

**NORWALK CONSERVATION COMMISSION MINUTES**

MAY 9, 2006

ATTENDANCE: Ann Cagnina; Beth Ackerman; Susan Llorca; Andrew Kydes; Marny Smith; Chris Handrinos; Matt Caputo.

STAFF: Alexis Cherichetti, Senior Environmental Officer

OTHERS: Jeff Savarine; Attorney Robert Maslan, Assistant Corporation Counsel; Christopher October, Stanley Dinyea, GZA

CALL TO ORDER

The meeting was called to order at 6:10 p.m.

Mr. Matt Caputo arrived at the meeting at 6:11 p.m.

ROLL CALL

Ms. Cherichetti called the roll.

RECEIPT/DISCUSSION

#S06-249 – 5 Rising Road – Savarine - Construction of a garage adjacent to a wetland.

Ms. Cherichetti described the application as a 40'x 40' detached garage. She said the applicant has recently had the wetlands flagged and that there are also wetlands on the adjacent property, just south of the applicant's property line, consisting of a pond, watercourse and swamp. The foundation of the old garage is still visible, along with a large debris pile. Ms. Cherichetti said the applicant must present a plan defining the limit of disturbance, the limit of the structure and the limit of lawn versus scrubby vegetation there now.

Ms. Smith asked if the new garage would be built on a slab. Mr. Savarine, the applicant, said there will not be a basement; the garage will be built on a foundation. He said the southwest corner of the garage was closest to the wetland area, approximately 32 feet. Ms. Smith said she has viewed the property and doesn't see any problems with the application, but she wanted a native plant vegetation buffer planted between the garage and the wetland area. Mr. Savarine asked if he should keep the vegetation that is already there now, and expressed a desire to follow the instructions of the Commissioners. A discussion took place in which the lawn area around the garage, removal of the piles of debris and grading were reviewed.

Ms. Cherichetti stated this application will be on the agenda for the May 23rd meeting.

No action was taken on this item.

## DISCUSSION/DECISION

#S05-239 – 8 Norden Place – Norden Place, LLC – Construction of a multi-unit (273 units) residential complex with associated stormwater drainage, grading and landscaping in and adjacent to wetlands and watercourses.

Mr. Christopher October and Mr. Stanley Dinyea of GZA were in attendance to assist in the discussion process with the Commissioners. Mr. Dinyea and Mr. October identified themselves for the record.

Ms. Cagnina stated that this item is a continuation of discussion from the previous meeting following the public hearing on the application. Ms. Cherichetti put together a compilation of a series of questions and information for the Commissioners. Ms. Cagnina said they would go through the questions item by item. She stated that at the April meeting Mr. October and Mr. Dinyea did not have a chance to go through the supplement that was provided by the applicants.

Attorney Robert Maslan identified himself for the record, and stated he was there as counsel for the Commission. He said that before this meeting, he met with Mr. Dinyea and Mr. October and explained to them their role in the meeting, and that their comments are limited to commenting on evidence that is already in the record prior to the public hearing being closed, and that their comments are not to be used as a way to insert new information that is not contained in the public record.

Ms. Cherichetti said that, of the different storm water treatment practices described in the Connecticut Storm Water Quality Manual, which are most similar to the seven retention basins the applicant has proposed?

Mr. October said he has a set of revised site plans, and at the last meeting they received supplemented drainage calculations. Basically his review was limited to the supplemented drainage calculations and the site plans, which he received on the 11th. At that time they reviewed the site plans and revisions and noticed there was a change in the design for the stormwater treatment, including the seven retention basins. They returned to the office and looked at the site plans and the supplemental calculations. They observed that both the hearing and the text make references to these basins as bio-retention basins, so one of the things they did in relation to the question was to go back to the Connecticut manual to identify the retention basins. Based on the site plans provided, and the drainage calculations in the supplemental package, they were unable to determine conclusively that they were bio-detention basins. They were labeled as such, and the applicants made reference in the text that they were going to excavate approximately two feet of native soil and put in sand. However, the site plans themselves typically include details when there are enhanced BMPs that have enhanced storm water treatment practices, and usually there is detail provided such as the depth of the fills are going to be, if there will be species, the outlet structure, etc. The site plans did not have these

details, and the text had some discussion, but not enough in his opinion to adequately depict the plans that were presented in the Connecticut manual. He was not able to determine clearly that these are bio-detention basins. The question of which they are most similar to, based on what they appear to be on the site plans, they look like dry detention basins with sand in the bottom. He was unable to determine if there was vegetation; he was unable to determine if there is an under-drain; he was unable to determine if there was a filter fabric separation layer separating the sand from the native soil that may be above it or collective silts.

In response to Mr. Handrinis' question about whether there were standards for this, Mr. October said there were no standards, but he would say that the Connecticut manual has a whole chapter devoted to how an applicant could prepare a storm water management plan that does have general guidelines for submissions to municipalities.

Ms. Cherichetti said, so then based on that opinion, how do each of the proposed basins rank as far as treatment of water quantity and issues, and water quality treatment.

Mr. October said that when he looked at the design, the design appears to design all the BMPs on a water quality-type basis. The State, in the management manual, and in typical practice, includes a dual design, treating water quality as well as water quantity. The design, as submitted, really concentrated on water quality. The units, including not only the basins, but the recharge units, were designed on a one-inch basis, which is commonly referred to in standard industry practices as a first flush, meaning the first one inch of rainfall for a 24-hour event. If you look at water quality, it's different. Some municipalities will have a desire to go up to a 25-year event; a 50-year event; or even a 100-year event. The difference is when you have designs for quality, basically you are treating the first flush and hold that to a high level of treatment standard, whereas the remaining inches of rain in a subsequent higher rain event is more held back so you don't flood downstream areas. When the question is how do the basins rank in terms of treatment of water quantity to water quality, he could not say. He cannot say how the system would work if there was a significant amount of water. It would depend on the event. In absence of the calculations he is unable to make a determination as to water quantity, which affects the quality. Generally speaking, if you have a high-intensity rain event that happened relatively quickly, that first flush may not have the retention time in the unit to be adequately treated, because the capacity of the unit is not of a larger rain capacity. It appears the applicants designed from a water quality point of view but he was unable to make much more of a statement than he already has.

Ms. Ackerman asked if Mr. October would consider these primary BMPs. Mr. October said that if they are bio-retention units, then the State appears, in their guidelines in the manual, to call them primary units. He was unclear if that is what they are. He doesn't know because there are no calculations stating what the water levels are; if they hold water; how quickly they drain; and the site plans do not show details with plants or vegetation beyond the fact that there is some. There is no legend articulating what that is. In response to Ms. Cherichetti's question, Mr. October said that if they are dry basins, then they are a secondary unit.



Ms. Cherichetti said, is wetland #7 still being used for storm water storage, or can you determine if wetland #7 is still being used for storm water storage?

Mr. October said that in absence of hydrology calculations that reflect the current site design, he is unable to determine that. It seems reasonable from an engineering point of view that if the unit's size is for a one-inch event, then a larger event would likely pass through the unit, and in a larger event, wetland #7 could possibly be used for water storage. Without the calculations he is unable to say definitively yes or no.

Ms. Cherichetti said, can you determine the duration of increase and inundation to wetland #7? And can you determine whether the wetlands experience more periods of inundation during and between frequent storm events, or will the frequency of flow through the culverts under the railways increase significantly?

Mr. October said that he was not going to answer because of lack of information. He could give a general comment but won't get into the specifics of a culvert or whatever. With a seven-acre wetland in front of it, he did not know.

Ms. Cherichetti asked if the components of the water quality treatment system as designed could catch that first flush.

Mr. October said it certainly appears that way.

Ms. Smith asked if that held true for larger rain events also.

Mr. October said that gets back to the earlier statements. Certainly, if you have a one inch rain event, the system will hold. According to the manual, the one-year event is a one-inch storm, and a two year event is a three-inch storm. The idea behind a rain event is cyclical. A 100-year event is the type of event you would expect every hundred years. A six-inch event would happen four times a century.

Ms. Cherichetti asked if there were any problems associated with replacing a construction stage temporary sediment trap with a long-term detention basin as most of these just overlap as far as design.

Mr. October said essentially no, this is a commonly used practice.

Ms. Cherichetti said, can you discuss the anticipated projected longevity of pervious pavers in Connecticut, and have there been any problems, and what maintenance is required; would you expect vegetation growth between them and so on.

Mr. October said, regarding porous pavers, he stated for the record that he had limited experience with them as they are new technology and have only been seen in the last four or five years. He understands that when they have spec'ed them out, they like to put them in areas of lower traffic because the design has two feet of sand below the pavers, which is a nice recharge area. However, the technical spec that the applicants have attached show that there is only twelve percent void space on the surface. In a septic system, or

any sort of recharge system, including the recharge system here, if you maintain the void ratio and you maintain the pore space, you have good luck with porous pavers. You stick them in a high traffic area that may get a lot of silt such as may be in a low-lying area and the pore spaces get full, they could act like a regular paver. The water may never get into the sand, especially with a twelve inch void space on the surface. It is up to how they are maintained. It is difficult to maintain them properly to get rid of the silt. Overall a heavy bristle sweeper must be used. He would not expect vegetation growth in a high traffic area, but he would definitely expect it in a low traffic area. Vegetation growth isn't necessarily a bad thing for clogging up pore spaces. It depends on where you site them.

Ms. Cagnina asked what was the manufacturer's predictions.

Mr. October said he believed that when the manufacturer looks at them, they are looking at more of a structural point of view in the loading, and since they're concrete it's a 10, 20, 30 year type of life expectancy. When they look at failure, they don't look at pore ratio as much as they look at the actual bricks crushing.

Ms. Ackerman asked Mr. October if he thought frost would be a problem.

Mr. October said that it could be, but it's not a reason not to use them. Generally speaking, you'll have ice on them because water will get in. His understanding is that they are not cemented in place and there's lots of room for water removal. Over time if they are not installed properly there could be a problem, but if they are installed properly and follow the manufacturer's specs, there shouldn't be any problems.

Ms. Cherichetti said, what impacts to a wetland and the wetland soils occur when a wetland is flooded for a longer duration, i.e., areas currently inundated, say, for six months of a typical year as compared to being inundated for nine to twelve months of a typical year.

Mr. Dinyea said the wetlands and watercourses generally vary with precipitation, with ground water discharge and recharge, man-made activity influences, storm water conveyances and other contributing sources which may be available in the watershed which may include springs, seeps, and the like. Wetlands and watercourses areas may have short and long term impacts based on the period of flooding and the height of the inundation. In wetland environments flooding may alter vegetation; it may cause scour of banks and substrates, and may change wildlife settings. The peak duration of the flooding need to be evaluated based on engineering results and assessment findings in a particular area subject to flooding. If there are sensitive species in these certain areas, there could certainly be significant changes. It depends on what the duration is and the height of the impact.

Ms. Cherichetti asked what are the benefits of keeping a permanent buffer of undisturbed land between the wetland areas and the areas of construction.

Mr. Dinyea said that this had been addressed in the letter sent to the Commission and he referred to that on page 4, and they believe a 35-foot setback would benefit the wetland areas. A buffer would be beneficial in providing a physical separation between the wetland and the land uses. It will also enhance certain functions and wildlife. Certainly buffers are recognized as beneficial.

Ms. Cherichetti asked if he was referring to a buffer that was made, or an area that was existing and left undisturbed.

Mr. Dinyea said that a buffer could be left as undisturbed, such as a no-mow type of area, where there might be existing grasses, and you could also create a buffer based on the site, especially if there are areas that have been disturbed in the past. You could establish and create a buffer between the development and the adjacent wetlands and watercourses using plantings, erosion fabrics, and doing different things of that nature to provide some assimilation between the two areas.

Mr. Caputo asked Mr. Dinyea and Mr. October if they could go wetland by wetland and tell them what impacts they could expect to see.

Mr. October said that generally when you have a site, even if it is a previously undeveloped site, or a site such as impacted gravel, whenever you have pavement in pervious areas, you will potentially impact drainage and flow. When they do site design, they try to replicate the natural flow patterns to the best of their ability; they try to provide a base flow for streams and wetlands; and generally speaking, whenever you pave areas, you have increased potential for higher runoff problems into undisturbed periphery areas whether it is resource areas or upland review areas. Whenever you pave areas you potentially decrease base flow to streams and wetlands, so generally speaking you provide mitigation to try to mitigate this type of thing.

Ms. Cagnina requested a recess at 8:30 p.m.

The meeting resumed at 8:45 p.m.

There was further discussion about vernal pools, the meadow area, and a return to the discussion about wetlands and storm runoff impact before the discussion ended.

Mr. Dinyea left the meeting at 9:10 p.m.

Ms. Cagnina invited Mr. October to remain for the duration of the meeting if he liked. Mr. October stayed until the end of the meeting.

#S06-244 – 21 Bonnybrook Road – Duncan – Corrective action filling and planting in and adjacent to a wetland and watercourse.

Ms. Cherichetti outlined the background of the application. She said the applicant submitted new plans, which arrived just prior to this evening's meeting, and she has not had time to review them.

No action was taken on this item.

#S06-247 – 139 Wolfpit Avenue – Legacy Development, LLC – Construction of a new single-family residence adjacent to a wetland.

Mr. Caputo recused himself from the discussion at 10:04 p.m.

Ms. Cherichetti said the applicant has submitted plans that were incomplete, and is working on new plans but have not yet submitted them. She recommended this item be put on the agenda for the May 23rd meeting.

No action was taken on this item.

Mr. Caputo returned to the meeting at 10:08 p.m.

#S06-248 – 60 Crooked Trail – Sequenzia/Coveny – Corrective action grading, landscaping and construction adjacent to a wetland.

Ms. Cherichetti stated that the applicant submitted incomplete plans, but that the applicant finally met with her and she explained what he needs to do. She has no new information on the application, and without new information or an extension, the Commission will have to make a decision by May 23rd. If no new information or extension is received by then, she recommends the application be denied.

No action was taken on this item.

## MINUTES

### a) April 11, 2006 minutes

\*\* MR. CAPUTO MOTIONED TO APPROVE THE MINUTES OF THE APRIL 11, 2006 MEETING AS AMENDED.

\*\* MS. SMITH SECONDED.

\*\* MOTION PASSED UNANIMOUSLY.

### b) April 25, 2006 minutes

\*\* MR. CAPUTO MOTIONED TO APPROVE THE MINUTES OF THE APRIL 25, 2006 MEETING AS AMENDED.

\*\* MS. SMITH SECONDED.

\*\* MOTION PASSED WITH ONE ABSTENTION (MR. KYDES)

## COMMENTS OF STAFF



a) Declaratory Permits and other Enforcement Actions

Ms. Cherichetti stated that she has approved a Declaratory Permit for 28 Briar--- for construction of a new single-family residence.

Ms. Cherichetti reported that an action was taken on 9 Bittersweet Trail in Rowayton for a second story rear addition. The addition is currently on footings; the owner wishes to remove the pilings and put in a slab foundation by hand.

Ms. Cherichetti reported on an action taken on 23 Maher Drive, where the owner wishes to remove an existing patio and build a sunroom. She stated there were no wetlands on this property and a minor regulated activity was issued.

Ms. Cherichetti reported on several warnings that have been issued. At 6 Alewives Road, deposits of leaves and debris have been made in the wetlands and she has asked for their removal. There was a violation at 45 Devils Garden Road and she has sent a violation to the owner, and requested an inspection of the property. At 29 Beechwood Road, there was a violation as the owner has done some tree removal of at least five trees. The property is alongside the Five Mile River. Ms. Cherichetti said she issued only a warning because she can't show how wooded the area was prior to the removal of the trees; it seemed to be all invasive growth and an aerial photo from 2003 show the property as being all open.

Ms. Cherichetti reported that at 8 Brookhill Road there was a very clear major violation. The back yard going up to the watercourse has had all the vegetation removed and is totally dirt. She said the Notice of Violation required that the owner file a permit yesterday, May 8, or restore the property to its prior state. She said that soil scientist Alexandra Monck has been hired and is working with the owner, who requested a 30-day extension. Ms. Cherichetti recommended the Commission shave the extension to two weeks, and have it due on May 21st.

**\*\* MR. CAPUTO MOTIONED TO GRANT A DELAY AND AMEND THE NOTICE OF VIOLATION FOR 8 BROOKHILL ROAD TO EXTEND THE DEADLINE TO EITHER MAY 21ST, 2006 OR THE OWNER MUST FILE FOR A PERMIT.**

**\*\* MR. KYDES SECONDED.**

**\*\* MOTION PASSED UNANIMOUSLY.**

Ms. Cherichetti reported that another violation was at 127 Perry Avenue, which was a 2 or 3 lot subdivision with conditions. She said they were only going to subdivide, there was no site disturbance, and a house is already up.

b) Report of Senior Environmental Officer

There was no report.



## COMMENTS OF COMMISSIONERS

### a) Open Space Ranking

There was no report.

## ADJOURNMENT

\*\* MR. CAPUTO MOTIONED TO ADJOURN THE MEETING.

\*\* MS. SMITH SECONDED.

\*\* MOTION PASSED UNANIMOUSLY.

The meeting was adjourned at 10:30 p.m.

Respectfully submitted,

Linda J. Hayes  
Telesco Secretarial Services

