

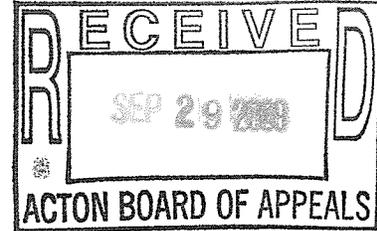


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September 29, 2009

Acton Zoning Board of Appeals  
472 Main Street  
Acton, MA 01720

Re: Marsh View - Hearing 09-03  
93 Central Street  
6730



Dear Board Members:

The purpose of this letter is to respond to communications to the Board concerning the proposed development of the property at 93 Central Street, consisting of four single-family homes served by a common driveway and subsurface sewage disposal system.

Without performing actual on-the-ground instrument surveys, this office, appropriately, did not take responsibility for the accuracy of the data shown on plans prepared by other firms, even though we found the information acceptable for design purposes.

Our client has now authorized this office to undertake the necessary surveys and they should be completed prior to the continued hearing. The performance of these surveys will allow this office to verify construction and certify as to the accuracy of the wetlands demarcation.

For simplicity and ease of reference we will answer each Interdepartmental Communication [IDC] separately.

***Acton Water District***

The water services to each of the houses have been denoted to be 1 inch HDPE [High Density Polyethylene].

***Fire Chief***

The guest parking spaces have been eliminated and a turning area for a SU-30 vehicle has been provided at the end of the common driveway.

The turning area is shown to be comprised of grass pavers, but our client is willing to install the less costly alternative of providing a turning area constructed of bituminous concrete installed to the same standard as other portions of the driveway.

### ***Conservation – Wetlands***

To be comprehensive we are also addressing concerns raised by abutters under this general heading.

A Notice of Intent must be filed with the Conservation Commission prior to any alterations occurring within 100 feet of bordering vegetated wetlands. The wetlands will be demarcated prior to filing the Notice with the Commission, and the accuracy of the demarcation will be determined by the Commission.

We have enclosed a copy of an orthophoto from the MassGIS website which shows the edge of wetlands. The edge of wetlands shown on the site plan was taken from the sewage disposal system plan for 89 Central Street, and as shown, it is similar to that shown on the MassGIS orthophoto.

The MassGIS Website indicates there are no Certified or Potential Vernal Pools in the vicinity of the site. Alterations are allowed in upland areas within 100 feet of vernal pools under the Wetlands Protection Act and the Acton Non-Zoning Wetlands Bylaw.

Field observations by this office have confirmed that the wetlands are approximately as shown and that no alterations to the wetlands are proposed.

Also during field observations, a rock lined drainage swale to the west of the site was found. The swale is located across the cross-country sidewalk and discharges to a culvert under Central Street. Any alterations within 100 feet of the swale are also under the jurisdiction of the Conservation Commission.

The Massachusetts Stormwater Management Standards do not apply to projects consisting of four or fewer dwelling units.

The project is also exempt from the Stormwater Management Standards in that it does not create a new stormwater discharge within 100 feet of a wetland resource area.

The project has been designed to conform to the Standards to the maximum extent possible.

### ***Board of Health***

Title 5, under 310 CMR 15.240(7), allows soil absorption systems to be constructed under impervious areas when restrictions make the placement under impervious areas unavoidable. We believe that a variety of factors, including but not limited to, the need for access for a SU-30 vehicle, the desirability of constructing the soil absorption system at the flattest portion of the site removed from wetlands, and the placement of the homes on a common green makes the location of the driveway unavoidable.

Title 5, under the definition of Facility, requires a subsurface sewage disposal system to be located on the same property as the facility it serves. The soil absorption system that serves 89 Central Street is located partially within the right of way, placing the system outside of the property it serves.

It is our understanding that the deed pertaining to Pine Ridge Road use provides for the unobstructed use of the owners of the abutting properties for access purposes.

A subsurface sewage disposal system construction permit to be issued by the Board of Health will be required prior to the granting of Building Permits.

The purpose of the Tensar Grid is to spread wheel loads, and is akin to altering the pavement over the soil absorption system to be reinforced concrete. The type of pavement or other reinforcement materials are not subject to Title 5. This matter can be further discussed with the Board of Health if necessary.

### ***Engineering Department***

1. A SU-30 turning area is now proposed at the rear of the property and will be constructed with the installation of grass pavers or with a less expensive bituminous concrete surface. The recharge trenches have been designed to allow a SU-30 Vehicle to drive over them, although a 10 foot wide drive is of sufficient width for a fire truck. If the Board desires that a larger radius be provided at the intersection of the driveway serving Unit 2 and the common driveway, it will be increased.
2. Rights will be reserved for access and utilities over the individual lots and Parcel A.
3. The driveway has been designed so the recharge trenches can be constructed near the surface of the existing ground to insure that the facilities are situated above groundwater. The infiltration rate utilized is as required by the State Stormwater Management Standards for the soils encountered by explorations, for both the proposed soil absorption system and abutters' soil absorption systems. Soils requiring a lesser infiltration rate will not be encountered on this property.
4. Recharge trenches are required to be offset 10 feet from soil absorption systems [310 CMR 15.211], so the 12 foot offset is conforming.
5. Diagrams showing the pre and post development conditions drainage areas are enclosed with the revised stormwater management calculations.
6. The enclosed stormwater management system model shows that the system has been revised so that the peak rate of runoff for the 10-year storm event is not increased, as required by Subdivision Regulation 8.2.3.

7. Pipe sizing calculations are attached. pipe inverts are not required because elevations are controlled by the drainage system details.
8. The existing conditions and conceptual plans prepared by other firms were found to be adequate for the design of the project, and this office has been authorized to perform the surveys it believes necessary for verification of construction.
9. Our client's understanding is the same as the Engineering Department's, and they desire to utilize the Pine Ridge right of way for access and will make every reasonable effort to protect the existing subsurface sewage disposal system constructed in a portion of the right of way.
10. The datum utilized for the preparation of the plan will be confirmed as being NGVD [1929], or the elevations will be converted to that datum. Two or more permanent benchmarks will be established on or in the environs of the site.
11. The presence of the sidewalks on Central Street and to Tuttle Drive has no impact on the design of the site but the locations adjacent to the site will be located by this office's surveys and added to the plans.
12. The houses will be numbered as determined by the Engineering and Fire Departments. We suggest that we be informed of the desired numbering system so that it may be shown on the plans.
13. Existing monuments and any monuments installed by this office will be shown on the Record Plan.
14. The Recordable Plan will be prepared to Registry of Deeds Standards.
15. Unit 1 will be the affordable unit and has been labeled as such on the plans.
16. The walls will be shown on the plans once they are located by instrument surveys.
17. All visually apparent features of the site and the area between the site and Central Street will be shown on the existing conditions plan prepared by this office. Runoff from the site during and after construction will be controlled so that there is no impact on the Central Street drainage system during or after construction. A note will be added to the Erosion and Sediment Control Plan to require that the contractor clean and maintain the Town's drainage system during construction.
18. A note has been added to the plan to detail the removal of the existing driveway and the restoration of the area.
19. At the time of our instrument surveys the edges of bordering vegetated wetlands will be demarcated according to State standards and will be reviewed and

confirmed by the Conservation Commission when the required Notice of Intent is filed.

20. Our existing conditions survey will locate all relevant visually apparent features of the site and the Pine Ridge right of way.
21. A note concerning the status of the existing subsurface sewage disposal system, house and shed, driveway, water service, and other utilities has been added to the plans.
22. The vent for the existing soil absorption system that serves 89 Central Street will be relocated to be on the property it serves. The status of and the best method of protecting the system will be discussed with the Board of Health.
23. The guest parking spaces have been removed. Parking facilities with less than 15 spaces are exempted from the requirement of providing accessible spaces and routes.
24. Fire protection will be provided in the same manner as for all residences along Central Street. A fire hydrant is located before 85 Central Street and results in all the proposed homes being within 500 feet of a fire hydrant.
25. General Note 20 on the Site Development Plan speaks to the cleaning of catch basins and other drainage facilities. The maintenance of stormwater facilities, subsurface sewage disposal facilities, and other common facilities will be included in any "homeowners agreement."
26. Sidewalks leading to individual homes are now proposed.
27. The pavement radius has been removed and replaced with a tapered driveway transition.
28. The sidewalks across the soil absorption system from the guest parking spaces have been removed.
29. The pavement detail has been modified.
30. The existing paved portion of Pine Ridge Road is now proposed to be reconstructed for its full length.
31. All existing utilities are to be removed and terminated as required by the respective utility companies.
32. The trench detail has been corrected.
33. A location for the project sign has been added to the plans.

***Acton Planning Department***

We offer the following in regard to the footnotes contained in the Project Evaluation Summary:

1. No comment necessary.
2. No comment necessary.
3. This office has not received architectural plans and cannot compute the Net Floor Area. However, we note that building service areas are exempt by 1.3.8 and a portion of the basement should be considered as such.
4. The guest parking areas and sidewalks across the “green” have been eliminated. We suggest that connections from the end of the driveways to the adjacent sidewalk connecting Central Street and Tuttle Drive might be appropriate.
5. No comment necessary.
6. Drought-resistant grasses were recommended, as an irrigation system is not proposed.
7. The project was designed in keeping with the intent of the Town of Acton’s standards and good practice.
8. No comment necessary.

*Other Comments Contained in Planning Department footnotes*

- a. The Master Plan is based on the Town’s GIS Data and reflects the inaccuracies of that Data. The property lines derived from the GIS are sufficient to show the relationship of the property and buildings to adjacent lots, roads, and Zoning Districts, but not for determining property line offsets
- b. Three Arborvitaes located between the gabled ends of the homes have been added to the plans.
- c. As suggested, please accept this letter as our client’s request for a waiver from the requirements of 3.8.1.5 to allow the common driveway to be constructed as shown. As stated above, the SU-30 vehicle turning area will be constructed with grass pavers or bituminous concrete as determined by the Board.
- d. This matter should be determined by our client. It is our preference that the entire Common Driveway be designated as Pine Ridge Road, as the right of way is designated as such on a variety of Town Maps and other documents.

- e. The guest parking spaces have been removed, but were shown to have a depth of 24 feet as compared to the 18 foot [minimum] required by the Zoning Bylaw.
- f. No comment required by this office and it should be assumed that the incorrect reference will be corrected.
- g. No comment necessary from this office.
- h. No comment necessary from this office.

***Municipal Properties***

The sizes of the trees to be planted are now included on the Landscape Plan. .

***Public Hearing Comments***

Representatives from this office were not present for the entire public hearing. In response to abutters' comments as to the impact of the project on their properties and wetlands, we prepared the enclosed "Overview" based on MassGIS data.

MassGIS did not show any Certified or Potential Vernal Pools in the area presented by the Overview. The Wetland Protection Act allows alterations to occur in upland areas adjacent to Certified Vernal Pools. A Notice of Intent will be filed with the Acton Conservation Commission.

The residence at 40 Tuttle Drive is located approximately 140 feet from the common driveway.

Visual reconnaissance by this office confirmed that the location of the wetland boundary shown on the plan is sufficient for this office to stipulate that no alterations to the wetlands are proposed.

If this letter and the accompanying materials are found inadequate, we will make every effort to rectify the data prior to the public hearing if notified by Town staff in a timely manner.

We are happy to meet with staff to provide them with additional materials if they desire.

Thank you for any consideration you may give to the contents of this letter.

Very truly yours,  
Mark T. Donohoe, PE

cc: Marshview, LLC.

  
for:  
Acton Survey & Engineering, Inc.

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