

The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Kathleen A. Theoharides
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
<http://www.mass.gov/eea>

April 23, 2021

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : The Village at Shepley Hill
PROJECT MUNICIPALITY : Groton
PROJECT WATERSHED : Nashua River
EEA NUMBER : 16348
PROJECT PROPONENT : Shepley Hill Capital Partners, LLC
DATE NOTICED IN MONITOR : March 24, 2021

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project consists of residential development in Groton. The project proposes construction of a 13-lot age-restricted subdivision housing with one residential duplex dwelling per lot (26 units); two separate 20-foot wide subdivision roadways from Sand Hill Road and Longley Road; parking, and associated drainage, stormwater management systems, utilities, landscaping, and other site development features. The project will be served by on-site water supply wells and on-site subsurface sanitary disposal system. Construction is anticipated to take 2.5 years. The project will provide the Town of Groton (Town) with open space that will be permanently protected through a Conservation Restriction that will be held by the Groton Conservation Commission (GCC). Approximately 81 percent of the site will remain undisturbed (approximately 38.6 acres).

Project Site

The 47.38-acre project site is located at the intersection of Sand Hill Road and Longley Road in Groton, with frontage on both roadways. The site is surrounded by residential uses with the exception of

the western boundary which abuts conservation land. It contains vacant woodlands and wetlands including approximately eight acres of Bordering Vegetated Wetland (BVW) and a small portion of Riverfront Area (RFA) associated with an unnamed perennial stream located off-site (north of the site on the opposite side of Sand Hill Road). BVW borders on an intermittent stream that flows parallel with site frontage on both Sand Hill Road and Longley Road. Access to upland portions of the site requires crossing of the intermittent stream and BVW. Upland portions of the site slope up to the top of a hill which runs north through the site. Topography generally slopes gently at the top of the hill and bottom of the hill with steeper side slopes to the west and east between 2:1 and 3:1. The entire project site is located within the Petapawag Area of Critical Environmental Concern (ACEC), which is approximately 25,630 acres in size, of which approximately 14,950 acres (58 percent) occurs within the Town.

Environmental Impacts and Mitigation

Potential environmental impacts of the project include alteration of 8.8 acres of land; creation of 4.1 acres of impervious area; permanent alteration of 1,107 square feet (sf) of BVW and 4,121 sf of RFA; generation of 96 new unadjusted average daily trips; construction of 55 new parking spaces; and new water use and wastewater generation of 3,900 gallons per day (gpd), respectively. Measures to avoid, minimize, and mitigate Damage to the Environment include replication of BVW to offset permanent impacts by 3:1; placement of 33 to 35 acres of the project site within a Conservation Restriction (CR) to be held by the GCC; reduction of the roadway width by two feet; implementation of an invasive species management plan; construction of a stormwater management system; and implementation of construction period best management practices (BMPs).

Jurisdiction and Permitting

This project is undergoing MEPA review and requires an ENF pursuant to 301 CMR 11.03(11)(b) because it requires an Agency Action and is located within a designated ACEC. The project requires the following from the Massachusetts Department of Environmental Protection (MassDEP): Approval to Site a Source and Conduct a Pumping Test for a Source less than 70 Gallons per Minute (BRP WS 13); Approval of Pumping Test Report and to Construct a Source Less than 70 Gallons per Minute (BRP WS 15); and a Superseding Order of Conditions (SOC) because the Order of Conditions (OOC) issued by the GCC was appealed¹.

The project requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the U.S. Environmental Protection Agency (EPA).

Because the Proponent is not seeking Financial Assistance from the Commonwealth for the project, MEPA jurisdiction for any future reviews would extend to those aspects of the project that are within the subject matter of required or potentially required Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations.

Review of the ENF

The ENF provides a description of existing and proposed conditions, preliminary project plans, and a limited analysis of alternatives. It identifies measures to avoid, minimize and mitigate project

¹ The ENF does not identify the requirement for a SOC from MassDEP.

impacts. The Proponent submitted supplemental information on April 9, 2021 to address requests for additional information from the MEPA remote consultation session including an expanded alternatives analysis, and on April 20, 2021 to provide a response to comments. For purposes of clarity, all supplemental materials are referred to herein as the “ENF” unless otherwise referenced.

I acknowledge comments from three abutters/residents which identify concerns with the analysis presented in the ENF regarding potential impacts to wetland resource areas and habitat within a designated ACEC. However, based on a review of the ENF, supplemental information, and comment letters, I do not find that a discretionary EIR is warranted. While I acknowledge these concerns, the project does not exceed mandatory EIR thresholds for purposes of MEPA review. The mandatory EIR review thresholds are intended to identify projects or aspects thereof that are presumed to have particularly significant environmental impacts, and for which an EIR is presumed to benefit the project and the environment. Additionally, comments from MassDEP did not request further analysis of impacts in an EIR. I note that the issuance of this Certificate does not signify the conclusion of the public engagement process for this project. The SOC review process includes additional opportunity for public review and comment and MassDEP has sufficient regulatory authority to address outstanding issues during permitting.

Alternatives Analysis

The ENF maintains that access to upland portions of the site requires crossing over the intermittent stream and BVWs and that there are no alternatives that would eliminate this need. Furthermore, it indicates that there are no other reasonable means of access over an adjacent parcel of land that is currently or formerly owned by the Proponent, or in which the Proponent has, or can obtain, an ownership interest that would avoid crossing over the intermittent stream channel. The ENF includes analysis of the Preferred Alternative and an alternative location for the required wetland crossing, which would relocate the crossing proposed at Longley Road to the north or south. According to the ENF, this alternative would place an awkward bend in the proposed roadway and infringe on the area reserved for the subsurface sanitary disposal system reserve area.

Supplemental information provides a summary of alternatives (Alternatives 1 through 5) evaluated during the local permitting process in a tabular format with conceptual plans. Alternative 1 (Approval Not Required (ANR) Plan) would include the only By-Right use. This alternative would create nine lots and 18 dwelling units. It would require eight driveways that would result in wetland filling to access the upland portion of each lot. Alternative 2 (Definitive Subdivision Plan) would construct 11 lots, of which one would be an ANR lot and the remaining 10 lots would be subdivided with frontage on two new cul-de-sacs. This alternative would require waivers and a Special Permit from the Planning Board. It would result in two new roadways and two driveways that would require wetland filling to access the upland portion of each lot and to create roadways. Alternatives 3, 4, and 5 would construct a 14-lot (28-unit) development with either two independent roads each ending in a cul-de-sac, a through street from Longley Road to Sand Hill Road which limited the last 375 feet of Sand Hill Road for emergency access only, or a single access roadway from Longley Road or Sand Hill Road, respectively. The Proponent submitted a letter from a traffic engineer to the Planning Board which opined that a single dead-end road would not be detrimental or unsafe due to the age-restricted nature of the project and associated low traffic volumes. However, supplemental information notes the Planning Board’s preference for spreading out project-generated traffic between both roadways and their opposition to two separate cul-de-sacs; only one entrance for the public to use; or allowing the project to

avoid constructing a through street from Longley Road through the site to Sand Hill Road.

The Preferred Alternative, as described herein, presents an age-restricted subdivision plan that includes a through roadway between Longley Road and Sand Hill Road. Changes made to the Preferred Alternative during the public hearing process to avoid and minimize impacts include elimination of two units and one lot; reduction in roadway width by two feet to 20 feet; reduction in the length of Road A by more than 240 feet and adjustment of its location to avoid impacts to hemlock groves; elimination of all grading cuts greater than seven feet; reduction of wetland fill in three locations (1,692 sf) to one area (1,107 sf) by lengthening the span at one stream crossing and sidewalk modifications; and preserving 39 acres of open space. It proposes to cross the resource areas at the narrowest location at a perpendicular angle, which will result in less impact to BVW and RFA. The ENF asserts that moving the proposed crossing in any direction would result in greater impact than the current proposal. The crossings will be designed to exceed the requirements identified in the Massachusetts Stream Crossing Standards. The roadways have been designed to the minimum legal and practical width acceptable to the Groton Planning Board.

Wetlands, Stormwater, and ACEC

The project will alter BVW, RFA, and Buffer Zone to BVW. The GCC issued an Order of Resource Area Delineation (ORAD) on August 25, 2020 to identify the boundaries of BVW, RFA and the perennial stream on the site. The Notice of Intent for the project was filed as a Limited Project in accordance with the requirements set forth in 310 CMR 10.53(3)(e). The GCC issued an Order of Conditions on February 23, 2021 that was appealed by the Groton Conservation Trust, an abutter to the site. MassDEP will review the project for its consistency with the Wetlands Protection Act (WPA), Wetlands Regulations (310 CMR 10.00) and associated performance standards including stormwater management standards (SMS).

The project proposes construction of two 20-foot-wide roadways to access upland portions of the site. The roadway from Longley Road will intersect near the midpoint of the roadway from Sand Hill Road as it continues to a cul-de-sac near the top of the existing hill. According to the ENF, the location of wetland resource areas and sloping terrain presented challenges for the design of the roadways. The Proponent maintains that during the local permitting process the Groton Planning Board sought two access points for the project (one on Sand Hill Road and one on Longley Road), which would require crossing the intermittent stream and BVW in two locations. Consequently, the project proposes two intermittent stream crossings that have been designed in accordance with the Massachusetts Stream Crossing Standards. The ENF indicates that one of these two crossings proposes fill within BVW. This crossing will require the permanent alteration of 1,107 sf of BVW located within an ACEC, which will be mitigated with a 3,359-sf replication area. The project includes work within approximately 4,121 sf of RFA and 163,919 sf of Buffer Zone to BVW. By constructing a longer span at the Sand Hill Road crossing than required by the Massachusetts Stream Crossing Standards, the Proponent minimized impacts to resource areas to reduce BVW alteration to 1,107 sf and avoid any alteration to inland Bank and Land Under Water.

Issues identified by the appellant question whether the project meets the Limited Project provisions for impacts to BVW within an ACEC associated with the two roadway crossings; whether proposed replication meets BVW performance standards; and whether work in Buffer Zone will cause

additional alterations to adjacent BVW. MassDEP comments indicate that it may request additional information from the Proponent and other parties during its review and will schedule a site meeting as part of that review prior to issuance of an SOC. According to MassDEP, pursuant to 310 CMR 10.55(4)(e), work within BVW that is also within an ACEC may only be permitted if it meets the Limited Project provisions pursuant to 310 CMR 10.53(3). During subsequent permitting, the Proponent will need to demonstrate how the proposed crossings meet the performance standards for work in BVW within an ACEC. In the event the Limited Project provision is not met and the project undergoes material design changes to avoid a Variance from the WPA, the Proponent should consult with the MEPA Office to determine if further MEPA review may be required. Project revisions that are developed to address MassDEP concerns and that are consistent with any of the alternatives and associated impacts disclosed in the ENF will not require further review. The Proponent should be aware that if the project requires a Variance from the WPA, the project would then exceed a mandatory EIR review threshold pursuant to 310 CMR 11.03(a)(2). If a Variance is required, the Proponent should submit a Notice of Project Change to initiate further MEPA review. Supplemental information confirms that during the public hearing on the Notice of Intent for a Limited Project, the Proponent prepared and submitted a deed restriction that limits the amount of filled BVW to less than 5,000 sf (a copy of the draft restriction is provided).

The project will result in approximately 4.1 acres of new impervious area. The site includes a stormwater management system designed to fully comply with the Massachusetts Stormwater Management Regulations. The project will incorporate low impact development (LID) strategies as well as conventional stormwater management techniques including surface infiltration basins, subsurface infiltration facilities, vortex units and deep sump catch basins for treatment and recharge of stormwater. Design strategies for the stormwater systems comply with the Massachusetts Stormwater Handbook and the Town of Groton Stormwater Design Criteria. Any stormwater that is discharged to the designated ACEC will be treated through the stormwater management system. I strongly encourage the Proponent to avoid tree removal to the maximum extent practicable.

The ENF did not review potential conditions at the site under future climate change scenarios or how the project design will make this infrastructure resilient under those conditions. I encourage the Proponent to implement measures that incorporate future climate change projections as the design of the project is finalized and proceeds to permitting. In particular, I encourage the Proponent to incorporate climate change data into design elements such as stormwater system sizing and roadway elevation, if applicable, and use ecosystem-based adaptation measures to mitigate stormwater runoff, such as integration of tree canopy cover, rain gardens, and LID stormwater management techniques.

Water Supply

MassDEP issued approval of the BRP WS 13 application² on March 12, 2021 to site the public water supply wells and conduct a pumping test for the project. The project includes a water demand of 3,900 gpd based on Title 5 (310 CMR 15.00) design flows. The Proponent does not anticipate that treatment of water will be necessary; however, treatment will be provided if required within the proposed pump station. Treated water will be stored in two 4,000-gallon storage tanks.

As required by MassDEP, supplemental information confirms that the Zone 1 areas related to the

² Approval to Site a Source and Conduct a Pumping Test for a Source less than 70 Gallons per Minute

water supply wells will be excluded from the CR (this condition is included in approvals by the Groton Planning Board and the Order of Condition from the GCC). It also indicates that the CR will allow inclusion of Zone I areas in the future to the extent permitted by MassDEP. MassDEP also recommended that the proposed CR not directly abut the Zone I areas to allow for expansion or shifting of the Zone I areas in the future. Supplemental information includes a copy of the draft CR. The Proponent should ensure that the draft CR corrects typographical errors and includes the attachments identified in MassDEP comments. To ensure compliance with MassDEP requirements, the Proponent should submit a copy of the draft CR to MassDEP prior to submitting it to EEA. Based on the MassDEP comments concerning the wastewater flow generation, the Proponent should submit updated information to the Drinking Water Program as it is developed.

Supplemental information confirms that the 12,600 gpd identified for groundwater withdrawal in the ENF is a typographical error; the correct number includes 1,450 gpd of irrigation demand from a proposed irrigation well, in addition to the potable demand of 3,900 gpd for a total of 5,350 gpd from the three proposed public water supply wells.

Wastewater

The ENF indicates that the combined design flow for wastewater associated with the project is 3,900 gpd, which will be served by a single on-site sewage disposal system. Supplemental information responds to comments from MassDEP. It indicates that the Groton Planning Board approved the Proponent's application on April 8, 2021 to develop the site as an age-restricted condominium development with 26 dwellings consisting of 13 two-bedroom duplexes. The Proponent will create the condominium by recording a master deed for the site; all land, including the roadways, stormwater management systems and septic systems (Common Areas) will be owned, maintained and managed by a condominium trust (Open Space will consist of 81.6 percent of the site). The project is permitted as "Housing for the Elderly" (defined as a facility restricted to use by adults over 55 years of age pursuant to 310 CMR 15.002) with a required design flow of 150 gpd per unit (maximum of two bedrooms per unit) pursuant to 310 CMR 15.203(2) and a total wastewater flow of 3,900 gpd for all 26 units. The Proponent asserts that the design of the septic system based on 150 gpd does not trigger the need for a deed restriction pursuant to 310 CMR 15.203 which applies to single family homes limited to two bedrooms and does not apply to Housing for the Elderly.

Supplemental information further clarifies that the system serving the condominium, which is located on the same facility, is not classified as a shared system pursuant to 310 CMR 15.002. The project served by the proposed septic system will be a condominium, and the property will be held in single ownership by the condominium trust and considered a single "Facility". This clarification was also outlined in a letter to the Nashoba Associated Boards of Health and Groton Board of Health, dated July 21, 2020. The Proponent maintains that the proposed septic system is a single system that serves the entire project (26 units); the site is also considered a single lot under the Groton's Board of Health Regulations. The proposed septic system will be designed to receive and shall receive less than 90 gpd per acre (3,900 gpd/47.38 acres). Therefore, the maximum loading requirement pursuant to 310 CMR 15.214(2) (that allows up to 440 gpd/acre) will not be exceeded.

The septic system is being designed to implement pressure distribution in compliance with 310 CMR 15.254(2). In addition, groundwater mounding calculations will be completed as required pursuant

to 310 CMR 15.212(2). No individual unit owner will own or operate any part of the septic system. The real property and all common areas of the condominium, which includes the septic system, will be owned and managed by the condominium trust.

Greenhouse Gas Emissions

While the project does not exceed the thresholds for application of MEPA's GHG Policy and Protocol, it does involve the development of new residential dwellings that will add to GHG emissions from the building sector. I encourage the Proponent to voluntarily undertake additional measures to minimize GHG emissions from the project. The Proponent's most recently designed home at the Village at Canter Brook Farm in Hamilton will have a dwelling with a HERS index between 50-55. The Proponent intends to use a similar home design for the proposed project and expects to make these homes more energy efficient during the final architectural design with a target HERS index rating in the high forties. The following techniques will be used to achieve the HERS ratings:

- 96 percent AFUE gas-fired furnaces with 13 SEER AC condensers
- 93 percent AFUE on-demand hot water heaters
- Low E (.28) Argon filled, double insulated exterior windows
- Spray foam insulation on roof eaves and sill plate rims on each home
- Blown cellulose R-21 on exterior walls, R-49 on all roof systems, and use of Rockwool insulation for party walls (R-18)
- Continuous air exchange venting through Panasonic bath fans and dedicated ERV units on each first floor
- Interior and exterior LED lighting

Construction Period

All construction activities should be managed in accordance with applicable MassDEP's regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban provision at 310 CMR 19.017 and handling/disposal of clean wood associated with tree removal and land clearing). I refer the Proponent to comments from MassDEP regarding the construction-period measures. The Proponent will install BMPs on the project site to control erosion and sedimentation during the construction period. The project will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the NPDES CGP. The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management) and emissions of air pollutants from equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11).

I encourage the Proponent to require that its contractors use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). If oil and/or hazardous materials are found during construction, the Proponent should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.0000). The Proponent should develop a spills contingency plan. All construction activities should be undertaken in compliance with the conditions of

all State and local permits. I encourage the Proponent to reuse or recycle construction debris to the maximum extent.

Conclusion

The ENF has adequately described and analyzed the project and its alternatives, and assessed its potential environmental impacts and mitigation measures. Based on review of the ENF and comments received on it, and in consultation with State Agencies, I have determined that an EIR is not required. MassDEP has sufficient regulatory authority to address outstanding issues during permitting.

April 23, 2021

Date



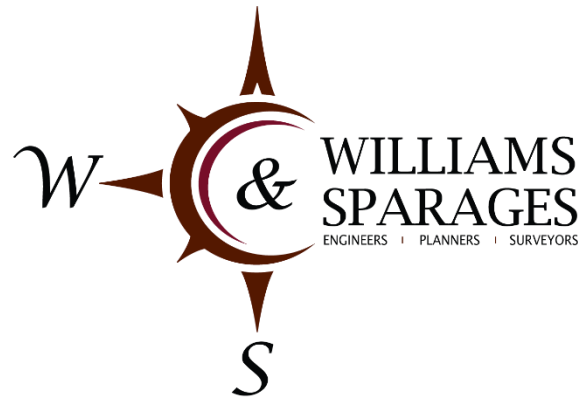
Kathleen A. Theoharides

Comments received:

04/07/2021 Marie Esten
04/08/2021 David Black
04/12/2021 Anna Eliot
04/13/2021 Ed McNierney, Groton Conservation Trust
04/13/2021 Massachusetts Department of Environmental Protection (MassDEP) –
Central Regional Office (CERO)

KAT/PPP/ppp

April 20, 2021



Secretary Kathleen A. Theoharides
Executive Office of Environmental Affairs
100 Cambridge Street, 9th Floor
Boston, MA 02114
Attention: MEPA Unit – Purvi Patel

Re: EEA#16348 The Village At Shepley Hill, Groton, MA
Response to ENF Comments

Dear Secretary Theoharides:

Set forth below are Shepley Hill Capital Partners LLC's responses and clarifications to the various comments received by MEPA during the ENF comment period for the above-project.

1. Comments from Mary Jude Pigsley, Regional Director for MassDEP shown in BLACK Shepley's responses shown in GREEN:

Wastewater

The ENF states that the design flow of wastewater for the combined flow of all duplexes is 3,900 gallons per day (gpd). A 3,900 gpd sewage disposal system equates to a total of 35 bedrooms for 26 residential units, or one to two bedrooms per residential dwelling. Without knowing the configuration of the duplexes, MassDEP cannot confirm that the design flow is accurate. The Proponent should provide an accurate assessment of the number of bedrooms for each dwelling to the Groton Board of Health. In addition, Title 5 regulations at 310 CMR 15.203 require that on-site sewage disposal systems be designed for 330 gpd for each dwelling unit; anything less will require a deed restriction. The total wastewater flow for 26 units generating 330 gpd is 8,580 gpd. The Proponent should revise the design flow to provide an accurate value based on the total number of bedrooms, in consultation with the Groton Board of Health.

Response:

On April 8, 2021, Groton Planning Board approved (the "Approvals") the application by Shepley Hill Capital Partners LLC to develop the subject property as an age-restricted condominium development with 26 dwellings consisting of 13 2-bedroom duplexes (the "Development" or "Condominium"). Copies of the Approvals are attached hereto as Exhibit A-1 (Subdivision Approval) and A-2 (Special Permit). Based on the Approvals, Shepley is required to include a restriction that at least one occupant of each Unit must be at least 55 years old and no one under the age of 18 will be permitted to permanently reside in any Unit.

Shepley will create the Condominium by filing a master deed for the Property with the appropriate registry of deeds, a draft of which is attached hereto as Exhibit B-1. As a Condominium, the ownership of all of the land, including the roadways, stormwater management systems and septic systems (“Common Areas”) will be owned by a condominium trust that will be formed at the same time as the master deed, a draft of which is attached hereto as Exhibit B-2. The purpose of the trust is to own, maintain and manage the Common Areas, which includes all of the real property (Open Space will consist of 81.6% of the real property). Each unit owner will receive a “unit deed” conveying to such owner all of the physical elements of the Unit accompanied by an indivisible, pro rata beneficial interest in the trust.

Pursuant to Title 5, 310 CMR 15.002 “Housing for the Elderly” is defined as “A facility restricted to use by adults over 55 years of age.” Accordingly, the Development has been permitted as “Housing for the Elderly” and the septic system will be designed accordingly.

Pursuant to Title 5, 310 CMR 15.203(2), the design flow for Housing for the Elderly requires 150 Gallons Per Day (GPD) per unit (with a maximum of 2 bedrooms per unit). Accordingly, the Development has a total wastewater flow for of 150 GPD or a total of 3,900 GPD for all 26 Units.

The requirement under Title 5, 310 CMR 15.203 ** applies to single family homes that are being limited to 2 bedroom and does not apply to Housing for the Elderly. Accordingly, the design of the septic system based on 150 GPD does not trigger the need for a deed restriction.

The ENF states that a single on-site sewage disposal system will serve the residential subdivision. This system is defined as a “shared” septic system and must comply with 310 CMR 15.290 through 15.292. The Proponent should verify that the design flow from the facility or facilities to be served by the shared system does not exceed the design flow that could have been constructed in compliance with 310 CMR 15.000 without the use of a shared system. Similarly, 310 CMR 15.214(2) states that “no system serving new construction in areas where the use of both on-site systems and drinking water supply wells are proposed to serve the facility shall be designed to receive or shall receive more than 440 gallons of design flow per day per acre from residential uses.” The Proponent should confirm that the 440 gpd/acre loading requirement is met. The Proponent must develop a “Grant of Title 5 Covenant and Easement” for this shared system. A financial assurance mechanism must be provided to the Board of Health for the shared system pursuant to 310 CMR 15.290.

Response:

Pursuant to Title 5, 310 CMR 15.002,

“Shared System” means “A system sited and designed in accordance with 310 CMR 15.100 through 15.293 which serves, or is proposed to serve, more than one facility and which has been approved in accordance with 310 CMR 15.290 through 15.293. *A system serving a condominium located on the same facility is not a shared system.*” [emphasis added]

“Facility” means “Any real property (including any abutting real property) and any buildings thereon, which is served, is proposed to be served, or could in the future be served, by a system or systems, where: (a) legal title is held or controlled by the same owner or owners; or (b) the local Approving Authority or the Department otherwise determines such real property is in single ownership or control pursuant to 310 CMR 15.011 (aggregation).”

Based on the foregoing and pursuant to Title 5, 310 CMR 15.002, the Development that will be served by the proposed septic system will be a Condominium where title to the real property is held in single ownership by the condominium trust and therefore is considered a single “Facility.” Accordingly, the septic system is not classified as a “shared system.” See the letter to the Nashoba Associated Boards of Health and Groton Board of Health, dated July 21, 2020, a copy of which is attached hereto as Exhibit C. The letter was submitted as part of the permitting process and explains in detail that the proposed septic system is not classified as a “shared” system, as such term is defined in Title 5, but rather is a single system that services the entire Development and all units located thereon, which is also considered a single lot under the Groton’s Board of Health Regulations. Accordingly, Shepley is allowed under both Title 5 and Groton’s Board of Health Regulations to install a single septic system to serve the Condominium. See above for a description of the condominium trust that will own and manage the system.

The septic system for the Development will be designed to receive and shall receive less than 90 GPD per acre (3,900 GPD/47.38). Therefore, the maximum loading requirement of Title 5, 310 CMR 15.214(2) (that allows up to 440 GPD/acre) has not been exceeded.

Any on-site sewage disposal system over 2,000 gpd must implement pressure distribution pursuant to 310 CMR 15.254(2). Any on-site sewage disposal system over 2,000 gpd must analyze the effects of groundwater mounding pursuant to 310 CMR 15.212(2). The ENF does not state that the homeowners will be organized under a homeowner’s association or trust for the management of the on-site sewage disposal system. A description of the form of ownership is necessary pursuant to 310 CMR 15.290. All components and appurtenances of the shared system, including individual septic tanks (if proposed), are subject to the operation and maintenance of the shared system and cannot be individually owned or operated.

Response:

In compliance with Title 5, 310 CMR 15.254(2), the septic system is being designed to implement pressure distribution. In addition, groundwater mounding calculations will be completed as required by Title 5, 310 CMR 15.212(2).

As noted, no individual unit owner will own or operate any part of the septic system. The real property and all common areas of the Condominium, which includes the septic system, will be owned and managed by the condominium trust.

Water Supply

MassDEP issued approval of the application for “Approval to Site a Source and Conduct a Pumping Test for a Source less than 70 Gallons per Minute - WS13” on March 12, 2021 to site the public water supply wells and to conduct a pumping test for the Project. The WS13 application described the project as a 26-unit, 55+ age-restricted housing requiring a water demand of 3,900 gallons per day (gpd) based on Title 5 design flows. As a condition of the WS13 approval, MassDEP required that the Zone I areas be excluded from the proposed Conservation Restriction (CR) and further recommended that the proposed CR not directly abut the Zone I areas to allow for expansion or shifting of the Zone I areas in the future. The Draft CR submitted with the ENF contains typographical errors and no attachments were included. To ensure compliance with MassDEP requirements, the Proponent should submit a copy of the draft CR to MassDEP prior to submitting it to EEA. Based on the comments above concerning the wastewater flow generation, the Proponent should submitted updated information to the Drinking Water Program as it is developed.

Response:

Pursuant to MassDEP’s requirement that the Zone 1 areas be excluded from a CR, Shepley’s water engineer, Don Provencher sent an e-mail to Tim O’Keefe (MassDEP-CERO), confirming that the Zone 1 areas related to the Development’s water supply wells will be removed from the CR. A copy of the email is attached hereto as Exhibit D. In addition, the requirement was brought to the attention of the Groton Planning Board and the approval condition that referenced the CR specifically noted that the Zone 1 area would be excluded from the CR. See Condition #23 of the Approvals, a copy of which is attached hereto as Exhibit A-2.

In compliance with the Approvals and Order of Condition issued by the Conservation Commission, the CR will exclude the Zone 1 areas. Notwithstanding the CR will include the ability to include Zone 1 areas in the future to the extent permitted by MassDEP. A copy of the CR is attached hereto as Exhibit E.

On page 13 of the report (Water Supply Section, ll. Impacts and Permits) the withdrawal from groundwater is listed as 12,600 gpd. MassDEP believes the Proponent entered this number incorrectly. The Proponent should confirm that this number is a typographical error. If it is not, the Proponent should explain the discrepancy to the Drinking Water Program during the permitting process.

Response:

The 12,600 GPD value is a typographical error. The correct value for the withdrawal from groundwater is 5,350 GPD. See Exhibit D, the email to Mr. O’Keefe which addressed the issue as follows: “The 12,600 GPD value was incorrectly reported in the ENF. Please disregard that number. The correct number of 5,350 GPD includes 1,450 GPD of irrigation demand from a proposed irrigation well, plus the potable demand of 3,900 GPD from the proposed three public water supply (PWS) wells.”

The ENF does not describe the project as a 55+ age restricted residential project. The Proponent should confirm that during the public water system permitting and with the Groton Board of Health during the Title 5 system permitting to ensure flows are correct and consistent.

Response:

The “Pump Test Proposal report” submitted with the application for “Approval to Site a Source and Conduct a Pumping Test for a Source less than 70 Gallons per Minute - WS13” described the Development as a 55+ age restricted condominium residential development.

The Septic System is being designed to support 26, 2-bedroom age-restricted residential condominium units that are classified as Housing for the Elderly (see, Title 5, 310 CMR 15.002). The design flow of 3,900 GPD complies with the design flow requirements of Title 5, 310 CMR 15.203(2). Based on the age-restriction, the wastewater design flow and potable water demand is 150 GPD per Unit, in lieu of the 110 GPD per bedroom for traditional nonrestricted residential housing.

Wetlands

A Notice of Intent (NOI) for the Project described as 13 duplexes – 26-unit subdivision was filed with the Groton Conservation Commission (the “Commission”) on December 8, 2020. The NOI was assigned the file number 169-1214. On February 24, 2021 the Commission issued an Order of Conditions (OOC) approving the Project. The OOC was appealed by a third party to MassDEP on or about March 10, 2021 and the Request for a Superseding Order of Conditions (SOC) is pending.

Issues raised in the appeal concern whether the Project meets the limited project provisions for the two 20-foot-wide roadway crossings that result in the alterations of approximately 1107 square feet of Bordering Vegetated Wetlands (BVW) located within the ACEC, whether the proposed replication area meets the BVW performance standards, and whether the work in the Buffer Zone will cause additional alterations to the adjacent BVW.

MassDEP is in the process of reviewing the appeal issues and evaluating the Project for compliance with Wetlands Protection Act regulations and Massachusetts Stormwater Standards and may have additional questions for the Proponent and other parties as it conducts its review. A site meeting will be scheduled as part of that review prior to MassDEP making its permit determination.

Pursuant to 310 CMR 10.55(4)(e), work within a BVW that is also within an ACEC may only be permitted if it meets the limited project provisions under 310 CMR 10.53(3). If it is determined that the Project does not meet those provisions, the Proponent will need to seek a variance to pursue the Project as proposed and further MEPA review could be warranted as a project change.

The NOI and the ENF state that the project is a subdivision. Unless a deed restriction is recorded to limit the amount of filled BVW to less than 5000 square feet, a 401 Water Quality Certification is required. Proponent should provide clarification to MassDEP if it intends to record such a deed restriction.

Response:

During the public hearing on Shepley's Notice of Intent for a Limited Project, Shepley prepared and submitted a deed restriction that limits the amount of filled BVW to less than 5,000 square feet. A copy of the draft restriction is attached hereto as Exhibit F.

Air Quality

Construction activity must conform to current Massachusetts Air Pollution Control regulations governing nuisance conditions at 310 CMR 7.01, 7.09 and 7.10 and not cause or contribute to a condition of air pollution due to dust, odor or noise. As such, the Proponent should propose measures to prevent and minimize dust, noise, and odor nuisance conditions, which may occur during construction. Because the Project is located close to residential development to the north, south and east, excessive dust generation may be a concern. The Proponent should consider commercially available dust suppression methods including use of a water truck and/or spreading calcium chloride during the construction period.

MassDEP requests that all non-road diesel equipment rated 50 horsepower or greater meet EPA's Tier 4 emission limits, which are the most stringent emission standards currently available for off-road engines. If a piece of equipment is not available in the Tier 4 configuration, then the Proponent should use construction equipment that has been retrofitted with appropriate emissions reduction equipment. Emission reduction equipment include EPA-verified, CARB-verified, or MassDEP-approved diesel oxidation catalysts (DOCs) or Diesel Particulate Filters (DPFs). The Proponent should maintain a list of the engines, their emission tiers, and, if applicable, the best available control technology installed on each piece of equipment on file for Departmental review.

Response:

A Stormwater Pollution Prevention Plan (SWPPP) will be prepared as part of the National Pollutant Discharge Elimination Systems (NPDES) permit that will be applied for prior to construction. During construction, Shepley will agree to have available dust suppression methods, including a water truck and calcium chloride to control dust.

2. Comments from Anna Eliot, resident and direct abutter to the Development:

No response is required, the comments speak for themselves.

Attached please find a copy of the letter I sent in support of the proposed development at the Village of Shepley Hill and support of the decisions of the Groton Conservation Commission and Planning Board. Thank you for allowing my few words at your "site walk" last Wednesday. This proposal better serves my neighborhood as it brings the development off both Longley Road and Sand Hill Road and is less intrusive. I understand that the Groton Conservation Trust has appealed the decision by the Groton Conservation Commission but if they truly appreciated us as neighbors, then they would consider the impact on us too.

[Set forth below is the text of the referenced letter]

"I thank you for your consideration and if there are any questions, I would be happy to answer."

I am asking that the boards look at the merits of the development at the Village at Shepley Hill. I welcome housing for my contemporaries. This developer is new to Groton. His team has shown a desire to work with us, both as neighbors and town, I think we owe it to ourselves to see the project in a favorable light. My statements are based upon my years of experience serving Groton and the impact upon my back yard.

As an abutter, how this plan fits into the neighborhood is paramount. I look towards what better serves the neighborhood. While the developer must address the engineering, landscaping and peer review, I can ask that you consider the effect on our neighborhood. There are options available to the land owner. Of those options, this plan proposed at "the Village" better serves us. I appreciate the amount of buffer between the constructed homes and the abutters. I appreciate the maintenance plan that is will be required to minimize intrusion upon the neighborhood. I appreciate the adjustments made to accommodate the abutters concerns. There is much need for over 55 housing and this plan complies with the Housing Plan promulgated on behalf of the town. We also need the public access for trails connecting other conserved properties. I am pleased and impressed with the quality of the team who have never deviated from courteous responses.

Looking at the alternatives frightens me. Land owners are confronted with higher taxes and options too. If this developer does not build, some other will.

As a direct abutter, I am asking that this project be approved and the relief being requested by the applicant be granted. The use of the property as a 28 unit over 55 development is the best possible use for the neighborhood and town. It brings revenue without burdening our infrastructure. It is the least impact development option and on that, I embrace and am hopeful that you, as members of the Planning Board and Conservation Commission, will do as well.

Thank you for your consideration and service to the town."

3. Comments from David Black, resident shown in BLACK Shepley's responses shown in GREEN:

I write to ask that your office direct the proponent of the above referenced project to prepare an Environmental Impact Report given the probability of significant impacts to wildlife associated with the extensive development of the site, including three wetland crossings, impacts that will cause disruptions to wildlife populations through significant habitat fragmentation and buffer zone effects. The site is located within 1000 meters of two mapped priority habitat areas (Appendix K of the ENF) and lies completely within an Area of Critical Environmental Concern (ACEC; Appendix I of the ENF) indicating that impacts associated with the project must be more fully mitigated through clustering of the units or other strategies that will reduce the area affected by the development.

Given the site's position on the landscape, it is likely that state-listed species move over the property and use the resources on the site during critical migratory periods. The existence of a potential vernal pool within 200 meters of the site underscores the concern. It is also important to note that because this is private property, no assessment of the wildlife habitat values on the site has been possible thus preventing any substantive analysis of impacts.

Response:

The Development is not likely to significantly impact wildlife nor will it cause significant habitat fragmentation. The subject property is 47.38 acres in size. The Development was approved with 38.6 acres (81.6%) of open space of which 30.8 acres are uplands and 7.8 acres are wetland resource areas. The entire Development will result in the disturbance of less than 12 acres of land, of which less than 9 acres or 18%

will be permanently disturbed and will support the roadway and individual Units and approximately 3 acres will be temporarily disturbed in order to allow for the stormwater management systems and septic system.

The proposed Development has undergone extensive review by 3 independent local authorities (Groton Planning Board, Groton Conservation Commission, Earth Removal Stormwater Advisory Committee), all Town Departments (Water, DPW, Board of Health, Town Administrator, Planning, Inspectional Services), and third-party independent professional peer reviews. The potential impacts from the Development to wildlife and plants were noted by abutters and members of the various boards during the lengthy public hearing process. As part of the iterative public hearing process, Shepley responded by making substantive changes to its design. Thereafter, all of the members of the foregoing boards deliberated and, as evidenced by the Approvals, Order of Conditions and Stormwater Permit, determined that Shepley had altered its design in a manner that would address their reasonable concerns and mitigate any such impacts. Accordingly, further review of the Development is not warranted.

The project does not propose 3 wetland crossings. There are 2 intermittent stream crossings that have been designed in accordance with the Massachusetts Stream Crossing Standards, and only one of those crossings proposes Bordering Vegetated Wetland (BVW) fill. The original Notice of Intent application proposed a total of 1,692 s.f. of BVW fill in 3 different areas. Working with the Groton Conservation Commission and Groton Planning Board, Shepley was able to eliminate 2 of the areas of proposed BVW fill and working with the Groton Planning Board and the Groton Conservation Commission, Shepley was able to minimize impacts to the BVW to the maximum extent by seeking various waivers from the Planning Board. The final project proposes 1,107 s.f. of BVW fill. On February 23, 2021, after numerous meetings, the Groton Conservation Commission voted unanimously to approve the BVW fill at the Longley intermittent stream crossing, which complied with the Massachusetts Stream Crossing Standards and will maintain the existing wildlife and plant corridors.

The Massachusetts Stream Crossing Standards require a minimum of 1.2 times bankfull width and an openness ratio that is greater than 0.82 feet. The 2 proposed bridges at Sand Hill and Longley far exceed what is recommended in the Massachusetts Stream Crossing Standards. The bridge at the Sand Hill intermittent stream crossing is approximately 22 feet from the top of the arch to the bottom of the channel and spans the channel 11.1 times the bankfull width and has an openness ratio of 11.5 feet. The bridge at the Longley Road intermittent stream crossing is approximately 7.5 feet from the top of the arch to the bottom of the channel and spans the channel 3.6 times the bankfull width and has an openness ratio of 2.7 feet.

During the public hearing the Commission was asked to request a study. After written and oral testimony presented by proponents for the study and by Shepley, the Commission, in accordance with their authority under the Groton Wetlands Protection Bylaw and associated regulations, made the decision that the wildlife corridor was being maintained and that a wildlife habitat evaluation was not required. The Commission's decision is supported by the following:

- Pursuant to the current 14th Edition Natural Heritage Atlas, August 1, 2017, the subject property is not mapped as Priority Habitat of Rare Species or Estimated Habitats of Rare Wildlife, and is therefore not subject to the Massachusetts Endangered Species Act (MESA) or 310 CMR 10.59 of the Massachusetts Wetlands Protection Act Regulations.
- The Development as proposed does not trip any thresholds that would require a wildlife habitat evaluation at the state or federal level.
- Based on the amount of clearance beneath both bridges and their associated spans, the wildlife corridors are preserved at both intermittent stream crossings. Accordingly, wildlife will still be able to migrate through the subject property and onto abutting properties.
- During the Abbreviated Notice of Resource Area Delineation (ANRAD) process, all of the members of the Commission attended a site walk with wetland scientists from Williams & Sparages LLC, Gregory J. Hochmuth, PWS, CWS, SE, RS & Thorsen Akerley, RS, SE. During the site walk and the various public meetings with the Commission, Shepley made it clear that none of the following “important habitat features” listed on Appendix A: Simplified Wildlife Habitat Evaluation, from the Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands were observed:
 - Habitat for state-listed animal species
 - Sphagnum hummocks and pools suitable to serve as nesting habitat for four-toed salamanders
 - Trees with large cavities (≥ 18 ” tree diameter at cavity entrance)
 - Existing beaver, mink or otter dens
 - Areas within 100 feet of existing beaver, mink or otter dens
 - Existing nest trees for birds that traditionally reuse nests (bald eagle, osprey, great blue heron)
 - Land containing freshwater mussel beds
 - Wetlands and waterbodies known to contain open water in winter with the capacity to serve as waterfowl winter habitat
 - Turtle nesting areas
 - Vertical sandy banks (bank swallows, rough-winged swallows or kingfishers)
 - Stream bed riffle zones
 - Springs
 - Gravel bottoms (trout and salmon nesting substrate)
 - Plunge pools (deep holes) in rivers or streams
 - Medium to large, flat rock substrates in streams

Alternatives exist that would allow for extensive use of the property while providing greater protection of the critical habitat resources on the site. However, no such alternatives were submitted for consideration during the permitting process. While the proponent has asserted that over 80% of the property has been left as open space, these calculations include wetlands, buffer zones that cannot be developed under the Town Bylaw, and large areas that will be landscaped and permanently altered. To the best of my knowledge, no open space plan was submitted during the various local approval processes and while it is difficult to verify the calculations, it appears that virtually all of the developable portions of the property will be permanently altered under the current plan. The proponent should prepare site plans that clarify which areas on site are not developable per the Town Bylaw and quantify the amount of open space to be preserved within the limits of developable area.

Response:

There are no reasonable and practicable alternatives to the Development. Shepley requested and secured waivers from the Planning Board from various design requirements that allowed the Development to be designed with a roadway of minimum length and practical width.

The Development has been designed to concentrate the development areas into 8.7 acres or 18.4% of the total land area. The plans that were approved by the Conservation Commission and Planning Board include an “Open Space & Drainage Key Plan” sheet 12 of 27 pursuant to which Meridian Associates certifies the open space calculations. Additionally, the “Erosion & Sediment Control Plan” sheet 22 of 27 identifies (i) the limit of permanent disturbance (boundaries of the Units and associated grading and yards and roadway); (ii) the large area of upland (outside of the 100 foot buffer zone) that spans the western boundary of the subject property for more than 1,100 feet with variable width ranging from approximately 60 feet to 150 feet; and the temporary disturbance areas (septic system, well locations, and stormwater management systems).

This proponent should prepare an alternatives analysis that considers a reduced build within only the developable area on site. The focus of the plan must be on better protecting the mosaic of uplands and wetlands so crucial to the preservation of the wildlife populations that depend on this area both for habitat and for the landscape connectivity that this site provides. Much of the site could be reached with a single wetland crossing in a manner that would be fully consistent with the Town’s 1000-foot limit on cul-de-sac length. A second crossing would add to the development potential of the property, but the creation of a loop road with a cul-de-sac branching from it is not appropriate for this site given the constraints created by topography and the network of wetlands that transect the land. The proponent’s contention that designation of a wetlands crossing as a Limited Project allows for unlimited crossings is inconsistent with the goals of this portion of the Massachusetts Wetlands Protection Act, especially given the higher standards established for resource protection in an ACEC.

The proponent asserted that the Town of Groton Planning Board would not allow development of the site without the connecting road and two proposed access points. No vote was ever taken by the Planning Board with respect to this, to the best of my knowledge the individual members of the Board were never polled, and the discussion occurred prior to an understanding of the environmental impacts associated with the extensive roadway network. The record will show that members of the Planning Board repeatedly expressed their

reservations about the extent of the site modifications proposed. A plan based on a single cul-de-sac is consistent with all town regulations and such a plan should have been presented for consideration during the project development. It is also important to note that clustering of units has been allowed in the town in the past; however, no such alternative was ever presented to the Planning Board nor the Conservation Commission. The final vote by the Planning Board will occur on April 8th, and comments at past meetings suggest that there is no unanimity among the members of that board with respect to support for the project in its current form.

Response:

Shepley presented alternative development options to the Planning Board. Each option provided the ability to develop the various upland areas of the subject property and were presented and discussed during a public meeting of the Planning Board. A copy of a letter, dated January 22, 2021, to the Commission describing the Development as a Limited Project is attached hereto as Exhibit G.

Two other “by right” alternatives were presented in response to questions during the current ENF review. Both of the options as shown on the associated plans and identified in the Tabular Summary resulted in more disturbance and greater impacts to the wetlands. A copy of the Tabular Summary is attached hereto as Exhibit H.

Regarding the Planning Board process and the ability of the Members to come to a unified vote, after extensive deliberation, on April 8, 2021, the Planning Board voted to approve Shepley’s applications for Definitive Subdivision Approval and Major Residential Special Permit. The Board voted 5 to 6 to approve the Definitive Subdivision Plan and unanimously in favor of the Major Residential Special Permit. See Exhibits A-1 and A-2.

One of the primary issues associated with the project is the level of wetland impacts. While the proponent claims that there is only one wetland crossing, this requires the acceptance of the idea that a bridge over a wetland, with filling almost to the limit of the resource, does not constitute a crossing, and that a wall with a maximum height of almost 10 meters and a length of almost 100 meters bisecting the wetland, located within 1 meter of the wetland resource area would not have a significant effect on that system. The proponent should submit revised materials that fully and correctly quantify the impacts and provide alternative plans that minimize the damage to the environment.

Response:

During the permitting process and in response to certain questions raised during the MEPA Consultation Session on April 7, 2021, Shepley submitted various materials that correctly quantified wetland impacts and confirmed that the Development as designed is the best alternative that complies with the Groton Subdivision Rules and Regulations and minimizes adverse impacts to the resource area to the maximum extent practicable.

The Development as currently proposed contains only 1 intermittent stream crossing that requires the filling of 1,107 square feet of BVW. As noted, the design for the Development was scrutinized by the Commission over a series of months. The iterative process resulted in the development of an alternative plan that eliminated 2

BVW fills, shortened the roadway, reduced the amount of impervious area, eliminated 2 dwelling units, reduced the area of wetland and buffer zone impacts and resulted in full compliance with the Massachusetts Stream Crossing Standards. During its deliberations, the Commission concluded that Shepley had revised its design to minimize the wetland filling as well as all other impacts to the wetlands and buffer zones to the maximum extent practicable. The proposed retaining wall is outside of the BVW and does not bisect a wetland.

Other specific comments on the ENF and subsequent meeting.

- A more detailed analysis of the historical resources known to occur in the area is important given the proximity of the area to early settlements in the Town of Groton which are reflected in the site's designation as a mapped inventory area.

Response:

As part of the permitting process, the plans were distributed to all Town departments and commissions for comment. The Groton Historical Commission reviewed the plans and responded that there were “no significant challenges for the project to proceed.” Accordingly, no further analysis of historical resources is required.

- The proponent has repeatedly asserted that the impacts to wildlife have largely been mitigated, with an emphasis on the reduced filling of the wetland resource areas and the inclusion of ecologically friendly lighting. It is important to note that this lighting was designed to mitigate impacts to sea turtle movements associated with beach nesting and is unlikely to have any effect on the behavior of local wildlife. It certainly will not mitigate the significant effects of the walls and wetland crossings that will disrupt patterns of wildlife movements and behaviors.

Response:

During the lengthy permitting process with the Planning Board and Conservation Commission Shepley addressed and mitigated to the maximum extent practicable impacts to wildlife. Shepley eliminated all onsite lighting with the exception of a single light pole located only at each of the 3 intersections. The bulbs proposed are “turtle friendly” LED that is 590 nm and is a true spec LED, not a coated LED to get the 590 nm. These bulbs help to reduce ambient light that can be confusing to all wildlife and were specifically designed for ecologically sensitive areas, migratory corridors and Dark Sky friendly communities. In addition to the ecologically sensitive lighting, the Commission created a condition that requires baffles to be installed below the bulbs to create a condition where no light will be seen from the wetlands or vegetated buffer zones to the wetlands. Special Condition 16 of the Order of Conditions states that no light directly from a light emitter (LED, filament, etc.) shall be allowed to shine on the ground within 100 feet of a wetland resource area.

In addition, as noted above, the clearance beneath both bridges and their associated spans preserves wildlife corridors at both intermittent stream crossings.

I was part of the group that initially sought to have the area designated as an ACEC, a designation that was given largely because of the area's importance to the protection of the biodiversity and the geologic features which characterize the region. While acknowledging the proponent's right to develop the lands, they are also under an obligation to do so in recognition of the property's significant ecological values. At a minimum, the proponent should be required to submit an alternatives analysis that considers feasible strategies to reduce and mitigate the impacts of this residential development.

Response:

The Commission properly and with diligence exercised its authority to approve the Development including the filling of the BVW. The Commission considered the magnitude of the alteration (which was reduced from 1,692 to 1,107 square feet), the absence of reasonable alternatives to the final design (as noted above several changes were made to the initial design) and the proposed replication areas. The Commission received testimony from the Planning Board during the public hearing that the proposed roadway was designed with the minimum legal and practical width that would not restrict the flow of water. In addition, as noted above, Shepley presented various alternatives that were evaluated and disallowed by the Planning Board. Based on the public hearing record, the Commission concluded that design of the Development minimizes adverse impacts to resource areas to the maximum extent practicable.

4. Comments from Ed McNierney, Trustee Groton Conservation Trust, an abutter to the Development shown in BLACK Shepley's responses shown in GREEN:

The GCT believes that the Conservation Commission's review did not require the proponent to provide sufficient information on wetland impacts nor investigate in sufficient detail alternative designs to avoid or minimize impacts on wetlands. The MEPA review process should support DEP's consideration of the SOC by requiring the preparation of an Environmental Impact Report (EIR).

NHESP lists 23 species of plants and animals in Groton as endangered, threatened, or of special concern. This project site has never been studied for the presence of state-listed species; several of these species migrate annually between wetland and adjacent upland areas during breeding seasons. The proponent should perform a complete survey to document the plant and animal wildlife on the site and to understand the impact the project would have on those populations.

Response:

The Development does not trigger any state or federal thresholds that would require a wildlife habitat evaluation. The subject property is not mapped as Priority Habitat of Rare Species or Estimated Habitats of Rare Wildlife. No "important habitat features" listed on Appendix A of the Massachusetts Wildlife Habitat Protection Guidance were observed. Even though the Commission has the authority under the local bylaw to require a wildlife evaluation based on the foregoing, the Commission did not require a study.

An important aspect of the wildlife habitat interest is the management of lands surrounding the currently mapped NHESP Priority and Estimated Habitat features. The ACEC designation

report describes the importance of this BioMap Supporting Natural Landscape, “defined by NHESP as large, minimally fragmented areas that safeguard the Core Habitat while also including habitat for the common species of Massachusetts”. Virtually the entire project parcel was mapped as a Supporting Natural Landscape.

Response:

As mentioned above, according to the current 14th Edition Natural Heritage Atlas, August 1, 2017, the property is not mapped as Priority Habitat of Rare Species or Estimated Habitats of Rare Wildlife, and is therefore not subject to the Massachusetts Endangered Species Act (MESA) or 310 CMR 10.59 of the Massachusetts Wetlands Protection Act Regulations.

The connections between currently mapped areas are also increasingly important as migration corridors for plant and animal species responding to the effects of climate change. The project area is a component of one of those corridors and the effects of its development should be better understood.

Response:

Plant and animal species will still be able to migrate through the subject property between the two closest mapped areas (PH 2024 & PH 2029), which are almost 1 mile apart. Additionally, 81% of the property will be open space following construction and probably the most important wildlife corridor on the property is being preserved by spanning the intermittent stream with bridges that were designed in accordance with the Massachusetts Stream Crossing Standards. A crossing designed in accordance with these standards is presumed to protect the physical stability of the Bank, the water carrying capacity of the channel within the Bank, ground water and surface water quality, the capacity of the Bank to provide breeding habitat, escape, cover and food for fisheries; and the capacity of the land to provide important wildlife habitat functions.

The bridges at both the Sand Hill and Longley intersections far exceed the standards recommended in the Massachusetts Stream Crossing Standards. The bridge at the Sand Hill intermittent stream crossing is approximately 22 feet from the top of the arch to the bottom of the channel and spans the channel 11.1 times the bankfull width and has an openness ratio of 11.5 feet. The bridge at the Longley Road intermittent stream crossing is approximately 7.5 feet from the top of the arch to the bottom of the channel and spans the channel 3.6 times the bankfull width and has an openness ratio of 2.7 feet. The Commission understands the need to maintain a wildlife corridor and made a reasoned and thoughtful determination that the design of the 2 intermittent stream crossings provided a sufficient migration corridor for plants and animals.

Limited Project Crossings

A single, large complex of Bordering Vegetated Wetlands (BVWs) winds through the project, ending in an intermittent stream leaving the parcel at its northwest corner. The two upland areas of the parcel can only be reached by crossing this wetland in two places, and the proponent has requested the designation of those two crossings as Limited Projects under the

provisions of 310 CMR 10.00. Disturbance of BVWs is prohibited in an ACEC except for Limited Project crossings.

The steep terrain requires elevated crossings to provide acceptable roadway grades. The crossings proposed are very substantial structures up to 30 feet high designed to just barely avoid the BVW areas. But they will have impacts on the wetlands complex beyond those small areas. The effect of reduced sunlight and the resulting reduction in temperature may be considerable and should be documented more carefully.

Response:

The Development is a “Limited Project” pursuant to 310 CMR 10.53(3), the roadway requires 2 crossings and certain buffer zone impacts in order to access onsite uplands. During the public hearings before the Planning Board and the Conservation Commission, Shepley submitted written testimony in response to ongoing assertions regarding the classification of the proposed roadway as a limited project. A copy of a Shepley’s response is attached hereto as Exhibit I. The intermittent stream crossing that requires 1,107 s.f. of wetland filling has been designed to provide for a 3,321 s.f. replication area. The buffer zone disturbances have been designed using retaining walls and bridges to minimize impacts.

As mentioned above, the bridge at the Longley Road intermittent stream crossing is approximately 7.5 feet from the bottom of the channel to the top of the arch and the bridge at the Sand Hill Road crossing is approximately 22 feet from the bottom of the channel to the top of the arch. Based on the evidence and testimony presented during the public hearing, the Commission concluded that plenty of light will enter the BVW below the proposed bridges to allow vegetation to grow thereby minimizing any negative impacts to the wetlands. Water flowing through the intermittent stream in these locations moves far too quickly for any shade from the bridges to have any impact on the temperature of the water flowing through these channels. It is also important to note that the BVW’s and intermittent streams on the subject property are located below a dense canopy of mature trees and that for most of the growing season are already shaded to some extent.

Interior Crossing

The project also includes an interior roadway running between two arms of the large BVW. Although the roadway squeezes through only a foot or two away from these BVWs, it is effectively a wetland crossing as it severs any connection between them. The roadway would run across an enormous wall over 400 feet long and up to 25 feet high. In addition to the illumination and temperature concerns it shares with the two Limited Project crossings, this wall will present a formidable barrier to any plant or animal movement over that small, level gap. As this crossing is not required to provide access to all upland areas on the site, we believe it should not be permitted as a Limited Project crossing. The importance of its impact must be understood for DEP to properly consider our request for a SOC.

Response:

Although the interior roadway is close to the BVW, it is not a “crossing” as stated by Mr. McNierney. During the permitting process with the Planning Board and Conservation Commission, Shepley was able to redesign the roadway, which involved reducing the pavement width, installing a retaining wall and cantilevering the sidewalk, to eliminate any filling and to minimize impacts in this location.

The interior roadway does not require the filling of any wetland nor does it “cross” any wetland, as noted it runs between two areas classified as BVW. Also, in response to concerns regarding illumination, please note that there are no lights along this section of roadway. All lighting with the exception of the roadway intersections have been eliminated and modified to ensure no impact to the wetlands or the associated buffer zones. With regard to temperature concerns see the Response to “Limited Project” on Page 15 hereof.

Topographic Modification

The site contains one large, long drumlin and a smaller upland area. The steep slopes along the drumlin require very substantial fill to create suitable building sites, and the construction impacts to those slopes require large retention basins for stormwater management. This combination creates slopes up to 33% and up to 30 feet high. Existing plant populations at these sites cannot be maintained, and animal movement will be significantly altered.

Response:

The roadways have been designed to eliminate large slopes along the travelled paths to provide safe travel throughout the Development. Shepley sought and received waivers from the Planning Board that allowed the elimination of all cuts in excess of 7' above existing grade. Due to the existing grades of the abutting public ways and the steep slopes along the intermittent stream crossings and interior roadway and the requirement to design a new roadway that complies with the Subdivision Regulations and is safe and adequate, the Planning Board granted Shepley a limited waiver for filling 3 segments of the roadway, which only resulted in 1,107 sq. ft. of wetland filling.

Existing plant populations and animal movement will not be significantly altered. The designs of the intermittent stream crossings comply with and or exceed the stream crossing standards and will provide for the maintenance of existing plant populations and wildlife corridors.

Planning Board Review

The Town of Groton Planning Board review of the project was extensive but, in large part, did not address its environmental impacts. Modifications to street lighting, narrowing of roads, and a reduction of the modified area in the BVWs were the only changes made to reduce impacts. A change to address the Board’s concern about the very high cuts required removed one duplex unit and shortened the length of the cul-de-sac.

Although the proponent reported that several Planning Board members were strongly opposed to a plan with two cul-de-sacs and no through road, the minutes of those meetings do not reflect

that opposition. Board members objected to an alternative making the Sand Hill Road entrance for emergency vehicles only, but there is no mention at all of an objection to two cul-de-sacs and no such proposal was ever presented to the Board. At their September 24, 2020 meeting, rather, Planning Board member Tim Svarczkopf suggested the units off Longley Road be served by a shared driveway rather than a through road. When the proponent replied that the town's subdivision regulations require two entrances, Planning Board chairman Russell Burke replied that the Board would be open to considering requests for waivers.

At the Board's October 8, 2020 meeting Attorney Mann reported that the proponent had provided a conceptual "flexible development" plan. That plan had only one 1,200-foot-long cul-de-sac road and one wetland crossing to support 11 triplex units. There was no discussion or further consideration of that alternative plan.

Response:

Shepley presented alternatives to the Planning Board that would require a waiver to allow more than 10 lots to be located on a dead-end street that also is longer than 1,000 feet. The majority of the Planning Board openly expressed their unwillingness to consider such a waiver during the September 24th and October 8th public meeting. However, the chair as well as other members of the Board expressed a willingness to consider waivers for the right of way width, pavement width and sight distance for roadways and construction methods for sidewalks.

In addition, as part of the Major Residential Special Permit, Shepley presented a flexible development plan as an alternative to the Development. Shepley presented the flexible plan to the Planning Board on March 11, 2021. Pursuant to the Approvals, see Exhibit A-2, the Board determined that the flexible plan was an inferior plan and would not best serve the goals of the Master plan which are to limit density, generate less traffic, provide for well-managed and maintained open space and have less impact on the natural environment.

Modifications to Reduce Wetland Impacts

The original proposal required three wetland crossings filling a total of 1,692 square feet of BVWs. By narrowing one roadway and widening the span of a culvert, filling of wetlands was reduced. The third crossing was reduced in area by about one third.

These reductions, however, will make virtually no difference to the affected wetlands. Moving a 25-foot-high barrier a few feet still leaves a 25-foot-high barrier. The Town of Groton's Wetlands Bylaw prohibits, with good reason, any structures at all within 50 feet of wetlands, recognizing the significance of these areas. This provision of the bylaw is waived for Limited Project crossings, but the interior road crossing is not eligible for such a designation. It neither impacts any wetland areas nor is required to provide access to any upland area that isn't already served by the other two crossings

Response:

The Groton Wetlands Protection Bylaw does not prohibit all structures within the 50' buffer zone. Contrary to the above assertion, Section 215-7.A.(2)(h) of the Groton Wetlands Protection Bylaw specifically authorizes the Commission to allow alteration of an "Adjacent Upland Resource Area" (which includes the 50' no-disturbance zone) when the request is part of a "limited project." During the public hearing, the Commissioners engaged in a lengthy discussion regarding their authority and concluded that the activity within the 50' buffer zone was part of the "limited project" and that the proposed buffer zone activities (including but not limited to the retaining walls) reduced impacts to the adjacent wetlands. Thereafter, the Commission voted unanimously to approve the Development. See Exhibit I.

Alternatives Analysis

No serious alternatives were ever investigated and presented. The proponent, at your request, prepared a few plans last week but these were never reviewed by the Planning Board, and, to our knowledge, by DEP.

In meetings with the Conservation Commission, the proponent repeatedly asserted that the interior crossing was "required by the Planning Board". The only reason the Board required it is because the proponent wants to build more units than would be permitted without it. A waiver for the length of a cul-de-sac off Sand Hill Road was never requested and should have been. Much would have been learned if the Conservation Commission had properly required the proponent to develop alternatives. DEP's *Wetlands Policy 88-2: Access Roadways* states: Therefore, the issuing authority may require the applicant to request the Planning Board to formally rule on revisions of the project which would protect wetlands, even if approval of the revisions would require the Planning Board to apply variance provisions that allow the Board to waive or vary its standard requirements. The issuing authority should only determine that no reasonable alternative means of access are available after the applicant has made a good faith effort to identify alternate means of access and has actually presented any reasonable alternatives to the Planning Board and received that Board's ruling.

Response:

At the February 9, 2021 public hearing with the Commission, Takashi Tada, Town Planner, appeared on behalf of the Planning Board and testified that due to safety concerns the Planning Board was unwilling to grant a waiver from its regulation requiring a through street for any development with more than ten lots and or longer than 1,000'. He further testified that the roadway as proposed was the minimum width and pavement required by the Board.

The proponent never requested or received a ruling from the Planning Board on alternative designs such as the Conservation Commission should have required. That investigation could have provided helpful scientific and environmental information that is now unavailable. The proponent should complete that work through the MEPA process to provide adequate information to DEP for its consideration of a SOC.

Response:

The Petitioner presented alternatives to the Planning Board. The alternatives were discussed and rejected.

The Groton Conservation Trust does not take its request for a Superseding Order of Conditions lightly. It stems from our serious concern for the wetland impacts of the approved plan and the lack of investigation into alternatives. The environmental effects of the large barrier walls and crossings and the opportunities to minimize them can now only be understood through the preparation of an Environmental Impact Report.

Response:

As evidenced by the numerous public meetings, volumes of submittal materials by proponents and opponents to the Development, site walks, department reviews, in depth plan review, thorough third-party peer reviews of the proposed plans, traffic impacts, stormwater management systems, extensive soil testing, inhouse habitat evaluation by Shepley's consultant, lighting impacts, and subdivision control regulations and design requirements, the members of the Groton Conservation Commission, Earth Removal Stormwater Advisory Committee and Groton Planning Board take their responsibility to oversee the permitting and regulation of land development in the Town very seriously. At all times during the permitting process, the members of the Commission, Committee and Planning Board demonstrated their concern for impacts not only to the wetlands but also to the community in general and at all times took seriously the concerns of all abutters and residents of the Town. Over a period many months Shepley worked respectfully and diligently to modify the design of the Development to (i) minimize to the maximum extent practicable intrusions to residential abutters, impacts on the natural environment, impacts on traffic; (ii) minimize wetland and buffer zone impacts; (iii) mitigate for wetland disturbances; and (iv) to comply with the Groton Subdivision Rules and Regulations, Wetlands Protection Act, the Groton Wetlands Protection Bylaw, Title 5, and the Massachusetts Water Quality Regulations and Stormwater Standards. Furthermore, contrary to GCT's position, Shepley's proposed retaining walls and bridges, which span the 2 intermittent streams, have reduced the amount of wetland fill and minimized disturbance and impacts to the wetland and buffer zones.

After many hearings, numerous plan changes, and multiple reviews by the members of the Board, Commission and Committee, engineering professionals and wetland scientists, the Conservation Commission (unanimously), Planning Board (Subdivision 5 out of 6 in favor and Special Permit unanimously) and the Earth Removal Stormwater Advisory Committee (unanimously) voted to approve the Development.

It is clear from the records of the Board, Commission and Committee that the above-referenced effects were discussed during the public hearing process and were addressed as deemed appropriate and reasonable by the Commissioners duly appointed by the Town to oversee the administration of the local and state wetlands and stormwater regulations and the Board Members elected to oversee the use, subdivision and development of land in Groton.

5. **Comments from Marie Esten of 96 Nod Road, shown in BLACK Shepley's responses shown in GREEN:**

1. Endangered species – The submitted document indicates that no endangered or other protected species are present at the site. Multiple species of bats are protected in MA and it is extremely likely that bats are present in the project area. Additionally, Blandings turtles have been observed on Nod Road, only a few miles from the site. The Groton Turtle group tracks these populations and should be consulted to ensure that there are no species of concern in the project area. As one of the proposed roads in the project goes right through a wetland area, is there some way to reduce mortality of reptiles and amphibians crossing this area? Could the contractor use a box culvert or other under the road structure to allow passage of animals from one side to the other?

Response:

Bridges are proposed at the 2 intermittent stream crossings that will allow passage of animals from one side to the other.

2. OWTS – The project plans show two potential areas for placement of the shared OWTS. Have these areas been tested to determine suitability? As the project area is basically on the side of a hill and there is ledge in the vicinity, it would be important to ensure that an appropriate area is available before construction and site work starts.

Response:

(Onsite wastewater treatment system) Yes, both the primary and reserve areas have been tested and the soil testing was witnessed by the Board of Health agent, Ira Grossman. There was no ledge encountered in the areas and the soils were loamy sands and medium sands. The primary and reserve areas are not proposed on the side of a hill.

3. Per item:"

Response: No response required.

4. compatibility with adjacent land uses: All of the adjacent uses are residential, therefore the development is consistent with the neighborhood.” – It must be noted that although there are residential dwellings adjacent to the project, the existing conditions are better described as a country road with sparse housing. This area currently has very low density land use and is not a traditional neighborhood. Arguments can be made that the proposed development is not consistent with the neighborhood. 4. Cul-de-sac – Have other configurations for a turn-around been considered to reduce the amount of impervious surface

Response:

The Planning Board during its deliberation on the Major Residential Special Permit had a lengthy discussion regarding the approval of the age-restricted condominium. The Board reasoned that the Development as proposed was consistent with the goals set forth in the Master Plan for the Town - to limit density, reduce traffic impacts and reduce water consumption and waste water.

If you require any additional information, please contact either the undersigned at ghochmuth@wsengineers.com or Jill Elmstrom Mann at 978-762-6238 or email her at jill@mannpc.com.

Sincerely,
WILLIAMS & SPARAGES LLC



Greg J. Hochmuth, RS, PWS, CWS
Project Manager

Cc: Larry Smith
Julia Dickinson
Richard Nylen
Jill Mann

View Comment

Comment Details

EEA #/MEPA ID* 16348	First Name Marie	Address Line 1 96 Nod Road	Organization --
Comments Submit Date 4-7-2021	Last Name Esten	Address Line 2 --	Affiliation Description Individual
Review Due By 4-15-2021	Phone +14014332684	State MASSACHUSETTS	Status Accepted
Reviewer Purvi Patel (617) 874-0668	Email marieesten@gmail.com	Zip Code 01450	

Comments

Topic: Comments on Shepley Hill

1. Endangered species – The submitted document indicates that no endangered or other protected species are present at the site. Multiple species of bats are protected in MA and it is extremely likely that bats are present in the project area. Additionally, Blandings turtles have been observed on Nod Road, only a few miles from the site. The Groton Turtle group tracks these populations and should be consulted to ensure that there are no species of concern in the project area. As one of the proposed roads in the project goes right through a wetland area, is there some way to reduce mortality of reptiles and amphibians crossing this area? Could the contractor use a box culvert or other under the road structure to allow passage of animals from one side to the other? 2. OWTS – The project plans show two potential areas for placement of the shared OWTS. Have these areas been tested to determine suitability? As the project area is basically on the side of a hill and there is ledge in the vicinity, it would be important to ensure that an appropriate area is available before construction and site work starts. 3. Per item:” 4) compatibility with adjacent land uses: All of the adjacent uses are residential, therefore the development is consistent with the neighborhood.” – It must be noted that although there are residential dwellings adjacent to the project, the existing conditions are better described as a country road with sparse housing. This area currently has very low density land use and is not a traditional neighborhood. Arguments can be made that the proposed development is not consistent with the neighborhood. 4. Cul-de-sac – Have other configurations for a turn-around been considered to reduce the amount of impervious surface?

Attachments

Update Status

Status

SUBMIT

Share Comment

SHARE WITH A REGISTERED USER

[BACK TO SEARCH RESULTS](#)

From: [David Black](#)
To: [Patel, Purvi \(EEA\)](#)
Subject: Re: Attendance at the Village at Shepley Hill Meeting
Date: Thursday, April 8, 2021 11:14:19 AM
Attachments: [Comments on ENF - David Black.pdf](#)

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Patel,

Thank you again for including me in this process and for the opportunity to comment on the materials submitted and some of the statements made by the proponent during yesterday's meeting.

I have attached my response to these. Given the past difficulties associated with getting the materials from the proponent in a timely manner, would you consider extending the comment period by one week to allow me and others to review the alternatives plan that you have required of the proponent? I trust that this plan will come with a statement about the inviability of such an alternative, and there are civil engineers and landscape architects who are better qualified than I to assess this expected statement.

The Planning Board meets tonight to render a final decision on the project and all await the outcome with bated breath given the ambivalence of so many on that Board.

I would very much appreciate your confirmation that my comments have been submitted in an appropriate manner.

With appreciation,

David Black

David Hills Black, Jr. PhD
Ecology and Environmental Science
Groton School
282 Farmers Row
Groton, MA 01450
USA

On Wed, Apr 7, 2021 at 9:01 AM Patel, Purvi (ENV) <purvi.patel@state.ma.us> wrote:

David – please find the link below:

Join Zoom Meeting
<https://us02web.zoom.us/j/86201277409?pwd=enlock1zNXdOTzlBenJqdk9uaXliZz09>

Comments on ENF
EEA Number 16348

PROJECT: 0 Longley Road, Definitive Subdivision; "The Village at Shepley Hill"

April 8, 2021

Dear Secretary Theoharides and Ms. Patel,

I write to ask that your office direct the proponent of the above referenced project to prepare an Environmental Impact Report given the probability of significant impacts to wildlife associated with the extensive development of the site, including three wetland crossings, impacts that will cause disruptions to wildlife populations through significant habitat fragmentation and buffer zone effects. The site is located within 1000 meters of two mapped priority habitat areas (Appendix K of the ENF) and lies completely within an Area of Critical Environmental Concern (ACEC; Appendix I of the ENF) indicating that impacts associated with the project must be more fully mitigated through clustering of the units or other strategies that will reduce the area affected by the development.

Given the site's position on the landscape, it is likely that state-listed species move over the property and use the resources on the site during critical migratory periods. The existence of a potential vernal pool within 200 meters of the site underscores the concern. It is also important to note that because this is private property, no assessment of the wildlife habitat values on the site has been possible thus preventing any substantive analysis of impacts.

Alternatives exist that would allow for extensive use of the property while providing greater protection of the critical habitat resources on the site. However, no such alternatives were submitted for consideration during the permitting process. While the proponent has asserted that over 80% of the property has been left as open space, these calculations include wetlands, buffer zones that cannot be developed under the Town Bylaw, and large areas that will be landscaped and permanently altered. To the best of my knowledge, no open space plan was submitted during the various local approval processes and while it is difficult to verify the calculations, it appears that virtually all of the developable portions of the property will be permanently altered under the current plan. The proponent should prepare site plans that clarify which areas on site are not developable per the Town Bylaw and quantify the amount of open space to be preserved within the limits of developable area.

This proponent should prepare an alternatives analysis that considers a reduced build within only the developable area on site. The focus of the plan must be on better protecting the mosaic of uplands and wetlands so crucial to the preservation of the wildlife populations that depend on this area both for habitat and for the landscape connectivity that this site provides. Much of the site could be reached with a single wetland crossing in a manner that would be fully consistent with the Town's 1000-foot limit on cul-de-sac length. A second crossing would

add to the development potential of the property, but the creation of a loop road with a cul-de-sac branching from it is not appropriate for this site given the constraints created by topography and the network of wetlands that transect the land. The proponent's contention that designation of a wetlands crossing as a Limited Project allows for unlimited crossings is inconsistent with the goals of this portion of the Massachusetts Wetlands Protection Act, especially given the higher standards established for resource protection in an ACEC.

The proponent asserted that the Town of Groton Planning Board would not allow development of the site without the connecting road and two proposed access points. No vote was ever taken by the Planning Board with respect to this, to the best of my knowledge the individual members of the Board were never polled, and the discussion occurred prior to an understanding of the environmental impacts associated with the extensive roadway network. The record will show that members of the Planning Board repeatedly expressed their reservations about the extent of the site modifications proposed. A plan based on a single cul-de-sac is consistent with all town regulations and such a plan should have been presented for consideration during the project development. It is also important to note that clustering of units has been allowed in the town in the past; however, no such alternative was ever presented to the Planning Board nor the Conservation Commission. The final vote by the Planning Board will occur on April 8th, and comments at past meetings suggest that there is no unanimity among the members of that board with respect to support for the project in its current form.

One of the primary issues associated with the project is the level of wetland impacts. While the proponent claims that there is only one wetland crossing, this requires the acceptance of the idea that a bridge over a wetland, with filling almost to the limit of the resource, does not constitute a crossing, and that a wall with a maximum height of almost 10 meters and a length of almost 100 meters bisecting the wetland, located within 1 meter of the wetland resource area would not have a significant effect on that system. The proponent should submit revised materials that fully and correctly quantify the impacts and provide alternative plans that minimize the damage to the environment.

Other specific comments on the ENF and subsequent meeting.

- A more detailed analysis of the historical resources known to occur in the area is important given the proximity of the area to early settlements in the Town of Groton which are reflected in the site's designation as a mapped inventory area.
- The proponent has repeatedly asserted that the impacts to wildlife have largely been mitigated, with an emphasis on the reduced filling of the wetland resource areas and the inclusion of ecologically friendly lighting. It is important to note that this lighting was designed to mitigate impacts to sea turtle movements associated with beach nesting and is unlikely to have any effect on the behavior of local wildlife. It certainly will not mitigate the significant effects of the walls and wetland crossings that will disrupt patterns of wildlife movements and behaviors.

I was part of the group that initially sought to have the area designated as an ACEC, a designation that was given largely because of the area's importance to the protection of the biodiversity and the geologic features which characterize the region. While acknowledging the proponent's right to develop the lands, they are also under an obligation to do so in recognition of the property's significant ecological values. At a minimum, the proponent should be required to submit an alternatives analysis that considers feasible strategies to reduce and mitigate the impacts of this residential development.

I appreciate your consideration of this matter.

Respectfully submitted,

A handwritten signature in black ink that reads "David Hills Black, Jr." with a stylized flourish at the end.

David Hills Black, Jr. PhD
dblack@groton.org
(978) 877-2134

From: [ANNA ELIOT](#)
To: [Patel, Purvi \(EEA\)](#)
Subject: MEPA Consultation EEA #16348
Date: Monday, April 12, 2021 1:32:51 PM
Attachments: [1.28.21 to Con Com ^0 PB.doc](#)

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Attached please find a copy of the letter I sent in support of the proposed development at the Village of Shepley Hill and support of the decisions of the Groton Conservation Commission and Planning Board. Thank you for allowing my few words at your "site walk" last Wednesday. This proposal better serves my neighborhood as it brings the development off both Longley Road and Sand Hill Road and is less intrusive. I understand that the Groton Conservation Trust has appealed the decision by the Groton Conservation Commission but if they truly appreciated us as neighbors, then they would consider the impact on us too.

I thank you for your consideration and if there are any questions, I would be happy to answer.

Anna Eliot
129 Longley Road
Groton, MA
January 25, 2021

Planning Board
Conservation Commission
Town of Groton
173 Main Street
Groton, MA

Re: Village at Shepley Hill

To Planning Board and Conservation Commission:

I am asking that the boards look at the merits of the development at the Village at Shepley Hill. I welcome housing for my contemporaries. This developer is new to Groton. His team has shown a desire to work with us, both as neighbors and town, I think we owe it to ourselves to see the project in a favorable light. My statements are based upon my years of experience serving Groton and the impact upon my back yard.

As an abutter, how this plan fits into the neighborhood is paramount. I look towards what better serves the neighborhood. While the developer must address the engineering, landscaping and peer review, I can ask that you consider the effect on our neighborhood. There are options available to the land owner. Of those options, this plan proposed at "the Village" better serves us. I appreciate the amount of buffer between the constructed homes and the abutters. I appreciate the maintenance plan that is will be required to minimize intrusion upon the neighborhood. I appreciate the adjustments made to accommodate the abutters concerns. There is much need for over 55 housing and this plan complies with the Housing Plan promulgated on behalf of the town. We also need the public access for trails connecting other conserved properties. I am pleased and impressed with the quality of the team who have never deviated from courteous responses.

Looking at the alternatives frightens me. Land owners are confronted with higher taxes and options too. If this developer does not build, some other will.

As a direct abutter, I am asking that this project be approved and the relief being requested by the applicant be granted. The use of the property as a 28 unit over 55 development is the best possible use for the neighborhood and town. It brings revenue without burdening our infrastructure. It is the least impact development option and on that, I embrace and am hopeful that you, as members of the Planning Board and Conservation Commission, will do as well.

Thank you for your consideration and service to the town.

Anna Eliot
Anna Eliot



P.O. Box 395
Groton, MA 01450

gctrust.org

April 13, 2020

Ms. Purvi Patel
Environmental Analyst
Massachusetts Environmental Policy Act Office

**RE: MEPA Project No. 16348 – The Village at Shepley Hills, Groton, MA
Comments on ENF**

Dear Ms. Patel:

Thank you for conducting such a comprehensive and thoughtful MEPA Consultation Session last Wednesday for the proposed Village at Shepley Hill development in Groton. As you know, the Groton Conservation Trust (GCT), an abutter, submitted a request to DEP for a Superseding Order of Conditions (SOC) following the Groton Conservation Commission's issuance of an Order of Conditions approving the project.

The GCT believes that the Conservation Commission's review did not require the proponent to provide sufficient information on wetland impacts nor investigate in sufficient detail alternative designs to avoid or minimize impacts on wetlands. The MEPA review process should support DEP's consideration of the SOC by requiring the preparation of an Environmental Impact Report (EIR).

Petapawag ACEC Designation

In December 2002 Secretary Durand designated the Petapawag Area of Critical Environmental Concern (ACEC). The proposed project lies entirely within that ACEC. The eight public interests of the Wetlands Protection Act are used as criteria for inland ACEC designation, and at least four are required. The Petapawag ACEC includes seven.

The ACEC regulations (301 CMR 12.11) require that:

- (1) All EOEEA agencies shall take action, administer programs, . . . in order to:
 - (a) acquire useful scientific data on the ACEC,
 - (b) preserve, restore, or enhance the resources of the ACEC, and
 - (c) ensure that activities in or impacting on the area are carried out so as to minimize adverse effects on:
 1. marine and aquatic productivity;

2. surface and groundwater quality or quantity;
3. habitat values and biodiversity;
4. storm damage prevention or flood control;
5. historic and archeological resources;
6. scenic and recreational resources; and
7. other natural resource values of the area.

NHESP lists 23 species of plants and animals in Groton as endangered, threatened, or of special concern. This project site has never been studied for the presence of state-listed species; several of these species migrate annually between wetland and adjacent upland areas during breeding seasons. The proponent should perform a complete survey to document the plant and animal wildlife on the site and to understand the impact the project would have on those populations.

An important aspect of the wildlife habitat interest is the management of lands surrounding the currently mapped NHESP Priority and Estimated Habitat features. The ACEC designation report describes the importance of this BioMap Supporting Natural Landscape, “defined by NHESP as large, minimally fragmented areas that safeguard the Core Habitat while also including habitat for the common species of Massachusetts”. Virtually the entire project parcel was mapped as a Supporting Natural Landscape.

The connections between currently mapped areas are also increasingly important as migration corridors for plant and animal species responding to the effects of climate change. The project area is a component of one of those corridors and the effects of its development should be better understood.

Limited Project Crossings

A single, large complex of Bordering Vegetated Wetlands (BVWs) winds through the project, ending in an intermittent stream leaving the parcel at its northwest corner. The two upland areas of the parcel can only be reached by crossing this wetland in two places, and the proponent has requested the designation of those two crossings as Limited Projects under the provisions of 310 CMR 10.00. Disturbance of BVWs is prohibited in an ACEC except for Limited Project crossings.

The steep terrain requires elevated crossings to provide acceptable roadway grades. The crossings proposed are very substantial structures up to 30 feet high designed to just barely avoid the BVW areas. But they will have impacts on the wetlands complex beyond those small areas. The effect of reduced sunlight and the resulting reduction in temperature may be considerable and should be documented more carefully.

Interior Crossing

The project also includes an interior roadway running between two arms of the large BVW. Although the roadway squeezes through only a foot or two away from these BVWs, it is effectively a wetland crossing as it severs any connection between them. The roadway would run

across an enormous wall over 400 feet long and up to 25 feet high. In addition to the illumination and temperature concerns it shares with the two Limited Project crossings, this wall will present a formidable barrier to any plant or animal movement over that small, level gap. As this crossing is not required to provide access to all upland areas on the site, we believe it should not be permitted as a Limited Project crossing. The importance of its impact must be understood for DEP to properly consider our request for a SOC.

Topographic Modification

The site contains one large, long drumlin and a smaller upland area. The steep slopes along the drumlin require very substantial fill to create suitable building sites, and the construction impacts to those slopes require large retention basins for stormwater management. This combination creates slopes up to 33% and up to 30 feet high. Existing plant populations at these sites cannot be maintained, and animal movement will be significantly altered.

Planning Board Review

The Town of Groton Planning Board review of the project was extensive but, in large part, did not address its environmental impacts. Modifications to street lighting, narrowing of roads, and a reduction of the modified area in the BVWs were the only changes made to reduce impacts. A change to address the Board's concern about the very high cuts required removed one duplex unit and shortened the length of the cul-de-sac.

Although the proponent reported that several Planning Board members were strongly opposed to a plan with two cul-de-sacs and no through road, the minutes of those meetings do not reflect that opposition. Board members objected to an alternative making the Sand Hill Road entrance for emergency vehicles only, but there is no mention at all of an objection to two cul-de-sacs and no such proposal was ever presented to the Board. At their September 24, 2020 meeting, rather, Planning Board member Tim Svarczkopf suggested the units off Longley Road be served by a shared driveway rather than a through road. When the proponent replied that the town's subdivision regulations require two entrances, Planning Board chairman Russell Burke replied that the Board would be open to considering requests for waivers.

At the Board's October 8, 2020 meeting Attorney Mann reported that the proponent had provided a conceptual "flexible development" plan. That plan had only one 1,200-foot-long cul-de-sac road and one wetland crossing to support 11 triplex units. There was no discussion or further consideration of that alternative plan.

Modifications to Reduce Wetland Impacts

The original proposal required three wetland crossings filling a total of 1,692 square feet of BVWs. By narrowing one roadway and widening the span of a culvert, filling of wetlands was reduced. The third crossing was reduced in area by about one third.

These reductions, however, will make virtually no difference to the affected wetlands. Moving a 25-foot-high barrier a few feet still leaves a 25-foot-high barrier. The Town of Groton's Wetlands Bylaw prohibits, with good reason, any structures at all within 50 feet of wetlands, recognizing the significance of these areas. This provision of the bylaw is waived for Limited

Project crossings, but the interior road crossing is not eligible for such a designation. It neither impacts any wetland areas nor is required to provide access to any upland area that isn't already served by the other two crossings.

Alternatives Analysis

No serious alternatives were ever investigated and presented. The proponent, at your request, prepared a few plans last week but these were never reviewed by the Planning Board, and, to our knowledge, by DEP.

In meetings with the Conservation Commission, the proponent repeatedly asserted that the interior crossing was "required by the Planning Board". The only reason the Board required it is because the proponent wants to build more units than would be permitted without it. A waiver for the length of a cul-de-sac off Sand Hill Road was never requested and should have been.

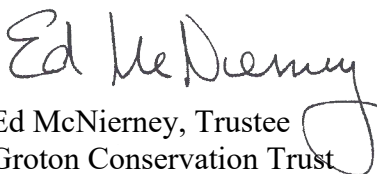
Much would have been learned if the Conservation Commission had properly required the proponent to develop alternatives. DEP's *Wetlands Policy 88-2: Access Roadways* states:

Therefore, the issuing authority may require the applicant to request the Planning Board to formally rule on revisions of the project which would protect wetlands, even if approval of the revisions would require the Planning Board to apply variance provisions that allow the Board to waive or vary its standard requirements. The issuing authority should only determine that no reasonable alternative means of access are available after the applicant has made a good faith effort to identify alternate means of access and has actually presented any reasonable alternatives to the Planning Board and received that Board's ruling.

The proponent never requested or received a ruling from the Planning Board on alternative designs such as the Conservation Commission should have required. That investigation could have provided helpful scientific and environmental information that is now unavailable. The proponent should complete that work through the MEPA process to provide adequate information to DEP for its consideration of a SOC.

The Groton Conservation Trust does not take its request for a Superseding Order of Conditions lightly. It stems from our serious concern for the wetland impacts of the approved plan and the lack of investigation into alternatives. The environmental effects of the large barrier walls and crossings and the opportunities to minimize them can now only be understood through the preparation of an Environmental Impact Report.

Sincerely,

A handwritten signature in black ink that reads "Ed McNierney". The signature is written in a cursive style with a large, looped initial "E".

Ed McNierney, Trustee
Groton Conservation Trust



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Central Regional Office • 8 New Bond Street, Worcester MA 01606 • 508-792-7650

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

April 13, 2021

Secretary Kathleen A. Theoharides
Executive Office of Environmental Affairs
100 Cambridge Street, 9th Floor
Boston, MA 02114

Attention: MEPA Unit – Purvi Patel

Re: Environmental Notification Form (ENF)
The Village at Shepley Hill
Groton
EEA #16348

Dear Secretary Theoharides,

The Massachusetts Department of Environmental Protection's ("MassDEP") Central Regional Office has reviewed the ENF for The Village at Shepley Hill (the "Project"). Shepley Hill Capital Partners, LLC (the "Proponent") is proposing to construct 13 residential duplexes on 47.8 acres at the intersection of Longley Road and Sand Hill Road. The property is currently vacant woodlands and is surrounded on the north, south and east by existing residential development. The western boundary abuts conservation land. There are Bordering Vegetated Wetlands (BVW) and a small portion of Riverfront Area (RA) on the Project property. The Project lies within the Petapawag Area of Critical Environmental Concern (ACEC).

The Project is under MEPA review because it meets or exceeds the following review threshold:

- 301CMR 11.03(11) – Areas of Critical Environmental Concern.

The Project requires the following State Agency Permits:

- MassDEP - Approval to Site a Source and Conduct a Pumping Test for a Source less than 70 Gallons per Minute - BRP WS13;

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

- MassDEP - Approval of Pumping Test Report and to Construct a Source Less than 70 Gallons per Minute - BRP WS15;
- MassDEP - Superseding Order of Conditions.

MassDEP offers the following comments:

Wastewater

The ENF states that the design flow of wastewater for the combined flow of all duplexes is 3,900 gallons per day (gpd). A 3,900 gpd sewage disposal system equates to a total of 35 bedrooms for 26 residential units, or one to two bedrooms per residential dwelling. Without knowing the configuration of the duplexes, MassDEP cannot confirm that the design flow is accurate. The Proponent should provide an accurate assessment of the number of bedrooms for each dwelling to the Groton Board of Health. In addition, Title 5 regulations at 310 CMR 15.203 require that on-site sewage disposal systems be designed for 330 gpd for each dwelling unit; anything less will require a deed restriction. The total wastewater flow for 26 units generating 330 gpd is 8,580 gpd. The Proponent should revise the design flow to provide an accurate value based on the total number of bedrooms, in consultation with the Groton Board of Health.

The ENF states that a single on-site sewage disposal system will serve the residential subdivision. This system is defined as a “shared” septic system and must comply with 310 CMR 15.290 through 15.292. The Proponent should verify that the design flow from the facility or facilities to be served by the shared system does not exceed the design flow that could have been constructed in compliance with 310 CMR 15.000 without the use of a shared system. Similarly, 310 CMR 15.214(2) states that “no system serving new construction in areas where the use of both on-site systems and drinking water supply wells are proposed to serve the facility shall be designed to receive or shall receive more than 440 gallons of design flow per day per acre from residential uses.” The Proponent should confirm that the 440 gpd/acre loading requirement is met. The Proponent must develop a “Grant of Title 5 Covenant and Easement” for this shared system. A financial assurance mechanism must be provided to the Board of Health for the shared system pursuant to 310 CMR 15.290.

Any on-site sewage disposal system over 2,000 gpd must implement pressure distribution pursuant to 310 CMR 15.254(2). Any on-site sewage disposal system over 2,000 gpd must analyze the effects of groundwater mounding pursuant to 310 CMR 15.212(2). The ENF does not state that the homeowners will be organized under a homeowner’s association or trust for the management of the on-site sewage disposal system. A description of the form of ownership is necessary pursuant to 310 CMR 15.290. All components and appurtenances of the shared system, including individual septic tanks (if proposed), are subject to the operation and maintenance of the shared system and cannot be individually owned or operated.

Water Supply

MassDEP issued approval of the application for “Approval to Site a Source and Conduct a Pumping Test for a Source less than 70 Gallons per Minute - WS13” on March 12, 2021 to site the public water supply wells and to conduct a pumping test for the Project. The WS13

application described the project as a 26-unit, 55+ age-restricted housing requiring a water demand of 3,900 gallons per day (gpd) based on Title 5 design flows. As a condition of the WS13 approval, MassDEP required that the Zone I areas be excluded from the proposed Conservation Restriction (CR) and further recommended that the proposed CR not directly abut the Zone I areas to allow for expansion or shifting of the Zone I areas in the future. The Draft CR submitted with the ENF contains typographical errors and no attachments were included. To ensure compliance with MassDEP requirements, the Proponent should submit a copy of the draft CR to MassDEP prior to submitting it to EEA. Based on the comments above concerning the wastewater flow generation, the Proponent should submitted updated information to the Drinking Water Program as it is developed.

On page 13 of the report (Water Supply Section, II. Impacts and Permits) the withdrawal from groundwater is listed as 12,600 gpd. MassDEP believes the Proponent entered this number incorrectly. The Proponent should confirm that this number is a typographical error. If it is not, the Proponent should explain the discrepancy to the Drinking Water Program during the permitting process.

The ENF does not describe the project as a 55+ age restricted residential project. The Proponent should confirm that during the public water system permitting and with the Groton Board of Health during the Title 5 system permitting to ensure flows are correct and consistent.

Wetlands

A Notice of Intent (NOI) for the Project described as 13 duplexes – 26 unit subdivision was filed with the Groton Conservation Commission (the “Commission”) on December 8, 2020. The NOI was assigned the file number 169-1214. On February 24, 2021 the Commission issued an Order of Conditions (OOC) approving the Project. The OOC was appealed by a third party to MassDEP on or about March 10, 2021 and the Request for a Superseding Order of Conditions (SOC) is pending.

Issues raised in the appeal concern whether the Project meets the limited project provisions for the two 20-foot-wide roadway crossings that result in the alterations of approximately 1107 square feet of Bordering Vegetated Wetlands (BVW) located within the ACEC, whether the proposed replication area meets the BVW performance standards, and whether the work in the Buffer Zone will cause additional alterations to the adjacent BVW.

MassDEP is in the process of reviewing the appeal issues and evaluating the Project for compliance with Wetlands Protection Act regulations and Massachusetts Stormwater Standards and may have additional questions for the Proponent and other parties as it conducts its review. A site meeting will be scheduled as part of that review prior to MassDEP making its permit determination.

Pursuant to 310 CMR 10.55(4)(e), work within a BVW that is also within an ACEC may only be permitted if it meets the limited project provisions under 310 CMR 10.53(3). If it is determined that the Project does not meet those provisions, the Proponent will need to seek a

variance to pursue the Project as proposed and further MEPA review could be warranted as a project change.

The NOI and the ENF state that the project is a subdivision. Unless a deed restriction is recorded to limit the amount of filled BVW to less than 5000 square feet, a 401 Water Quality Certification is required. Proponent should provide clarification to MassDEP if it intends to record such a deed restriction.

Air Quality

Construction activity must conform to current Massachusetts Air Pollution Control regulations governing nuisance conditions at 310 CMR 7.01, 7.09 and 7.10 and not cause or contribute to a condition of air pollution due to dust, odor or noise. As such, the Proponent should propose measures to prevent and minimize dust, noise, and odor nuisance conditions, which may occur during construction. Because the Project is located close to residential development to the north, south and east, excessive dust generation may be a concern. The Proponent should consider commercially available dust suppression methods including use of a water truck and/or spreading calcium chloride during the construction period.

MassDEP requests that all non-road diesel equipment rated 50 horsepower or greater meet EPA's Tier 4 emission limits, which are the most stringent emission standards currently available for off-road engines. If a piece of equipment is not available in the Tier 4 configuration, then the Proponent should use construction equipment that has been retrofitted with appropriate emissions reduction equipment. Emission reduction equipment include EPA-verified, CARB-verified, or MassDEP-approved diesel oxidation catalysts (DOCs) or Diesel Particulate Filters (DPFs). The Proponent should maintain a list of the engines, their emission tiers, and, if applicable, the best available control technology installed on each piece of equipment on file for Departmental review.

MassDEP appreciates the opportunity to comment on the Project. If you have any questions regarding these comments, please do not hesitate to contact JoAnne Kasper-Dunne, Central Regional Office MEPA Coordinator, at (508) 767-2716.

Very truly yours,

Mary Jude Pigsley

Mary Jude Pigsley
Regional Director

cc: Commissioner's Office, MassDEP