

Project Application

Land Use Department

P.O. Box 660; 333 Calef Hwy, Barrington, NH 03825 ♦ Phone: 603-664-5798 ♦ Fax: 603-664-0188

240-8-NR-23-Sub(23)

Case Number: _____ Project Name: Major Subdivision for Paul Thibodeau Date 2/15/23

Staff Signature required PRIOR to submittal

PRELIMINARY APPLICATION: Preliminary Conceptual Review _____ Design Review _____ Development of Regional Impact _____

FORMAL APPLICATION:

Subdivision Type: Major ☒ Minor _____ Conventional _____ Conservation ☒
Site Plan Review: Major _____ Minor _____
Conditional Use Permit _____ Sign Permit _____ Boundary Line Adjustment _____ Special Permit _____
Change of Use _____ Extension for Site Plan or Subdivision Completion _____
Amendment to Subdivision/Site Plan Approval _____ Other _____

Project Name: Thibodeau Subdivision Area (Acres or S.F) 65.55

Project Address: Young Rd

Current Zoning District(s): Neighborhood Residential Map(s) 240 Lot(s) 8

Request: To subdivide the property into 23 Lots using the Conservation Subdivision Ordinance.

The property owner shall designate an agent for the project. This person (the applicant) shall attend pre-application conferences and public hearings, will receive the agenda, recommendations, and case reports, and will communicate all case information to other parties as required.
All contacts for this project will be made through the Applicant listed below.

Owner: Norma Bearden
Company _____
Phone: _____ Fax: _____ E-mail: _____
Address: 802 North Union St, Natchez, MS 39120

Applicant (Contact): Paul Thibodeau
Company _____
Phone: 603-767-3552 Fax: _____ E-mail: paulthibodeau1@gmail.com
Address: 76 Young Rd, Barrington, NH 03825

Developer: _____
Company _____
Phone: _____ Fax: _____ E-mail: _____
Address: _____

Architect: _____
Company _____
Phone: _____ Fax: _____ E-mail: _____
Address: _____

Engineer: Kenneth A. Berry, PE, LLS
Company Berry Surveying & Engineering
Phone: 603-332-2863 Fax: _____ E-mail: Crberry@Metrocast.net
Address: 335 Second Crown Point Rd, Barrington, NH 03825

Owner Signature
Barbara Duine
Staff Signature

Applicant Signature
2/15/23
Date

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TOWN OF BARRINGTON - LAND USE DEPARTMENT

PROJECT NARRATIVE

PROJECT NAME Proposed Subdivision For Paul Thibodeau

CASE FILE NUMBER 240-8-NR-23-Sub(23)

PROJECT LOCATION Young Road

DATE OF APPLICATION 2-15-23

Property Details:

Single-Family ☒ Residential Multi-Family Residential Commercial Industrial

Current Zoning: Neighborhood Residential Lot Area Size 65.55

Setbacks: Front 40' Conventional 100' Conservation Side 30' Conventional 20' Conservation Rear 30' Conventional 20' Conservation

Parking Spaces Required: 0

Parking Spaces Provided: 0

Please describe your project and its purpose and intent. You may attach a typed description.

The applicant is proposing to subdivide the subject parcel using the Conservation Subdivision Ordinance. A yield plan was developed which provides for 23 lots in a conventional subdivision layout. The applicant is proposing the same 23 lots in a subdivision that utilizes the existing roadway infrastructure and does not propose any new roadways. The proposed open space for the project is central to the most valuable resources on the property and is adjacent to the protected lands owned by the Town and eased by SELT.

There is an existing cistern on the project site.

The applicant proposes to keep an existing trail through the property to the conserved land open and free of proposed driveways and lots. Shared driveways will be proposed in areas which lend to the best sight distances so as to reduce the number of curb cuts needed for the project. The application has received a variance to allow the driveways to be within the front buffer, to allow the front buffer to be reduced on certain lots, and to allow the front buffer to be incorporated into the lots. The application has also received a special exception to permit driveways to be within easements that are off the lots frontage.

Wetlands have been delineated and survey located on the project site. Prime Wetland #4 is located in the middle of the parcel and as such the 100' buffer is shown in areas where it is not otherwise affected by the 50' wetlands buffer. Areas less than 3,000 SF do not require buffers. The project design does not require any 9.6 requests.

The applicant has incorporated the connections to the open space area previously discussed at the Preliminary Hearing. In addition the final plans now provided for driveway locations and sight line profiles in each direction. There is one less driveway provided in this design from the previous design due to the concerns the board and abutting land owners had.

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Applicant: Major Subdivision Case # 240-8-NR-23-Sub(23)
for Paul Thibodeau

Subdivision, Site Review, and Lot Line Adjustment Application Checklist
Barrington Planning Board
Adopted January 20, 2009

This checklist is intended to assist applicants in preparing a complete application for subdivision as required by the Barrington Subdivision Regulations and must be submitted along with all subdivision applications. An applicant seeking subdivision approval shall be responsible for all requirements specified in the Barrington Subdivision Regulations even if said requirements are omitted from this checklist.

An applicant seeking subdivision approval shall be responsible for providing all the information listed in the column below entitled "Subdivision" and should place an "x" in each box to indicate that this information has been provided. If an item is considered unnecessary for certain applications the "NA" box should be marked instead indicating "Not Applicable". Only certain checklist items are required for lot line adjustments, as noted by the applicable check boxes below.

Check The Appropriate Box or Boxes Below:					
<input type="checkbox"/> Lot Line Relocation See Section I & II	<input type="checkbox"/> Site Plan See Sections I & II	<input checked="" type="checkbox"/> Subdivision Plan See Sections I, II, III, IV & V			
			Provided	NA	
Section I.					
General Requirements					
1. Completed Application Form			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Complete abutters list			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Payment of all required fees			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Five (5) full size sets of plans and six (6) sets of plans 11" by 17" submitted with all required information in accordance with the subdivision regulations and this checklist			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Copies of any proposed easement deeds, protective covenants or other legal documents			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Any waiver request(s) submitted with justification in writing			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. Technical reports and supporting documents (see Sections IX & X of this checklist)			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Completed Application Checklist			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Section II.					
General Plan Information					
1. Size and presentation of sheet(s) per registry requirements and the subdivision regulations			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Title block information:			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
a. Drawing title			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Name of subdivision			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Location of subdivision			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Tax map & lot numbers of subject parcel(s)			<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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Application Checklist

Barrington Subdivision Regulations

e. Name & address of owner(s)	<input type="checkbox"/>	<input type="checkbox"/>		
f. Date of plan	<input type="checkbox"/>	<input type="checkbox"/>		
g. Scale of plan	<input type="checkbox"/>	<input type="checkbox"/>		
h. Sheet number	<input type="checkbox"/>	<input type="checkbox"/>		
i. Name, address, & telephone number of design firm	<input type="checkbox"/>	<input type="checkbox"/>		
j. Name and address of applicant	<input type="checkbox"/>	<input type="checkbox"/>		
3. Revision block with provision for amendment dates	<input type="checkbox"/>	<input type="checkbox"/>		
4. Planning Board approval block provided on each sheet to be recorded	<input type="checkbox"/>	<input type="checkbox"/>		
5. Certification block (for engineer or surveyor)	<input type="checkbox"/>	<input type="checkbox"/>		
6. Match lines (if any)	<input type="checkbox"/>	<input type="checkbox"/>		
7. Zoning designation of subject parcel(s) including overlay districts	<input type="checkbox"/>	<input type="checkbox"/>		
8. Minimum lot area, frontages & setback dimensions required for district(s)	<input type="checkbox"/>	<input type="checkbox"/>		
9. List Federal Emergency Management Agency (FEMA) sheet(s) used to identify 100-year flood elevation, locate the elevation	<input type="checkbox"/>	<input type="checkbox"/>		
10. Note the following: "If, during construction, it becomes apparent that deficiencies exist in the approved design drawings, the Contractor shall be required to correct the deficiencies to meet the requirements of the regulations at no expense to the Town."	<input type="checkbox"/>	<input type="checkbox"/>		
11. Note the following: "Required erosion control measures shall be installed prior to any disturbance of the site's surface area and shall be maintained through the completion of all construction activities. If, during construction, it becomes apparent that additional erosion control measures are required to stop any erosion on the construction site due to actual site conditions, the Owner shall be required to install the necessary erosion protection at no expense to the Town."	<input type="checkbox"/>	<input type="checkbox"/>		
12. Note identifying which plans are to be recorded and which are on file at the town.	<input type="checkbox"/>	<input type="checkbox"/>		
13. Note the following: "All materials and methods of construction shall conform to Town of Barrington Subdivision Regulations and the latest edition of the New Hampshire Department of Transportation's Standard Specifications for Road & Bridge Construction."	<input type="checkbox"/>	<input type="checkbox"/>		
14. North arrow	<input type="checkbox"/>	<input type="checkbox"/>		
15. Location & elevation(s) of 100-year flood zone per FEMA Flood Insurance Study	<input type="checkbox"/>	<input type="checkbox"/>		
16. Plan and deed references	<input type="checkbox"/>	<input type="checkbox"/>		
17. The following notes shall be provided:	<input type="checkbox"/>	<input type="checkbox"/>		
a. Purpose of plan	<input type="checkbox"/>	<input type="checkbox"/>		
b. Existing and proposed use	<input type="checkbox"/>	<input type="checkbox"/>		
c. Water supply source (name of provider (company) if offsite)	<input type="checkbox"/>	<input type="checkbox"/>		
d. Zoning variances/special exceptions with conditions	<input type="checkbox"/>	<input type="checkbox"/>		
e. List of required permits and permit approval numbers	<input type="checkbox"/>	<input type="checkbox"/>		
f. Vicinity sketch showing 1,000 feet surrounding the site	<input type="checkbox"/>	<input type="checkbox"/>		
g. Plan index indicating all sheets	<input type="checkbox"/>	<input type="checkbox"/>		
18. Boundary of entire property to be subdivided	<input type="checkbox"/>	<input type="checkbox"/>		
19. Boundary monuments	<input type="checkbox"/>	<input type="checkbox"/>		
a. Monuments found	<input type="checkbox"/>	<input type="checkbox"/>		
b. Map number and lot number, name addresses, and zoning of all abutting land owners	<input type="checkbox"/>	<input type="checkbox"/>		
c. Monuments to be set	<input type="checkbox"/>	<input type="checkbox"/>		
20. Existing streets:	<input type="checkbox"/>	<input type="checkbox"/>		
a. Name labeled	<input type="checkbox"/>	<input type="checkbox"/>		
b. Status noted or labeled	<input type="checkbox"/>	<input type="checkbox"/>		
c. Right-of-way dimensioned	<input type="checkbox"/>	<input type="checkbox"/>		
d. Pavement width dimensioned	<input type="checkbox"/>	<input type="checkbox"/>		
21. Municipal boundaries (if any)	<input type="checkbox"/>	<input type="checkbox"/>		

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Application Checklist

Barrington Subdivision Regulations

b. Contiguous uplands(s)	<input type="checkbox"/>	<input type="checkbox"/>		
5. Proposed streets:	<input type="checkbox"/>	<input type="checkbox"/>		
a. Name(s) labeled	<input type="checkbox"/>	<input type="checkbox"/>		
b. Width of right-of-way dimensioned	<input type="checkbox"/>	<input type="checkbox"/>		
c. Pavement width dimensioned	<input type="checkbox"/>	<input type="checkbox"/>		
6. Source and datum of topographic information (USGS required)	<input type="checkbox"/>	<input type="checkbox"/>		
7. Show at least one benchmark per sheet (min.) and per 5 acres (min.) of total site area	<input type="checkbox"/>	<input type="checkbox"/>		
8. Soil Conservation Service (SCS) soil survey information	<input type="checkbox"/>	<input type="checkbox"/>		
9. Location, type, size & inverts of the following (as applicable):	<input type="checkbox"/>	<input type="checkbox"/>		
a. Existing water systems	<input type="checkbox"/>	<input type="checkbox"/>		
b. Existing drainage systems	<input type="checkbox"/>	<input type="checkbox"/>		
c. Existing utilities	<input type="checkbox"/>	<input type="checkbox"/>		
10. 4K affluent areas with 2 test pit locations shown with suitable leaching areas	<input type="checkbox"/>	<input type="checkbox"/>		
11. Location of all water wells with protective radii as required by the NH Department Of Environmental Services (meeting Town and NHDES setback requirements)	<input type="checkbox"/>	<input type="checkbox"/>		
12. Existing tree lines	<input type="checkbox"/>	<input type="checkbox"/>		
13. Existing ledge outcroppings & other significant natural features	<input type="checkbox"/>	<input type="checkbox"/>		
14. Drainage, Erosion and Sediment Control Plan(s) containing all of the requirements specified in Section 16.3.2 (Final Plan Requirements) of the Subdivision Regulations	<input type="checkbox"/>	<input type="checkbox"/>		
Section IV				
Construction Detail Drawings				
Note: Construction details to conform with NHDOT Standards & Specifications for Roads & Bridges, Town of Barrington Highway Department requirements, and Subdivision Regulations	<input type="checkbox"/>	<input type="checkbox"/>		
1. Typical cross-section of roadway	<input type="checkbox"/>	<input type="checkbox"/>		
2. Typical driveway apron detail	<input type="checkbox"/>	<input type="checkbox"/>		
3. Curbing detail	<input type="checkbox"/>	<input type="checkbox"/>		
4. Guardrail detail	<input type="checkbox"/>	<input type="checkbox"/>		
5. Sidewalk detail	<input type="checkbox"/>	<input type="checkbox"/>		
6. Traffic signs and pavement markings	<input type="checkbox"/>	<input type="checkbox"/>		
7. Drainage structure(s):	<input type="checkbox"/>	<input type="checkbox"/>		
8. Outlet protection riprap apron	<input type="checkbox"/>	<input type="checkbox"/>		
9. Level spreader	<input type="checkbox"/>	<input type="checkbox"/>		
10. Treatment swale	<input type="checkbox"/>	<input type="checkbox"/>		
11. Typical section at detention basin	<input type="checkbox"/>	<input type="checkbox"/>		
12. Typical pipe trench	<input type="checkbox"/>	<input type="checkbox"/>		
13. Fire protection details	<input type="checkbox"/>	<input type="checkbox"/>		
14. Erosion control details:	<input type="checkbox"/>	<input type="checkbox"/>		
15. Construction Notes	<input type="checkbox"/>	<input type="checkbox"/>		
a. Construction sequence	<input type="checkbox"/>	<input type="checkbox"/>		
b. Erosion control notes	<input type="checkbox"/>	<input type="checkbox"/>		
c. Landscaping notes	<input type="checkbox"/>	<input type="checkbox"/>		
d. Water system construction notes	<input type="checkbox"/>	<input type="checkbox"/>		
e. Sewage system construction notes	<input type="checkbox"/>	<input type="checkbox"/>		
f. Existing & finish centerline grades	<input type="checkbox"/>	<input type="checkbox"/>		
g. Proposed pavement - Typical cross-section	<input type="checkbox"/>	<input type="checkbox"/>		
h. Right-of-way and easement limits	<input type="checkbox"/>	<input type="checkbox"/>		
i. Embankment slopes	<input type="checkbox"/>	<input type="checkbox"/>		
j. Utilities	<input type="checkbox"/>	<input type="checkbox"/>		

Application Checklist

Barrington Subdivision Regulations

22. Existing easements (identified by type)	<input type="checkbox"/>	<input type="checkbox"/>		
A) Drainage easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
B) Slope easements(s)	<input type="checkbox"/>	<input type="checkbox"/>		
C) Utility easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
D) Temporary easement(s) (Such as temporary turnaround	<input type="checkbox"/>	<input type="checkbox"/>		
E) No-cut zone(s) along streams & wetlands (as may be requested by the	<input type="checkbox"/>	<input type="checkbox"/>		
F) Conservation Commission)	<input type="checkbox"/>	<input type="checkbox"/>		
G) Vehicular & pedestrian access easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
H) Visibility easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
I) Fire pond/cistern(s)	<input type="checkbox"/>	<input type="checkbox"/>		
J) Roadway widening easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
K) Walking trail easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
a) Other easement(s) Note type(s)	<input type="checkbox"/>	<input type="checkbox"/>		
23. Designation of each proposed lot (by map & lot numbers as provided by the assessor)	<input type="checkbox"/>	<input type="checkbox"/>		
24. Area of each lot (in acres & square feet):	<input type="checkbox"/>	<input type="checkbox"/>		
a. Existing lot(s)	<input type="checkbox"/>	<input type="checkbox"/>		
b. Contiguous upland(s)	<input type="checkbox"/>	<input type="checkbox"/>		
25. Wetland delineation (including Prime Wetlands):	<input type="checkbox"/>	<input type="checkbox"/>		
a. Limits of wetlands	<input type="checkbox"/>	<input type="checkbox"/>		
b. Wetland delineation criteria	<input type="checkbox"/>	<input type="checkbox"/>		
c. Wetland Scientist certification	<input type="checkbox"/>	<input type="checkbox"/>		
26. Owner(s) signature(s)	<input type="checkbox"/>	<input type="checkbox"/>		
27. All required setbacks	<input type="checkbox"/>	<input type="checkbox"/>		
28. Physical features	<input type="checkbox"/>	<input type="checkbox"/>		
a. Buildings	<input type="checkbox"/>	<input type="checkbox"/>		
b. Wells	<input type="checkbox"/>	<input type="checkbox"/>		
c. Septic systems	<input type="checkbox"/>	<input type="checkbox"/>		
d. Stone walls	<input type="checkbox"/>	<input type="checkbox"/>		
e. Paved drives	<input type="checkbox"/>	<input type="checkbox"/>		
f. Gravel drives	<input type="checkbox"/>	<input type="checkbox"/>		
29. Location & name (if any) of any streams or water bodies	<input type="checkbox"/>	<input type="checkbox"/>		
30. Location of existing overhead utility lines, poles, towers, etc.	<input type="checkbox"/>	<input type="checkbox"/>		
31. Two-foot contour interval topography shown over all subject parcels	<input type="checkbox"/>	<input type="checkbox"/>		
32. Map and lot numbers, name, addresses, and zoning of all abutting land owners	<input type="checkbox"/>	<input type="checkbox"/>		
Section III				
Proposed Site Conditions Plan				
(Use Sections I General Requirements & Section II General Plan Information)				
1. Surveyor's stamp and signature by Licensed Land Surveyor	<input type="checkbox"/>	<input type="checkbox"/>		
2. Proposed lot configuration defined by metes and bounds	<input type="checkbox"/>	<input type="checkbox"/>		
3. Proposed easements defined by metes & bounds. Check each type of proposed easement applicable to this application:	<input type="checkbox"/>	<input type="checkbox"/>		
a. Drainage easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
b. Slope easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
c. Utility easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
d. Temporary easement(s) (such as temporary turnaround)	<input type="checkbox"/>	<input type="checkbox"/>		
e. Roadway widening easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
f. Walking trail easement(s)	<input type="checkbox"/>	<input type="checkbox"/>		
g. Other easement(s) Note type(s)	<input type="checkbox"/>	<input type="checkbox"/>		
4. Area of each lot (in acres & square feet):	<input type="checkbox"/>	<input type="checkbox"/>		
a. Total upland(s)	<input type="checkbox"/>	<input type="checkbox"/>		

(date of adoption)

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APPLICATION AGREEMENT

I hereby apply for Subdivision Plan Review and acknowledge I will comply with all of the ordinances of the Town Of Barrington, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the subdivision Plan or Application specifications are incomplete, the Application will be considered rejected.

In consideration for approval and the privileges accruing thereto, the subdivider thereby agrees:

- E. To carry out the improvements agreed upon and as shown and intended by said plat, including any work made necessary by unforeseen conditions which become apparent during construction of the subdivision.
- E. To post all streets "Private" until accepted by the Town and to provide and install street signs as approved by the Selectmen of the Town for all street intersections.
- E. To give the Town on demand, proper deeds for land or rights-of-way reserved on the plat for streets, drainage, or other purposes as agreed upon.
- E. To save the Town harmless from any obligation it may incur or repairs it may make, because of my failure to carry out any of the foregoing provisions.
- E. Mr/Mrs Any Member of Berry Surveying & Eng. to whom all communications to the subdivider may be addressed with any proceedings arising out of the agreement herein.

Signature of Owner: _____

Signature of Developer: _____

Technical Review Signatures: _____

Town Engineer/Planner Approval Signature: _____ The owners, by the filing of this application as indicated above, hereby give permission for any member of the Barrington Planning Board, the Town Engineer, The Conservation Commission and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, test and inspections as may be appropriate.

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Application Checklist**Barrington Subdivision Regulations**

Section V Supporting Documentation If Required					
1. Calculation of permitted housing density (for Conservation Subdivisions only as required in Article 6 of the Barrington Zoning Ordinance)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
2. Stormwater management report	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
3. Traffic impact analysis	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
4. Environmental impact assessment	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
5. Hydrogeologic study	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
6. Fiscal impact study provided	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
7. Calculation of permitted housing density (for Conservation Subdivisions only as required in Article 6 of the Barrington Zoning Ordinance)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
8. Site Inventory and Conceptual Development Plan (from preliminary Conservation Subdivision review only)	<input type="checkbox"/>	<input checked="" type="checkbox"/>			

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(Refusal to sign this permission form does not invalidate an application, but the Planning Board may not be able to make an informed decision regarding unseen lands with potential areas of concerns).

Signature of Owner: _____

Note: The developer/individual in charge must have control over all project work and be available to the Road Agent and Code Enforcement Officer during the construction phase of the project. The Road Agent and Code Enforcement Officer must be notified within two (2) working days of any change by the individual in charge of the project.

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ADMINISTRATIVE AND REVIEW FEES



BERRY SURVEYING & ENGINEERING

335 Second Crown Point Road
Barrington, NH 03825

Phone: (603) 332-2863

Fax: (603) 335-4623

www.BerrySurveying.Com

February 15, 2022

Town of Barrington Planning Board
333 Calef Highway
Barrington, NH 03825
RE: Thibodeau Subdivision
Waiver Request
Young Road
Tax Map 240, Lot 8

Dear Chairman and Members of the Barrington Planning Board,

In accordance with the subdivision standards Article 8, 8.1 General Waiver Provision, the following waiver is hereby requested:

1. Identification of Waiver Request:

- Definition of Sight Distance to be consistent with common practice, NHDOT Standards and AASHTO Standards.
- Intersection Design Figure 4A.
- Definitions – Sight Distance

2. Explanation:

The requirements found in the definitions and in Figure 4A are misapplied for driveway applications and deviates from standard use and practice of the American Association of State Highway and Transportation Officials (AASHTO) Geometric Design of Highways and Streets, 7th Edition (2018) (aka Green Book). The regulations also differ from the requirements of New Hampshire Department of Transportation (NHDOT) Driveway Policy.

The driveway section 12.3 points to Figure 4A which is found in the Road Design section of the regulations when describing regulations for a residential driveway. Figure 4A is of a vehicle sitting at a functional intersection with a stop bar and stop sign, implying its purpose is for a new road or similar, not a residential driveway. Figure 4A being found in the Road Design section has the same implication. The definition supplied in the subdivision regulations for stopping sight distance states that it is a calculated requirement from the driver's eye of 3.5' looking at an object 0.5' which is misapplied from the AASHTO manual for the purposes of calculating sight distance. In the 2018 revision, section 3.2.6 "Criteria for Measuring Sight Distance", stopping sight

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distance is calculated with a driver assumed to be at 3.5' looking at an object 2.0' tall along the alignment of the roadway. *The revision here is that prior, now outdated, manuals calculated this as 3.5' looking at 0.5' tall.*

The misapplication comes in the form of a clarifying paragraph entitled "Intersection Sight Distance" which states that, when calculating intersection sight distance heights, Passing Sight Distance which uses the same object height function of 3.5' looking at 3.5' should be utilized. The pages from the AASHTO Green Book are included at the end of this document on pages 3 and 4. In all applications to the NHDOT, as found in the NHDOT driveway policy, the requirement is an object traveling at 3.75' tall looking at an object of the same height, 3.75'. The page from the NHDOT policy detailing this is included at the end of this document on page 5. This project is requesting to use the NHDOT standard.

3. Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The purpose and intent of requiring sight distances to a certain standard is to ensure the safety of drivers and future occupants of the residential homes on the Town roadway system. We submit that the proposed design carries out this purpose and intent through the proper use of the NHDOT driveway policy along with the proper use of the AASHTO Green Book.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity would place a burden on the applicant by way of additional excavation on a roadway that would not ordinarily be required. Additionally, this would result in driveways not meeting Barrington sight distance requirements when the sight distance provided is consistent with NHDOT measuring techniques. It is unnecessary in that the standard required by the regulations is misapplied and far exceeds the standard regulations imposed by higher government agencies on more highly traveled roads.

Respectfully Submitted,
BERRY SURVEYING & ENGINEERING

Christopher R. Berry
Project Engineer
Principal, President

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3.2.6 Criteria for Measuring Sight Distance

Sight distance is the distance along a roadway throughout which an object of specified height is continuously visible to the driver. This distance is dependent on the height of the driver's eye above the road surface, the specified object height above the road surface, and the height and lateral position of sight obstructions within the driver's line of sight.

3.2.6.1 Height of Driver's Eye

For all sight distance calculations for passenger vehicles, the height of the driver's eye is considered to be 3.50 ft [1.08 m] above the road surface. This value is based on a study (19) that found average vehicle heights have decreased to 4.25 ft [1.30 m] with a comparable decrease in average eye heights to 3.50 ft [1.08 m]. Because of various factors that appear to place practical limits on further decreases in passenger car heights and the relatively small increases in the lengths of vertical curves that would result from further changes that do occur, 3.50 ft [1.08 m] is considered to be the appropriate height of driver's eye for measuring both stopping and passing sight distances. For large trucks, the driver eye height ranges from 3.50 to 7.90 ft [1.80 to 2.40 m]. The recommended value of truck driver eye height for design is 7.60 ft [2.33 m] above the road surface.

3.2.6.2 Height of Object

For stopping sight distance and decision sight distance calculations, the height of object is considered to be 2.00 ft [0.60 m] above the road surface. For passing sight distance calculations, the height of object is considered to be 3.50 ft [1.08 m] above the road surface.

Stopping sight distance object—The selection of a 2.00-ft [0.60-m] object height was based on research indicating that objects with heights less than 2.00 ft [0.60 m] are seldom involved in crashes (19). Therefore, it is considered that an object 2.00 ft [0.60 m] in height is representative of the smallest object that involves risk to drivers. An object height of 2.00 ft [0.60 m] is representative of the height of automobile headlights and taillights. Using object heights of less than 2.00 ft [0.60 m] for stopping sight distance calculations would result in longer crest vertical curves without a documented decrease in the frequency or severity of crashes (19). Object height of less than 2.00 ft [0.60 m] could substantially increase construction costs because additional excavation would be needed to provide the longer crest vertical curves. It is also doubtful that the driver's ability to perceive situations involving risk of collisions would be increased because recommended stopping sight distances for high-speed design are beyond most drivers' capabilities to detect objects less than 2.00 ft [0.60 m] in height (19).

Passing sight distance object—An object height of 3.50 ft [1.08 m] is adopted for passing sight distance. This object height is based on a vehicle height of 4.35 ft [1.33 m], which represents the 15th percentile of vehicle heights in the current passenger car population, less an allowance of 0.85 ft [0.25 m], which represents a near-maximum value for the portion of the vehicle height that needs to be visible for another driver to recognize a vehicle as such (35). Passing sight dis-

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tances calculated on this basis are also considered adequate for night conditions because headlight beams of an opposing vehicle generally can be seen from a greater distance than a vehicle can be recognized in the daytime. The choice of an object height equal to the driver eye height makes passing sight distance design reciprocal (i.e., when the driver of the passing vehicle can see the opposing vehicle, the driver of the opposing vehicle can also see the passing vehicle).

Intersection sight distance object—As in the case of passing sight distance, the object to be seen by the driver in an intersection sight distance situation is another vehicle. Therefore, design for intersection sight distance is based on the same object height used in design for passing sight distance, 3.50 ft [1.08 m].

Decision sight distance object—The 2.00-ft [0.60-m] object-height criterion adopted for stopping sight distance is also used for decision sight distance. The rationale for applying this object height for decision sight distance is the same as for stopping sight distance.

3.2.6.3 Sight Obstructions

On a tangent roadway, the obstruction that limits the driver's sight distance is the road surface at some point on a crest vertical curve. On horizontal curves, the obstruction that limits the driver's sight distance may be the road surface at some point on a crest vertical curve or it may be some physical feature outside of the traveled way, such as a longitudinal barrier, a bridge-approach fill slope, a tree, foliage, or the backslope of a cut section. Accordingly, all highway construction plans should be checked in both the vertical and horizontal plane for sight distance obstructions.

3.2.6.4 Measuring Sight Distance

The design of horizontal alignment and vertical profile using sight distance and other criteria is addressed in Sections 3.3 through 3.5, including the detailed design of horizontal and vertical curves. Sight distance should be considered in the preliminary stages of design when both the horizontal and vertical alignment are still subject to adjustment. Stopping sight distance can easily be determined where plans and profiles are drawn using computer-aided design and drafting (CADD) systems. The line-of-sight that must be clear of obstructions is a straight line for the driver's eye position to an object on the road ahead, with the height of the driver's eye and the object as given above. The vertical component of sight distance is generally measured along the centerline of the roadway. The horizontal component of sight distance is normally measured along the centerline of the inside lane on a horizontal curve. By determining the available sight distances graphically on the plans and recording them at frequent intervals, the designer can review the overall layout and produce a more balanced design by minor adjustments in the plan or profile.

Because the view of the highway ahead may change rapidly in a short travel distance, it is desirable to measure and record sight distance for both directions of travel at each station. Both horizontal and vertical sight distances should be measured and the shorter lengths recorded.

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(d) In cases where a permit is requested for a limited access highway as defined in RSA 230:44 and 45, the number of permanent points of access as specified in the acquisition documents on file at the bureau of right-of-way shall not be exceeded.

(e) In cases where an applicant is seeking a permit for a simple residential driveway, the applicant may shorten the permit process in accordance with section 5.

(f) Where entrances to state highways have been constructed after July 1, 1971 without benefit of a permit, or not constructed according to the permit issued, the entrances shall be considered non-conforming. Upon notification by the district engineer, the owner shall apply for a permit and make the necessary alterations as required by this policy.

(g) Compliance with this policy shall not relieve the applicant from the responsibility to comply with other federal, state or local ordinances, rules or regulations.

(h) In cases where a permit has been denied, the applicant may initiate the appeals process by submitting in writing a request for a hearing.

(i) Appendix I contains a list of highway districts and locations from which permit applications may be requested. Appendix II contains figures of typical driveway design standards for illustrative purposes, and standard conditions applicable to all permits. Appendix III contains a copy of the driveway statute, RSA 236:13 and Appendix IV contains a sample of a request for a wetland permit from the Department of Environmental Services.

3. Definitions.

(a) "Algebraic difference" means the absolute value of the arithmetic difference between 2 grades in a driveway. For example, a driveway with one grade of +2% and a second grade of -3% would have an algebraic difference of 5%. The algebraic difference provides a numerical guideline for establishing maximum safe grade differentials.

(b) "All-season safe sight distance" means a line that encounters no visual obstruction between 2 points, each at a height of 1.14 meters or 3 feet 9 inches above the pavement, allowing for a snow windrow and/or seasonal changes. The line represents the line of sight between the operator of a vehicle using the driveway (point 1) and the operator of a vehicle approaching from either direction (point 2).

(c) "Alteration" means any work on a driveway including, but not limited to:

- (1) Paving and repaving;
- (2) Regrading;
- (3) Widening;
- (4) Changing its use;
- (5) Changes in existing drainage affecting the highway; and



October 31, 2022

Berry Surveying and Engineering

335 Second Crown Point Road

Barrington NH 03825

(603) 332-2863

Re: Map 230 Lot 8

This letter is to authorize Berry Surveying and Engineering as our agent to represent us, Paul & Linda Thibodeau of 76 Young Road, Barrington NH 03825, for presentation to local planning, zoning boards and other authorities in the town of Barrington NH. To sign as our agent, as needed, all required applications to facilitate the process for final approval of a subdivision for the property known as Map 230 Lot 8 Barrington NH 03825.

Paul Thibodeau

dotloop verified
10/31/22 1:37 PM EDT
AF3E-MEUE-LYYL-GLCM

Paul Thibodeau

Linda Thibodeau

dotloop verified
10/31/22 1:39 PM EDT
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Linda Thibodeau

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FEB 12 2023