



Vinton Subdivision Ordinance Revisions Framework

Proposed Revisions to the Town of Vinton Subdivision Ordinance

APPENDIX A - SUBDIVISIONS

Sec. 2. – Definitions.

Recommendation:

Revise the definition of “setback” in the Subdivision Ordinance so that it matches the definition of setback in the Zoning Ordinance (Article X; Sec. 10-2; Words and Terms Defined).

Justification:

The term “setback” is defined in both the Zoning and Subdivision Ordinances and the definitions conflict with each other in that the definition used in the Subdivision Ordinance references a minimum distance, while the definition in the Zoning Ordinance only references a distance. Since we are recommending in some cases that maximum as well as minimum setbacks be required (as in the recommendations for the CB District on page 9, above).

Suggested Amendments:

Sec. 2. – Definitions.

~~*Setback.* The minimum distance that a building must be set back from the front lot line or street right-of-way line. See *Building line*.~~

Setback. The distance a building, structure, feature or activity is separate from a lot line. Depending on the context, the term "setback" may refer to a front yard, side yard or rear yard.

Recommendation:

Add a definition of “effective turning radius” in the definitions section.

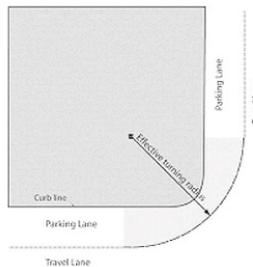
Justification:

The turning radius between intersecting streets is an important element of urban design that influences the speed of turning vehicles, pedestrian safety, and pedestrian comfort. Reducing subdivision turning radii is also referenced in the State Code under Urban Development Areas¹. In practice, the radius may be defined either by the distance that a vehicle actually travels when turning from one street to the other (effective turning radius) or as a simple minimum radius measured at the curb line, as in Vinton’s case. While defining the radius simply as the curb line is common, it can cause the minimum design radius to be longer than necessary for the type of vehicles anticipated to use the intersection. Using the effective turning radius as the basis of regulation may allow for actual radii that are less than what is presently required by the Town’s subdivision code. This is an important feature used to calm traffic and contribute to walkability². Below, we have used the definition of Effective Turning Radius from the Roanoke Subdivision Ordinance as the basis for our recommendation.

Suggested Amendments:

Sec. 2. – Definitions.

Effective turning radius: The turning radius provided at the intersection of the travel lanes of two (2) streets.



¹ See Virginia State Code § 15.2-2223.1.B.5.vii.

² A description of this principle, with illustrations, is given in FHWA guidance at the following link:

http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=28

Sec. 3. – General requirements for subdivision of land.

Recommendation:

Reduce the minimum block size from 300 feet to 150 feet between intersections to better match the existing lotting patterns in the Town.

Reduce the maximum block size from 1,000 feet to 800 feet between intersections to conform to a more traditional neighborhood design. However, retain the existing provision that allows the planning commission to approve longer or shorter blocks for unusual existing conditions.

Replace the requirement of a mid-block crossing in blocks of 800 feet or greater with a requirement that the subdivider conduct an engineering study to determine the need for a mid-block crossing for any instance where a block of 800 feet or greater is proposed. The engineering study must consider elements that protect pedestrian safety at the mid-block crossing, such as signage, a pedestrian safety island, or rapid flashing beacons. Require installation of the crosswalk with safety measures as supported by the engineering study.

Justification:

Small block sizes support walkability and provide more route options for all users of a street. Blocks in downtown Vinton are typically between 300 and 400 feet in length. However, blocks in the older residential neighborhoods around downtown have block lengths typically 150-180 feet between intersections on their short sides. Reducing both the minimum and maximum length of blocks between intersections will help ensure that any new subdivisions platted in the Town will retain the traditional lotting pattern and walkability of the Town's historic traditional residential neighborhoods.

Mid-block crosswalks can help people access destinations but must be well designed to ensure they will be used and will protect pedestrian safety. Proper installation of a mid-block crosswalk is important, and VDOT requires an engineering study before any crosswalk markings can be installed across uncontrolled locations on roads that it controls. A similar level of scrutiny should be applied to mid-block crossings of new subdivision streets in Vinton. The requirement for an engineering study for long blocks will ensure that these crossings will be designed for pedestrian safety.

Suggested Amendments:

Sec. 3. – General requirements for subdivision of land.

(a) The owner or developer of a subdivision shall observe and comply with the following general requirements and principles of land subdivision ordinance in preparing the preliminary and final subdivision plats:

(6) Blocks, in general, shall not be longer than ~~1,000~~ 800 feet or less than ~~300~~ 150 feet between street intersections; provided, however, [that] in instances where topography or existing peculiar conditions require it, a longer or shorter block may be approved by the planning commission. In blocks 800 feet or greater in length, an engineering study must be conducted and submitted to the Zoning Administrator at the time of submission of a preliminary plat. The engineering study shall consider elements that protect pedestrian safety at the mid-block crossing, such as signage, a pedestrian safety island, or rapid flashing beacons. The installation of a mid block crosswalk with safety measures as supported by the engineering study may be required by the Zoning Administrator. ~~A crosswalk shall be provided between cross streets in blocks 800 feet or more long.~~

Recommendation: Require that local streets with projected ADT less than 4,000 vehicles be designed with an effective turning radius of 15 to 20 feet. For all other streets, the turning radius would be controlled by the same VDOT standards that govern other streets in the Town. Note that the “effective turning radius” is recommended as a new definition in the definitions section (Section 3 (8)).

Justification: A larger turning radius supports higher speed turns, while a shorter (or tighter) turning radius slows the speed of turning vehicles providing greater pedestrian safety. Shorter turning radii at corners can also reduce pedestrian crossing distances. Turning radius is a key factor, although often overlooked, in the walkability and safety of a community's streets and is referenced in the State Code under UDAs, as noted above. There are ways to accommodate a fairly generous effective turning radius while maintaining a reasonably tight radius at the curb line. For example, the designer can increase the effective turning radius by adding bicycle lanes, parking lanes, or striping advance stop lines on the destination street.

Suggested Amendments:

Sec. 3. – General requirements for subdivision of land.

(a) The owner or developer of a subdivision shall observe and comply with the following general requirements and principles of land subdivision ordinance in preparing the preliminary and final subdivision plats:

(8) At street intersections, ~~for local streets with projected Average Daily Traffic of less than 4,000 vehicles, the property shall be rounded by an arc~~ ~~he shall be rounded by an arc~~ having an effective turning radius no less than 15 feet and no greater than 20 feet. ~~a radius of not less than 15 feet.~~ Property lines at ~~for major street intersections with projected Average Daily Traffic of 4,000 or more vehicles,~~ or at other locations where traffic hazards and congestion may be anticipated, shall be designed for ~~a~~ **an effective turning radius of not less than 20 25 feet, or greater if deemed necessary.**

Sec. 13 – Improvements

Recommendation:

Require sidewalks with a minimum width of 5 feet, and a planted strip of 6 feet in width between the curb and sidewalk with street trees, on both sides of all new streets created in the Town. Sidewalk minimum widths are 5 feet to accommodate ADA requirements. Planting strips need to be a minimum of six feet to allow for healthy tree growth and minimize sidewalk buckling from root intrusion.

Justification:

Sidewalks are the most basic building block of a walkable community. VDOT street improvement regulations now include required consideration of pedestrian and bike facilities. Many subdivision requirements, including those of the City of Roanoke, also require the provision of a buffer with street trees between the sidewalk and the street. Including a buffer with street trees between the sidewalk and the vehicle travel way increases pedestrian safety and comfort and helps beautify the streetscape in new residential neighborhoods. Street trees also provide benefits by cleaning the air of pollutants and can subtly help reduce traffic speeds on roads where they are planted by providing visual cues that the area is pedestrian-friendly.

Suggested Amendments:

Sec. 13. – Improvements.

(a) All plans and specifications shall be in conformity with requirements approved by the town for various types of physical improvements.

(b) The following improvements shall be required to be installed by the subdivider in subdivisions lying, in whole or in part, within the corporate limits of the town, when such subdivision shall include or involve any public street, any extension of the town water and sewer systems, any private water and sewer systems, any right-of-way connecting two public streets, or any easements for any of the foregoing; and the same shall be installed in strict accordance with the specifications provided herein as approved by the agent:

(7) The subdivider shall install a sidewalk at least five feet in width on both sides of any new street or road and include a buffer zone between the sidewalk and curb of 6 feet in width planted with deciduous streetscape trees at a spacing as required in paragraph (8) below. The sidewalk and buffer zone shall be within the dedicated right of way for a public street. No tree shall be planted within 20 feet of an intersection.

Recommendation:

Provide additional requirements for street trees to be provided not only on new streets but also on any improved streets. Also, provide standards for street tree planting in accordance with professional landscaping and engineering practice. The standards below were copied in large part from the City of Roanoke's standards.

Justification:

Many Vinton streets were originally planted with street trees but there is no requirement that new streets or street improvements include trees. Street trees give an attractive character to the streetscape, help clean air pollution and, as noted above, can subtly reduce traffic speeds. By incorporating these standards for any improved streets, Vinton can become gradually greener over time as streets are maintained and improved to incorporate trees within the right of way.

Suggested Amendments:

Sec. 13. – Improvements.

(a) All plans and specifications shall be in conformity with requirements approved by the town for various types of physical improvements.

(b) The following improvements shall be required to be installed by the subdivider in subdivisions lying, in whole or in part, within the corporate limits of the town, when such subdivision shall include or involve any public street, any extension of the town water and sewer systems, any private water and sewer systems, any right-of-way connecting two public streets, or any casements for any of the foregoing; and the same shall be installed in strict accordance with the specifications provided herein as approved by the agent:

(8) Street trees shall be planted along the entire length of any street being created or improved, exclusive of areas required to remain clear for the purposes of sight distance.

i. The minimum number of street trees required shall be calculated by dividing the block length, minus twenty (20) feet of sight distance required at each corner of the block, by thirty (30). Any fractional remainder may be rounded down to a whole number.

ii. Street trees shall be provided in the planted strip between the sidewalk and curb or within tree grates located in an extended-width sidewalk. Street trees shall be located with centers a minimum of three (3) feet from the back of the curb in a planted strip or in tree grates along an extended-width sidewalk. A minimum of five (5) feet of clearance shall be maintained between street trees and underground utilities.

iii. Street trees shall be planted in accordance with the Standardized Landscape Specifications for the Commonwealth of Virginia, 2000, jointly adopted by the Virginia Nurserymen's Association, the Virginia Society of Landscape Designers, and the Virginia Chapter of the American Society of Landscape Architects.

iv. All trees required by this section shall be a minimum of 2.5 inches caliper at breast height at the time of planting and shall be of a hardy type that are recommended for street tree installation in the hardiness zone of the Town.