be a six-inch square. That is the activity.

Chairman Thier responded that the activity would be ongoing at the location.

Commissioner Breckinridge requested clarification on the classification of a structure above the wetlands, something that is not contacting the land. Is that a disturbance?

John McCahill responded that the applicant is requesting approval for the deck. The disturbance really is the supporting posts, but the Commission would have to decide upon this issue.

Chairman Thier stated that if the house is pivoted further away from the stream, at the same time as moving the garage approximately 20 feet closer to the stream, the corner of the house is now forty feet from the stream and the garage is 80 feet away.

Mr. Bridgewater stated that the house would be 20 feet from the road. The zoning requirement is a 60-foot setback.

Commissioner Breckinridge reminded the members of the slope of the land.

Commissioner Thier stated that the Inland Wetlands Commission was not concerned with the Planning and Zoning Commission setback.

Mr. McManus stated that the Commission should remember that the impact on the wetlands would be a six-inch post in the ground, 20 feet away from an engineered stream. The

watercourse has been disturbed over decades. Mr. McManus did not see the impact to the wetlands in relation to the need to move the house.

Mr. Bridgewater commented that the constructed house would be approximately \$500,000.00 and he planned the house in order to have a view of the endangered species. If the proposed plan were pivoted, he would be looking at his neighbor's house. It is an important issue.

Commissioner Breckinridge commented that if the Commissioners were to walk the property, they would see that near the southern area where the garage is shown, there is a huge drop-off. If the house were rotated, the whole area, including the wetlands, would have to be disturbed tremendously. I would vote against that, having seen the property.

Chairman Thier stated that they should forget about the issue of the posts for the deck. How close would the house be to the wetlands if there was no deck?

John McCahill responded that a distance of 30 feet to the stream was shown on the site map.

Chairman Thier commented that the applicant is stuck between two commissions with different goals and responsibilities. The house was shown in a different direction originally but it was turned to achieve compliance?

Mr. Bridgewater responded that the original house was straight, like a traditional ranch. After a conversation with John McCahill, we thought to angle half of it. The house was then closer to the stream at that point. Then it was suggested that the house be rotated clockwise to be far enough away from the stream and the road to accommodate both commissions; and to still maintain a view and have a nice place to live. That was the goal.

Commissioner Usich believed that another application had been approved, at least this close to the wetlands, a restaurant, and he did not have a problem with 30 feet and the 6-inch posts.

Chairman Thier commented that at the time, the Commission was afraid they were setting a precedent.

Mr. McManus stated that the precedent was not of the Commission's concern, however it was to consider each application on its own.

Chairman Thier inquired of John McCahill on the practice of the Planning and Zoning Commission granting variances for application approvals. He thought that perhaps the Planning and Zoning Commission had allowed houses closer to the road.

John McCahill responded that the Zoning Board of Appeals grants variances, and it depended on the specific situation. The required front yard setback for this property, which is on a collector road, is 60 feet. After having gone to the Zoning Board of Appeals, right now the variance is for 20 feet. The typical setback for residential properties is 40 feet.

Chairman Thier inquired what the setback is for this application plan.

Mr. Cunningham responded that it is just over 39 feet.

Commissioner Applefield inquired if the applicant had applied for a variance.

Mr. Bridgewater responded that a variance had been applied for and granted and the application reflects the variance.

John McCahill stated for the record that he had been working with the applicant for over a year to create a layout that would provide an appropriate balance for what the Inland Wetlands Commission might allow and what the Zoning Board of Appeals could tolerate in the way of a variance. Several different options were reviewed, several different grading options were considered, and this seemed to be the best one that provided the least disturbance and provided a house in keeping with what the applicant is trying to accomplish on the property. We looked at four or five different house layouts on this property and ruled out the other ones for all of the various issues discussed. This layout was the compromise that the applicant thought best to bring forward to both commissions.

Commissioner Dean inquired whether the Commission was supposed to use a separate set of criteria for a site that is complicated. How historic is this property, and has it been subdivided?

John McCahill requested that the Commission should put into perspective what this wetland is. It is basically a drainage channel that was created on this property a number of years ago, from drainage that has come down onto the property and then channeled. There are some peripheral wetlands beyond the channel.

Commissioner Dean inquired whether it had been channeled for farming.

John McCahill responded that the lot had been manicured over the 25 years that he has worked for the Town of Avon.

Mr. McManus responded that there had been farming on the land for decades. In order to be certain, he would have to go through aerial photographs. The existing house was a barn at one point, along with a pasture field. The wetlands are more predominant as you move southerly.

Commissioner Dean stated that the Commission typically does not approve of houses 20 feet from streams.

Mr. McManus indicated that it was not a house but six-inch posts that are 20 feet from the stream.

Chairman Thier noted that it was 30 feet from the stream.

Commissioner Applefield inquired whether the breakfast nook was elevated as well.

Mr. Bridgewater indicated that the distance was the equivalent to the walk-out under the deck.

Mr. Cunningham stated it was 32 feet away from the stream.

Chairman Thier inquired about the function of the walkout, the 30 feet of distance from the stream, and the use of the exterior land beyond the walkout.

Mr. Bridgewater stated that it would be a playroom for his grandchildren. He confirmed the distance from the stream, and that the rear area would remain grassy with a swing set, possibly. There will be no other structures added.

Mr. Cunningham stated that part of that area includes the slope.

Chairman Thier sought confirmation of the location of the steep slope in the back yard.

Mr. Bridgewater confirmed the location to be under the deck.

Commissioner Applefield inquired whether the stone wall is an existing one, and asked for the height of the wall.

Mr. Bridgewater confirmed that it is existing. The height varies, however it is generally 24 inches high.

Chairman Thier asked if the Commissioners had any further questions. There were no further questions from the Commissioners. He asked if John McCahill had additional comments.

John McCahill stated that he received an e-mail from Diane Harding of the Farmington Valley Health District (FVHD), dated November 20, 2018. The e-mail indicated that she reviewed the subject property and confirmed that the soil test data is capable of supporting the septic system as shown, and that she will be reviewing the follow-up design when the owners are ready to install the system. He asked Ms. Harding questions regarding the existing septic system and she responded that it cannot be used because the FVHD documented in 1995 that there was a backup of sewage in the house, and also the house was abandoned. He asked her if the FVHD had approved other forced mains underneath watercourses. Ms. Harding confirmed that the FVHD had approved many installations of forced mains under watercourses in all of the ten towns within the jurisdiction of the FVHD. She had provided two site plans, including one from the Town of Canton and one from the Town of East Granby. Chairman Thier had asked that John McCahill review past installations executed under watercourses. There were five examples of installations done under watercourses. The reoccurring theme in all of the installations was a proper sequence of construction and a meeting with Town staff prior to beginning the work. In many cases, the Town required ductile iron or sleeves, and then for the areas that were disturbed, there was attention to how the areas would be restored. John McCahill researched to ensure that the 1920 barn was converted to a house in 1939, to satisfy a question whether it was an appropriate conversion. The Town of Avon Building Department had also issued a number of upgrade permits in 1967 to improve the house.

Commissioner Dean inquired when the split in the property was made.

John McCahill responded that the split has existed historically, back to 1967, and confirmed that it was prior to the Town of Avon Inland Wetlands Commission regulations.

Commissioner Breckinridge motioned to approve the application subject to draft approval conditions.

John McCahill responded by noting that he had four draft approval conditions to consider for this application. The plans have been modified to respond to the bulk of his prior comments. He read the conditions as submitted for the record. The first approval condition included the conservation restriction and final review and approval before submission to the Town land records. He commented further on the permanent demarcation feature, such as the boulder rows to be installed around the wetlands fingers that stick out on the property now. The boulders are graphically shown on the plan, and will be subject to review and approval by Town staff.

Commissioner Applefield requested explanation of the boulder rows.

Mr. Cunningham responded that the applicant had discussions with the Town on how to mark the wetlands so that anyone on the property would recognize the edge of the wetlands. Five markers were located based on wetland flags done by the soil scientists. There are a couple of boulders on the other side of the septic tank as well.

Commissioner Applefield commented that a row would indicate a line along the land, however the plan seems to show a pile. Is it to be a boulder pile in one location for demarcation?

John McCahill indicated there would be boulders place strategically along the fingers of the wetlands. A sizeable stone would be placed along the way to create a row of boulders. The area in the back of the house has been mowed historically. The goal is to recapture that wetland area, prevent it from being mowed, and allow it to restore. That would be the benefit of the boulder placement.

Commissioner Dean inquired on the spacing of the boulders.

John McCahill responded that as shown on the current plans, the demarcation is approximately every 20 feet and the boulders get closer as they get to the narrow edges near the brook.

Commissioner Dean inquired regarding the size of the boulders in relation to the height of new wetland growth.

John McCahill responded that his expectation is of a sizeable boulder, three to four feet in diameter.

Commissioner Breckinridge commented that once the vegetation matures, it serves as a marker in itself. The boulders also serve as the initial demarcation function until the vegetation grows.



Commissioner Dean inquired whether, in other applications, the Commission has approved boulders that are 20 feet apart. That is the approximate distance from the house to the watercourse, and a great distance. Does the Commission normally approve the boulders closer together?

John McCahill responded that the Commission typically approves a continuous boulder row, meaning that the boulders are basically touching each other.

Commissioner Breckinridge stated that when the Commission has required installation of a boulder row, its purpose has been to create a barrier.

Commissioner Applefield wondered if future applicants of the property would desire to remove the large boulders.

Mr. Cunningham indicated the boulders would be located within the conservation easement.

Commissioner Dean clarified that the Commission has approved boulder rows, in prior applications, to create a visual line of demarcation.

Commissioner Breckinridge stated that the term *row* was not correct in this case. Boulder markers would be more appropriate.

Commissioner Applefield wondered whether or not it would be more of an advantage if the Commission would require a smaller stone wall to go around the wetland area in order to create the demarcation. He did not see much value to the boulders.

Commissioner Breckinridge indicated it was unnecessary.

Chairman Thier then guided the discussion to the next approval condition number three. He stated that approval condition number two will remain and not be deleted.

John McCahill then read approval condition number three regarding the abandoned well and old septic system, and the required subject review and approval from the FVHD for the installation of the new systems. He read approval condition number four regarding the applicant's strict adherence to important details, as stated on the submitted final plans.

Commissioner Dean wondered why the phrase *strict adherence* must be included in the conditions, and did the Commission not always require this in all applications.

John McCahill responded that since there are many details included in the plans, it would be important to reiterate this requirement, and if any details should change, it should be in writing. It is not uncommon to use such a condition.

Commissioner Dean questioned whether it was normally written.

John McCahill stated that it has been included in a number of applications as an approval condition.

Commissioner Dean questioned if an applicant did not receive this in writing as a condition, then the conditions might be interpreted as without requirement for strict adherence.

John McCahill did not have a response to this question.

Chairman Thier asked if Commission Breckinridge wished to continue with his motion.

Commissioner Breckinridge made a motion to approve Inland Wetlands Commission Application #757 with the four additional conditions as outlined by John McCahill, in addition to the standard approval conditions as stated in the memo of John McCahill, dated January 30, 2019.

Commissioner Dean seconded the motion.

Commissioner Applefield recommended the deletion of condition number two. He did not feel it was necessary.

Chairman Thier concluded that if condition number two was superfluous, then it could remain anyway.

Commissioner Applefield commented on Commissioner Usich's earlier statement that this application does not necessarily represent an approval with a structure 20 feet from a watercourse. He noted he would likely vote in favor of the application, however was not comfortable with the notion that the Commission might be establishing a 20-foot distance from a known watercourse. It was of less concern to him about the wetlands than the watercourse on this property, siting that watercourses flow from one property to another, and contaminants can move from one location to another. He appreciated that in this case the structure is elevated. It was a significant consideration to him in moving forward with the application, but in no way did he want to establish this as the new limit. It was an important consideration in his vote.

Chairman Thier stated that this is a very unusual site. There will be other unusual sites to consider. The Commission has discussed all of the alternatives of the structural plan. As is, the plan is 40 feet from the road?

Mr. Bridgewater confirmed Chairman Thier's question.

Chairman Thier stated that it was discussed to place the house 20 feet from the road and 40 feet from the stream.

Commissioner Applefield commented that there were other feasible designs. The house did not have to be rectangular. It can be moved back. It does not make sense to do that at this point. It sounds like the applicant has done a lot of work for the current plan. He was uncertain as to how productive it was to see what more could be done.

John McCahill commented that possibly the deck could be made smaller. He was uncertain if the applicant was willing to do that.

Commissioner Applefield decided he would not request that and was prepared to move forward.

Commissioner Breckinridge stated the reason why he is a little more comfortable with this plan than some other situations. Based upon the property, it appears as if a man-made drainage ditch was dug at some point. He questioned if water existed there only in the winter.

Mr. Bridgewater concurred about the ditch. He responded in the affirmative regarding the presence of water in the winter.

Commissioner Breckinridge did not necessarily consider it to be a watercourse, in the sense of water running all of the time, like a brook or stream. The watercourse appears man-made, as if it could have been put anywhere.

Commissioner Applefield stated that the watercourses in Town are all man-made. This is not the Farmington River, just about every watercourse in this town is man-made. It is at a point where the Commission will be grading watercourses in terms of quality. The watercourse serves functions and values, and nutrient removal. It is not an irrelevant feature on the property.

Commissioner Breckinridge asked the Commission to remember the property of the proposed car dealership. There were wetlands there, and they were basically ditches that were dug and filled up with water. He struggled with the issue of a man-made watercourse.

Commissioner Applefield inquired as to which watercourse in town was not man-made. He felt strongly that they were all man-made.

Commissioner Breckinridge responded that Roaring Brook has existed.

Commissioner Applefield noted that he and Commissioner Breckinridge viewed the importance of the feature differently.

John McCahill stated that many of the watercourses are the result of channelized flow. What started many of these was probably an erosional feature that started at one time and became managed along the way.

Commissioner Applefield stated that the watercourse is not an irrelevant feature.

Commissioner Breckinridge maintained his motion.

Chairman Thier stated that the Commission was discussing the motion and inquired if there were any comments on the motion. Everyone had an opportunity to express their views on the motion.

John McCahill was asked if he had any further comment and he responded in the negative.

Chairman Thier asked for those Commissioners in favor of the motion to approve the application. All were in favor. The application was approved.

NEXT MEETING

The next regularly scheduled meeting is Tuesday, February 5, 2019.

There being no further business, the meeting adjourned at 8:40 p.m.

Susan Guimaraes, Clerk  
Inland Wetlands Commission  
Planning and Community Development