



Department of Planning and Zoning

Technical Bulletin

Subject: Shape Factor in the R-C District, Increase in Residential Building Height and Minor Lot Line Adjustments

Original Date: 2/2/18 No.: 18-03
Rev. Date: 1/29/2019

Summary: This Technical Memorandum was originally dated February 2, 2018, and has been revised on January 29, 2019, to incorporate a reference to Technical Bulletin 19-01 which was issued on January 29, 2019.

The Board of Supervisors (Board) adopted ZO-16-455 on September 20, 2016, with an effective date of September 21, 2016. ZO-16-455 adds a shape factor requirement in the R-C District; increases the maximum allowable building height in the R-C and R-E Districts when the impact of the increase on adjacent properties is mitigated; and facilitates the minor adjustment of lot lines between corner lots and the adjacent lots when such lots do not meet the current lot area, lot width and/or shape factor requirements, but met the requirements that were in effect when the lots were created.

Effective Date: 10/14/16

Background: This technical bulletin provides a summary of each component of ZO-16-455 and its implementation methodology.

I. Shape Factor

Background: Shape factor is designed to prevent irregularly shaped lots by providing a measurement by which the compaction and degree of regularity of the shape of a lot can be evaluated. Shape factor is defined in the Zoning Ordinance as the non-dimensional ratio of the lot perimeter squared, divided by the lot area, where the perimeter and area are derived from the same unit of measurement. In order to understand the context of shape factor, the most compact geometric shape is a circle with a shape factor of 12.5. A square has a shape factor of 16. In 2006, a maximum shape factor limitation of 35 by right and up to 50 with special exception approval by the Board was added to the R-E through R-8 Districts.

Amendment: The amendment adds a shape factor requirement in the R-C District as follows:

- Allows lots to be created by right in the R-C District provided that such lots have a shape factor less than or equal to 60. The shape factor requirement does not apply to those lots that are designated as open space or to those lots that are developed under the cluster provisions and require special exception approval from the Board. Lots in the R-C District that are not designated as open space or located in a Board approved cluster subdivision are subject to the shape factor requirement and all other applicable R-C District bulk regulations, even though subdivision approval is not required for lots that are 5 acres or more in size.
- Lots in the R-C District may have a shape factor greater than 60 but less than 100 with special exception approval from the Board.
- Prior to the approval of a special exception for an increase in shape factor in the R-C District, the Board must determine that:
 - (a) The increase in shape factor results in a development that preserves and/or minimizes the impact on existing vegetation, topography, historic resources and/or other environmental features; or
 - (b) A portion of the property is required for the establishment of a wastewater system (septic), private water supply system (well), stormwater management facility, and/or a stream valley trail as an outlot within the proposed subdivision, provided that there is no alternative location on the property being subdivided for the proposed facility or trail.

Process: Lots in the R-E through R-8 Districts will continue to be subject to the review process as specified in the January 11, 2007, Letter to Industry, <https://www.fairfaxcounty.gov/landdevelopment/land-development-technical-bulletins-3-1-7-8-8-9-and-9-3>

All lots in the R-C District that are recorded in the Fairfax County land records after September 21, 2016 and are not part of a cluster subdivision approved by the Board are subject to the shape factor requirement. Lots in the R-C District that were recorded in the land records prior to September 21, 2016 are grandfathered from the shape factor requirement. In order to assist the Site Development and Inspections Division of Land Development Services in the review of infill lot grading plans and site plans in the R-C District, the shape factor of each lot and the date that the lot in its current configuration was created through the recordation of the lot in the Fairfax County land records must be included as a note or in a table on all infill lot grading or site plans.

Lots in the R-C District that were recorded prior to September 21, 2016 and exceed a shape factor of 60 are considered “buildable” under Sect. 2-405 of the Zoning Ordinance. Sect. 2-405 applies to those lots that met the zoning requirements that were in effect when the lots were recorded, but the lots do not meet the current minimum district size, lot area, lot width or shape factor requirements. Such a lot pursuant to a building permit may be used for any use permitted in the zoning district even though the lot does not meet the minimum district size, lot area, lot width and/or shape factor requirements, provided that all other

requirements can be met. Under Sect. 2-405, a minor lot line adjustment can occur between such contiguous lots provided that the reconfigured lots contain either the same lot area as existed prior to the adjustment of lot lines, or a greater area than existed prior to the adjustment of the lot lines which results in a reduced number of lots. In addition, a minor lot line adjustment **cannot** result in any additional lots or outlots being created or an increase in the maximum density, and the resultant lot lines cannot create any new or aggravate any existing noncompliance with regard to minimum lot area, lot width, shape factor or minimum yard requirements. The minor lot line adjustment provisions of Sect. 2-405 will apply to any R-C District lot that was recorded in the Fairfax County land records prior to September 21, 2016 and the lot does not meet the current shape factor, lot area or lot width requirements.

II. Building Height

Amendment: With the adoption of ZO-16-455, the maximum allowable building height for a single family detached dwelling developed in the R-C and R-E Districts is 40 feet provided that a minimum required yard of 50 feet is maintained from all lot lines for any such building greater than 35 feet in height.

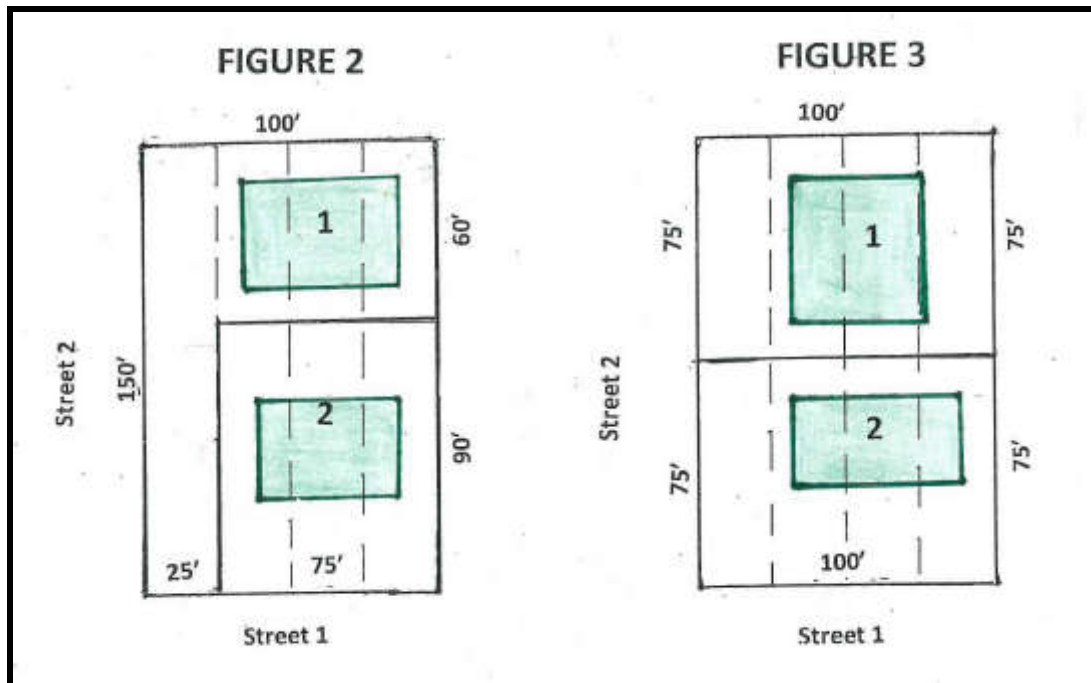
Application: The 50 foot minimum required yard would apply to those lots developed under the conventional subdivision provisions as well as those lots developed under the cluster provisions. Single family dwellings in the R-C and R-E Districts that are no greater than 35 feet in height would continue to be subject to the cluster or conventional subdivision minimum yard requirements of the respective districts. Single family dwellings up to 35 feet in height that are developed under the conventional provisions in the R-C District are still subject to a 40 foot minimum required front yard, 20 foot minimum required side yards and a 25 foot minimum required rear yard. Single family dwellings up to 35 feet in height that are developed under the conventional provisions in the R-E District are still subject to a 50 foot minimum required front yard, 20 foot minimum required side yards and a 25 foot minimum required rear yard.

The location of accessory structures and accessory storage structures (sheds) are subject to Paragraphs 10 and 12 of Sect. 10-104 of the Zoning Ordinance, respectively. Accessory structures greater than 7 feet in height and sheds greater than 8 ½ feet in height are not permitted in any minimum required front or side yard on any lot, or in any front yard on a lot less than 36,000 square feet in size. In addition, such accessory structures must be setback a distance equal to or greater than their height from the rear lot line. Sect. 2-412 of the Zoning Ordinance allows certain features, such as bay windows, eaves, decks and chimneys, to encroach into the minimum required yards of the zoning district in which located. On R-C and R-E District lots that contain a single family dwelling with a building height greater than 35 feet and up to 40 feet, the minimum required front, side and rear yards of 50 feet also applies to the location of accessory structures under Sect. 10-104 and the permitted extensions under Sect. 2-412. In summary, the 50 foot minimum required yard would apply to all situations where the Zoning Ordinance has a minimum required yard. However, Sect. 2-416 of the Zoning Ordinance contains yard regulations for pipestem lots and lots contiguous to pipestem driveways. Sect. 2-416 would still be applicable for pipestem lots and lots contiguous to pipestem driveways as the provisions of Sect. 2-416 supersede the minimum yard requirements of the district in which located.

Process: As outlined in Technical Bulletin 19-01, dated January 29, 2019, the submission of a height certification is required for new single family detached dwellings and additions to single family detached dwellings with proposed heights of 33 feet or greater. This requirement includes single family detached dwellings in the R-C and R-E District that qualify to be up to 40 feet tall.

III. Minor Lot Line Adjustments

Background: As was previously noted, Sect. 2-405 allows for the minor adjustment of lot lines between contiguous lots that do not meet the current lot size or shape factor requirements, but met the requirements in effect when the lot was originally recorded in the Fairfax County land records subject to certain criteria provided that such adjustment does not create or aggravate any existing noncompliance. These provisions can be limiting on a corner lot situation as demonstrated in the following illustrations. Figure 3 below depicts a desirable minor lot line adjustment that results in two compact and regularly shaped lots. However, a new lot width noncompliance is being created along a street where such compliance previously did not exist. Under the previous provision and in order to avoid the creation of a new noncompliance, the layout depicted in Figure 2 would have resulted. Although the lots in Figure 2 met the minor lot line adjustment criteria in Sect. 2-405, the resulting Lot 1 is not desirable given its configuration with an appendage along Street 2. The lot layouts in Figure 3 are more desirable and it would be easier to place structures that met the minimum yard requirements on such lots.



Amendment: In response, Sect. 2-405 has been amended to now allow a minor adjustment of lot lines between corner lots and contiguous lots that changes the road frontage or orientation of the lots, provided that there are no additional lots or outlots created, the number of lots that do not comply with the current minimum lot width requirement is not increased, and the

amount of lot width noncompliance is not aggravated. In addition, such adjustment of lot lines cannot create or aggravate any existing noncompliance with regard to minimum lot area, shape factor or minimum yard requirements. With this amendment, a minor lot line adjustment as depicted in Figure 3 above can now be approved.

Approved by: Leslie B. Johnson, Administrator
Zoning Administration Division