

TOWN OF MIDDLEBURY

Conservation Commission 1212 Whittemore Road Middlebury, Connecticut 06762 (203) 577-4162 ph (203) 598-7640 fx

REGULAR MEETING MINUTES Tuesday, January 31, 2023 7:30 P.M.

REGULAR MEMBERS PRESENT

Mary Barton, Vice Chairwoman George Tzepos **Brian Stroby** Peggy Gibbons

Joseph Martino Curtis Bosco

ALSO PRESENT

John Calabrese, P.E. Deborah Seavey, W.E.O.

I. **CALL TO ORDER**

Vice Chairwoman Barton called the Regular Meeting to order at 7:30 p.m. She announced specific details regarding the maximum occupancy allowed in the Auditorium as well as the other rooms in the building where members of the public were provided viewing capabilities. She then initiated roll call to which all members were present, with the exception of Chairman Paul Bowler.

REGULAR MEMBERS ABSENT

Paul Bowler, Chairman

II. ACTION ON MINUTES

November 29, 2022 Regular Meeting

<u>Motion</u>: to accept the Minutes of the November 29, 2022 Regular Meeting. Made by George Tzepos, seconded by Curtis Bosco.

Discussion:

Vice Chairwoman Barton stated that although she was not present, she did read the minutes and felt comfortable voting.

Unanimous Approval.

III. OLD BUSINESS

1. Permit Modification #481 – 39 Sandy Beach Road

Thomas Mele stated that they are seeking approval for a modification for a holding tank and to pull water from the lake for their house.

James Mele, part owner of the subject property, added that the seasonal cottage has been in their family for 150 years and they are trying to rebuild it, as it was dilapidated and falling down, and put a holding tank back in.

Thomas Mele confirmed that they previously had a septic and did draw water from the lake.

James Mele added that they did pull a demo permit although they did not obtain a wetland permit.

Vice Chairwoman Barton stated that there is no approval for a holding tank from the Torrington Health District.

James Mele clarified that they did receive an approval from the State of CT per the condition that approval is granted by this commission as well as the Planning & Zoning Commission.

Vice Chairwoman Barton indicated that the application is lacking in information with respect to the impact of using water from the lake for the septic system and holding tank. She suggested they hire a professional who can attest to the environmental impact.

James Mele shared that the reason they are seeking to put back a holding tank is due to the fact that their property is so small, are unable to have a leech field and septic system and the State of CT Health Department will only allow what they previously had. He also mentioned that there are other cottages on the lake that have holding tanks and they are just trying to put back what they had.

Deborah Seavey, W.E.O. confirmed that an extension to March 3, 2023 was already granted.

Vice Chairwoman Barton reiterated her concerns about the environmental impact on Lake Quassapaug and suggested they hire someone to prepare an impact statement and return to this commission's February 28, 2023 Regular Meeting.

AGENDA

<u>Motion</u>: to proceed out of order to Old Business #3, New Business #1 and #2. Made by George Tzepos, seconded by Curtis Bosco. Unanimous Approval.

3. Application #491 – 80 Turnpike Drive

Emily Jones, P.E. with Civil 1 Engineering in Woodbury, CT spoke on behalf of the applicant, Ed Godin of GB Middlebury, LLC. She submitted and reviewed her January 31, 2023 letter (see attached) and revised plans with the Commission. She confirmed receipt of the January 3, 2023 Review submitted by John Calabrese, P.E. and made minimal revisions based on his recommendations. The project site is located on the south side of Turnpike Drive and borders the City of Waterbury. The entire property is 10.5 acres in size and located in the LI-80 Zone. There is an existing 20,000 square foot building on the property and the proposal is to build an additional 13,900 square foot industrial office building behind the existing building utilizing the same two curb cuts for access and adding a new parking lot. The storm drainage system will consist of catch basins, piping and stormwater renovation area for the new improvements as well as an oil grit separator to be a replacement for one of the existing catch basins in which water currently goes out onto Turnpike Drive untreated. There is some regulated activity associated with the construction of the stormwater renovation area and a small portion of the parking area.

John Calabrese, P.E. confirmed that he is satisfied with the revisions made based on his recommendations.

Deborah Seavey, W.E.O. confirmed that weekly site inspections would be required.

<u>Motion</u>: to approve application #491 - 80 Turnpike Drive per the Draft Resolution (see attached). Made by George Tzepos, seconded by Joseph Martino. Unanimous Approval.

IV. <u>NEW BUSINESS</u>

1. Application #492 – 20 Juniper Road

Maria Tapia of 20 Juniper Road stated that she cut some trees that were within 100 feet of the wetlands and leaning towards her home. She was unaware that she needed a permit to do so and apologized for not taking the proper steps. She proposed to plant trees further away from her house.

Vice Chairwoman Barton informed Ms. Tapia that a professional planting plan would be required due to the activity being in such close proximity of the Lake and that this commission would prefer it if she does not put grass in the wetland area.

<u>Motion</u>: to accept application #492 - 20 Juniper Road. Made by George Tzepos, seconded by Brian Stroby. Unanimous Approval.

2. Application #493 – 404 Tucker Hill Road

Paul Fabian of 404 Tucker Hill Road is seeking approval to construct a 15' X 22' art studio on a 20' X 22' deck which will be sixty-eight feet from the delineated wetland boundary.

Vice Chairwoman Barton stated that the application would be accepted this evening and requested that he return with revised plans clearly indicating where the building and deck will be as well as the deck's material.

<u>Motion</u>: to accept application #493 – 404 Tucker Hill Road. Made by George Tzepos, seconded by Joseph Martino. Unanimous Approval.

III. OLD BUSINESS

3. Application #490 – 555 Christian Road/764 Southford Road

Vice Chairwoman Barton clarified that this was not a Public Hearing and that the requirements to hold a Public Hearing are stated in the Wetland Regulations. She went on to state that people would be asked to leave in the event they cause a disruption.

Attorney Edward (Ned) Fitzpatrick of 203 Church Street, Suite 4, Naugatuck, CT 06770 spoke on behalf of the applicant and requested that Ryan McEvoy, P.E. and Matt Sanford, Professional Soil Scientist and Wetland Scientist with SLR, Milone &

MacBroom, 99 Realty Drive, Cheshire, CT 06410 provide an overview of the application. He stated that they would address all comments indicated in the January 17, 2023 Review from John Calabrese, P.E. He also confirmed receipt of the January 27, 2023 letter from the interveners' engineer, Steven Trinkaus, P.E. Due to the fact that it was received on January 27, 2023, he requested more time to address said letter and declared that he would be prepared to do so prior at the next meeting, should this commission decide to hold another meeting.

Vice Chairwoman Barton agreed with Attorney Fitzpatrick and requested that he submitted a written request for an extension to the April 8, 2023 in order to allow all sides to comment.

Attorney Fitzpatrick stated for the record that he was requesting so verbally and would confirm same in writing.

Ryan McEvoy, P.E. with SLR, Milone & MacBroom, 99 Realty Drive, Cheshire, CT 06410 spoke on behalf of the applicant and reviewed the plans with the Commission as well as an aerial view of the property. The Timex parcel, which includes the Timex Headquarters, parking, vegetative areas and hayfields, represents approximately 92 acres. The second parcel, which is owned by Stacey Drubber, is located to the south and west and is estimated to be 20 acres in size. A maintained open meadow surrounds the Timex building. Parking is to the south and Christian Road is to the east, where the Timex building presently takes access from its driveway coming to the east. An agricultural field is located at the intersection of Christian Road and Southford Road, while the coverage to the west and south is primarily wooded. A non-confirming single-family residential home currently exists on said piece. The majority of the property is in the LI-200 Zone with a portion along Christian Road zoned residential. The Timex HQ sits on a knoll with a high elevation of approximately 735 and that ridgeline runs from north to south with a low point along Christian Road of approximately 650. The south side of the parcel has a high elevation of 685 and a low elevation along Southford Road of 630. The site is presently served by public water, sanitary sewer, electric and gas. They are proposing to construct two (2) industrial buildings. The one to the south (Southford Road piece) is 180,000 square feet and the larger of the two to the north will be 540,000 square foot. The existing driveway that serves the Timex building will only be utilized as an emergency access and a new access road will be constructed out to Southford Road. All traffic from the development, with the exception of emergency service access, will be on Southford Road and not on Christian Road. Both buildings will be served by 360° circulation pattern. Parking will be adjacent to both buildings to accommodate employee parking as well as trailer storage. Additional landscaping along Christian Road and around the permitted is also being proposed. There is an extensive wetland mitigation plan located in the southeast corner of the property, however, the remaining regulated activities will consist

of approximately 15,600 square feet of direct wetland impact, primarily located in and around the larger northerly building. There will also be an estimated 7.22 acres of disturbance within the upland review areas, with a majority being associated with areas within 100 feet of small wetlands pockets. They are providing stormwater management features and will also be utilizing existing stormwater management features that were constructed as part of the Timex development. Four (4) new basins are proposed in addition to the existing two (2) basins. All are designed in accordance with the 2004 DEEP Water Quality Manual and are sized to provide zero (0) net increase in runoff from up to the 100-year storm. It is also their understanding that their design is in accordance to town regulations. He confirmed receipt of the January 17, 2023 Review from John Calabrese, P.E. and responded to said comments in their January 27, 2023 letter. Revised plans were also submitted although he was not certain if John Calabrese, P.E. had the opportunity to review the revised plans.

John Calabrese, P.E. confirmed that he did receive their letter, however, he did not have the opportunity to ensure that the plans reflect the changes.

Matt Sanford, M.S., P.W.S. with SLR, Milone & MacBroom, 99 Realty Drive, Cheshire, CT 06410 provided a presentation on behalf of the applicant. He stated that he utilized the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) to map out the project interest area. It provides an indication of where upland soils and wetland soils are likely to occur on the site, as well as the types of soils. The potential of four complexes wetland soils on the site and a variety of upland soils were indicated. Any evidence of previous delineation on the site was also sought by pulling the files at the Town Hall for the original Timex building. It was determined that the wetlands were flagged in the mid-90s by another soil scientist. He verified the previously flagged wetlands and reset flags where he believes wetlands delineation markers are today. He proceeded to review each of the wetland corridors which is summarized in his Wetland Delineation Soil Scientist Report dated November 2022. The Federal Wetlands are jurisdictional to the Army Corps of Engineers, state and local commission. The State/Local Wetlands are not regulated by the Army Corps of Engineers. The first Federal Wetland system is located along the eastern property line, which he referred to as Federal Wetland A, was previously mapped. The hydrologic flow path is from south to north and discharges along and under Christian Road. The man-made stormwater basin with a concrete outlet structure allows stormwater to be retained and slowly discharge out. Federal Wetland B flows from north to south toward Southford Road. Federal Wetland C is located to the west along the southwest property line and runs the entire property length and flows primarily north to south towards Southford Road. Several isolated wetlands were discovered that did not exist in 1997 and are a result of the construction of the Timex facility. During the construction process, a small wetland pocket on the west

side of the main access road developed and anything that does bleed off of it ends up in a lawn area which then moves to the western edge of the gutter line and ultimately discharges into the stormwater basin. He believes the second man-made wetland developed as a result of solar panel installation within the last ten (10) years, creating a drainage swale along the south side of the solar panel. The depression pocket is approximately 200-300 square feet in size and holds water and allows non-invasive grass to grow. Two (2) isolated wetlands are located on the western side of the property and the eastern edge of both originated at the foundation/rock wall that was previously installed and ground water is ultimately intercepted. They were unable to find an active water table for the oval-shaped wetland on the eastern side of the main entrance which was delineated in 1997. The watershed that originally fed said wetland has been changed and now is picked up by the existing access road and moves southward along the gutter line to the detention basins. He acknowledged that they would be impacting wetlands, however, the impacts are all within the isolated man-made wetlands or wetlands that have been historically impacted and no longer has a hydrologic capacity to be a wetland capable of performing important functions and values. In total, approximately 15,600 square feet of impact to State Wetlands is being proposed, with no impact being proposed to Federal Wetlands. The principal function that the State Wetlands currently perform is groundwater discharge. Their proposed mitigation plan was developed with the intention of replacing the existing function of groundwater discharge as well as to supplement and enhance the existing wetlands on site. The area they selected for the mitigation is located along Federal Wetland A which is a maintained upland lawn area. The intent is to create a more diverse and highly-functioning wetland system by removing the upland soil to an elevation, thus creating an expansion of the existing wetland. A comprehensive planting plan is associated with the wetland creation by utilizing super rich topsoil. Several habitat structures for wetland and upland dependent wildlife, deer fence and monitoring plan are also proposed. They plan to remove the debris in the upland review area which was accumulated by the existing homeowner who has a private salvage yard along the southwest portion of the site and they will also reseed/restore it.

Attorney Keith Ainsworth of 51 Elm Street, Suite 201, New Haven, CT 06510 and legal counsel to Middlebury Small Town Alliance, LLC, spoke on their behalf. He submitted his Review Comments dated January 31, 2023 (see attached) for the record. He stated that their organization represents and is supported by four (4) HOAs and five hundred (500) homes: Ridgewood, Benson Woods, Avalon Farms and Brookside. At Steeplechase, forty-five (45) out of seventy-eight (78) homes (not the HOA) have expressed their support of the alliance as well. He added that he is general counsel to the Middlebury Land Trust, however, was acting solely on behalf of Middlebury Small Town Alliance, LLC. He added that various professionals would also be speaking on their behalf

They feel that the application is lacking in a number of material respects and that this commission has been deprived of much information which would assist a commission in being able to determine what likely impacts there are. He declared that the application is incomplete and that the activity being proposed is a high-pollutant loading activity with the amount of impervious surface area currently being 5.7 acres increasing to 33 acres. He shared that he has a B.S. in biology from Tufts University and a past first selectman. He reminded the commission that they can call for a Public Hearing for various reasons, one being due to public interest which he suggests there is a great deal of. He is also the Acting Chair of CT Council on Environmental Quality and former Chair the Environmental Law Section of the CT Bar Association. He professed that this is the wrong project for the site and that a project could be proposed that does not involve destroying wetlands and the creation acres of impervious area. He questioned if Timex obtained a permit for the benching that caused the unintentional wetlands creation. He reminded the commission that they regulate all wetlands regardless of the classification. He cited a portion of page 6 of the Inland Wetlands Watercourses Regulations regarding "Significant impact activity". He argued that any activity that destroys a wetland has a major or significant impact. The proposal to destroy 15,000+ square feet of wetlands is diminishable and maintained that this would be a significant activity. He went on to state that he has never seen a project of this scale proposing thousands of square feet of direct wetlands loss with a mitigation project he deems to be of questionable integrity. He understands that there is discretion within this commission to make the determination, but claims at some point it becomes an abuse of discretion. He stated that the application fails to submit significant analysis to properly assess to the potential impacts with no thermal or pollutant loading or noise and lighting impact from night-time trucking activity on wetland species. The use salt or ice melt materials when plowing and storing snow is also of concern. It is his understanding that there is ribbon snake and endangered plants at the site, although no explanation was given if they looked at the appropriate time of year, being early to mid-spring. He added that there has been a failure to delineate the wetlands in accordance with the state definition of wetlands. Page WR-2, Note #2 of their plans states that these wetlands were defined and delineated according to the Army Corps of Engineers manual from 1986, which he stated is not how wetlands are delineated in CT. Wetlands must be delineated according to the Inland Wetlands & Watercourses Act. He voiced his concerns with respect to the increase in impervious area from roofing and parking lot and the pollutants associated with the runoff. He encouraged the commission to hold a Public Hearing and added that they must make a determination of a potentially significant impact. He cited portions Sections 7.5, 7.6 & 10.2 of the Inland Wetlands Watercourses Regulations and commented that it would grounds for denial if alternatives were not mapped out on a site plan or drawing that the applicant considered or rejected.

He referenced to Inland Wetlands & Watercourses Act Sec. 22a-41a and the six (6) items that should be considered. He believes it is unnecessary to have the impacts as there are other alternatives the applicant could choose.

Manesh Dodia of 151 Judd Hill Road stated that he is a civil engineer and worked for D.O.T. as well as projects throughout the town. He added that he was the project manager for the state for a project at the intersection of Route 64 and Route 188. Based on his knowledge and prior work in the area, he believes that the proposed project should include a 100-year flood plan and does not think that Kissewaug Pond would be able to withstand additional water and claimed that there is historical flooding in the area.

Bob Nerney of 414 Long Meadow Road spoke as an expert witness for and member of the Middlebury Small Town Alliance, LLC. He shared that he holds a master's degree in community regional planning, a member of the American Planning Association and a life-time member of the American Institute of Certified Planners. He has worked in the land use industry at the municipal level, primarily in Texas, Florida, New Hampshire & Connecticut. He also served as a Certified Inland Wetlands Agent at the municipal level and holds certification in Connecticut through the Department of Energy and Environmental Protection. For comparison purposes, he provided at depiction of a distribution facility in Maryland which is similar in size to the proposed 750,000 square foot building. He questioned if a geotechnical report was submitted as he was unable to locate a on the town's website. He voiced his concerns with respect to potential blasting, erosion, dewatering activities, lighting and the potential impact they will have on the wetlands. He added that the town has lean staffing and stated they do a fine job, but believes the project of this magnitude with part-time assistance at the municipal level proves difficult to monitor. He believes that cutting into the hillside runs the potential of dewatering the wetland that is supposed to be preserved. He stressed the importance of providing a pollutant loading analysis. He stressed the importance of community involvement and believes that more assurances need to be brought forward. He reminded the commission that they have the authority to interview and hire outside experts and charge the applicant for incurred costs. He expressed his frustration with the cost burden being placed on the residents who resorted to a GoFundMe site to help pay for the input of experts. He thanked the commission for their service for the community but respectfully requested that the application be denied and encouraged future collaboration with other commissions

Steven Trinkaus, P.E., 114 Hunters Ridge Road, Southbury, CT 06488 spoke on behalf of Middlebury Small Town Alliance, LLC. He added that he holds a B.S. in Forestry and also worked with one of the principal soil scientists with Environmental Resource Associates who performed the original delineation of the site in the late-90s. He questioned if the applicant considered where the State boundary is in association with

Federal Wetlands. He stated they may be uphill from the Federal boundaries in all cases. He believes that stormwater basins that develop wetland hydrology also qualify as being delineated wetlands. He stressed the importance of the need for a Class A-2 Survey by a licensed land surveyor. He claimed a conflict in topographic mapping on the title page of the plans that state mapping was taken from Lidar vs. Middlebury GIS on another page, neither of which he feels is adequate. He questioned why all wetlands were not redelineated and recommended the commission review DEEP's Stormwater Quality Manual Guidance. He claimed the revised plans that include the addition of forebays at the inlet points of the basins are not in compliance as they need to be 4-6 feet in depth and have a 2:1 or 3:1 length width ratio. He also believes the soil and erosion control plan is inadequate. He submitted a report dated January 30, 2023 titled Non-Point Source Pollutants – Impact on Aquatic Environments (see attached)

Matt Sanford, M.S., P.W.S. addressed comments that were made by representatives of the Middlebury Small Town Alliance, LLC as follows:

- Questioned if Attorney Ainsworth was a soil scientist
- The Wetlands were in fact delineated according to the Inland Wetlands & Watercourses Act and is stated in his November 2022 report
- Steven Trinkaus is not a registered soil scientist or certified professional soil scientist
- The wetlands were delineated and they also re-verified the wetland lines that were done in 1997
- He expressed his assurance that the wetland lines present on the revised plans are correct
- All wetlands were reviewed on the site
- There are no additional state wetlands beyond the lines that are presented.
- CT DEEP does not indicate any areas of concern on the site and if some exists should be reported by qualified individuals (herpetologist)

Attorney Edward (Ned) Fitzpatrick stated that comments made by counsel are not evidence including those by counsel for Middlebury Small Town Alliance, LLC as well as his own. Substantial evidence is defined by the Supreme Court as evidence in the record, which in this case is scientific evidence that matters. He submitted the attached written request for an extension.

Vice Chairwoman Barton stated that a peer review would be performed and made available to the public. She also requested that the buildings and parking area be flagged and that the members visit the site. She believes the public would be allowed to walk the property as well but would not be allowed to speak.

<u>Motion</u>: to initiate a Peer Review of the project for Application #490 – 555 Christian Road/764 Southford Road. Made by George Tzepos, seconded by Curtis Bosco. Unanimous Approval.

Curtis Bosco requested that a phasing plan and an A-2 Survey be included in the Peer Review.

V. ADJOURNMENT

<u>Motion</u>: to adjourn the meeting at 9:44 p.m. Made by George Tzepos, seconded by Brian Stroby. Unanimous Approval.

Filed Subject to Approval,

Respectfully Submitted,

Rachelle Behuniak, Clerk

Original to Brigitte Bessette, Town Clerk
cc: Conservation Commission Members
Debbie Seavey, W.E.O.
Mark Lubus, Building Official
John Calabrese, P.E.
Terry Smith, P&Z Chairman
Curtis Bosco, Z.E.O.
Attorney Robert Smith, WPCA



January 31, 2023

Mr. Paul Bowler, Chairman Middlebury Conservation Commission 1212 Whittemore Road Middlebury, CT 06762

Re:

80 Tumpike Drive Engineering Report

Dear Mr. Bowler:

We have received a review letter from John Calabrese, P.E., dated January 3, 2023, for the above referenced regulated activity application. Enclosed please find three revised sets of plans with a revision date of January 31, 2023. Additionally, we offer the following responses to each of Mr. Calabrese's comments.

CA. The stormwater piping is shown as HDPE. This much be changed to reinforced concrete pipe.

RA. The pipe material has been updated in the plans and profiles as required.

CB. The emergency spillway is proposed to be constructed at 680.5. However, the peak elevation for the 100-year storm is shown as 680.14. The spillway elevation should be raised along with the berm height to allow for 1' of freeboard from the peak elevation.

RB. The spillway elevation is typically set 6" below the berm elevation and we have raised both the spillway elevation and bern elevation to provide 1" of freeboard below the detention basin berm in a 100-year storm. The updated berm elevation is 681:50 and the updated spillway elevation is 681:0, which provides 1.36" of freeboard from the berm and 11" of freeboard from the spillway.

Please contact me with any questions or if you need any additional information.

Sincerely yours,

Emily M Jones, P.E.

T 203 288 0778 F 203 286 4759

Eginectione Professional Park Suite D-101 43 Sharman Hill Road Waodbury, CT 05798 in/a®C/VILL soon www.CIVIL1 com

RESOLUTION/REPORT

Application #491 80 Turnpike Drive

WHEREAS: The Middlebury Conservation Commission for the Town of

Middlebury has received an application on November 29, 2022 from

GB Middlebury, LLC map entitled "80 Turnpike Drive" dated

October 7, 2022;

WHEREAS: The Commission has considered the proposed activity, application

and all documents and reports submitted by or on behalf of the

applicant.

WHEREAS: The application was referred to Town Engineer, John Calabrese

whose comments have been considered by the Commission;

WHEREAS: Field inspections were conducted by Commission members;

WHEREAS: The Commission finds based on evidence received that the

proposed activity does conform to the purposes and requirements

of the Inland Wetlands Commission;

WHEREAS: The Commission finds on the basis of the record that a feasible and

prudent alternative does not exist. In making this finding, the commission considered factors and circumstances as set forth in

Section 10.2;

NOW THEREFORE, BE IT RESOLVED That the Middlebury Conservation Commission approves the above application with the following conditions:

- (1) The proposed activity that consists of construction of commercial building with associated parking and drainage facilities will not have a substantial impact on the regulated area.
- (2) Prior to permit issuance, revised plans shall be submitted to reflect John Calabrese's comments.
- (3) Weekly inspections shall be conducted regarding soil erosion control and site conditions. Said inspection reports shall be provided to the commission.
- (4) The applicant shall notify the enforcement officer forty-eight (48) hours prior to the commencement of work and upon its completion.
- (5) Timely implementation and maintenance of sediment and erosion control measures are a condition of this approval. All sediment and erosion control measures must be maintained until all disturbed areas are stabilized.
- (6) No equipment or material including without limitation, fill, construction materials, or debris, shall be deposited, placed or stored in any wetland or watercourse on or off site unless specifically authorized by this approval.
- (7) All work and all regulated activities conducted pursuant to this approval shall be consistent with the terms and conditions of the wetland permit. Any structures, excavation, fill, obstructions, encroachments or regulated activities not specifically identified and authorized shall constitute a

- violation of this approval and may result in its modification, suspension, or revocation.
- (8) It is the applicant's responsibility to give notification to the Army Corps of Engineers and the Department of Environmental Protection if necessary.

January 31, 2023

* Received at mtg *

TO: MIDDLEBURY CONSERVATION COMMISSION

Keith R. Ainsworth, Esq., Counsel to Middlebury Small Town Alliance, LLC

DATE: JANUARY 31, 2023

RE: Review Comments-- January 31, 2023 REGULAR MEETING

Application #490 Christian Road.

Comments:

FROM:

In my 33 years of environmental and land use litigation, I have never seen a project of this scale, proposing thousands of square feet of direct wetlands loss, a mitigation project of questionable integrity, hundreds of thousands of upland review area disturbance, an increase of 27.23 acres of impervious surface, and a change in intensity of activity from office to industrial trucking center go without a determination that the proposed activity is likely to have a significant impact on wetlands resources. It would be arbitrary, capricious and implausible to fail to make that determination, especially in light of downstream sensitive wetlands receptors.

The application fails to submit significant analysis to properly assess the potential impacts.

- · Thermal and pollutant loading lighting impacts to wetlands species
- · Comments on impacts from nighttime trucking activity
- The lack of comments on the use of de-icing materials (salt, snow-melt chemicals) on parking areas
- · The handling and storage of plowed snow
- A failure to perform a meaningful review of the presence of and vulnerabilities of threatened or endangered species
- A lack of a complete functions and values analysis of the existing and proposed mitigation wetlands
- The failure to delineate the wetlands in accordance with the state definition of wetlands. This
 alone makes the application incomplete under your regulations.

At this scale, the potential impact from stormwater runoff, pollutant loads, direct wetlands destruction and the attempt to re-create the complex ecosystem represented by wetlands is by any objectively reasonable standard a significant activity with a likelihood of significant impact to wetlands resources.

The commission must make a determination of potential significant impact and require the presentation of greater detail on the subjects noted above and the presentation of feasible and prudent alternatives to the proposed activity which may pose lesser or no impact as required by the Inland Wetlands & Watercourses Act, IWWA §22a-41(b)(1) and existing caselaw. Starble v. Inland Wetlands Comm'n of the Town of New Hartford, 183 Conn. App. 280 (Conn. App. Ct. 2018).

Section 22a-41(a) lists the factors which must be considered when a significant activity hearing has been held:

- (1) The environmental impact of the proposed regulated activity on wetlands or watercourses;
- (2) The applicant's purpose for, and any feasible and prudent alternatives to, the proposed regulated activity which alternatives would cause less or no environmental impact to wetlands or watercourses;
- (3) The relationship between the short-term and long-term impacts of the proposed regulated activity on wetlands or watercourses and the maintenance and enhancement of long-term productivity of such wetlands or watercourses;
- (4) Irreversible and irretrievable loss of wetland or watercourse resources which would be caused by the proposed regulated activity, including the extent to which such activity would foreclose a future ability to protect, enhance or restore such resources, and any mitigation measures which may be considered as a condition of issuing a permit for such activity including, but not limited to, measures to (A) prevent or minimize pollution or other environmental damage, (B) maintain or enhance existing environmental quality, or (C) in the following order of priority: Restore, enhance and create productive wetland or watercourse resources;
- (5) The character and degree of injury to, or interference with, safety, health or the reasonable use of property which is caused or threatened by the proposed regulated activity; and
- (6) Impacts of the proposed regulated activity on wetlands or watercourses outside the area for which the activity is proposed and future activities associated with, or reasonably related to, the proposed regulated activity which are made inevitable by the proposed regulated activity and which may have an impact on wetlands or watercourses.

Given the information that would be gained by considering the preceding 6 factors, I am at a loss as to why a commission would not want to request an applicant for a project of this size and nature present information bearing on all these topics.

Applicant's engineers make the claim that the 'federal wetlands' are not hydrologically connected to the state wetlands, thus implying that it is OK to destroy the state wetlands.

SLR on Federal Wetland A: "Due to its landscape position, it is likely hydrologically supported by stormwater runoff from the lawn hillslope to the west and a seasonally high groundwater table"

SLR on Federal Wetland C: "This wetland area is hydrologically supported by stormwater runoff from adjacent upland forested areas and seasonal groundwater breakout at the toe of slope."

SLR on the five isolated wetlands (CT-1 through CT-4 and CT-C): "these five wetlands possess varying levels of the required hydrology, soils and vegetation to qualify as wetlands; however, they all lack hydrological (i.e. nexus) connection to federally regulated waterway or wetland."

First, wetland are wetlands. There are no federal wetlands or state wetlands. All wetlands in Middlebury are regulated by the Conservation Commission. Some are regulated by the Army Corps of Engineers under the Federal Clean Water Act. A delineation of the wetlands under federal rules may result in a different size and extent of the wetlands which is why the applicant is required by the regulations to delineate the on-site wetlands under state rules.

Second, nowhere does the Applicant identify the factual or scientific basis upon which they determined the hydrological properties of the 'federal wetlands' and the source or connections that these wetlands may have to other wetlands or ground water sources. They simply assert the conclusion without any data for the conclusion. Opinion without foundation in fact is what is known as speculation. And speculation may not serve as the basis for a decision by a commission.

Third, the application indicates that the associated grading for basin 320 impacts 42,147 sf of the upland review area to Federal Wetland A without discussing how this may impact the wetland. This is emblematic of the way the application seems to indicate that filling wetlands is of some marginal concern, but impacts to almost 300,000 sq ft of upland review area is routine and merits no consideration of wetlands obligate species which likely use that upland review area during their life cycle.

It is my opinion that the project poses the unreasonable harm to wetlands resources from the direct loss of wetlands, the reasonable conclusion that the mitigation will not mitigate the loss or re-create the wetlands functions lost, the expected thermal impacts from roof and parking lot water, the pollutant loading, lighting impacts and the disturbance (noise) from significant trucking operations.

The Middlebury Small Town Alliance representing five homeowners associations (Avalon Farms, Benson Woods, Ridgewood, Steeplechase, and Brookside), the Lake Quassy Outing Club and over 100 donors and hundreds more taxpaying citizens of Middlebury, urge you to deny this application as incomplete and not in the best interest of the greater good of the community.

*Received at mtg *



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Trinkaus Engineering, LLC 114 Hunters Ridge Road Southbury, Connecticut 06488 203-264-4558 (office) *1-203-525-5153 (mobile) E-mail: strinkaus@earthlink.net http://www.trinkausengineering.com

January 30, 2023

NON-POINT SOURCE POLLUTANTS - IMPACT ON AQUATIC ENVIRONMENTS

The proposed warehouse at 555 Christian Road will consist of large areas of directly connected impervious area, such as flat building roofs, large parking areas for both trucks and cars connected by driveways. The large building roofs will be a significant source of nitrogen and phosphorous loads due to atmospheric deposition during dry and wet periods of time. The large-paved parking areas will be a significant source of metals and hydrocarbons due to the movement and storage of vehicles. These pollutants will cause adverse water quality impacts to downgradient inland wetlands and watercourses.

The following is a description of the various non-point source pollutants and their adverse impacts on the aquatic environment.

The water quality impacts associated with storm water runoff is called non-point source pollution. The United States Environmental Protection Agency defines non-point source pollution as follows:

Non-point source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water. These pollutants include:

- Excess fertilizers, herbicides, and insecticides from agricultural lands and residential areas.
- B. Oil, grease, and toxic chemicals from urban runoff and energy production.
- C. Sediment from improperly managed construction sites, crop and forest lands, and eroding stream banks,
- D. Salt from irrigation practices and acid drainage from abandoned mines,
- E. Bacteria and nutrients from livestock, pet wastes, and faulty septic systems,
- F. Atmospheric deposition and Hydro modification are also sources of non-point source pollution.

The most common pollutants which are found in non-point source runoff are Litter, Sediment and Total Suspended Solids (TSS), Total Nitrogen (TN), Total Phosphorus (TP), Metals, such as Zinc (Zn) and Copper (Cu), Hydrocarbons, Thermal Impacts, Oxygen demanding substances and Pathogens. Each pollutant and its impact on the natural environment are stated below.

Litter

Litter while not causing toxic impacts on the environment, the presence of litter is an aesthetic issue that is not well received by the public.

Total Suspended Solids (TSS)

Total Suspended Solids are fine soil particles, such as silts and clay which are dissolved in water. In excessive amounts it causes turbidity in water. The turbidity blocks light in the water column which causes reduced photosynthesis, which in turn reduces the oxygen levels in the water. Coarse and fine sediments can clog the gravel substrate in breeding streams thus affecting the biological community ability to reproduce. Common sources of TSS and sediment are runoff from construction sites, winter sanding operations, atmospheric deposition, and decomposition of organic matter, such as leaves. Turbidity is measured as NTU. A range of turbidity levels are shown in Figure 1 below.

Turbidity (NTU)

Water Samples:



Figure 1 - Range of Turbidity in water samples

Nutrients

Phosphorus and nitrogen are commonly found in non-point runoff with the primary source being lawn fertilizers. Excessive levels of phosphorus in freshwater systems are a concern as this nutrient cause's excess growth of non-native aquatic plants and algae in lakes. As a result of increased nutrient loads, toxic algae blooms are becoming more prevalent in lakes in Connecticut, including Bantam Lake. These toxic algae blooms have resulted in beach closures as exposure to the algae blooms can cause adverse health issues in humans. A further problem occurs, when the algae die off, the decomposition process of organic matter removes oxygen from the water column, thus reducing oxygen levels in the water. The reduced oxygen levels in the waterbody can result in fish kills. Nitrogen, in the form of nitrate, is a direct human health hazard and an indirect hazard in some areas where it leads to a release of arsenic from sediments. While not a major concern for freshwater systems, nitrate can cause environmental impacts in tidal regions, even though the source of nitrate can be far away from coastal regions. Sources of nutrients are organic and inorganic fertilizers, animal manure, bio solids and failing sewage disposal systems.

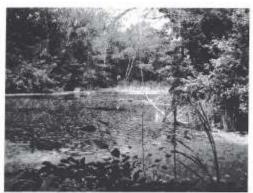


Figure 2 - Phosphorus impacts on a freshwater pond

Metals

Metals in non-point source runoff are very toxic to aquatic life. The adverse effects of metals are far reaching for both aquatic and human health. Many metals can bio accumulate in the environment, which can affect higher living organisms. While the concentration of zinc or copper in stormwater generally is not high enough to bother humans, these same concentrations can be deadly for aquatic organisms. Many microorganisms in soil are especially sensitive to low concentrations of cadmium. Zinc, Copper, and Cadmium found in non-point source runoff result from the movement and wear and tear of automobiles on our roadways.

Of the above discussed metals, zinc and copper are the two metals which are found dominantly in non-point source runoff. Metals commonly bind themselves to sediment and organic matter in stormwater and thus are transported to the receiving waters. Since natural rainfall is slightly acidic, metal roofs or components on the roof can be a significant source of the zinc or copper concentrations in stormwater.



Figure 3 - Primary source of zinc (automobile brake pads)

Hydrocarbons

Total Petroleum Hydrocarbons (TPH) are highly toxic in the aquatic environment, especially to aquatic invertebrates. The primary sources of petroleum hydrocarbons are oil, grease drops from an automobile, gas spills, and vehicle exhaust. Polycyclic Aromatic Hydrocarbons (PAHs) are also toxic to aquatic life. PAHs can be discharged into the environment using coal tar asphalt sealants, commonly used by homeowners on residential driveways. The movement of vehicles or people walking over the sealed driveway can release dust particles containing PAH, which can then be washed off with the next rainfall into the stormwater management system. PAHs are also generated by the burning of fossil fuels and the airborne particles are then deposited by atmospheric deposition on an impervious surface, especially large flat roof areas. When it rains, the accumulations of PAHs due to atmospheric deposition are carried off in the stormwater.



Figure 4 - Petroleum Hydrocarbons in Stormwater

Thermal Impacts

Impervious surfaces, such as roofs and moderately sized paved areas, such as residential driveways can heat up during sunny days and hold onto this heat. When rainfall occurs on these heated surfaces, the resulting runoff will have a highly elevated temperature because of the heat transference from the impervious surface to the runoff. As this heated runoff is discharged into receiving waters, the temperature of the receiving water is raised to a level which can exceed the temperature tolerance limits for fish and invertebrates, thus lowering their survival rates. Elevated water temperatures will also contribute to reduced oxygen levels in the water.



Figure 5 - Fish kills due to increased thermal levels

Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD)

Biochemical oxygen demand (BOD) is the amount of dissolved oxygen needed by aerobic biological organisms to break down organic material present in each water sample at certain temperature over a specific time. The BOD value is most expressed in milligrams of oxygen consumed per liter of sample during 5 days of incubation at 20 °C and is often used as a surrogate of the degree of organic pollution of water. Dissolved oxygen depletion is most likely to become evident during the initial aquatic microbial population explosion in response to a large amount of organic material. If the microbial population deoxygenates the water, however, that lack of oxygen imposes a limit on population growth of aerobic aquatic microbial organisms resulting in a longer-term food surplus and oxygen deficit.

Chemical oxygen demand (COD) is the total measurement of all chemicals in the water that can be oxidized. Total Organic Carbon (TOC) is the measurement of organic carbons. The chemical oxygen demand test procedure is based on the chemical decomposition of organic and inorganic contaminants, dissolved, or suspended in water. The result of a chemical oxygen demand test indicates the amount of water-dissolved oxygen (expressed as parts per million or milligrams per liter of water) consumed by the contaminants, during two hours of decomposition from a solution of boiling potassium dichromate. The higher the chemical oxygen demand, the higher the amount of pollution in the test sample.

Both BOD and COD are surrogates for the direct measures of specific pollutants found in non-point source runoff.

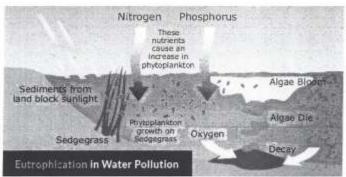


Figure 6 - Impacts of Nitrogen and phosphorus on aquatic systems

Pathogens

Pathogens are bacteria and viruses, which can cause disease in humans. Most pathogens are found in discharges from overflowing sanitary sewers or in combined sanitary/stormwater systems which is not applicable to the Town of Morris. In communities such as Morris, the primary source of pathogens in stormwater is pet waste which is not picked up along roadways. Dog poop which washes into a storm drain are the common source of both fecal coliform and enterococci bacteria which are used as indicators for the presence of pathogenic organisms, yet their presence does not mean a pathogen is present, just that there is a higher risk of being present.

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