Town of

AMHERST *Massachusetts*

PLANNING BOARD **Report to Town Meeting**

ARTICLE 25 DENSITY CALCULATIONS (Planning Board)

To see if the Town will add a new Section 4.12 and amend Sections 4.3231, 4.330, and 4.520 of the Zoning Bylaw by deleting the ~~lined out~~ language and adding the language in *bold italics*, as follows:

~ SEE ATTACHMENT ~

Recommendation

The Planning Board voted unanimously (7-0) to recommend that Town Meeting adopt Article 25.

Background

Article 25 is a technical amendment that adds a mathematical method for resolving fractional results in the calculation of maximum density for three selected residential development methods. The method to be added is the standard mathematical approach of rounding up to the next whole number when a fraction equals 0.5 or more, and rounding down to the lower whole number when the fraction is less than 0.5. Except in unusual circumstances, any resulting change in maximum density would never exceed a single lot or unit.

Amherst's Development Methods

Amherst's zoning regulates several methods for creating new residential developments other than standard frontage lot on existing streets. These development methods include:

- Standard Subdivisions
- Cluster Developments:
  - Standard Clusters*
  - Affordable Clusters*
  - Farmland Conservation (FC) Clusters
- Open Space Community Developments (OSCDs)*
- Planned Unit Residential Developments (PURDs)

The amendments under Article 25 would apply to standard clusters, affordable clusters, and OSCDs (*asterisked). Article 25 would not apply to standard subdivisions, farmland conservation clusters, or PURDs, for reasons that will be discussed.

How Density is Calculated

The maximum density (total building lots or dwelling units possible) for standard subdivisions and PURDS is calculated by using minimum area requirements per lot (standards subdivisions) or for housing types (PURDs), and then simply seeing what will fit on the buildable portions of a property under consideration. There are no established mathematical formulas in the Zoning Bylaw for calculating maximum density for these development methods, and thus no fractional results to resolve.

However, the three development methods that are the subject of this article do have mathematical formulas set out in the Bylaw for determining maximum density. These formulas vary somewhat depending on the purposes and character of the specific development method. Typically, a density formula will begin with the total land area of the parcel(s) to be developed, and will then subtract a certain percentage of land area (8% or 10%) for roads and utilities, and may also subtract percentages of unbuildable areas (wetlands, floodprone areas, etc.). The resulting "net" total land area is divided by the minimum lot area requirements for the zoning district(s) in question or the minimum lot area requirements specific to the development method. The result is a number—maximum density figure which represents the total number of building lots or units possible on the property. In some cases, that amount may be increased by up to 20% through the voluntary or mandatory inclusion of affordable or accessible dwelling units.

The Problem

There is currently no method for resolving a fractional result from calculating a maximum density using one of these formulas. It has been the interpretation of the Building Commissioner (supported by opinions of Town Counsels) that unless a maximum density figure reaches the next highest whole number, it has to be counted as the next lowest whole number. So a development with a maximum density calculation resulting in a figure of 9.97, for instance, could have no more than 9 lots or units, even though it was within a hair's breadth of reaching 10.

There are provisions elsewhere in the Zoning Bylaw that resolve fractional results for calculations that affect development. Those provisions use the standard mathematical method for rounding fractions up or down. But no such method is available for the maximum density calculations of the three development methods addressed by Article 25. Over the years, some developers have complained about finding themselves in situations where the absence of a method for resolving the fractional result density calculations has unreasonably (they believed) limited their total lot or unit count.

So Why Change This?

This is not just a concern for developers worried about their bottom lines, trying to squeeze one more saleable lot out of a property. Despite the fact that this would usually affect total density by only one lot or unit, the absence of a method for resolving fractional results does have some meaningful policy

implications for Amherst's intentions in residential development. Several development methods (standard clusters, affordable clusters, OSCDs, PURDs) were specifically created to encourage responsible, sustainable design and to increase residential density. Others (farmland clusters) were developed to minimize the impacts of unavoidable residential development, and to discourage density.

Consider the fictional density calculation result previously cited (9.97 lots/units). 'Resolving the fraction' for that result could have different policy implications in different settings. In a development where the community wants increased density, rounding up to reach ten units would not just gain an extra lot or unit. If it was an OSCD (which requires a Special Permit) rounding up would reach one of the thresholds (10, 15, 21 lots) for inclusionary zoning requirements that mandate the provision of affordable units and allow still more total density (up to 20% more) to accommodate those units. In that situation, rounding up would be desirable. Article 25 will apply to those development methods.

In a farmland conservation cluster, however, resolving that fraction upward would increase density in areas where the community has clearly indicated it does not want density. For that reason, Article 25 does not apply to farmland conservation clusters—a 9.97 result for a density calculation for a farmland cluster would still produce only 9 lots or units, avoiding both the extra lot and the inclusionary requirements that could increase density still further.

Aside from these rare "threshold" scenarios, in most cases Article 25 would have a modest and marginal effect. Sometimes there would an increase of a single lot or unit; sometimes there wouldn't. In the few instances where the impact might be more significant, the result would support existing community intentions for residential development.

Public Hearing

The Planning Board held a public hearing on February 20 and March 19, 2008. After discussion, the Planning Board voted unanimously (7-0) to recommend that Town Meeting adopt Article 25.

~ ATTACHMENT ~

ARTICLE 25 DENSITY CALCULATIONS

To see if the Town will add a new Section 4.12 and amend Sections 4.3231, 4.330, and 4.520 of the Zoning Bylaw by deleting the ~~lined out~~ language and adding the language in ***bold italics***, as follows:

A. Add a new Section 4.12, as follows:

4.12 If the calculation of maximum density of lots or units for any development method referencing this section results in a figure including a fraction equal to 0.5 or greater, then the figure shall be rounded up to the nearest whole number. If the fraction is less than 0.5, the figure shall be rounded down to the nearest whole number. Dimensional requirements established for building lots in the applicable zoning district(s) and under the applicable development method shall remain in full force and effect, and shall not be altered by the provisions of this section.

B. Amend Sections 4.3231, 4.330, and 4.520, as follows:

4.3231 The maximum density of a cluster subdivision, except for an affordable cluster, shall not exceed the allowed density for a standard subdivision in any zoning district, said density to be calculated by taking the parcel area, subtracting 10% of that area and dividing that number by the minimum lot area of the zoning district in which the parcel is located. ***See Section 4.12.*** In addition, it is the intention of this Section that the cluster subdivision not result in more lots than would be approved for a standard subdivision under a Definitive Subdivision Plan***, except as may otherwise be authorized under this Bylaw***.

4.330 The Planning Board may authorize a greater number of building lots than would be allowed by the density requirements of Section 4.3231 or Section 4.327 only if a minimum of 10% of the total dwelling units in the development are affordable units as herein defined. In no event shall the Board authorize a greater number of building lots than 120% of the maximum number of lots otherwise allowed under the applicable development method. For the purpose of this calculation, 10% of the total parcel size shall be subtracted for road allowance prior to calculating the maximum density normally allowed. ***See Section 4.12.***

4.520 The maximum density allowed in an Open Space Community Development shall be calculated as follows:

1. Determine the Net Parcel Area by subtracting 75% of the area of all Unbuildable Land Area from the total parcel acreage. Unbuildable Land Area shall consist of the combined acreage of all wetlands, FPC District and 100-year floodplain areas. 100-year floodplain areas shall consist of those areas so designated on federal flood insurance maps.

2. Subtract 8% of the Net Parcel Area for roadways, parking and utilities.

3. Divide the remaining buildable land area by the minimum lot area required in the applicable zoning district(s).

4. Multiply the resulting lot count by 1.2 (120%) to derive the maximum density. ***See Section 4.12.***

5. Where no lots are to be provided in an OSCD, the maximum density resulting from this calculation shall serve as the total base dwelling unit count.