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Town of Durham

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and Zoning

Letter of Intent and Conditional Use Prepared For Michael and Martha Mulhern Planning, Assessing Phase 3 Final Conservation Subdivision Application Tax Map 10 / Lot 8-6, 91 Bagdad Road

October 28, 2020

Project Purpose

The intent of this project is to design and permit an age restricted residential development that is unique in style but environmentally sensitive and community centered. The design style is called a "pocket neighborhood" which consists of a group of residences centered around a central courtyard. The developed area of the parcel is approximately 3 acres and the remaining 13 acres will be preserved as open space.

Existing Conditions

The subject property is located at 91 Bagdad Road. The parcel has 51.5' of frontage on Dover Road (Route 108), has a current access via a shared right of way (ROW) with 68.03' of frontage on Bagdad Road, and has 51'+/- frontage on a ROW extending from Gerrish Drive to the westerly property boundary. The current access to the existing single-family house on the parcel is via the (ROW), shared with lots 8-7 & 8-8. The existing ROW from Gerrish Dr. and Ambler Way is owned by the Town of Durham and was designated as future access to the subject parcel for the purpose of development and deeded to the Town of Durham when the Gerrish Dr. and Ambler Way subdivision was approved in 1972. The total parcel area is approximately 15.6 acres with approximately 2.0 acres within the Town of Madbury. The parcel is surrounded on the west, south and east by single family house lots, and on the north by undeveloped woodland within the town of Madbury. The topography on the property slopes generally from south to north and northeast, with some small knolls within the center and east side. The highest point is approximately elevation 100 and the lowest point is approximately elevation 25 on the Madbury town line. The slopes range from 3% to 25% with an average slope across the parcel of approximately 6%. There is a large wetland complex of approximately 4+ acres adjacent to the westerly boundary situated approximately 300' north of the southerly boundary and contiguous to the northerly property boundary within the Town of Madbury. The wetland is connected to an unnamed brook just off the parcel, which flows easterly into Gerrish Brook. The soils on the site range from moderately well drained glacial till on the higher knolls, with some small ledge outcrops to mostly moderately well drained silty marine sediments over the remaining upland area. Poorly drained silty to clayey marine

sediments occupy the wetlands with a narrow band of somewhat poorly drained soil around the perimeter. A high intensity soil survey has been completed on the site and is included in the site analysis plans. Overhead utilities currently service the one single family home via the ROW from Bagdad Road. The parcel is currently fully wooded with a small yard area around the existing house.

Development Proposal

The optimum development opportunities on the parcel have been determined to be an area of approximately 2 – 3 acres of gently sloping to level topography for house construction. This area is to the north and northeast portion of the parcel and is directly adjacent to the access ROW. The majority of this area is interior to the parcel and will afford a wooded buffer to the surrounding properties. There is currently town water on Gerrish Dr. and Ambler Way, which is approximately 250' from the site.

The constraints on the site are largely due to the extensive wetland within the access ROW and the wetland buffer setbacks associated with the wetland complex. Other constraints include some minor ledge outcrops, and some small areas of steep slopes. The steep slopes are mostly on the fringes of the parcel and can be avoided. The open space conservation potential of the site is high due to the larger wetland complex and marginal soils that surround this wetland. In addition, there are some irregular shaped and narrow areas of the parcel due to the lot line configuration that are mostly unusable and are also restricted from access due to the wetland and buffers. All these issues lend itself to significant conservation potential.

The proposal is to develop the property for residential use. The development design is proposed to be a "pocket neighborhood" providing high quality construction of small to moderate sized homes. A pocket neighborhood is a planned community that consists of a grouping of residences that is centered around a courtyard, common garden or open space designed to promote a close-knit sense of community and neighborliness with an increased level of contact. The developable area has been previously determined through the three-step process and accepted by the planning board under the first two subdivision phases. Referring to the Site Analysis Plan submitted under the Design Review Application, the maximum number of Lots (units) is calculated to be 9. A density bonus is allowed in accordance with Section 175-57 A.1 of the Durham Zoning Ordinance. Applying this density bonus for 1-4 bedroom senior housing units, allows an increase in density from 9 units to a total of 18 units if all units are designated as senior housing.

The development has been designed with a road extension from the corner of Gerrish Drive and Ambler Way to the property. The portion of the roadway from the existing town road to the split in the access road will be a town road. This length is approximately 500' into the site. The intersection is designed to provide turn around space for emergency vehicles, and larger commercial vehicles. The remainder of the road system is a private road designed as a driveway with a clear width of 20' and a paved width of 14' with 3' gravel shoulders on each side. This portion of the roadway system will be private and is intended to minimize the disturbance and impervious surfaces. The existing town roads have adequate capacity for the development of this site and there are no sight distance issues. A traffic report is included with the submission.

Approvals Being Requested from the Planning Board

The Subdivision Regulations and Zoning Regulations will require the following approvals based on the current proposed development scope of work.

1. Planning Board Approvals:

- Subdivision approval per RSA 674:35 and the Durham Subdivision and Zoning Regulations.
- Conditional Use approval per Zoning Regulations pursuant to Article VII Condition
 Use Permits, and Article XIII Wetland Conservation Overlay District Section 175-61;
 A.1. The construction of streets, roads, driveways, access ways bridge crossings, and
 utilities including pipelines, power lines and transmission lines. This approval will
 require conservation commission review also.

A. Request for Conservation Subdivision and Conditional Use Approval

In accordance with the Subdivision and Zoning Regulations, this submission package includes the Applications and Checklists, and the following plans are included:

- 1. Existing Conditions Plan
- 2. Overall Site Plan
- 3. Entrance Site Plan
- 4. Cluster site Plan
- 5. Entrance Grading Plan
- 6. Cluster Grading Plan
- 7. Road Plan and Profiles
- 8. Wetland Crossing Sections
- 9. Construction Details

B. Conditional Use Permit approval;

The following outlines how this project complies with the provisions of the general conditions for a Conditional Use Permit contained within Article VII, Section 175-23.C of the Town of Durham Zoning Ordinance and Article XIII, Section 175-62.B specific to the WCOD. The numbering below coincides with the applicable section.

The statements below demonstrate how this development project complies with the CUP criterion. The plans incorporate best management practices for the construction and thereby satisfy the CUP criterion.

Section 175-23.C

1. Site Suitability:

The property is suitable for the proposed expansion because the use is allowed as a primary use. The proper three step process for conservation subdivision and the proposal for the first two preliminary and conceptual phases have been approved. This process validates that the site is suitable for the proposed development pending the final local and state approval.

- (a) Adequate vehicular and pedestrian access for the intended use. Based on the traffic study, the roadways are adequate for the proposed use. Given the amount of pedestrian use of the existing roads for walking, the design of the new road extension will not deter the use by pedestrians and will be more than adequate for all vehicle access.
- (b) The availability of adequate public services to serve the intended use including emergency services, pedestrian facilities, schools and other municipal services. Adequate emergency services can be provided, and access will meet all current fire department and DPW standards. Municipal water and sewer are close enough to the site that the design incorporates these services and provides future connection for the existing single family houses that do not currently have municipal sewer; there will be minimal impacts to the schools by this development; solid waste will be handled by a private waste company and the homeowners can be included in the Town recycling program.
- (c) The absence of environmental constraints (floodplains, steep slope, etc.) or development of a plan to substantially mitigate the impacts of those constraints. The environmental constraints have been identified throughout the conservation subdivision design process and this design provides the mitigation of those constraints. First and foremost, this design is clustering the development of the land on the least constrained portion of the parcel and we have chosen a development style that minimizes impacts to the land and enhances community involvement to care for the environment. The land area with the most constraints is being conserved as openspace. Secondly, the design of the roadway that impacts the wetland and steep slopes is being designed to minimize and mitigate those impacts. The use of retaining walls to minimize fills, best management practices for stormwater and oversized culvert design for reduction in existing flooding issues and enhanced wildlife movement are part of the design. The stormwater collection/treatment system is classified by the NHDES as a best management practice incorporating infiltration/filtration and detention. The stormwater system will collect, treat, and improve the quality of the stormwater runoff and significantly reduce the peak flow discharged from the site. The landscape plan will enhance the aesthetics within the development and the stromwater treatment system.
- (d) The availability of appropriate utilities to serve the intended use including water, sewage disposal, stormwater disposal, electricity, and similar utilities. The site is suitable because of the availability of appropriate utilities to serve the intended use available. The stormwater system will meet LID standards and provide collection, filtration, some infiltration, and detention.

2. External Impacts:

The external impacts of the proposed use on the abutting properties and the neighborhood will be no greater than the impacts of adjacent existing uses or other uses permitted in the zone. This shall included but not be limited to traffic, noise, odors, vibrations, dust, fumes, hours of operation, and exterior lighting and glare.

 This unique conservation subdivision will not cause an adverse impact to abutting properties to a greater extent than any other existing residential use in the neighborhood. This property is surrounded by single family homes and woodland similarly to abutting properties in the neighborhood. This subdivision will not produce any additional odors, noise, vibrations, or fumes that do not currently exist in the neighborhood. Vehicle traffic exists in the neighborhood and surrounding roadways and the parking report proves that additional traffic from this development will not significantly increase the traffic to a point where it will burden the existing or proposed roadway. The exterior lighting will be similar to existing residential lighting.

The location, nature, design, and height of the structure and its appurtenances, its scale with reference to its surroundings, and the nature and intensity of the use will have no adverse effect on the surrounding environment and will not discourage the appropriate and orderly development and use of the land and buildings in the neighborhood because:

• The location and scale of this subdivision is controlled by the subdivision and zoning regulations, the constraints of the property and environmental concerns and the design and intensity of use will not be greater than similar residential uses of surrounding properties. In fact, this unique design is better suited on this property than the existing standard subdivision adjacent to it because of the setbacks to minimize impacts in the setbacks, land conservation and stormwater design. In addition, the nature and intensity of the use will be equal to or in some cases less intensive than other residential lots in the surrounding neighborhood. This design meets appropriate and orderly development because it meets the design intent required by the subdivision regulations and is in line with the master plan.

3. Character of the site development:

The proposed layout and design of the site shall not be incompatible with the established character of the neighborhood and shall mitigate any external impacts of the use on the neighborhood. This shall include but not be limited to, the relationship of the building to the street, the amount, location, and screening of off street parking, the treatment of yards and setbacks, the buffering of adjacent properties, and provisions for vehicular and pedestrian access to and within the site.

• The design is not incompatible with the neighborhood because it is an approved use and it meets the current conservation subdivision requirements with respect to its relationship to the existing buildings, streets, screening and buffers. This subdivision is designed to the interior of the parcel providing proper separation and screening to other properties in the neighborhood. There is currently adequate vehicle access and the new roadway is being designed to match the existing roads and maintain vehicle and pedestrian access.

4. Character of the buildings and structures:

The design of any new buildings or structures and the modifications of existing buildings or structures on the site shall not be incompatible with the established character of the neighborhood. This shall include but not be limited to, the scale, height, and massing of the building or structure, the roof line, the architectural treatment of the front or street elevation, the location of the principal entrance, and the material and colors proposed to be used.

The residential structures are designed to the correct scale with respect to the size
of the parcel and the size of other residential structures on various parcels within

the neighborhood. This design meets all the zoning and subdivision regulations, to make it very compatible with the character of the neighborhood, when compared with other similar residential uses in the neighborhood.

5. Preservation of natural, cultural, historic, and scenic resources:

The proposed use of the site, including all related development activities, shall preserve identified natural, cultural, historic, and scenic resources on the site and shall not degrade such identified resources on abutting properties. This shall include, but not be limited to, identified wetlands, floodplains, significant wildlife habitat, stonewalls, mature tree lines, cemeteries, graveyards, designated historic buildings or sires, scenic views, and viewsheds.

This subdivision is specifically designed to preserve all of these resources that exist to the greatest extent possible, given the fact that the three-step process for conservation subdivisions is being followed. The first two application review phases are set up to a) identify the suitability of the site for development, b) review the proposal with regard to the compliance with the regulations, c) identify constraints and usable land area, d) identify conservation areas, and e) provide a preliminary layout of the subdivision based on all the information. This design protects the natural resources to the greatest extent possible by clustering the developed area on usable land and conserving the unsuitable areas and buffers. The most significant wetland area is protected by the creation of the conservation land and the stromwater collection system. Conserving 13 acres of woods throughout the parcel, which surround the wetland and small streams, protects their habitats. This corridor is interrupted in one location by the roadway. In this location a large culvert has been designed to help the movement of wildlife. There are no cemeteries, graveyards, historic building scenic views or viewsheds, therefore this design does not have a negative impact on these natural or cultural resources.

6. Impact on property values:

The proposed development will not cause or contribute to a significant decline in property values of adjacent properties.

This subdivision design and the construction of the proposed residential houses will not have a negative impact on adjacent property values because it fits with the character of the surrounding properties. The houses are clustered in the center of the property providing a significant buffer to the adjacent houses. The subdivision road is designed to the same standards as the existing roads and they minimize the impacts to natural resources. In addition, the stormwater collection and treatment system will meet current standards and significantly reduce the effects of surface water runoff to a greater extent than surrounding developments. This project will also provide connection to the municipal sewer system in addition to allowing existing properties to connect, thereby further reducing the negative impact to adjacent and downstream surface waters.

7. Availability of Public Services and Facilities:

Adequate and lawful facilities or arrangements for sewage disposal, solid waste disposal, water supply, utilities, drainage and other necessary public or private services, are approved or assured, to the end that the use will be capable of proper operation. In addition, it must be

determined that these services will not cause excessive demand on municipal services, including, but not limited to, water, sewer, waste disposal, police protection, fire protection and schools.

 As previously stated, the design incorporates current LID stormwater practice, connects to municipal water and sewer and electrical utilities are available. This subdivision will not increase demand on any municipal services to any greater extent that existing subdivisions in the neighborhood. In fact, this subdivision will have little effect on the schools due to the age restriction.

8. Fiscal impacts

The proposed use will not have a negative fiscal impact on the Town unless the planning board determines that there are other positive community impacts that off-set the negative fiscal aspects of the proposed use. The Planning Board's decision shall be based upon an analysis of the fiscal impact of the project on the town. The Planning board may commission, at the applicants expense, an independent analysis of the fiscal impact of the project on the town.

On balance, this subdivision will produce significant tax dollars with minimal
increase to municipal costs. The public roadway is minimal, the extension of the
utilities are paid for by the developer and the increase in school age children will be
minimal. This subdivision will not be a negative fiscal impact to the town.

Section 175-62.B

1. There is no alternative location on the parcel that is outside of the WCOD that is reasonably practical for the proposed use;

The first two application phases of the conservation subdivision process helped define the usable and unusable areas by preparing a site inventory map and analyzing the wetlands, buffers, soils, drainage, slopes woodland and wildlife components of the property. From this analysis, the determination is that this 3-acre area is the best suitable location for development on the parcel and the most valuable natural resources can be adequately protected by clustering the development in this location and placing the remaining land in conservation in perpetuity. There is a total of three ROW's that provide access to the parcel. Two of those access ROW's impact the WCOD. The only alternative access that does not impact the WCOD is the ROW from Route 108. The access from Route 108 on the east side of the parcel is a 50' ROW but it does not allow the subject property owner the right to construct a public road for access to a subdivision and the topography along the access ROW greatly exceeds the maximum slope for any road construction, therefore this access is not a reasonably practical option. The use of the Town Right of Way (ROW) from Gerrish Dr. and Ambler Way is the least impacting alternative for access to the developable area.

The other impacts from the roadway include crossing a small wetland finger and disturbing part of the 75' wetland buffer. These impacts are much less significant and allow for the development of the most desirable usable land area based on the subdivision analysis. The impacts are required because the developable area is narrow for the style of development due to the location of the narrow wetland finger and steep slopes. This wetland finger is the least significant on the property, and there is no other reasonably feasible location to develop this "pocket neighborhood" subdivision style on the parcel without these minor impacts. Preserving a large portion of this wetland finger has been incorporated into the

design to allow for the development style. By incorporating a LID stormwater treatment system into the design and enhancing the remaining buffer, this design meets the purpose of the wetland buffer.

- 2. The amount of soil disturbance will be the minimum necessary for the construction and operation of the facilities as determined by the Planning Board;
 - The grading in the wetland areas and buffers has been designed to be the minimum required to meet all engineering and environmental standards. The access road from Gerrish Dr. and Ambler Way is being designed to the minimum grade to provide for culvert installation to maintain the existing surface water flow through the wetland and mitigate flooding potential on the adjacent property. In addition, retaining walls are being used to minimize wetland impacts, reduce soil disturbance and reduce the removal of existing native vegetation. The crossing at the ravine is being designed to adequately pass the design storm without causing flooding and erosion and provide a corridor for wildlife use to avoid crossing the road. Grading in the buffer areas is being minimized and re-vegetated to protect the wetland functions.
- 3. The location, design, construction, and maintenance of the facilities will minimize any detrimental impact on the wetland, and mitigation activities will be undertaken to counterbalance any adverse impacts;
 - This is being accomplished through the grading design, the stormwater system design, the planting and the required maintenance of these systems. At the first two crossings, the runoff from the roadway will be collected and treated prior to discharge to the wetland. The buffer impacts include the construction of the stormwater system to collect and treat surface water runoff from impervious areas. This stormwater system design will improve the existing buffer while still maintaining a vegetative screen.
- 4. Restoration activities will leave the site, as nearly as possible, in its existing condition and grade at the time of application for the Conditional Use Permit;
 - As stated above, the grades are being minimized to the greatest extend possible based on engineering standards. This will allow the changes to be as nearly as possible to the existing condition and grade while providing for development of usable area on the property.

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely;

Michael J. Sievert PE

Michael N. Sairt

MJS Engineering