

**AGENDA SUMMARY REPORT
ENVIRONMENTAL PROTECTION BOARD**

Date: November 18, 2024

Application #2024-19

Location: 0 South Brook Drive (Lot 13)

Applicant: S.E. Minor & Company, Inc. for Adam Aglietti

Watersheds: Mianus River (DWS)

FEMA FIRM: 09001C0363F (6/18/2010)

Flood Zone: X – low annual probability of flood

Area: 2.03 acres

Account: 004-0002

Map: 22

Block: 400

Lot: 13

References

- Plans entitled “Proposed Site Development Plan on Property of Adam Aglietti – 13 South Brook Drive, Stamford, Connecticut” prepared by S.E. Minor & Company, Inc. – Cover Sheet – Zoning Location Survey – Existing Conditions – Proposed Site Plan – Erosion Control Plan – Detail and Notes – Proposed Septic Plan – Septic Details and Notes – certified by Robert D. Sandolo, Jr., CT PE #34334 and Charles F. Steinhilper, Jr., CT LS #70238 – dated July 23, 2024 and revised November 12, 2024.
- Soils report prepared by JMM Wetland Consulting Services LLC, certified by professional soil scientist James M. McManus, dated August 30, 2024.
- Stamford Engineering Bureau referral comments prepared by Susan Kiskien, P.E., dated September 19, 2024 and November 18, 2024.
- Drainage Summary Report prepared by S.E. Minor & Company, Inc., certified by Robert D. Sandolo, Jr., PE, dated July 23, 2024 and revised November 11, 2024.
- Letter responding to the Engineering Bureau comments prepared by Robert W. Flood, EIT, of S.E. Minor & Company, Inc. dated November 12, 2024.

Proposal

The applicant proposes to construct a single-family residence, driveway, in-ground pool, retaining wall, septic system, and stormwater management system on this undeveloped lot. This application was filed on September 16, 2024, and was accepted by the Board at its meeting held on September 19, 2024.

Description of Project Area

The steeply sloping uplands in the southeast and northwest portions of this 2-acre wooded parcel are bisected by a perennial watercourse, riparian swamp wetlands, and a 0.8-acre conservation easement area. There is an approximate 32 foot elevation change from the high point in the southeast corner of the site to the low point in the southwest where the watercourse flows off the property and toward the Aquarion Water Company’s Samuel J. Bargh Reservoir, which is located about 550 feet to the west. The off-site channel slopes at about an 18% grade to the reservoir.

The wetland delineation done by soil scientist James McManus earlier this year is much more detailed than the one done as part of the subdivision review and which only picked up the watercourse. Mr. McManus identified the undisturbed wetland soils that fringe the brook as being the Ridgebury, Leicester, and Whitman soil series complex. The lot features a closed canopy of mixed deciduous trees with scattered hemlocks and a sparse understory that includes spicebush, Japanese barberry, ferns, and Japanese stiltgrass. This property is not located within a Connecticut Natural Diversity Data Base area of concern.

Prior EPB Actions

EPB permit issued for construction of subdivision road and associated drainage

Issues/Discussion

This parcel was created as part of a subdivision in the 1980s. The map in the Planning Board's files does not show any conceptual house locations on the lots and, unfortunately, no record can be found of the review of this subdivision the Environmental Protection Board conducted on referral from the Planning Board. However, staff reports contained in applications for the development of lots near the subject property indicate the EPB has expressed concerns about the developmental viability of some of the subdivision lots within this critical watershed area¹.

Regarding this application, the project has been designed with a degree of attention to the site constraints. All of the improvements are proposed in the southeastern upland with no activity in the wetland itself. The project will result in disturbance of about 0.48 acres, of which less than half is in the upland review area. The plans show the house 40 feet from the wetland and show the retaining wall as the closest of the proposed improvements at 10 feet from the wetland. The application narrative includes a discussion of the design alternatives that were considered and notes the option that minimizes grading was selected for the house.

Implementation of this project will require the removal of five dozen trees, with 18 of these being in the upland review area. The applicant's agent states the "construction envelope" shown on the "Erosion Control Plan" sheet approximates the anticipated limit of residential landscaping and a landscape architect has been retained to develop a planting plan for this area. The planting plan should also locate where markers ought to be set along the edges of the conservation easement to roughly show its curving boundary.

The project will create 4,788 square feet of new impervious coverage. The applicant's agent confirms there will be no patio around the pool and no patios or decks around the house. The proposed stormwater management design consists of a subsurface infiltration system to take runoff from the house roof and footing drain, driveway, and pool area, and a rain garden to take runoff from the walk, lawn, and woods. According to the Drainage Summary Report, this design

¹ As David Emerson wrote in his 2006 staff report on EPB Applications 2428 – 2431, "The EPB has had a long involvement with the so-called Levine subdivision, the development of lots within the subdivision in general, and with the development and proposed development of lots on South Brook and Wallenberg Drives. It is useful to remember that the Board has been consistently on record in its view that not every designated lot within the Levine subdivision may be buildable in an environmentally sound manner."

will reduced peak runoff rates through the 100-year design storm compared to existing conditions. Peak volumes will be reduced through the 2-year storm, with less than 3% increases over existing conditions for the 5 through 100 year events. The Engineering Bureau has responded to the November 2024 revisions of the site plans and drainage report and has asked for additional information that may result in revisions to the drainage design.

The applicant's erosion control plan consists of double silt fence between the work zone and wetland, high visibility fencing around the entire construction envelope, a reinforced construction entrance, silt fencing around stockpiles, catch basin protection, and protective fencing around the infiltration, rain garden, and septic areas to prevent compaction. The dirtbag dewatering location called out on the plan may be needed during excavation for the basement of the westernmost house module and crawlspace of the central module.

Although some of the site constraints have been factored into the project design, additional measures seem to be called for given the scale of improvements proposed on this very tight site and the fact that the hardpan that has been found at 24-40" below grade within the construction zone will make it difficult to control the water falling on and flowing across the activity area from the south so there are no impacts to the wetland, brook, and reservoir. As noted by Mr. Emerson in his 2006 report, site control shortcomings during past projects resulted in adverse impacts to this sensitive area. While the current applicant's agent has not received any feedback to the letter they sent to the Aquarion Water Company notifying them of this application, the attached comments Aquarion's Senior Environmental Analyst Brian Roach sent to Mr. Emerson in response to the applications to develop nearby lots on South Brook Drive describe why the current project needs to go above and beyond standard site control practices.

The construction sequence on the Erosion Control Plan sheet is generic and the applicant's agent was informed by staff that relying on this outline is not acceptable on such a sensitive site. In response, a Phasing Plan sheet was added to the revised plan set. In order to better avoid the type of adverse impacts experienced in the past, the applicant should address whether this sequence can be revised so that the retaining wall is built as the first activity after erosion control installation in order to create a solid barrier between the wetland/watercourse corridor and the subsequent clearing, topsoil stripping, grading, and construction activities.

Recommendation

Staff recommends the Board provide the applicant with any additional comments members may have about this application and then defer rendering a decision until the applicant responds the issues raised by the EPB and the Engineering Bureau to date.


Robert E. Clausi

CITY OF STAMFORD

MAYOR
CAROLINE SIMMONS

DIRECTOR OF OPERATIONS
MATT QUINONES
Email: MQuinones@StamfordCT.gov



CITY ENGINEER
LOUIS CASOLO, JR., P.E.
Email: LCasolo@StamfordCT.gov

INTEROFFICE MEMORANDUM

November 18, 2024

To: Robert Clausi Executive Director
Environmental Protection Board

RECEIVED

From: Susan Kisken P.E. - Coordinator of Site Plan Reviews and Inspections

NOV 18 2024

Subject:
0 South Brook Drive Lot No. 13 - Adam Aglietti
EPB Application No. 024-19

ENVIRONMENTAL PROTECTION
BOARD

The Engineering Department has reviewed plans for the construction of a new single-family dwelling as depicted in the following plans and documents:

- EPB application package, dated 9/13/24
- "Zoning Location Survey," dated 7/23/2024, prepared by S.E. Minor & Co., Inc.
- "Existing Conditions," dated 7/23/2024, revised 11/12/2024, prepared by S.E. Minor & Co., Inc.
- "Proposed Site Plan," dated 7/23/2024, revised 11/12/2024, prepared by S.E. Minor & Co., Inc.
- "Erosion Control Plan," dated 7/23/2024, revised 11/12/2024, prepared by S.E. Minor & Co., Inc.
- "Details and Notes," dated 7/23/2024, revised 11/12/2024, prepared by S.E. Minor & Co., Inc.
- "Proposed Septic Plan," dated 7/23/2024, revised 11/12/2024, prepared by S.E. Minor & Co., Inc.
- "Septic Details and Notes," dated 7/23/2024, revised 11/12/2024, prepared by S.E. Minor & Co., Inc.
- "Drainage Summary Report," dated 7/23/24, revised 11/11/2024, prepared by S.E. Minor & Co., Inc.
- Response letter, dated 11/12/2024, prepared by S.E. Minor & Co.

The engineer of record, Robert D. Sandolo Jr. PE, has stated, "Based on the above information, the proposed improvements are designed in accordance with the City of Stamford Stormwater Drainage Manual and will not adversely impact adjacent or downstream properties or City-owned drainage facilities."

The Engineering Department offers the following comments shall be addressed by an engineer licensed in the State of Connecticut:

- 1) A formal address for the property shall be obtained from the Engineering Department. SUBMITTED
- 2) Provide an existing conditions survey in accordance with the City of Stamford Stormwater Drainage Manual. Survey shall be based on NAVD88 datum, and signed and sealed by a surveyor licensed in the State of Connecticut. NOT COMPLETE
- 3) Is there any proposed pool patio or other patios or walks. COMPLETE
- 4) TP#3 and TP#1 located near the proposed raingarden indicate hardpan as the restrictive layer. Bottom of raingarden shall be set at least one foot above the restrictive layer. If the stone and other material below the system is used for storage, the bottom of the stone and material needs to be at least one foot above the restrictive layer. NOT COMPLETE
- 5) Cultec system shall be set at least one foot above the restrictive layer. If the stone below the system is used for storage, the bottom of the stone needs to be at least one foot above the restrictive layer. NOT COMPLETE, TP#9 located near the proposed cultec units indicates hardpan as the restrictive layer.
- 6) Provide cleanouts for roof drainage system. Label plan accordingly. NOT COMPLETE, CLEARLY LABEL AND PROVIDE DETAIL.
- 7) Provide additional top and bottom of wall elevations. COMPLETE
- 8) Roof drainage that discharges at grade shall be supplied with splash pads. COMPLETE
- 9) Identify concrete wash down area. COMPLETE
- 10) Show all proposed utilities. COMPLETE
- 11) Show location and outfall for any proposed footing drain. Footing drain drainage shall be in accordance with the City of Stamford Stormwater Drainage Manual. COMPLETE
- 12) Provide maintenance schedule for stormwater management systems on plan. COMPLETE
- 13) Provide clear detail of raingarden with proposed grades. NOT COMPLETE
- 14) Show proposed polyliner on raingarden detail. CLEARLY SHOWN POLYLINER. WILL THE POLYLINER BE INSTALLED AGAINST THE WALL?
- 15) Provide one foot of free board in the raingarden and emergency overflow. COMPLETE
- 16) Provide pavement detail for driveway. COMPLETE
- 17) Provide curb detail for driveway. COMPLETE
- 18) Provide standard City of Stamford trench repair detail. NOT COMPLETE
- 19) Provide junction box detail. COMPLETE
- 20) Provide retaining wall detail. NOT COMPLETE. Show polyliner on detail.
- 21) Provide sight distance for proposed driveway. COMPLETE
- 22) Provide additional spot elevations around the dwelling to ensure positive drainage. COMPLETE

- 23) There shall be no catchment structure to catchment structure connections. COMPLETE
- 24) Trench drain shall discharge into a structure supporting a 2-foot sump with elbow on the outlet pipe. COMPLETE
- 25) Level spreader is subject to freezing. Increase depth of stone or include other modifications. REVISE DETAIL
- 26) Will the proposed raingarden or cultec system result in hydrostatic pressure on the wall? COMPLETE
- 27) TC's for existing condition shall not be less than proposed. Calculate existing TC. COMPLETE
- 28) Provide DT#9 data on plan. COMPLETE
- 29) No pipe bend shall exceed 45 degrees. Provide note on drawing. COMPLETE
- 30) Review all notes as they pertain to this site. Revisions are warranted. NOT COMPLETE
- 31) Provide drawdown calculation for rain garden. NOT COMPLETE
- 32) Is there any proposed low flow pipe for cultec system? COMPLETE
- 33) Clarify how the easterly portion of the roof drainage is tributary to the cultec system. COMPLETE
- 34) Provide pipe conveyance calculations showing proposed flow and pipe capacity provided. COMPLETE
- 35) Health Department approval will be required. ACKNOWLEDGED
- 36) The Engineering Department reserves the right to make additional comments once revised drawing and drainage report are received. ACKNOWLEDGED
- 37) Provide elbow on outlet pipe and 24 " sump in Yard Drain. Revise detail.
- 38) All outfalls shall be stabilized, including discharge into rain garden.
- 39) Consider rearranging cultec units to typical layout which is end to end.
- 40) Summary for Pond P.2:RainGarden:
- Gravel elevation does not match plan.
- Elevation of underdrain is not indicated on plan.
- 41) Review all inverts.
- 42) Provide larger scale drawings.

Should you have any questions, please call.

Reg. No. 312

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AQUARION

Water Company

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David M. Emerson, Executive Director
Environmental Protection Board
City of Stamford, Connecticut

December 5, 2005

Re: Proposed Development of Lots 1, 2, 3 and 6; South Brook Drive, Stamford
Dr. William B. Levine, Applicant

Dear Mr. Emerson;

Aquarion Water Company received revised plans of the above referenced proposal on November 29, 2005. As you know, the site is within the watershed of and is directly adjacent to Aquarion's Samuel J. Bargh Reservoir. As you are also aware, Aquarion has been very concerned that this new phase of development have an adequate stormwater pollution control plan in place prior to the start of any construction activities because inadequate erosion controls for previously developed lots within this subdivision, when coupled with the subdivision's steep terrain, caused silted stormwater run-off from the site to discharge into adjacent wetlands, watercourses, and into Bargh Reservoir itself.

The Aquarion source protection staff has reviewed the revised site plans for the development of Lots 1, 2, 3 and 6 specifically to assess the adequacy of the newly-proposed Stormwater Pollution Control Plan, and believes that the Plan outlines a practicable approach for developing these lots while providing an adequate level of protection to Bargh Reservoir. The extremely close proximity of the project site to Bargh Reservoir and the very steep topography of the site, however, make it imperative that careful compliance with the provisions of the new Stormwater Pollution Control Plan, particularly the phasing of site disturbance and the installation of stormwater detention structures, is maintained at all times during site development in order to prevent further adverse impacts to the quality of the public drinking water supply.

As per the requirements of the Connecticut Department of Environmental Protection's (CT DEP) *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities*, Aquarion requests that our office receive a copy of CT DEP General Permit for the project. Additionally, Aquarion requests notification by the Environmental Protection Board of its decision regarding this application. If approved, Aquarion requests notification by the developer prior to the start of any soil disturbing activities at the site.

Aquarion sincerely appreciates the efforts of the Stamford Environmental Protection Board to address our concerns regarding this phase of the South Brook Drive, and for its efforts to mitigate previous erosion problems at the site. We also acknowledge and appreciate Dr. Levine's willingness to make the extra efforts that are necessary to protect the water quality of our Samuel J. Bargh Reservoir. If you have any questions regarding Aquarion's assessment of the newly-proposed Stormwater Pollution Control Plan for the South Brook Drive project, please feel free to call me at 203-452-3508.

Sincerely,

Brian T. Roach
Senior Environmental Analyst

Dr. William B. Levine
Robert J. Levine, Home Construction, LLC
John E. Pugliesi, P.E., Edw. J. Frattaroli, Inc.
Thomas D. Ryder, Land-Tech Consultants, Inc.