



MEMORANDUM

TO: Judi Roland, Chair, Planning Commission
Ron Copple, Vice-Chair, Planning Commission
Planning Commission Members

FROM: Jeff Tate, Assistant Director of Community Development

DATE: July 31, 2017

RE: Calculating Residential Densities

Summary Statement

Community Development and Public Works is seeking to pursue amendments to the Auburn City Code to help simplify the layout standards for new residential subdivisions. The proposed amendments will work to improve the methodology that the City Code utilizes when calculating the potential number of new lots in the residential subdivision.

Background and Overview of Existing City Code

Auburn City Code establishes several different residential zoning designations. Each designation is defined, in part, by its allowed density range (establishing both a minimum density and maximum density within each zone). The residential designations and their corresponding density is displayed in the following table.

Table 1

Zone	RC	R-1	R-5	R-7	R-10	R-16	R-20
Minimum Density	.25 (1 house per 4 acres)	1 (1 house per acre)	4 (4 houses per acre)	5 (5 houses per acre)	8 (8 houses per acre)	12 (12 houses per acre)	15 (15 houses per acre)
Maximum Density	.25 (1 house per 4 acres)	1 (1 house per acre)	5 (5 houses per acre)	7 (7 houses per acre)	10 (10 houses per acre)	16 (16 houses per acre)	20 (20 houses per acre)

The above standards generally only have application when considering a subdivision proposal. In other words, there usually isn't a need to apply the above density standards to existing conditions, developments, or uses.

In addition to the minimum and maximum densities within each zone, there are a number of other standards that apply when subdividing land. If a subdivision of land is proposed, not only does the subdivision have to fall within the range of required densities of the underlying zoning designation, each resulting lot must also meet a minimum lot size, minimum lot width, minimum setback requirements, and an overall minimum average lot size across the entire subdivision. Those additional standards are added to the table below.

Table 2

Zone	RC	R-1	R-5	R-7	R-10	R-16	R-20
Minimum Density	.25 (1 house per 4 acres)	1 (1 house per acre)	4 (4 houses per acre)	5 (5 houses per acre)	8 (8 houses per acre)	12 (12 houses per acre)	15 (15 houses per acre)
Maximum Density	.25 (1 house per 4 acres)	1 (1 house per acre)	5 (5 houses per acre)	7 (7 houses per acre)	10 (10 houses per acre)	16 (16 houses per acre)	20 (20 houses per acre)
Minimum Lot Size	174,240 sq. ft.	35,000 sq. ft.	6,000 sq. ft.	4,300 sq. ft.	2,000 sq. ft.	2,000 sq. ft.	2,000 sq. ft.
Minimum Avg. Lot Size	174,240 sq. ft.	35,000 sq. ft.	8,000 sq. ft.	6,000 sq. ft.	4,300 sq. ft.	2,700 sq. ft.	2,175 sq. ft.
Minimum Lot Width	125 ft.	125 ft.	50 ft.	40 ft.	20-35 ft.	20-35 ft.	20-35 ft.

All of the above standards must be achieved when designing the layout of a subdivision. Additionally, the above standards apply only after identifying the area of a property that is eligible to be subdivided. In other words, the above standards are not applied to the gross size of a parcel; instead, they are applied to what the City Code refers to as “Net Site Area” which requires that specific features of a property first be subtracted before determining lot potential. Auburn City Code 18.02.065 defines the methodology for determining Net Site Area; this section of code is provided below. If you find the language confusing, please continue reading past this section to read a summary of the intent of this language, an overview of the challenges experienced when applying this code, and suggestions for simplifying and clarifying the methodology. During staff’s presentation, visual examples will be provided that help illustrate density calculations using both the existing city code language as well as the proposed language. The current methodology is provided as follows:

ACC 18.02.065

The permitted number of dwelling units or lots shall be determined as follows:

A. Net Site Area. The area of a site used to calculate the allowed number of dwelling units or lots shall exclude those areas designated for public rights-of-way, except for the designation of additional right-of-way along arterials, private streets, vehicle access easements, and on-site public or homeowners’ association-maintained recreation space if required.

Further, the net site area shall be subject to the following adjustments and limitations for critical areas:

- 1. Net site areas shall exclude streams, wetlands, fish and wildlife habitat areas, and high landslide hazards; and*
- 2. Net site area shall include any required critical area buffer, seismic hazards, and flood hazard areas when calculating base density, unless critical areas identified in subsection (A)(1) of this section are present; provided, that net site area shall not include required critical area buffers when calculating minimum density. The allowed number of dwelling units or lots for a site shall be computed by multiplying the net site area of the lot as calculated in this section by the applicable residential base density number found in the development standards for each zone.*

B. “Base density” refers to the maximum number of dwelling units or lots allowed for a specific zone without application of the bonus density provisions of Chapter 18.25 or 18.49 ACC,

expressed as units per net acre. Base densities for residential zones are specified in ACC 18.07.030.

C. "Base units" refers to the number of allowable dwelling units for a site, as determined by multiplying the base density of the zone in which the site is located by the net site area.

For example, the R-5 zone has a base density of five units per acre; therefore, the maximum number of base units allowed on a lot with 0.6 acres of net site area in the R-5 zone is three units.

D. Bonus density, where applicable, shall be computed by adding the bonus units authorized by Chapter 18.25 or 18.49 ACC to the base units computed under this section.

E. When calculations result in a fraction, the fraction shall be rounded to the nearest whole number as follows:

- 1. Fractions of 0.50 or above shall be rounded up; and*
- 2. Fractions below 0.50 shall be rounded down.*

Overview of Challenges and Suggestions

Lot Size Standards

In Table 2 there is a row that is titled "Minimum Average Lot Size". After 9 years of this standard existing in City Code, and dozens of completed subdivisions, it is unclear what this standard accomplishes. While staff believes that it is appropriate to require that each individual lot meet a minimum square footage, there does not appear to be a value in designing subdivisions to also achieve an overall minimum average lot size. Using the R-5 zone as an example, the current code requires that each lot must be at least 6,000 square feet in size and that the overall subdivision should have an average lot size of at least 8,000 square feet. This means that if there is one 6,000 square foot lot there must also be one 10,000 square foot lot in order to meet the requirement for an average lot size of 8,000 square feet. Staff does not see how this requirement adds value to the subdivision.

Additionally, because the overall density is still limited to 5 dwelling units per acre, the limitation on the number of lots is achieved irrespective of lot size. To help make these numbers a little more tangible, here are some figures to consider:

- There are 43,560 square feet in one acre.
- In the R-5 zone there is a limit of 5 dwelling units per acre.
- 43,560 square feet divided by 5 dwelling units = 8,712 square feet per lot. This means that a minimum average lot size is already achieved simply by having a maximum density.
- Allowing each lot to be as small as 6,000 square feet gives the developer greater flexibility when working around topography, wetlands, storm ponds, etc. While 5 lots that are each 6,000 square feet only adds up to 30,000 total square feet (and thus, only a little over 2/3 of an acre) the developer is also designing around other physical features on the property that are not developable, is required to provide storm water facilities, and must construct roads and sidewalks.
- By virtue of the city code allowing a minimum lot size of 6,000 square feet the city has already determined that it is an adequate size for a lot within the R-5 zone. If it is adequate for 1 lot why should it not be adequate for all lots?
- The minimum lot width and setbacks within each zone also control subdivision design and preclude undesirable lot configurations. In the R-5 zone each lot must be at least 50

feet in width and meet 5-foot side yard setbacks, 20-foot front yard setbacks, and 20-foot rear setbacks. These standards continue to ensure that houses meet minimum separations from each other.

Staff believes that the minimum average lot size requirement should be removed from each residential zoning designation.

Calculating Density

Most readers of the code language cited in the previous section find it confusing. This leads to numerous questions about how to determine Net Site Area and the resulting allowed density. Equally, it has resulted in inconsistent application of its requirements by staff.

The essence of ACC 18.02.065 is that areas of land must be removed from a property before determining the potential number of lots that can be created through a subdivision. A developer starts with the gross site (e.g. 5 acres), must remove specific features from the gross site (e.g. let's just say that adds up to 1 acre), and the density potential is calculated on the area that is left over (e.g. in this case, that leaves 4 acres). If the property is zoned R-5 (5 dwelling units per acre) it means that the developer can achieve 20 lots (4 acres x 5 dwelling units per acre).

Staff believes that there are two general considerations that should be given for revising ACC 18.02.065:

- (1) Restructure the language so that it is easier to understand, and
- (2) Revisiting the appropriateness of determining lot potential utilizing net site area or gross site area.

The greatest need for restructuring the language is in ACC 18.02.065.A. The entirety of this section is made confusing because the features that are intended to be included and/or excluded are described in narrative format rather than a simple list. The narrative format utilizes commas and includes exceptions that can be interpreted in multiple ways. Staff proposes to restructure this language so that it includes a section of features that should be deducted from the gross site area and features that should not be deducted (and therefore remain as part of the net site area). The attached draft code language attempts to better organize the methodology.

Staff is also recommending that the Net Site Area methodology be replaced with a Gross Site Area methodology. Because each zone includes a requirement that a subdivision comply with both the minimum density and the maximum density and because there is a minimum lot size and width, staff believes that calculating density using Gross Site Area will achieve the following:

- Simplicity – it is far easier for the applicant and city staff to understand the subdivision potential when using Gross Site Area. The Gross Site Area is a number that is a known quantity at the outset whereas Net Site Area is not fully understood until well into the design process.
- Predictability – Feasibility analysis, property transactions, and pre-application meetings will all be based upon the same understanding of the lot potential. Also, because many permit, utility connections and impact fees are based on the number of lots created, it will be easier to understand these types of upfront costs.

- Flexibility – The applicant and city can exercise greater creativity in designing lot and road layouts when working around wetlands, steep slopes, storm water ponds, and other constraints that exist on a property.
- Greater Infill Potential – A fundamental goal of the Growth Management Act is to encourage growth within cities in order to reduce the pressure of sprawl in the surrounding farm, forest and open space lands. Over the last decade, without a single exception, utilizing Net Site Area to calculate density has reduced lot potential by an average of 1 lot for every 1 acre of land that is being subdivided (e.g. applicants have achieved 4 dwelling units per acre instead of 5 dwelling units per acre).

Allowance to Deviate from Minimum Density

Minimum density is a necessary standard when considering methods for achieving infill objectives. In fact, cities are obligated under several court decisions related to the Growth Management Act to achieve an overall citywide density of at least 4 dwelling units per acre. While this standard is generally easy to comply with for larger subdivisions, it has become a barrier for smaller land divisions and/or divisions of lands that are heavily encumbered with critical areas. Staff suggests that two principles be included within the draft language that create flexibility related to how minimum density standards are applied.

First, proposed code section ACC 18.02.065.B would allow short plats to have full relief from the minimum density standard. Short plats are subdivisions of 9 lots or less. In the R-5 zone this would apply where an applicant is attempting to further subdivide a parcel that is under 2 acres in size. Over the last 10 years, staff has informed dozens of property owners who are interested in dividing their land that they must meet a minimum density requirement. They expect that they can't exceed the upper range of their zoning density but are surprised that they must also meet a minimum density. The reason that the minimum density becomes problematic is because smaller parcels tend to have atypical lot configurations, an existing residence that the owner would like to retain, or have utility or driveway configurations that reduce the owner's ability to create more lots.

A typical example is a .60 acre parcel where the owner would like to divide the land in half, intends to remain living in an existing home already on the property, and would like for the newly created vacant parcel to be marketable for construction of an additional home. Unfortunately, when the owner inquires with the City, staff must inform them that they must divided their land into at least 3 parcels in order to meet the minimum density requirement. A .60 acre parcel divided in half results in two .30 acre parcels. In the R-5 zone this type of land division fails to meet the minimum density requirement because .30 acre lots are nearly a third of an acre in size and must instead be 1/5th of an acre. Time after time, the City has turned away potential short plat customers because it is not possible to meet the minimum density. Proposed ACC 18.02.065.B is intended to overcome this by granting full relief. While minimum density is a necessary tenant of the Growth Management Act, so too is incentivizing infill. The current standards generally preclude infill on smaller lots.

Second, proposed code section ACC 18.02.065.A.5 allows similar relief for traditional subdivisions (divisions of land into more than 9 lots) when a property is heavily encumbered with critical areas. Relief of the minimum density standard can be granted through the land division process where the applicant is able to demonstrate that the critical are footprint is encumbering the land to such an extent that it is impossible to meet the minimum density. For example, a 10 acre lot that has 9 acres of wetland only leaves 1 acre that may be developed. If the zoning is R-5 and the minimum density is 4 dwelling units per acre, it is impossible to place

the requisite 40 dwelling units on the remaining 1 acre and still meet the minimum lot size of 6,000 square feet (6,000 square feet x 40 dwelling units = 240,000 square feet; 240,000 square feet / 43,560 square feet = 5.51 acres). In this type of scenario, staff believes that relief should be granted from the minimum density while requiring that each lot meet the minimum lot size.

Conclusions

Staff has prepared a preliminary series of draft code amendments that are intended to accomplish the following:

- (1) Modify ACC 18.07.030.C to eliminate the requirement that the developer achieve an overall minimum average lot size across the entire subdivision.
- (2) Modify ACC 18.02.065.A to reorganize the code so that it is easier to understand how to calculate density.
- (3) Modify ACC 18.02.065.A to change the method of calculating density from Net Site Area to Gross Site Area.
- (4) Modify ACC 18.02.065.A to allow for administrative consideration of deviations to the minimum density requirement.
- (5) Add ACC 18.02.065.B which exempts short plats from the requirements to meet minimum density.

Questions

- (1) Does the Planning Commission concur with the suggestions offered by staff?
- (2) Are there questions or ideas that the Planning Commission would like staff to consider before bringing code amendments forward for public hearing?
- (3) Is Planning Commission comfortable with scheduling a public hearing for August 8, 2017?

Attachments

Draft Code Amendments