

# Town of Ayer

## CONSERVATION COMMISSION

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Date: October 14, 2022  
To: Ayer Planning Board  
From: Ayer Conservation Commission

### **CONSERVATION RECOMMENDATION TO THE AYER PLANNING BOARD STRATTON HILL OPEN SPACE RESIDENTIAL DEVELOPMENT (OSRD) PRELIMINARY SUBDIVISION PLAN**

Ayer's OSRD Zoning Bylaw (Section 10.1) requires a minimum of 50% of land to be set aside as open space within a proposed subdivision. The open space is to be permanently protected by means of a Conservation Restriction or like mechanism. In accordance with the Bylaw, the Conservation Commission is required to provide a Conservation Recommendation for OSRD projects in order to assist the Planning Board in shaping subdivisions so that the land with the highest conservation value is permanently protected. As such, central to the recommendation process is the Commission's role in confirming that priority areas for conservation have been correctly identified. As part of the OSRD permitting process, the Applicant must submit a Conservation Analysis that includes a ranking of High, Medium, and Low Priority Areas for conservation. The Analysis is then carefully studied by the Commission. The Commission also conducts its own site walk observations before preparing its Recommendation. In the case of Stratton Hill, the Commission conducted two site walks on the property, on July 9 and August 5, 2022. And while the Commission is cognizant that the Applicant's proposed plan sets aside considerably more than the 50% required, it is also cognizant of the unique ecological importance of this particular site (approximately 160 acres). Because of this, the Commission hired Matt Burne, of BSC Group, to provide a third-party peer review of the Conservation Analysis and the preliminary project design proposal.

Materials reviewed by BSC Group included the "Preliminary Subdivision & Open Space Residential Development Plan in Ayer" (last revised 7/22/2022); Attorney Robert L. Collins's "Application Narrative" (June 1, 2022); Dillis & Roy's "Conservation Analysis" (June 30, 2021, revised August 18, 2021); Oxbow Associates Inc.'s "Rare Herpetofaunal Investigation, Sandy Pond Road, Groton, Massachusetts" (January 30, 2004); and other pertinent data. In addition to reviewing the above material, the Commission asked BSC Group to evaluate other considerations, such as the potential for blasting to have an adverse impact on wildlife or the potential of the preliminary proposed locations for stormwater management structures to have serious adverse impacts to Long Pond.

**It should be underscored right away that the Commission is in full agreement with BSC Group Peer Reviewer Matt Burne's assessment that the Conservation Analysis submitted by Fox Meadow Realty is clearly incomplete, contains out-of-date information and "important deficiencies," is missing relevant layers of BioMap 2 data, and is not in compliance with the 18 submittal requirements for a Conservation Analysis (OSRD Regulations and Design Guidelines, 2022). Nevertheless, the Commission is confident that it has enough information and guidance from the BSC peer review – in**

**addition to its own observations on the layout and previous disturbances of the existing site – to provide the recommendations contained herein.**

The Conservation Commission strongly agrees with Mr. Burne's key assertion that the data contained in the Conservation Analysis has not actually been used in any meaningful way in relation to the preliminary plan designs submitted to the Planning Board in June 2022. As Mr. Burne said when presenting his report at the Commission's August 25 meeting, the existing loop road from the previous work period (2005-2008) should not rule the re-design of the project today, as if the Analysis data had absolutely no bearing.

While much of the data collected by Oxbow Associates in the 2003-2004 period is of great value, most of it pertains to the Groton side of the parcel rather than the Ayer side. For example, the New England Power Company (NEP)/National Grid powerline Right-of-Way (ROW) that bisects Stratton Hill was not part of the original Oxbow study area and should therefore be considered uninvestigated. The floodplain to Long Pond south of the ROW was similarly not taken into serious consideration by the 2022 submitted Conservation Analysis.

**You will therefore see in the Recommendations section below that our first recommendation emphatically expresses our strong disagreement with the validity of the "Priority Conservation Areas Map" submitted by the applicant for this project.**

## **OVERVIEW OF THREE KEY AREAS OF CONCERN**

### **North of the Right-of-Way (ROW)**

The unanimous consensus of the Commission is that the area north of the ROW/powerlines is of obvious great importance, in particular as it is directly contiguous to already-protected land in Groton. The open space to be set aside in Ayer will add to the enlargement of a valuable undeveloped tract of forest, protecting habitat and preserving wildlife corridors.

However, what should not get lost in the discussion is the vital importance also of the unique and uncommon habitat underneath the powerlines, and just as importantly, the forested slope down to Long Pond south of the ROW where it is in close proximity to the proposed development. **All three** of these key areas (north of ROW, ROW, slope to Long Pond south of ROW) that would be impacted by the current design should therefore be carefully considered by the Planning Board before issuing its decision on the preliminary plan.

In addition, keep in mind that the entire Stratton Hill parcel is within the Petapawag Area of Critical Environmental Concern (ACEC). To the north, it directly abuts Mass Audubon's Rocky Hill Sanctuary in Groton. The entire project parcel is Priority Habitat re Natural Heritage & Endangered Species Program (NHESP), and nearly the entire site is located within Critical Natural Landscape re NHESP's BioMap2. As noted by BSC Group in reviewing the Analysis, important NHESP BioMap2 data layers were missing that should have been included in order to more adequately evaluate the ecological functions and values of various Core Habitats: Wetlands; Critical Natural Landscape Upland Buffer; Vernal Pools; and Forest.

### **National Grid ROW**

This area should be considered as a valuable early successional scrub/shrub habitat characterized by low-growing vegetation. While these conditions have arisen from vegetation management undertaken regularly by NEP, this should not detract from this area's high conservation value. This sort of

landscape, as Mr. Burne noted, is uncommon in the wider landscape of Massachusetts and therefore particularly valuable for wildlife.

### **Forested Slope down to Long Pond South of ROW**

In 2015-2016, the Town of Ayer spent a great deal of money to fund a biological assessment of Ayer's ponds, including Long Pond (aka Lower Long Pond). The Geosyntec Consultants final report ("Biological Survey, Assessment and Management Recommendations for Ayer's Ponds") described Long Pond as a pristine pond that "could be considered a regionally significant example of a healthy and diverse aquatic plant community." (p. 57, 81). It is not currently listed as an impaired waterbody in Massachusetts – in contrast to many other waterbodies in Ayer. Careful consideration of what development occurs on its eastern shore is therefore imperative in order to maintain this unimpaired status and protect Long Pond's ecological integrity. Long Pond is a 50-acre **"Great Pond,"** a kettle pond naturally formed from the retreat of glaciers and given protection under MGL Ch. 91. It transitions from Open Water north of the ROW to Deep Marsh at its southern end, a transition process that begins shortly after the powerlines cross over the pond. Although wetlands and beaver activity about the north end of the pond, no clearly delineated stream of surface water flows into Long Pond and this likely contributes to its current pristine condition and lack of invasive aquatic vegetation. Long Pond is also the beginning point in Ayer for the chain of ponds that eventually flow into the Nashua River: Long Pond flows into Sandy Pond, which flows into Flannagan Pond, then Balch, Grove and Plow Shop ponds, then Nonacoicus Brook and the Nashua. **Through the Planning Board, this is Ayer's opportunity to protect this Great Pond while it can.**

## **RECOMMENDATIONS**

### **"Priority Conservation Areas Map" and Proposed Development**

For the purpose of its project review, the Planning Board should understand that the **Conservation Commission strongly disagrees with the Priority Conservation Areas Map** submitted by the applicant to rank High, Medium and Low Priority areas on the parcel. It is the Commission's recommendation that the Planning Board regard the submitted map as unacceptable. The land north of the ROW, underneath the ROW, and on the forested slope down to Long Pond south of the ROW should be regarded as High Priority areas. Note Mr. Burne's comment below:

"The 'Low Priority' area shown on the Applicant's Priority Conservation Areas Map appear to be too focused on the previously delineated lot lines and road alignment, rather than an objective evaluation of conservation values based on the data." (BSC Review, p. 19)

- If the Planning Board is not comfortable with the Commission's assessment related to the priority ranking, the Commission recommends that the applicant be required to retain a trained ecological professional to contribute new and directly applicable data to support their current prioritization and ranking of conservation areas. It is within the rights of the Planning Board, per the OSRD Bylaw (10.1.3.B.3), to require that the applicant provide "sufficient information" and it should do so if it is as concerned as the Commission that the current assessment of these areas is subpar.

This would also be in line with Mr. Burne's general recommendation #19 (BSC Report, p. 20) where he maintains that a trained ecologist be required to "certify the results of the procedures leading to the prioritization of conservation areas" as represented by the applicant in submitting the Analysis:

“BSC recommends that the Conservation Commission provide significant guidance on how to assess all of the data requested as part of the Conservation Analysis process or that ecological professionals be required to contribute (at least) to the final analysis and ranking.”(20)

Because this is part of the Planning Board’s OSRD review and not part of an application directly before the Commission and under the jurisdiction of the Wetlands Protection Act, the Commission cannot directly require this. It is our guidance, however, that the Planning Board should do so if it disagrees with the Commission’s position on the validity of the submitted map or if it needs a means of resolving the differing assessments on this matter between the Commission and the applicant.

#### North of the ROW

The whole of the area north of the ROW should be regarded as High Priority. However, given the size of the open space proposed for conservation (130 acres +), it will be up to the Planning Board to determine the feasibility of the extent to which it can seek to protect all of this land. If no development is permitted north of the ROW, then the issue of protecting the habitat underneath the ROW becomes moot. If the Planning Board permits limited development north of the ROW, then it will have to consider all means of minimizing adverse impacts to the ROW itself, as noted below.

- The Planning Board should do all in its power to discourage housing development north of the ROW/powerlines in order to best preserve and protect the undeveloped forest and wildlife corridors in that area that are contiguous to Mass Audubon’s Rocky Hill Sanctuary as well as other undeveloped forest parcels adjacent in Ayer.
- The reasonable redistribution of house lots to the south of the ROW should be strongly pursued. Our position is that there is enough space to the south to construct an economically viable subdivision, and the value of protecting the habitat to the north should outweigh development pressure.
- If the Planning Board is compelled to permit some development north of the ROW, it should seek a reduction in the number of houses in order to limit overall impact from construction and blasting. Fewer houses north would also reduce the amount of daily residential traffic passing under the powerlines where turtle populations are at great risk.
- Also, if redistribution north of the ROW is unavoidable, the Planning Board should require a new professional ecological survey of this area than was provided by the applicant.

#### Powerline Right-of-Way (ROW)

- The ROW should be regarded by the Planning Board as a unique and significant habitat and wildlife corridor with High Priority conservation value. All efforts should be made to ‘avoid, minimize or mitigate’ adverse impacts from development to this area. This is important for the protection of the Blanding’s turtle, especially given that this area has been identified as the location of one of the prime populations of this threatened species in Massachusetts (comment letter received from Tom Lautzenheiser, Mass Audubon’s Central/West Regional Scientist for Ecological Management, BioMap2). Road crossings present a particular risk to the endangered Blanding’s turtle which is both long-lived and slow-breeding, with roadway mortality

disproportionately affecting female turtles and therefore a significant risk-threat to the integrity of the population as a whole.

- Please note: Mr. Burne's review included photographic documentation of turtle nesting having recently taken place in the ROW (as well as on the north-facing slope of the soil pile at the northern tip of the existing loop road, adjacent to the impounded beaver pond).
- If development north of the ROW is unavoidable, the Planning Board should consider the feasibility of reducing the roadway crossings underneath the powerlines to one rather than two, eliminating a looped roadway on the north side.
- In addition, the installation of wildlife underpasses, with appropriate fencing protection, and the avoidance of the use of vertical granite curbing that would inhibit turtle movement should be considered. Long-term maintenance needs for such structures should be considered as well.

#### Forested slope to Long Pond, south of ROW

- The distance between the proposed loop road north of the ROW and Long Pond is much greater, with heavy forest and vegetation in between, than from the roadway south of the ROW to the pond. It is this latter area, south of the ROW, that is of critical concern to the Conservation Commission and should be considered to have High Priority conservation value (noting it was incorrectly designated Low Priority and has been wrongly designated as "Prime farmlands" in the Conservation Analysis). Not far off the roadway, the grade of the forested slope changes to a steep drop-off, then flattens out at the base into floodplain (FEMA Flood Zone A) that abuts the southern marsh end of the pond. Stormwater basins have been proposed in this area on the slope or base of the slope. Mr. Burne's review was clear that neither the floodplain aspect of this area, nor the impact to Long Pond, appears to have been taken into consideration in the Analysis or the plan design. It is likely, given the general topography of the area, that ledge shallowly underlies this floodplain – this has not been adequately investigated to say otherwise. In addition, stormwater basins must have both sufficient size and depth in order to function effectively. It is unclear how a basin with sufficient depth could be constructed at the base of the slope without bringing in fill, something that would be highly problematic in this sensitive area.
  - The Planning Board should also be mindful of the ease with which contaminated runoff could reach Long Pond in this area, if allowed to be disturbed for stormwater management, both from **surface flow** as well as **subsurface groundwater flow**, particular if ledge shallowly underlies the floodplain soils. Technical compliance with State Stormwater Standards does not provide guarantees of protection to this pristine Great Pond that we argue it deserves.
- The Commission therefore strongly recommends that all of the forested slope down to Long Pond, south of the ROW, remains untouched (both the older growth trees/vegetation pre-dating the 2005-2008 construction activities as well as the new growth that has taken place in the intervening years), and that all efforts be made by the applicant to redesign stormwater management in such a way as to avoid direct impacts to this area. Per the BSC review, all efforts should be made to maximize the distance between stormwater structures and Long Pond and its floodplain. We recommend that complete protection of this slope be considered non-negotiable.

- In keeping with the original intent of protecting the land and limiting development, the Planning Board should require the applicant to investigate more modern techniques of stormwater management, for example rain gardens, bioretention areas, swales, detention basins located on each property or in shared green areas. (See BSC Report, Comment 8)

#### **General Recommendations and Considerations**

- In recommending that the Planning Board, where possible, eliminate or at least reduce the number of house lots north of the ROW, the Commission suggests the Board reconsider its previous request for the construction of a playground. This seems excessive and unnecessary for an area that will have so much natural recreation available. Instead, please consider whether some house units north of the ROW could be relocated south to the areas closer to the Wright Road entrance, or to the location where a playground was envisioned.
- Because of the extensive surrounding habitat for wildlife in this area, the Planning Board should consider what requirements it might seek in terms of the sequence of construction. The reason for this is to shorten the duration and/or minimize the impact from construction disturbance on wildlife in the adjacent undeveloped forested area. For example, consideration might be given to whether adverse wildlife impacts would be lessened if the areas to be developed first and then completed first – including roadway, infrastructure, and final houses – were at the back of the site (either just south of the ROW or, if permitted for development, the area north of the ROW) rather than starting with the lots closest to Wright Road.
- With an abundance of wildlife habitat surrounding this site, Dark Sky compliant lighting should be required. Because of the likelihood of adverse impact to wildlife, the Commission prefers to recommend no required street lighting in this subdivision.
- The Commission recommends the use of ‘turtle-friendly’ Cape Cod berms, rather than vertical curbing, along the roadway throughout the subdivision in order to provide better protection for turtles who will inevitably cross roads in this area. The Planning Board should also consider other means of designing the roadway to lessen adverse impacts to the valuable and relatively abundant turtle population in this area (notably the Blanding’s Turtle).
- The Commission supports the use of sidewalks on only one side of the roadway.
- Wherever possible, existing trees and native shrubbery should be preserved in both common areas and private house lots, in part to inhibit the introduction of non-native plantings.
- The Commission recommends that the Planning Board turn down the applicant’s request for a waiver from documenting specimen trees with diameters greater than 12 inches.
- The turtle nesting area(s) in Ayer must be completed prior to home site construction. (See comments further below re the issue of noncompliance on this matter in Groton and Ayer.)
- The Commission recommends the use of alternatives to impervious surfaces where possible, such as the use of porous paving or gravel for driveways. (See BSC Report, Comment 8)

- The Commission recommends the installation and maintenance of oil and grease separators for pre-processing stormwater, especially from roads and driveways where vehicle leaks are more likely. (See BSC Report, Comment 8)
- The Commission recommends the planting of trees and native vegetation rather than lawn/turf areas in shared green spaces. (See BSC Report, Comment 8)
- Regarding blasting: Given the considerable amount of ledge throughout this site, the sensitivity of its habitats, and the potential for adverse impact to wildlife, the Planning Board should do all within its power to eliminate or reduce the amount of blasting.
  - The construction of basements rather than slab foundations seems questionable given the particular nature of this site and the predominance of ledge throughout.
  - Any consideration for the use of chemical blasting as an alternative to the use of conventional explosives should be given intense scrutiny. Little literature could be found by BSC Group on potential impacts in a ledge-infused environment with Long Pond downhill to its east and Sandy Pond downhill to its west. The introduction of new chemicals should therefore be discouraged.
  - In addition, the Commission recommends that the Planning Board, to the extent possible, impose time-of-year limitations on unavoidable blasting in order to avoid adverse impacts during active breeding seasons for birds and spawning seasons for fish/amphibians given nearby ponds, vernal pools, and wetlands.
- Regarding the 18 items in the OSRD Guidelines – given the size of the land donation proposed by the applicant (approximately 132 acres), the Commission is not concerned that all of these items have not been addressed for the entire 150+ acre tract. The Commission’s primary concern at this stage is for the areas close to or including proposed development activities.
- The beaver-impounded wetland north of the existing loop road should, per the BSC review, be regarded as one of the more valuable wetland features on the site and treated accordingly. This should also include evaluation of the soil pile between the roadway and the beaver pond to its south as there is now clear evidence this area is being used for turtle nesting. This use is likely new, resulting from this area having been disturbed by previous construction activities and then left to sit when construction ceased in 2008. Ironically, in the intervening years, this disturbance wound up creating new habitat that is attractive for turtles.
  - NHESP has suggested this area would be ideal for the Planning Board to require a Restoration Plan that involved the careful spreading of the soil and the introduction of native plantings. Because of proximity to the road, NHESP does not want to encourage turtle activity in this area. Regardless, any re-disturbance of this area should be carefully considered by the Planning Board.
- We recommend that restrictions be placed on this subdivision regarding the application of road salt on the road or private driveways, especially south of the ROW, in terms of potential adverse impact to Long Pond, wetlands, and the environment. This should also include the use of so-

called “eco-friendly” deicing products that BSC Group states may have higher toxicity than normal road salt. (See BSC Report Comment 9)

- Are there other LID (Low Impact Development) measures that could be productively employed throughout the site, such as the use of porous paving? (See BSC Report, Comment 8)
- Regarding the final disposition of the OSRD ‘Open Space’ – whether to the Town in a traditional Conservation Restriction, to Mass. Fish & Wildlife, or to another appropriate and agreed-upon party – the Commission recommends that the Planning Board require this disposition be as close to complete as reasonably possible prior to the commencement of work on the site.
- In recent (9/26/2022) consultation with Lauren Glorioso, of NHESP, the Commission understands that while the existing 2005 joint CMP may have expired, as Mr. Burne had noted, NHESP considers this to be merely a “procedural violation,” especially given that work continues into the present under the same CMP in Groton. NHESP recommends strongly that the best course of action going forward is to amend and extend the original CMP with regard to the OSRD re-design in Ayer. For NHESP, mitigation of adverse impact to wildlife is through land protection. The existing joint CMP provides more robust protection of open space than any other course of action would.
  - The Commission also understands that NHESP will not issue an amended/extended CMP until the project is brought into compliance with the existing CMP. This is in reference to the Commission having heard from Tom Lautzenheiser, of Mass Audubon, that the applicant has not constructed the turtle-nesting area in Groton that it was required to do at the beginning of the project. NHESP was already well aware of this failure in compliance and has now made it clear it will not issue a revised CMP until compliance in the construction of turtle nesting areas in Groton as well as Ayer has been accomplished.
  - NHESP, through Ms. Glorioso, does not see a need for additional herpetofaunal investigation for the Ayer portion of the parcel – they do not need further confirmation of the presence of animals they already know are there. NHESP stressed that the Rare Herpetofaunal Investigation included by the applicant with the Conservation Analysis was part of the data that NHESP requested when issuing the original CMP. The applicant had been told by NHESP not to share this document publically and its inclusion was therefore a mistake. No additional information in this regard should be sought.
  - In addition, the Commission learned from NHESP that if the applicant seeks to amend the existing CMP, this will trigger the requirement of a new MEPA filing (Mass. Environmental Protection Act), as Mr. Burne had suggested was probable. NHESP would therefore not issue an amended/extended CMP until it received a Certificate from the Secretary of Energy & Environmental Affairs following completion of the MEPA review process and its public comment period.



- One outstanding point of confusion remains and has to do with whether the applicant could, as was suggested by Attorney Robert Collins, withdraw the OSRD submission if they so choose and return to the original subdivision plan – with its larger development footprint and the existing roughed-in road – that was permitted by a previous Planning Board in 2005. Whether this permit is still valid should be clearly resolved, once and for all, and as soon as possible. The Planning Board should seek a clear statement from Town Counsel on this matter. NHESP made clear that, if the applicant did not change the footprint of the subdivision from the 2005 plan, the applicant would only have to seek an extension of the original CMP from NHESP – and that NHESP would grant it (provided the aforementioned compliance was accomplished). In that case, there would be no need for a new MEPA review.

These recommendations are herewith respectfully submitted to the Planning Board. The Commission will be happy to discuss further any questions or concerns that may arise.

Sincerely,

A handwritten signature in black ink, reading "Jon Schmalenberger". The signature is fluid and cursive, with the first name "Jon" being more prominent.

Jon Schmalenberger,  
Chair, Ayer Conservation Commission