INLAND WETLANDS COMMISSION MINUTES

Special Meeting of August 19, 2020 at 7:30 p.m.

Zoom Meeting

Website link:

https://zoom.us/j/97236080884?pwd=YStCUXZCTHc0QTdFNllzUytOQzM0dz09

Call-in Number: 1 (646) 558-8656 Meeting ID: 972 3608 0884 Passcode: 436605

These Minutes are subject to Approval by the Inland Wetland Commission

Present: Sharon Salling, Mike McCabe, Suzanne Guidera, Craig Ferris, Kendall Horch

Staff Present: Steve Maguire, Senior Land Use Enforcement Officer, Steve Hnatuk, Land Use Officer, Dawn Fried, Clerk

Ms. Salling opened the meeting at 7:33 p.m.

PUBLIC HEARING

Application IW #20-04 by James F. Walsh, for a property located at 32 Berkshire Road, Newtown, CT, for the proposed development of a 14,000 sq. ft. building for retail use and a restaurant.

Mr. McCabe read the legal notice in to the public record.

Ms. Salling gave an overview of the Zoom meeting expectations and the public hearing process.

Kevin Solli, Solli Engineering, Monroe, CT represented the applicant. Mr. Solli introduced Tom Cusack, Hydrogeologist, WSP, Shelton, CT.

Mr. Solli described the existing property as being over three acres of land with a proposed 14,000 sq. ft. commercial, mixed-used building and 88 parking spaces.

Mr. Solli stated that protective measures will be put into place during the construction phase. The Erosion and Sediment Control Plan includes the following: silt fence and hay bales along the wetland edge, a landscape plan with robust buffers and a water quality basin which will collect the sediment. The basin will be cleaned after construction.

Mr. Solli stated special attention was paid to the lighting plan and there will be no light disturbance to the wetlands or Curtis Pond Brook.

Mr. Solli gave a brief description of the CT DOT realignment project on Berkshire Road and Toddy Hill Road. Mr. Solli feels that the combination of both, the newly created development at 32 Berkshire Road and the CT DOT realignment project, will benefit the town.

Mr. Solli reviewed some of the concerns discussed at the last IWC public hearing in March. One concern was trash falling into the brook. Mr. Solli stated that a 4-ft high chain-link fence will be installed to stop the debris as well as a guide rail and additional vegetative buffers along the wetlands.

Mr. Solli stated there will be no direct impacts to the wetlands and no adverse impacts to the watershed or aquifer.

Mr. Solli discussed three alternatives for the site:

- 1. Changing the proposed mixed-use building to an office building. This would not be an ideal alternative because there is no demand for office space.
- 2. Changing the location of the parking lot to the front of the building. This would not be prudent due to the increase of impervious surfaces as well as the building's proximity to the wetlands.
- 3. Leaving the site in its current condition. This would not be prudent due to the lack of existing protective measures for the wetlands and the lack of mitigation for the existing contaminants on-site.

Another concern was the water quality flow and the water volumes and rates that run through the hydrodynamic separator. Mr. Solli stated they can increase the volume capacity of the hydrodynamic separator as well as provide a larger unit which will double the volume.

Mr. Soli addressed the comments regarding "assumptions" he made on the thermal impacts from the proposed storm water run-off. Mr. Solli gave a detailed description of the improved storm water management plan and the thermal impact analysis from the first flush of rain fall. Mr. Solli also made calculations based on the potential water downstream. He stated that the run-off will not have a thermal impact on the brook, fish or habitats. He explained, according to the analysis, the water temperature will be between 45 and 65 degrees which is optimal for the aquatic habitats.

The storm water management plan enables the rain water from the impervious areas to flow to catch basins through pipes to a low point in the back of the building to a hydrodynamic separator that will handle water quality flow. The water will then drain into an infiltration basin which will flow into a level spreader into the wetlands.

Mr. Solli described the proposed protection of the Riparian corridor. He stated at this time there is a limited buffer which does not provide any protection from sheet flow run-off. Mr. Solli stated they will be increasing the buffer area, improving the green space and improving water quality measures which will protect against contaminants.

The property will have a septic and well. The septic system will be located in the front parking lot. Mr. Solli gave an overview of the nitrogen levels and nitrogen loading in the brook associated with the septic system. An analysis conducted by WSP was done to look at the potential nitrogen loading

impacts to the brook. The levels of nitrogen was confirmed and these levels will not impact the brook and the levels will be in compliance with Newtown's aquifer protection regulations.

Mr. Ferris questioned what it meant for the water quality from a restaurant to be "problematic"? He questioned the nitrate loading of 50 milligrams per liter in the report? Mr. Ferris stated that 50 milligrams per liter gives pause for concern. Mr. Ferris also questioned the absorption of phosphorous discharging to the steam over a period of time and if the soil would be saturated or have the ability to absorb? He also questioned the thermal loading impacts to the streams from the pavement. Mr. Ferris asked the applicant if they would be willing to monitor and document evidence that there is no high levels of nitrate or thermal impact to stream. Mr. Ferris recommended temperature monitors that record temperatures over time.

Mr. Cusack stated phosphate and nitrate loading soils are very good at renovating. Phosphate over time will break down and the soil will renovate newly induced nitrogen and phosphates in the soil. The nitrate concentration leaving the leech field is 9.5gpm. There is between 150 - 250 feet in between Curtis Brook and the leech field which will be diluted and dispersed with significant renovation. There will be no significant impact on Curtis Brook. The high water table also allows for travel time and renovation capability of natural soils from any effluent from the septic system.

Mr. Solli added that the water service comes from a potable public supply well, which requires additional permits from the state, additional public health code requirements and strict regulatory requirements. With these added requirements Mr. Solli feels confident that the proposed design will not have any impact to Curtis Brook.

In regards to thermal impact, Mr. Solli explained that this project design gives the water ample time to cool before entering the stream. The volume and rate of run-off and the temperature of the brook all play a part in decreasing the thermal impact. There are 1.3 acres of impervious surface on this property with negligible impact.

Mr. Ferris reiterated that he would like monitoring to be done. Ideally, Mr. Ferris would like to start the monitoring at a base flow and put the monitoring in place during a storm event. Mr. Ferris asked the applicant if they would be willing to install monitors. Mr. Solli stated he would be happy to accept any conditions from the Commission to address concerns. Ms. Salling thanked Mr. Solli.

Ms. Salling questioned whether measures will be taken if issues arise during monitoring and whether mitigation can be put into place. Mr. Cusack replied there are modifications available to the septic system in case of an issue such as an additional baffling system. There would also be mitigation alternatives. The nitrate monitoring base monitoring prior to construction and having a schedule sampling. Mr. Ferris suggested an aeration system or a fountain.

Mr. Solli addressed the storm water run-off from the dumpster pad. He stated the storm water will drain towards the building. He also stated that the entirety of the property also drains towards the site and is collected and treated prior to discharge.

Ms. Horch questioned whether state approval is needed for the septic system and if they have gotten approval? Mr. Solli stated yes, the septic system is over 2,000 gallons and needs state approval. Ms. Horch pointed out that the state should require monitoring. Ms. Horch also questioned why an underground storm water detention system is not being considered. Mr. Solli stated an underground system is not necessary because the site is located on the lower region of the overall watershed. The objective is to get water off of the property before the higher peak volumes from the water shed come through the corridor. Ms. Horch asked whether there was a storm water maintenance plan. She recommended the maintenance plan require bi-annual cleanings. Mr. Solli stated he would be happy to provide one as a condition of approval.

Ms. Horch asked if pervious pavement was considered. Mr. Solli stated the conditions are not optimal and would not be effective.

Ms. Horch asked whether there was a schedule for a soil convergence plan and will there be temporary sediment basins during construction. Mr. Solli stated yes, constructing a sediment basin is the first step. The basin will be cleaned out after construction and then readied for planting.

Mr. McCabe clarified that the existing vegetation that borders the brook will not be altered. Mr. Solli stated that was correct. Mr. McCabe questioned if the steep slopes will remain by the buffer area. Mr. Solli stated retaining walls will be added and some steep slopes will remain. The buffer area will be enhanced with additional plantings, a conservation wildflower mix and an erosion control restoration mix.

Mr. Maguire pointed out that the applicant originally stated a substantial amount of the buffer along the brook would remain. But now the Sediment and Erosion plan shows there is going to be a limit of disturbance directly on the wetland boundary along the brook. Currently there is an existing 30 - 40 ft. natural vegetative buffer on the hillside but with the disturbance there is going to be significant loss of that buffer. Mr. Maguire stated that even with additional plantings and retaining wall it will not be enough. Mr. Maguire questioned whether it is possible to pull the driveway back and to shrink one of the units to increase and restore the buffer. Mr. Solli stated he is not looking to disturb the slope. Will propose to supplement additional plantings on the other side of silt fence and hay bales to further enhance the buffer. Mr. Solli stated they are looking to maintain buffer and will work together to provide additional details to address concerns. Mr. Solli is looking for the existing vegetation to remain and not disturb the slope. Mr. Maguire needed clarification of the limit of disturbance line on the sediment and erosion control plan. Can you pull the disturbance line back? Building size modification? Mr. Solli pointed out that the DOT project will change the site dramatically and the design the site to blend with the DOT project. Best develop the site in accordance with DOT project.

In regards to the nitrate in the Aquifer, Mr. Maguire stated that 10 mg/per liter is considered maximum contaminate level. Mr. Maguire is concerned that adding the nutrient load will add to the nitrate level and surpass the threshold. Mr. Maguire stated that the data from the PWA over the past 14 years has been on average .99 mg/liter and the highest recorded level has been 2.2mg/liter in comparison with the projected 9.5 mg/liter. Mr. Maguire questioned if the nutrient loading will raise the nitrogen level. Mr. Maguire stated he would be happy with sampling. Mr. Cusack stated there are higher nitrate concentration levels in ponds compared to rivers and streams. Streams have seasonal variations and

lower concentration levels because of dilution and dispersion due to flow. Mr. Maguire reiterated that sampling would help with the concerns.

Ms. Guidera asked the applicant if they had considered putting plantings on the other side of the brook. Ms. Guidera felt it would help the overall health of the wetland and would have a positive impact on the thermal aspects. Mr. Solli stated they can add supplemental wetland plantings and tree canopy for shade. Ms. Salling stated if it is prudent it is a good idea.

Mr. Hnatuk asked if there was a snow shelf on-site. Mr. Solli stated there are snow storage areas along the perimeter of the site which are on the lawn and will not damage the bushes or shrubs. Mr. Hnautk asked to elaborate on the peak flow summaries since there isn't an underground detention system. Mr. Solli stated that the site is 2.8 miles away from the head waters of the water shed and is in the lower 5% of the water shed. In accordance with the DOT Drainage manual the water should leave the property as soon as possible. Mr. Solli gave an overview of run off rates.

Public Participation

Mike Fatse – High Rock Road, Sandy Hook. In response to Mr. Ferris's question regarding monitoring, Mr. Fatse questioned why wait for the nitrates to be over the acceptable levels when it can be done ahead of time before a problem occurs? What can be done with thermal problems if thermal problems occur? Mr. Fatse stated the overflow from the holding tank, which is 18 cfs., would be joining the brook within 5 minutes at 448 cfs. (at peak over 2 hours). If you are adding hot water before the brook dilutes is there is going to be a problem? Mr. Solli gave an overview of the report. Collectively, between the discharge from the level spreader and the discharge over the spillway it is 15 cfs. The rate that it will travel is 448 cfs. In response to the nitrates Mr. Solli does not want to "overdesign" the project.

Joe Hovious –3 Leopard Drive, Sandy Hook.

- Mr. Hovious stated the various boards and committees he has served on relating to this application.
- Mr. Hovious stated there are a number of assumptions made by the applicant in regards to the
 conclusions and impacts. The conclusions are not consistent throughout the Engineering
 report. Mr. Hovious spoke about the level of nitrates entering the stream and the discrepancies
 in the report regarding the dissolution calculations. Mr. Hovious recommended the
 Commission look at the discrepancies.
- Mr. Hovious spoke about the hydrodynamic separator and the confusion regarding flow quality and flow rate and whether a larger separator is needed. Mr. Hovious asked the Commission to reconsider the sizing of the hydrodynamic separator and its impact.
- Mr. Hovious appreciated the clarification of the trash dumpster location.
- Mr. Hovious was concerned with the predicted cooling rates within the basins and pipes making a comparison to the Fairfield Hills storm water system.
- Mr. Hovious stated that shade is great for the stream and serves as protection for the wildlife and the Riparian Buffer.
- In summary, there are still a number of questions regarding nitrates and the analysis and thermal issues that need to be addressed.

Tim Clark – Officer of the Pootatuck Club, 100 Wasserman Way, Newtown. Mr. Clark gave an overview of the Pootatuck Club's interests and concerns in the project. Mr. Clark agreed with comments regarding the implementation of a formal monitoring program which will immediately address problems. Mr. Clark would also like an expansion of the monitoring program done by PWA that has been ongoing for 14 years. In closing, Mr. Clark requested both a formal monitoring program and a formal response program as a prerequisite to the Commission approving this project.

Mr. Ferris would like the applicant to provide "what the volume of flow is when you start the discharge at the Toddy Hill Road crossing". The information would give some level of confidence as well as address concerns. Mr. Solli stated he doesn't have the information readily available.

Randy Walker – 11 North Branch Road, Newtown. Mr. Walker questioned how the DOT project will impact the site. The analysis did not include the DOT thermal impacts. Mr. Walker also questioned whether the design for the storm water run-off from the impervious surfaces will impact the brook. Mr. Solli stated the analysis on the storm water was based on a 2-year storm event. Mr. Solli feels the calculations are correct and would not have an adverse impact on the brook. Mr. Solli stated the DOT has their own permitting process. Mr. Walker stated that the DOT question would be better suited for the Commission to look into.

Mr. Solli thanked the Commission and public for their comments and concerns. Mr. Solli stated that if the Commission requests a larger system then he would provide a larger hydrodynamic separator which has a higher flow rate capacity. Although, Mr. Solli doesn't feel a larger system is necessary and that the proposed system would go above and beyond what is required by DOT, DEEP and the Newtown storm water requirements. Mr. Solli also stated if the Commission requests a monitoring program and a response program as part of the conditions the applicanct would be happy to comply.

Ms. Salling appreciated the comments by the Commission and the public and would like the applicant to review all requests and concerns. Ms. Horch wants to make sure the Storm Water Management plan be added as a condition. Ms. Salling thanked the applicant for the thorough and careful answers. The Commissioners discussed whether the Public Hearing should stay open or not.

With no additional questions from the Commission or the public the Commission agreed to close the Public Hearing. Mr. Ferris moved to close the Public Hearing. Mr. McCabe seconded. All in favor.

OTHER BUSINESS

Mr. Maguire reviewed an application from the P&Z Commission for a proposed shared driveway in a subdivision at 15 Swamp Road. The purpose of the shared driveway is to minimize the wetland disturbance that would otherwise be created if the property was accessed by a new driveway from its own road frontage.

Mr. Ferris moved to approve the shared driveway on 15 Swamp Road and to make a recommendation to the P&Z Commission for its approval. Ms. Horch seconded. All if favor.

ACCEPTANCE OF APPLICATIONS

Application IW #20-20 by Donna and Roger Ball, property located at 20 Saw Mill Road for pond dredging.

Application IW #20-21 by Artel Engineering Group, LLC, property located at 1 Pocono Road for the restoration of the existing wetlands to its natural condition.

ADJOURNMENT

With no additional business, Mr. Ferris moved to adjourn. Mr. McCabe seconded. All in favor. The meeting of August 19, 2020 was adjourned at 10:06 pm.

Respectfully Submitted, Dawn Fried.