



February 8, 2022

Bolton Zoning Board of Appeals
663 Main Street
Bolton, Massachusetts 01740

Re: 89-91 South Bolton Rd
Slade Family Trust
Hammerhead Lot and Common Driveway Special Permit
Places Project No.5579

Dear Board Members:

Thank you for this opportunity to work with the Board of Appeals on this project. We have reviewed the submitted information and prepared this review in accordance with the Rules and Regulations for the Application of Special Permits under Bylaw 2.3.5.5 Backland Zoning, Rules and Regulations for the Application of Special Permits under the Zoning Bylaw 250-17B Common Driveways Serving Three (3) Lots to Five (5) Lots and common engineering practices.

In conjunction with this review, we have reviewed the following information:

1. Cover Letter for Slade Family Trust Backland Lot and Common Driveway Application by John D. Sargent, P.E. (undated).
2. Backland Lot Application for Special Permit (undated)
3. Plan Set
 - a. Wetland Resource Area Demarcation Plan Sheet 2 of 3, Lot Layout Plan, South Bolton Road, Bolton, Mass. By D.J. Associates dated July 13, 2021
 - b. Lot Layout Plan, South Bolton Road, Bolton, Mass. By D.J. Associates dated August 23, 2021, sheet 1 of 3.
 - c. 93 South Bolton Road, Slade Family Trust Common Driveway by John D. Sargent, P.E. dated August 15, 2021 (2 sheets)
4. South Bolton Road, Soil Test Results with test holes dated 11/31/16.

This office has the following Comments:

1. Plans do not comply with Section 3.1.c.1) which requires the common driveway site plan to show the geometry of the proposed common driveway and the existing and proposed contours at a 1' contour interval. Without this data, the impact of the driveway cannot be evaluated and there is insufficient information to allow its construction in accordance with these plans.
2. The plans show a Typical Pavement Cross-Section of porous pavement which is not consistent with the DEP Stormwater Manual Porous Pavement (Vol. 2, Ch. 2, Pg 119). Porous pavement design is based on the drainage calculation for the rainfall volume, recharge etc. No drainage calculations or other documents were submitted supporting the cross section shown.
3. The Common Driveway covenant needs to address the very specific maintenance requirements for the porous pavement.
4. Drainage calculations should be provided – changes in the surface cover from woods to lawn, additional impervious areas with roofs all contribute to an increase in runoff from the site. It

appears that the identified gravel soils are well suited for recharge but only when sized appropriately based on the drainage analysis.

5. Soil test results were provided and the location shown on the layout plan. However, in the absence of topography, this office cannot identify if there are any areas of concern that a minimum of 4' offset is provided between the bottom of the infiltration and the water table.
6. The plans show a low point in the driveway in area where the driveway is cut lower than the existing conditions (see profile station 6+50). The depiction of existing and proposed contours will indicate whether there is a potential ponding area and the need for additional drainage features like a swale or catchbasin. The profile sheet shows a proposed grade but no elevational data other than lines which are insufficient to enable a contractor to layout and construct the common driveway according to the plans.
7. We note that the plan view of the common driveway has the edge of pavement being fileted into the street right of way line, not the edge of pavement.
8. The plan shows an Intercept Stone Trench on both sides of the proposed driveway separated by a 2.5" berm from the shoulder. The plans should address how runoff is addressed when the driveway is in a cut and under frozen ground conditions – the concern is to allow positive overflow under the melt/freeze cycle in the winter to prevent icing.
9. It is noted that the intersections of the common driveway with individual driveways will accommodate only a relatively small turning radius (the radii are not dimensioned). It is recommended that at least one of these individual driveways be widened to accommodate a SU-30 Truck Turn so that a delivery truck, ambulance or fire truck does not need to go to the end of the common driveway (station 5+65) in order to be able to turn around.
10. If the Planning Board grants a waiver of the lot shape factor, that a note should be added to the ANR plan indicating the waiver being granted.

It is this office's opinion that the information provided is not sufficient to allow the ZBA to make an informed decision regarding compliance with your regulations and related criteria. We recommend that the applicant provide the above items, allowing sufficient time for this office to provide input to the Board.

Please contact this office should you have any questions regarding this review. Thank you for using the professional services from Places Associates, Inc.

Thank you.

Very truly yours,
Places Associates, Inc.

By:



Susan E. Carter, P.E, LEED AP
President, Director of Engineering