

**THOMPSON-LISTON
ASSOCIATES, INC.**

Professional Engineers Professional Land Surveyors

Erosion Control Specialists

51 Main Street, Post Office Box 570
Boylston, Massachusetts 01505-0570
Telephone 508-869-6151 FAX 508-869-6842
www.thompsonliston.com



COPY

EXHIBIT 4

January 31, 2019

Joseph Laydon, Town Planner
Grafton Municipal Center
30 Providence Road
Grafton, Massachusetts 01519

RECEIVED

Re: Definitive Subdivision filing for
Land at 88 Adams Road, Grafton, Massachusetts
Assessor's map 32 parcel 10

FEB - 4 2019

**PLANNING BOARD
GRAFTON, MA**

Dear Mr. Laydon:

I want to take this opportunity to explain how the Definitive Subdivision Plans were revised to address the comments in your Memorandum dated 11-14-18 summarizing your initial review of the Definitive Subdivision Plans dated 10-9-18.

I will summarize or repeat your comments in italics and respond in normal text. First there were four requirements of the Subdivision regulations which you cited as not having been addressed.

1. *Section 3.3.3.19 Stormwater Management: An application for definitive subdivision approval requires the submission of a stormwater management plan and stormwater management hydrologic study that complies with the Planning Board and Conservation Commission requirements. It does not appear that the Drainage Report was prepared to comply with the Town's Stormwater Bylaw and no application has been made to the Commission.*

The Drainage Report was revised to utilize the Cornell University rainfalls for this location. In the more frequent, 2 and 10 year storm events the difference is not very much but in the 100 year storm this made the 24 hour rainfall modeled to compare pre and postdevelopment drainage functioning increase from 6.5 inches to 8.79 inches. Our drainage system was already conservatively designed and this required only small changes to two proposed detention basins.

2. *Section 3.3.4.1 Environmental and Community Impact Analysis (ECIA): ECIA was submitted with Major Residential Development/Preliminary Plan application. ECIA should be updated to reflect any changes in the project scope or community information. Project information Summary is an additional submission, not in place of ECIA.*

An updated ECIA has been included with the documents filed with the Definitive Subdivision Plans.

3. *Section 3.3.4.7.e – Traffic Study: Section 3.3.4.7.e of the Subdivision Rules and Regulations require that traffic counts be taken within 12 months of the submission of the Definitive Subdivision approval. Counts included in the Conley Associates*

Traffic Impact Study dated February 2016 were taken on January 6, 2016, 34 months prior to the submission of the definitive subdivision application. Traffic study must be updated with counts within the last 12 months.

The Traffic Impact Study and new traffic counts done in December 2018 are included with the documents filed with the Definitive Subdivision Plans.

4. *Section 3.3.4.2 – Waivers: A letter dated November 7, 2018 was submitted that listed waivers, however no justification and/or benefit was provided for each waiver. Furthermore, the following waivers are also needed or information under the section needs to be included on the plans: Section 3.3.4.3 Staking; 3.3.4.4 Soil Survey and Percolation tests; 3.3.4.5 Soil Limitations.*

The staking required under section 3.3.4.3 at 100 foot stations and at lot corners has been done. Information regarding soil limitations from the USGS web soil survey of this site, per section 3.3.4.5, has been included with other documents accompanying the filing of the Definitive Subdivision Plans. We are requesting a waiver from section 3.3.4.4 as we have already dug nearly 100 officially observed deep observation holes on site which have confirmed expected soil types according to published soil surveys.

Then, the memorandum listed 15 comments to be addressed on revised plans:

1. *Signature Block: Except for cover sheet, plan set does not have suitable space to record action of the Board and signatures of all members. Signature block should be located in a similar location across all sheets. If sheets are intended not to be recorded, submit an itemized list of such sheets. Planning Board has in the past required recording of all sheets.*

On the revised Plans we provided a signature block on the title sheet, key sheet and land plans, which is a common set of plans chosen to be recorded. If the Planning Board is adamant about other sheets we'll revise the plans accordingly.

2. *Recording Block: Except for cover sheet, plan set does not have space for recording information.*

The title sheet, key sheet and land plans were revised to create space for recording information.

3. *Landscape Plan: Roadway layout for Road C does not match layout of Randolph Road on other sheets in the plan set.*

The Landscaping Plans, sheets T1 and T2, were revised to show the correct street and lot layout.

4. *Landscaping Plan – Tree Selection: Staff will review proposed tree plan for native species and will, at a future date, provide comments.*

We acknowledge that this review will take place. We will work with the staff to make the best choices for project street trees.

5. *Proposed trail off Randolph Road does not connect to a trail system internal to the property.*

This isn't true. On sheets G5 and G6 you can see that a proposed trail, dashed line, connects to the end of Randolph Circle and goes north away from the cul de sac connecting to an existing trail shown as a solid line north of lots 20 and 21.

6. *Plans do not include details of trail head connections and are not accessible by sidewalk on Olive Circle. Furthermore, details sheet should include detail of Trail Parking Lot and signs for trails should be developed and included with plan set.*

The four space trail parking lot will be in Westborough so we aren't showing any details of it in this plan set. We corrected the mistake of the trail off the north end of Olive Circle not going all the way to connect to it. And we added a detail of a trail head sign from Sudbury Valley Trustees that is to be used at the trail connection to Olive Circle and Randolph Circle.

7. *Plan does not indicate locations of benchmarks and there is not statement regarding the datum for the elevations shown on the plan.*

The Grading & Utility Plans now show benchmarks that have been set at station 2+00 of Stidsen Road, at station 9+00 of Stidsen Road, at station 14+75 of Stidsen Road, at station 18+70 of Stidsen Road, at station 7+85 of Randolph Circle and at station 3+50 of Olive Circle. A note was added to sheet D1 indicating the elevation basis of the project.

8. *Legend does not indicate a hydrant symbol.*

A symbol for proposed hydrants was added to the keys on the Grading & Utility Plans and the profile sheets.

9. *Plans do not include a street light location and there are no details of proposed light fixtures. DPW is recommending a new LED street light standard and Staff will email the detail of that fixture with this memo.*

Proposed street light locations are now shown on the plans. They are at station 1+15 of Stidsen Road, at the intersection of Stidsen Road and Olive Circle, at the intersection of Stidsen Road and Randolph Circle and at the ends of both Olive Circle and Randolph Circle. The lighting note added to sheet D1 calls for the proposed street lights to be American Electric Lighting Autobahn series LED lights meeting Town of Grafton standards.

10. *Since utilities are also shown on the grading plan, either create a separate utility plan or label the plan "Grading and Utility Plan".*

We retitled those sheets as Grading & Utility Plans.

11. *Tree stumps: Section 3.3.4.8 states that there shall include a plan for the disposal of all stumps, limbs, brush and other deleterious material. Since the site is heavily forested, such a plan should be submitted.*

We added a Stump Disposal Note to sheet D1. As it states, we will not transport stumps off site and will no bury them. They will be ground on site for use as a temporary stabilization material in which use it performs very well. We also indicate the locations were grinding and material storage will take place.

12. *Subdivision Phasing Plan: A phasing plan should be submitted that provides more detail than the narrative that was submitted with the application material or the text*

on Sheet D3 outlining the construction process. Specifically, the phasing plan should be a plan that identifies phases of construction, indicates adequate areas for emergency vehicles to turnaround, and locations for storing loam, stumps, rocks, and other construction related materials.

We added a Phasing Plan to the subdivision set to address this issue. The project will take place in two phases. The first phase will be the construction of Stidsen Road in both towns and the connection to Harvest Way in Westborough. There is a very significant cut associated with the construction of the north end of Stidsen Road in Westborough which will create the surplus material needed to be placed in the area of Stidsen Road and lots 3-8 and 31-34 in Grafton. The indicated phasing is to allow for this transfer of material.

13. *Draft Easements: Section 3.3.3.23 states that draft easements shall be submitted with the application.*

Proposed easements are shown on the land plans including their areas and the bearings and distances of their boundary lines.

14. *Open Space Ownership: The project cover letter and project description do not state how the open space will be maintained or whether it differs or remains the same from the Flexible Development approval process.*

Two additional Open Space Parcels, Parcels E and F, are now proposed on the Plans. Two notes were added to Sheet D3 to call out that Sudbury Valley Trustees is to be the owner of Open Space Parcel C, the one to the north of Stidsen Road and both culs de sac and which joins open space in Westborough. The second note calls for Sudbury Valley Trustees to maintain the existing and proposed trail network in Parcel C but for Parcels D, E and F to be buffer parcels.

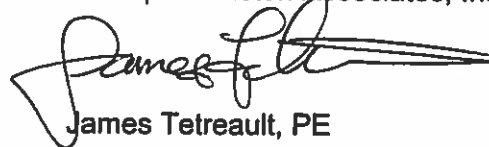
15. *Water Supply: Please clarify whether the water system in Grafton is connection to existing water supply in Westborough, if so an intermunicipal agreement will be needed to facilitate such connection.*

There is to be no connection between the water systems in the two Towns. Both systems will have a hydrant near the Town line on Stidsen Road theoretically allowing an emergency connection between the two systems but there is to be no connection created as part of this project.

Thank you for your time in reviewing the plans and your consideration.

Sincerely,

Thompson-Liston Associates, Inc..



James Tetreault, PE