

August 3, 2021



**TOWN OF OXFORD**  
S.B. Church Memorial Town Hall  
486 Oxford Road, Oxford, Connecticut 06478-1298  
[www.Oxford-CT.gov](http://www.Oxford-CT.gov)

**Conservation Commission / Inland Wetlands Agency**

**SPECIAL MEETING MINUTES**

Tuesday, August 3, 2021

The **Special Meeting** of the Oxford Conservation Commission/Inland Wetlands Agency was held virtually online with Google meets video. The following is the agenda for the Oxford Conservation Commission Inland Wetlands Agency Special Meeting to be held in David T. Schreiber Memorial in the hearing room of the S.B. Church Memorial Town Hall on **Tuesday, August 3, 2021 at 6:30 PM.**

**Meeting was called to order at 6:30 P.M. by Chairman Susan Purcella Gibbons**

**PLEDGE OF ALLEGIANCE:**

**ATTENDANCE ROLL CALL:**

**COMMISSIONERS PRESENT:** Chairman Sue Purcella Gibbons and Commission Members Andy Ferrillo, Joe Lanier, Brian Smith and Ethan Stewart

**STAFF:** Administrative Secretary Denise Randall and I.W. Enforcement Officer Michael Herde, Town Council -Attorney Kevin McSherry

**ABSENT:** None

The Chairman asked if we have 2 items on the agenda. They are the following:

**639 Chestnut Tree Hill** request for agricultural exemption

**(IW 21-10) Cornerstone Assembly of God, Inc.,** 656 Oxford Rd, Oxford (Map 19, block 28, Lot 10,13,22) proposed use = New Church & parking, Total size of site 16 acres (Total acres of wetlands= 3.77 acres) (Wetlands impact = 0 acres) (Upland review area impact = 78,780 sq. ft.) (amount of material removed= 2,455 c.y.) (Deposited= 5,055 c.y) (Public Hearing closed on June 28, 2021)

The Chairman asked if the Enforcement Officer can explain 639 Chestnut Tree Hill Rd for clarification.

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The Enforcement Officer explained that Mr. Curtiss owns an existing farm and his son just finished building a house on the farm and there are hay fields. There is a little wetland crossing going to the new house, just up hill from it, it is an old pond farm. Over the last 60 years, it has crept in and is at the point where the crossing and the growth of the plants is starting to clog it up. He would like to dredge it and he asked me to come up and look at it. You can tell it was quite a larger pond at one time and I strongly suggested that he ask for an agricultural exemption as it is still an active farm. I strongly suggest that the Commission recognize it as an agricultural use. That is all it needs to be is a vote towards agricultural use or a vote not towards agricultural use and then I would just supervise the excavation so that they not get carried away.

The Chairman asked for a vote.

Commissioner Joe Lanier asked where the property was located.

Commissioner Andy Ferrillo stated: this is near the Naugatuck line.

Commissioner Lanier stated: Oh ok. I thought it was near the Chanko pond which has beaver issues.

**MOTION** made by **Commissioner Brian Smith** and seconded by **Commissioner Andrew Ferrillo** voted to acknowledge the 639 Chestnut Tree Hill Rd, Oxford, CT. property as an agricultural. The Commission has concerns regarding the excessive excavation performed on the property. Any excavation performed on the property should require wetland approval. Notify the Enforcement Officer upon commencement. All in favor 5-0.

The Chairman stated: Ok, now we will go into discussion regarding Cornerstone Church with possible action.

Commissioner Andy Ferrillo stated: In regards to the feasible and prudent alternatives, the 2 plans, neither of which met the needs of the applicant, they were much too small. The second one on the other side of the brook would have been much more wetland impact, including a bridge. I also noticed that the detention pond would have been closer to the brook and that would have caused a lot of problem. Neither one of them were feasible, in light of the applicant's point of view or ours. And that is about it.

Chairman Gibbons responded: I think they did not meet the criteria.

Commissioner Andy Ferrillo replied: right and they had to present something.

Commissioner Brian Smith stated: I don't have anything further than the last meeting but the size of the parking lot. That is my biggest concern is the impervious pavement which I believe is 2 acres.

Commissioner Andy Ferrillo added: The building was taken care of with partial underground piping that is proposed anyway.

Commissioner Ethan Stewart stated: I kind of summarized what I have from the last meeting and so I just wanted to go thru that. During the public hearing it was discussed many times that the stormwater system was designed to the 2004 quality manual and it that manual on page 8-6 it does recognize that class "A" watercourses, like Little River are a sensitive watercourse and special concerns should be taken and warranted in a high degree of protection including pollutants, bacteria and thermal impacts should be taken into consideration. On chapters 5 and 8, they spoke about in the same manual, they spoke about de-icing materials and the problems they pose along with potential mitigation. I don't

believe that enough of these tools with implemented in this design. Some of the thermal impacts that were brought up numerous times, I don't believe those were adequately addressed either. These same concerns were referenced in the Southwest Conservation District review and correspondence from the Trout Unlimited. In the June 28<sup>th</sup> hearing, Mr. Hart (SLR Consultants) stated that the design is the best you can do for this situation so my thinking was maybe this current plan isn't right for the site in regards to wetland and the river. I just wanted to say, I'm not opposed to the development, but the current plan appears to be an over development of the site causing thermal and de-icing material concerns. Concerns that I don't believe were adequately addressed and these concerns with lead to chemistry changes in the wetlands which is an adverse effect to the wetlands.

Chairman Gibbons stated: Ok thank you. Joe, your next.

Commissioner Joe Lanier stated: Yes. I will reference the Southwester Conservation District plan from May 18<sup>th</sup> the action provided an excellent visual presentation and actually it is a video as well. It talks about saturated soils. In particular which concerns me is that, when talking about the detention basins, they were saying that all of the material are going to run out into the wetland or over the vegetative materials. The Southwest Conservation mentions how these soils are not well drained and they are relatively saturated and even when they are not saturated, when they obtain material or pollutants and then from there, they re-release back out during rain events. So, they retain the material and re-release and are constantly putting it back in there and this creates a double release from current and past events which creates a concern, at least from my prospective. So that can be hydrocarbons, that can be salt. They also mentioned the thermal impacts which is concerning when you start talking about hydrocarbons or salts they are talking about thermal pollution, that potentially you can de-oxygenate the water, so your physically changing the body of water in the wetland itself and this is a concern for me. I did my own additional research and this is a UCONN study which I had looked at which was winter de-icing effects on ground water quality beneath permeable asphalt. I really kind of addresses the issues that I had asked about from Mr. Baker and Mr. Baker did not address. In regards to the chloride and whether it was sodium or calcium cat ions that were being released. He mentioned that calcium chloride is recommended for near sensitive areas. But even in the storm water manual, it actually talks about how even calcium chloride and calcium acetate really don't provide the benefit, doesn't negate the negative impacts and so that is kind of concerning as well. This is on the storm water page 5-5 table 5-1 and it lists sodium chloride, calcium chloride and then the calcium acetate which all of these things create problems with mitigation of releasing of heavy metals from the soils that naturally occur. One thing they don't say here, but the UCONN study does address, that I do want to point out in addition is the chloride an-ions so those are negatively charged molecules that are dissociated, because salt breaks apart when in water and with the chloride an-ions, what is going to happen when it is in negatively charge soils, its going to migrate freely. When it migrates, it picks up metals. It moves just as quickly as water does thru these soils and it creating a plume underneath these soils. If I can reference on page 5 within that study, it talks about how chloride is a major contamination and using the others, which is not relative or feasible because it can also decrease the oxygen level. Chlorides getting out there can create "dead zones" and so the scientific research that I found is actually kind of further supported that fact which was not alluded to when I asked the professional engineering as he didn't seem to be aware of it or wouldn't acknowledge it. When I look here when it talks about impacts on water quality. Talks about settling ponds are relatively in effective and actually acts as a chlorine sink. It will just accumulate over time and be re-released at each rain event or slowly percolating thru the soils so that is of concern. Especially during the summer because that will be the primary source of water to the stream. If your percolating out chlorine constantly and you can't forget the nutrients from the effluent from the septic system, this is just completely changing the physical characteristics of the stream itself. Within this research paper, it actually talks about the Connecticut DEEP has established a chronic and

acute aquatic toxicity of criteria of 230 milligrams per liter and 286 per liter respectfully. As far as toxicity of chlorines and changing the physical characteristics of the water and the amount of oxygen that is actually there, that is of concern. When we start going down into further research it talks about surface water concentration has reached concentrations of 1309 milligrams of ground water springs. These are on parking lots with permeable surfaces and how much they are absorbing the salts. I really think that this is a strong consideration. When you release chlorine and release these salts into the environment your causing heavy metal release and causing denitrification in existing soils when then alters the soils voda which then kills the plants potentially, which mitigates the soils abilities to try to prevent the pollutants from reaching the body of water. So we create basically a non-functional wetland. This is from my own research and looking at the comparison to the storm water manual which I previously referenced in my last comments.

Chairman Sue Gibbons stated: I wanted to bring in the conversation and I know you asked Mr. Baker about at the last public hearing about the thermal pollution and the salts. We have asked our town engineer to address this and he received the revised plans and he sent us a clarification letter. Basically, he gave some examples and made pretty strong statement that these contaminates going untreated will have a significant negative impact on the inland wetlands. For me, that is a very strong statement because it means that this was not addressed adequately and again this is something that we did ask for more than once on the public hearings and we never really got a full answer that satisfied us, in my opinion as to what are we going to do about the treatment train of those 3 things being so close to a class "A" stream the Little River.

Chairman asked if anyone else would like to speak.

Enforcement Officer Herde stated: Just that Mr. Baker does stand behind his plans and that was his final statement.

Chairman Gibbons stated: Yes, and he has his opinion and we know he spent much time on this plan and when SLR asked him to make revisions. Again, when I reached out to staff to ask for clarification, the treatment train is not satisfactory for those 3 things, thermal, hydrocarbons and salts as those are the closest to the brook. When I read the stormwater manual and looking at raingardens and pervious pavement, it kind of lead me to believe that possibly there is something that can be constructed on this site but the magnitude and the treatment train not being adequate for a project this size.

Commission Joe Lanier stated: I just wanted to point out on my research of pervious pavement, I thought maybe with the pervious pavement will help mitigate some of these issues and when I did further research, it is not the case. Things get into the soils and migrates. It is a delayed effect as water moves within days or hours. I could not find research to support it.

**MOTION** made by Commissioner Ethan Stewart and seconded by Commissioner Joe Lanier to deny without prejudice this application as it stands because there may be feasible and prudent alternatives to the proposed activity which has significant adverse impact on wetlands/watercourses. The applicant may investigate the following types of alternatives:

- 1.) Reducing the size of the footprint of the building.
- 2.) Reducing the size of the parking lot.
- 3.) Reduction in parking spaces.
- 4.) Moving the footprint further away from the wetlands/ water course.
- 5.) Reducing impervious services throughout the site.

6.) Additionally, the following issues have been raised in review of the submissions, the State of Connecticut Stormwater Quality Manual (2004) and correspondence from Town Engineer Nafis and Young, (James Galligan) dated 7/21/2021.

a.) The Town Engineer in his letter of July 21, 2021, indicated that the treatment trains must be improved to address thermal pollution, hydrocarbon contamination, septic contamination and salt (winter treatment) contamination of the wetlands.

b.) Connecticut Storm Water Quality Manual (2004) 8-4 defines Little River as a Class A water course as it is fishable, swimmable and can potentially serve as drinking water that warrants a high degree of protection. The plan as proposed will alter the character of the wetlands/watercourse adversely and does protect the Class A watercourse.

c.) The thermal impact of the storm water runoff will adversely affect the physical character of the wetland/water course. This may require a more effective design of the storm water retention system that would allow for storm runoff from arriving at the wetlands/river at a temperature that would cause an adverse effect to the physical character of the wetlands.

d.) The design is not in accordance with the Connecticut Stormwater Quality Manual (2004) 4-3. A more effective plan should be designed by reducing the impervious areas. This would contribute to the ecological health of streams and receiving waters. A modification of the stormwater management plan in a manner that addresses section 4.3 to lessen the impact of the stormwater runoff and provide better water treatment train as suggested by the town engineer.

e.) Hydrocarbons entering the wetlands/water course at a rate of 20% is not satisfactory and the applicant should modify its design to eliminate the hydrocarbons. The hydrocarbons would have an adverse effect on the physical characteristics of the wetlands/watercourse.

f.) The Connecticut Storm Water Quality Manual (2004) section 3.7, drainage design and flood control principles for water quality, by modifying the design of the stormwater system to address water quality, runoff volume and downstream channel erosion in accordance with Section 3.7

g.) The design does not address in accordance with the Connecticut Storm Water Quality Manual (2004) 4.4. through 4.4.1 and does not incorporate sufficiently the practices and designs using vegetated swales, buffers and filter strips, bioretention/rain gardens other approach is in order to better manage the stormwater quality and runoff.

h.) Salt (winter treatment) from the parking lots will cause contamination of the wetlands/watercourse causing an adverse impact on the physical character wetlands/watercourse. The impact from materials used to treat the parking lot during the winter months and the proposed maintenance plan for the parking lot does not prevent an adverse impact on the physical character of the wetlands/watercourse.

i.) The topography is not conducive to the amount if negative chlorides.

Roll call vote: Commissioner J. Lanier- voted yes

Commissioner A. Ferrillo- voted yes

Commissioner E. Stewart – voted yes

Commissioner B. Smith – voted yes

Chairman S. Gibbons – voted yes

All voted in favor voted 5-0.

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MOTION amended by Commissioner Joe Lanier and seconded by Commissioner E. Stewart to add the negative chlorides are a significant impact to the wetlands & watercourses. Roll call vote: Commissioner J. Lanier- voted yes

Commissioner A. Ferrillo- voted yes

Commissioner E. Stewart – voted yes

Commissioner B. Smith – voted yes

Chairman S. Gibbons – voted yes

All voted in favor voted 5-0.


**ADJOURNMENT:**

MOTION made by Commissioner Brian Smith and seconded by Commissioner Andy Ferrillo to adjourn this special meeting for (IW 21-10) Cornerstone Assembly of God, Inc., 656 Oxford Rd, Oxford (Map 19, block 28, Lot 10,13,22) at 7:11 pm. All in favor 5-0.

Respectfully Submitted,

  
Denise Randall

I/W Administrative Secretary

21 SEP 27 AM 10:56  
TOWN OF OXFORD, CT  
  
TOWN CLERK