

Date of Meeting: November 21, 2019

5

**BOARD OF SUPERVISORS
BUSINESS MEETING
ACTION ITEM**

SUBJECT: **ZOAM-2017-0005 and DOAM-2018-0001: Amendment of the Revised 1993 Loudoun County Zoning Ordinance and the Loudoun County Facilities Standards Manual in Regard to Setbacks, Buffers, Screening, and Related Landscaping (To Include Cemetery, Burial Ground, and Grave Buffer Standards)**

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: At the pleasure of the Board

STAFF CONTACTS: Josh Elkins, PLA, CZA, Planner, Planning and Zoning
Alaina Ray, AICP, Director, Planning and Zoning
Laura Edmonds, Public Review Committee Liaison, Building and Development
Alan Brewer, Director, Building and Development

PURPOSE: To amend the Revised 1993 Loudoun County Zoning Ordinance (Zoning Ordinance) and the Loudoun County Facilities Standards Manual (FSM) buffering and screening regulations.

RECOMMENDATIONS: The recommendations of the Planning Commission (Commission), Zoning Ordinance Action Group (ZOAG), Facilities Standards Manual Public Review Committee (PRC), and Heritage Commission (HC) provided below reflect the prior version of the proposed amendments that included new regulations for preserving existing cemeteries. At the September 11, 2019, Board of Supervisors (Board) Public Hearing, the Board directed (8-0-1: Saines absent) staff to remove the draft regulations for preserving existing cemeteries from Zoning Ordinance Amendment (ZOAM)-2017-0005 and Development Ordinance Amendment (DOAM)-2018-0001 to be considered as a separate initiative that will receive further review by the Commission and the public before presentation to the Board for consideration. At the October 17, 2019, Board Business Meeting, the Board voted (9-0) to suspend the rules for the purpose of a new motion. The Board then forwarded (9-0) the item to the November 21, 2019, Board Business Meeting for action, and further directed that staff reinstate the proposed cemetery protection regulations in the draft text, to include the cemetery Preservation Buffer, and incorporate criteria for approval of administrative modifications of the cemetery Preservation Buffer.

Planning Commission: At the Commission Public Hearing on July 30, 2019, the Commission forwarded (5-3-1: Barnes, Jennings, and Priscilla opposed; Blackburn absent) ZOAM-2017-0005

and DOAM-2018-0001 to the Board with a recommendation of approval, with further recommendations to eliminate the cemetery Preservation Buffer and related requirements and add language to limit grading to a 3:1 slope in the area 25 feet beyond the limits of the cemetery Protection Buffer.

Zoning Ordinance Action Group: ZOAG supports approval of the ZOAM as included in Attachment 1 with one remaining issue to be considered. In regard to the Cemetery, Burial Ground, and Grave Buffers, ZOAG recommends that some land disturbance be allowed within the 25-foot Preservation Buffer without requiring a modification from the Zoning Administrator. Specifically, ZOAG recommends that grading, not to exceed a 3:1 slope, be permitted within the 25-foot Preservation Buffer, with the limitation that no improvements, such as buildings and parking, be permitted within such buffer.

Facilities Standards Manual Public Review Committee: PRC had no issues with the comprehensive revisions to the buffering and screening requirements and supports approval of the DOAM as included in Attachment 2. In regard to the new Cemetery, Burial Ground, and Grave Buffer, the PRC supports eliminating the 25-foot Preservation Buffer or permitting land disturbance and improvements 25 feet beyond the Protection Buffer without requiring a Cemetery, Burial Ground, and Grave Treatment Plan.

Heritage Commission: The HC prefers a non-modifiable, 50-foot buffer for cemeteries, burial grounds, and graves. The HC also supports the current draft text that requires a modifiable, 50-foot buffer, composed of a 25-foot Protection Buffer plus a 25-foot Preservation Buffer.

Staff: Staff supports Board adoption of the ZOAM and DOAM as provided in Attachment 1 and Attachment 2, respectively.

Given the complexity and scope of the proposed amendments, staff further recommends that the effective date be delayed until January 1, 2020. Moreover, staff recommends that the Board adopt the Transition Rules provided in Attachment 3 to address the “grandfathering” of certain active non-legislative land development applications officially accepted before the effective date.

BACKGROUND: The Board adopted (9-0) a Resolution of Intent to Amend (ROIA) initiating this ZOAM and DOAM on March 22, 2018. During the process of addressing agency referral comments, staff identified recommended changes to Article 1 and Article 8 of the Zoning Ordinance that were not included within the scope of the approved ROIA. As such, at the June 4, 2019, Board Business Meeting, the Board adopted (7-0-2: Meyer and Buffington abstained) a revised ROIA to include Article 1 and Article 8 within the scope of the ZOAM (Attachment 4).

The purpose of the ZOAM is to 1) ensure the buffering and screening standards of the Zoning Ordinance are appropriate for the intended forms of development throughout the County, and 2) provide sufficient flexibility to facilitate innovative site design and enable resolution of common design challenges and constraints. The companion DOAM will ensure consistency between the

updated Zoning Ordinance requirements and the corresponding technical design standards of the FSM. Additionally, the ZOAM and DOAM will address the Board Member Initiative (BMI)¹ that the Board approved (7-0-2: Buffington and Higgins absent) on March 7, 2017, that directed staff to develop ordinance language to preserve existing and historic cemeteries and burial grounds.

The Zoning Ordinance defines Buffering and Screening as, “any device or natural growth, or a combination thereof, which shall serve as a barrier to vision, light, or noise between adjoining properties, wherever required by this ordinance and further defined herein and in the FSM. Whenever used for screening or buffering purposes, “natural growth” shall be taken to mean “coniferous or deciduous trees, bushes and shrubbery.”

The current buffering, screening, and related landscaping regulations of the Zoning Ordinance are a recurring source of modification requests with legislative applications. The prevalence of these modifications indicates that existing regulations do not effectively address evolving industry expectations and development conditions. The proposed amendments will establish appropriate landscape buffers and ensure that the public and development community understand what is reasonable and expected, which, in turn, will improve the land development review process and result in more desirable built outcomes, and perhaps fewer modification requests.

The Commission conducted a Work Session concerning the ZOAM and DOAM on July 11, 2019, and held a Public Hearing on July 30, 2019. Three speakers addressed the Commission in regard to the cemetery buffer provisions, and these speakers favored a cemetery non-disturbance buffer larger than 25 feet. One written comment requested that the environmental purposes of the buffering and screening standards be more explicitly identified. The Commission had no issues with the staff-recommended text amendments to the current buffer yard, screening, and setback requirements; discussion focused primarily on the proposed cemetery buffer. The Commission forwarded (5-3-1: Barnes, Jennings, and Priscilla opposed; Blackburn absent) the ZOAM and DOAM to the Board with a recommendation of approval, with further recommendations to eliminate the Preservation Buffer and related requirements and add language to limit grading to a 3:1 slope in the area 25 feet beyond the limits of the Protection Buffer, as provided in a prior draft.

The Board held a Public Hearing on September 11, 2019, and five speakers addressed the Board. These speakers asked that the Board revise the cemetery buffer requirements and ideally favored a 50-foot buffer for cemeteries, burial grounds, and graves. The Board forwarded (8-0-1: Saines absent) the item to the October 17, 2019, Board Business Meeting for action, excluding the Cemetery, Burial Ground, and Grave Buffer component of the amendments, which the Board directed staff to bring back to the Commission for consideration. The Board further directed staff to include an implementation policy with the Action Item that establishes the effective date of the amendments and clarifies their applicability to pending land development applications.

¹[March 7, 2017, Board of Supervisors Business Meeting Action Item #15, Develop a Cemetery Preservation Ordinance to Protect Existing and Historic Cemeteries and Burial Grounds During the Land Development Process](#)

At the Board Business Meeting on October 17, 2019, the Board voted (9-0) to suspend the rules for the purpose of a new motion. The Board then forwarded (9-0) the item to the November 21, 2019, Board Business Meeting for action, and further directed that staff reinstate the proposed cemetery protection regulations in the draft text², to include the cemetery Preservation Buffer, and incorporate criteria for approval of administrative modifications of the cemetery Preservation Buffer.

In accordance with Board direction, the draft Zoning Ordinance text in Attachment 1 has been revised to reinstate the proposed cemetery protection regulations, which establish a 50-foot Cemetery, Burial Ground, and Grave Buffer for the protection and preservation of existing cemeteries, burial grounds, and graves. The buffer will be composed of two components, the Protection Buffer and Preservation Buffer, each of which consists of 25 feet in width. The 25-foot Protection Buffer will extend outward from the edge of the delineated boundary of the cemetery, burial ground, or grave to protect the physical integrity of existing burials. This buffer can only be modified by approval of a Minor Special Exception application by the Board. The 25-foot Preservation Buffer will extend outward from the edge of the Protection Buffer to create additional separation from adjacent land uses in order to preserve the historic context of the existing cemetery. The Preservation Buffer may be modified by an administrative waiver, requests for which will be evaluated based on the criteria of Section 5-1409, to include how the historic context of the cemetery, burial ground, or grave will be preserved through alternative mitigation techniques. To further clarify the evaluation criteria, the draft text has been updated to include a description of the physical characteristics that define the historic context of a cemetery burial ground, or grave. The revisions to the administrative waiver criteria and process have been highlighted in the draft text for ease of reference.

The draft FSM text in Attachment 2 has been revised to reinstate the proposed cemetery protection regulations, which require a Phase I Archaeological Survey for site plan (STPL) and construction plans and profiles (CPAP) applications and delineation of the boundary of cemeteries, burial ground, and graves. The draft text further includes new standards for preserving historic cemeteries, burial grounds, and graves through the establishment of easements and provisions of protective barriers during construction. Additionally, the draft text establishes content requirements for a Cemetery, Burial Ground, and Grave Treatment Plan, which will be required with any administrative modification of the Preservation Buffer to evaluate and address the historic context of a cemetery, burial ground, or grave.

SUMMARY OF PROPOSED TEXT CHANGES: These proposed amendments are intended to be a comprehensive review and refinement of the County's current buffer yard, screening, and setback requirements. The following is a summary of the proposed amendments as provided in Attachment 1:

² [October 17, 2019 Board of Supervisors Business Meeting Action Item #9, ZOAM-2017-0005 and DOAM-2018-0001: Amendments of the Revised 1993 Loudoun County Zoning Ordinance and the Loudoun County Facilities Standards Manual in Regard to Setbacks, Buffers, Screening, and Related Landscaping](#)

1. **Article 1, General Regulations:** Proposed amendments clarify how to measure road corridor buffer yards and setbacks from streets.
2. **Section 5-600, Additional Regulations for Specific Uses:** Proposed amendments delete the landscaping requirements for specific uses referenced in Section 5-653, which requirements are being consolidated into revised Section 5-1400. The buffer yard standards applicable to data centers specified in Section 5-664 are revised to promote year-round screening of such uses. Specifically, when a data center use is proposed adjacent to property within a residential zoning district and/or a collector or arterial road, an increased number of evergreen trees would be required per 100 linear feet of buffer yard, and the minimum height of such trees at time of planting would also be increased from six feet to eight feet.
3. **Section 5-900, Access and Setbacks From Specific Roads and the W&OD Trail:** Deleted and its requirements consolidated into revised Section 5-1400, to include Road Corridor Buffer Yard Types for certain roads and road classifications.
4. **Section 5-1300, Tree Planting and Replacement:** Revised to clarify that the street tree requirement of Section 5-1303(B)(4) applies to both sides of the street.
5. **Section 5-1400, Buffering and Screening:** This section is comprehensively rewritten. The current version of this Section can be viewed [here](#). The proposed amendments will accomplish the following:
 - a. Applicability - Clarify applicability and identify exceptions to the requirements of this Section.
 - b. Plant Unit System - Establish a “Plant Unit” system for calculating buffer yard density. The Plant Unit system will establish a plant unit equivalent for each plant type (e.g., a large deciduous tree is equal to ten plant units), with each buffer yard type requiring a particular number of plant units and mix of plant types (e.g., a Type B Buffer Yard requires 80 plant units, a maximum of 50 percent of which may be large deciduous trees). Applying the Plant Unit system will achieve effective screening while allowing flexibility in the selection and composition of plant types within the buffer yard, which in turn will enable design that is more creative and capable of addressing site constraints. To ensure a mix of plant types and effective screening of uses, each buffer yard must adhere to a maximum number of plants for each plant type that can be counted toward the plant unit requirement.
 - c. Road Corridor Buffer Types - Establish Road Corridor Buffer Types and base the front yard buffer on the classification of the adjoining street as opposed to the use located on the opposite side of the street to promote a consistent and complementary streetscape, regardless of land use pattern. The building and parking setbacks of Section 5-900 will be relocated to Section 5-1400 and a Road Corridor Buffer Type

applied to each specified road classification. The current Buffer Yard Type 5 applicable to segments of Route 50 and Route 7 will be renamed to Gateway Corridor Buffer, however, the specific requirements of this enhanced buffer will remain unchanged from the current ordinance.

- d. Buffer Yard Matrix - Establish the side and rear buffer yard requirements for a use based on the adjacent use. The revised Buffer Yard Matrix of Table 5-1404(B) requires the more stringent buffer yard requirement apply to the more intense land use with the less intense land use required to provide a lesser buffer yard, thereby ensuring a clear nexus between land use intensity and screening responsibility. The matrix is also simplified by replacing specific uses with broad land use groups and including vacant land as a distinct use group to clarify the use buffers on adjoining developing parcels. For informational purposes, the Zoning Administrator will issue an advisory opinion on how the permitted uses listed in the Zoning Ordinance will be classified under the new broad use groups, as shown in the chart provided in Attachment 5.
- e. Buffer Location - Required side and rear buffer yards will be permitted to surround the proposed use as opposed to being located along the full length of the property line as currently required. This is beneficial when only a small portion of a large parcel is being developed and for allowing the buffer yard to be setback from site constraints along the edge of the property.
- f. Cemetery, Burial Ground, and Grave Buffer - Establishes a 50-foot Cemetery, Burial Ground, and Grave Buffer for the protection and preservation of existing cemeteries, burial grounds, and graves. The buffer will be composed of two components, the Protection Buffer and Preservation Buffer, each of which consists of 25 feet in width. The 25-foot Protection Buffer will extend outward from the edge of the delineated boundary of the cemetery, burial ground, or grave to protect the physical integrity of existing burials. This buffer can only be modified by approval of a Minor Special Exception application by the Board. The 25-foot Preservation Buffer will extend outward from the edge of the Protection Buffer to create additional separation from adjacent land uses in order to preserve the historic context of the existing cemetery. The Preservation Buffer may be modified by administrative waiver, requests for which will be evaluated based on the criteria of Section 5-1409, to include how the historic context of the cemetery, burial ground, or grave will be preserved through alternative mitigation techniques. To further clarify the evaluation criteria, the draft text has been updated to include a description of the physical characteristics that define the historic context of a cemetery burial ground, or grave.
- g. Clarify requirements for screening certain on-site functions, such as loading areas, dumpsters, outside storage areas, maintenance areas, mechanical equipment, and utility equipment. Specifically, these functions may be screened using one of three

- 1. Chapter 7, Environmental Design Standards:** This chapter contains the following proposed amendments:
 - a.** Add and/or amend references for the following guidelines and specifications:
 - i.** Planting and maintenance of new plant material;
 - ii.** Virginia invasive species list;
 - iii.** Above-ground landscape containers and planters;
 - iv.** Pruning methods; and
 - v.** Reforestation planting.
 - b.** Amend plant diversity standards.
 - c.** Add soil suitability standards.
 - d.** Provide sample buffer yard tables identifying required plant units.
 - e.** Provide a plan sheet size requirement for Forest Management Plans.

- f. Amend required plant densities for reforestation, time of planting, and release/maintenance and restocking requirements.
 - g. Relocate landscape material specifications associated with the current Type 5 Buffer Yard in the Zoning Ordinance to Table 3 of Chapter 7 and identify species required for Gateway Corridors.
 - h. Amend Section 7.800, Archaeology and Historic Resources Section, to require a Phase I Archaeological Survey for site plan (STPL) and construction plans and profiles (CPAP) applications to delineate the boundary of cemeteries, burial ground, and graves. Phase I surveys are already required for preliminary subdivision applications.
 - i. Create new standards for preserving historic cemeteries, burial grounds, and graves, including protective barriers during construction and easements.
 - j. Establish content requirements for a cemetery, burial ground, and grave treatment plan.
2. **Chapter 8, Administrative Procedures:** This chapter contains amendments to specify site plan, construction plans and profiles, and subdivision applications that would require an archaeological survey report and boundary delineation/digital file for any identified cemeteries, burial grounds, and graves and archaeology notes to be provided on plans. Additionally, this chapter contains amendments to record drawings that would require a redline Tree Conservation and Landscape Plan if plantings do not conform to the approved quantities for each plant category.

REFERRAL COMMENTS: The draft text for both the ZOAM and DOAM was prepared using referral comments received from the Department of Building and Development Natural Resources Team, the Department of Economic Development, Fire and Rescue, the Department of Transportation and Capital Infrastructure, the Community Planning Division of the Department of Planning and Zoning, ZOAG, the FSM PRC, and the HC. Referral comments are included in this staff report as Attachment 6. Most of the comments support adoption of the ZOAM and DOAM; however, there is one issue raised by PRC and ZOAG that involves the proposed buffer yard associated with the preservation of existing cemeteries, burial grounds, and graves. This issue is explained in greater detail below.

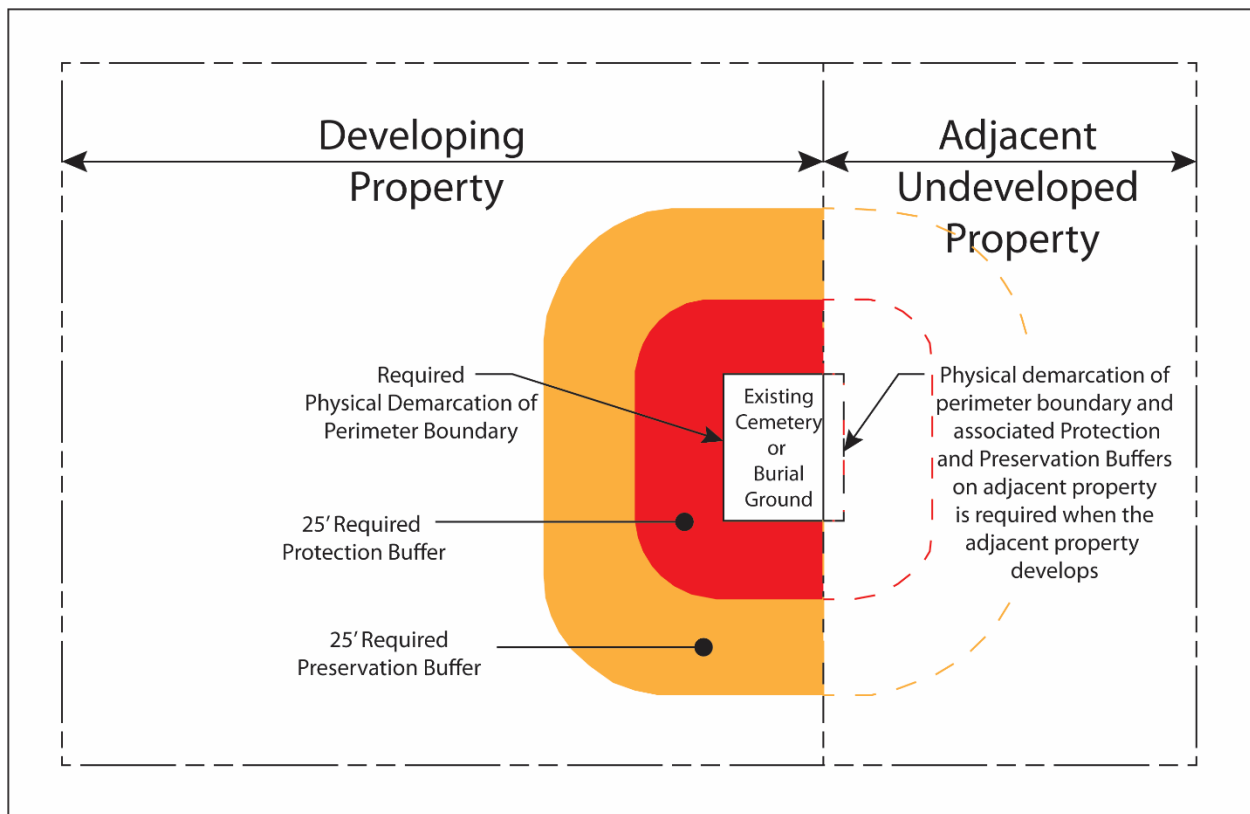
ISSUES: Cemetery, Burial Grounds, and Grave Buffer Width

At the July 11, 2019, Commission Briefing and at the July 30, 2019, Public Hearing on this item, the Commission expressed concerns about the size of the proposed buffer for cemeteries, burial grounds, and graves. The Commission was generally agreeable to the 25-foot Protection Buffer, but felt that the additional 25-foot Preservation Buffer (bringing the total cemetery buffer up to 50 feet) may be too large and not appropriate in suburban and urban settings, and recommended staff eliminate the Preservation Buffer and related requirements and add language to limit grading to a 3:1 slope in the area 25 feet beyond the limits of the cemetery Protection Buffer. The Commission's recommended language was included in the draft text considered by the Board at the September 11, 2019, Board Public Hearing, which multiple speakers cited as objectionable.

The ZOAG recommended that some land disturbance be allowed within the 25-foot Preservation Buffer without requiring a modification from the Zoning Administrator. Specifically, ZOAG recommended that grading, not to exceed a 3:1 slope, be permitted within the 25-foot Preservation Buffer, with the limitation that no improvements, such as buildings and parking, be permitted within such buffer.

The PRC recommended that the 25-foot Preservation Buffer be eliminated, as subsequently recommended by the Commission, or that land disturbance be permitted 25 feet beyond the Protection Buffer without requiring a Cemetery, Burial Ground, and Grave Treatment Plan.

Proposed Cemetery Buffer Standard



The recommended 25-foot Protection Buffer is intended to protect the physical integrity of existing burials and preservation of the natural and cultural features associated with the landscape. The Protection Buffer will extend outward from the edge of the delineated boundary of the cemetery, burial ground, or grave. No land disturbing activity is permitted within the Protection Buffer, except land disturbing activity associated with construction of a perimeter demarcation of the delineated boundary of the cemetery (by wall, fence, or pillar), the pedestrian access, and clearing of invasive vegetation on the surface, excluding any species that were planted in association with burials. The Protection Buffer can only be modified through a Minor Special Exception approved by the Board.

The second component is a 25-foot Preservation Buffer that is intended to create separation from adjacent land uses to preserve the historic context of the existing cemetery. The Preservation Buffer will extend outward from the edge of the Protection Buffer. The Preservation Buffer permits the same minimal level of land disturbing activity as the Protection Buffer, but can be modified by the Zoning Administrator through the new administrative modifications provisions of Section 5-1400. An administrative modification of the Preservation Buffer would require submission of a Cemetery, Burial Ground, and Grave Treatment Plan in accordance with FSM standards. This would allow staff to review each modification request and evaluate, on a site-by-site basis, the differences in the context of these historic cultural features.

FISCAL IMPACT: The proposed amendments are not projected to have any fiscal impact.

ZONING ORDINANCE CRITERIA FOR APPROVAL: Section 6-1210(D), Text Amendments, of the Zoning Ordinance states “. . .for an amendment of the text of this Ordinance, the Planning Commission shall consider the following matters:”

Standard *Whether the proposed text amendment is consistent with the Comprehensive Plan.*

Analysis The *Loudoun County 2019 General Plan* (2019 GP) was adopted (8-1: Umstattt opposed) by the Board at the June 20, 2019, Board Business Meeting. The 2019 GP does not provide specific guidance on screening and buffering that differs significantly from what was provided by the previous Revised General Plan. However, Community Planning staff notes that the Place Type approach to land use as described in the 2019 GP generally promotes compatibility of uses and unified site design through form-based considerations and thoughtful transitions among disparate uses. Overall, the additional flexibility enabled by the proposed amendments will encourage the type of creative approaches to streetscapes and transitions among uses envisioned in the 2019 GP.

The Heritage Preservation Plan recognizes that archaeological sites are finite, fragile, and non-renewable heritage resources that serve as tangible links to the prehistory and history of Loudoun. Chapter 2, Archaeological Resources, Policy 9 states that when archaeological resources are identified during the land development process, it is the County’s primary objective to protect and conserve these resources. Policy 10 goes on to state that during the design process, the locations of identified significant archaeological resources will be a determining factor in the delineation of the required open space element.

Standard *Whether the proposed text amendment is consistent with the intent and purpose of this Ordinance.*

Analysis The purpose and intent of the Zoning Ordinance is provided under Section 1-102, which states: “This Ordinance is enacted in order to promote the health, safety and

welfare of the residents of Loudoun County and to implement the Loudoun County Comprehensive Plan.” The amendment is consistent with the intent and purpose of the Zoning Ordinance by implementing the natural and heritage policies of the Comprehensive Plan. The proposed amendments promote the health safety and welfare of the residents of Loudoun County by allowing greater flexibility for design solutions in regard to preserving or screening viewsheds and implementing new standards for preservation of historic resources throughout the County.

ALTERNATIVES: Staff has identified the following alternatives for the Board’s consideration:

1. The Board may adopt ZOAM-2017-0005 and DOAM-2018-0001 as included in Attachments 1 and 2, respectively, to take effect on January 1, 2020, and the Transition Rules included in Attachment 3.
2. The Board may adopt ZOAM-2017-0005 and DOAM-2018-0001 as included in Attachments 1 and 2, respectively, to take effect immediately.
3. The Board may forward this item to the Transportation and Land Use Committee (TLUC) for further discussion.

DRAFT MOTIONS:

1. I move that the Board of Supervisors adopt ZOAM-2017-0005 and DOAM-2018-0001 as provided in Attachments 1 and 2 of the November 21, 2019, Board of Supervisors Business Meeting Action Item, with an effective date of January 1, 2020, and the Transition Rules provided in Attachment 3 of the November 21, 2019, Board of Supervisors Business Meeting Action Item.

OR

2. I move an alternate motion.

ATTACHMENTS:

1. ZOAM-2017-0005 Draft Text
2. DOAM-2018-0001 Draft Text
3. Transition Rules
4. Revised Resolution of Intent to Amend the Revised 1993 Loudoun County Zoning Ordinance and the Loudoun County Facilities Standards Manual
5. Zoning Administrator Advisory Opinion on Use Classification
6. Referral Comments

Section 5-1400 — Buffering and Screening.

5-1401 — Purpose. The purpose and intent of this Section is to facilitate the creation of a convenient, attractive and harmonious county; to conserve natural resources including adequate air and water; to preserve the character of an area by preventing or mitigating the harmful effects of one use on another use; and to preserve and promote the health, safety and general welfare to the public. More specifically, this Section is intended to mitigate the effects of uses on adjacent uses by requiring a screen and/or buffer between the uses in order to minimize the harmful impacts of noise, dust and other debris, motor vehicle headlight glare or other artificial light intrusion, and other objectionable activities or impacts conducted on or created by an adjoining or nearby use. Also, this Section is intended to require the landscaping of parking lots in order to reduce the harmful effects of heat and noise and the glare of motor vehicle lights; to preserve underground water reservoirs and to permit the return of precipitation to the ground water strata; to enhance the natural drainage system and ameliorate storm water drainage problems; to reduce the level of carbon dioxide and return pure oxygen to the atmosphere; to prevent soil erosion; and to provide shade.

5-1402 — Applicability.

(A) The provisions of this Section shall apply to all development where site plans and/or subdivisions are filed in accordance with the provisions of Section 6-700 of this Ordinance or the Land Subdivision and Development Ordinance.

(B) The provisions of this Section are intended to complement the regulations of Section 5-1300 of this Ordinance. Trees planted to fulfill the Canopy requirements of Section 5-1300 may also fulfill the Buffering and Screening requirements of this Section. However, where any provision of this Section imposes restrictions or standards different from those of Section 5-1300 or any other County ordinance or regulation or other provision of law, whichever provisions are more restrictive or impose higher standards shall control, unless the intent is clearly otherwise.

5-1403 — Standards. The following standards shall apply to the installation and maintenance of all landscaping and screening required by the provisions of this Section.

(A) The planting and maintenance of all trees and shrubs shall be in accordance with the provisions of Facilities Standards Manual, and the following requirements:

(1) The installation of all landscaping shall be done following the procedures established by the American Association of Nurserymen.

~~(2) At the time of planting, all canopy trees shall have a minimum caliper of one (1) inch diameter at breast height (d.b.h., measured at 4 and ½ feet above ground level), and all understory trees shall have a minimum height of six (6) feet. Evergreen trees shall be a minimum of six (6) feet in height. Evergreen shrubs shall have a minimum height of thirty (30) inches. Dwarf deciduous shrubs shall have a minimum height of eighteen (18) inches.~~

~~(B) Existing vegetation which is suitable for use in compliance with the requirements of this Section, when supplemented by new vegetation, if needed, so as to provide buffering and screening in accordance with the purpose and intent of this Section, may be used as required planting.~~

~~(C) The Board of Supervisors or the Board of Zoning Appeals may modify the requirements of this Section as part of an approval action of a special exception, variance, or as part of proffered conditions. In such event, the requirements of such approval shall govern.~~

~~(D) Any landscaping required by this Section that would fall within the area of a recorded sight distance easement granted to the County of Loudoun or the Commonwealth of Virginia shall be eliminated or reduced to meet the standards of such sight distance easement. This plant material must be located elsewhere on site in areas that provide room for viable plant growth.~~

~~(E) — Except where a Type 5 Buffer is required, any property with frontage on an existing or planned four-lane divided roadway shall provide, in lieu of otherwise applicable landscaping, buffering and tree planting along such roads, a Type 3 Front Yard Buffer along the property's frontage on such road, regardless of the present or planned future use on properties on the other side of such road.~~

5-1404—Landscaping Plan.

~~(A) Except as permitted by the provisions of Section 5-1405 below, a landscaping plan meeting the requirements of the Facilities Standards Manual, including a parking lot landscape and screening plan, shall be submitted as part of every final site plan required by the provisions of Section 6-701.~~

~~(B) — Such landscaping plans shall be drawn to scale, including dimensions and distances, and shall delineate existing and proposed buildings, parking spaces or other vehicle areas, access aisles, driveways, and the location, size, and description of all landscaping materials and the installation schedule if materials are to be installed in phases extending beyond 90 days from the date of occupancy of the building or structure to which they are appurtenant.~~

1 ~~(C) The landscaping required by this Section and depicted on such~~
2 ~~landscaping plan shall be completed or bonded in accordance with~~
3 ~~current County requirements prior to approval of any Certificate of~~
4 ~~Occupancy.~~

5 **~~5-1405 Buffer Yards and Screening, General Provisions.~~**

6 ~~(A) Buffer yards and screening shall be provided in accordance with the~~
7 ~~Buffer Yard and Screening Matrix set forth in Section 5-1414(A), and~~
8 ~~in accordance with the provisions of this Section and Section 5-1406,~~
9 ~~5-1407 and 5-1408 below.~~

10 ~~(B) Buffer yards and screening shall be provided on the lot whose use is~~
11 ~~indicated in the left column of the matrix where it is contiguous to or~~
12 ~~across the street from land used or zoned for uses indicated across the~~
13 ~~top of the matrix, except as provided for in Section 5-1403(E) above.~~

14 ~~(C) Where the structure or lot or development is to contain more than one~~
15 ~~use or category of uses as presented in the matrix, the more stringent~~
16 ~~requirements of the matrix shall apply; provided, however, that the~~
17 ~~Zoning Administrator may reduce and/or modify the requirements of~~
18 ~~the matrix upon a finding that the need for the more stringent~~
19 ~~requirements has been partially mitigated or eliminated by the~~
20 ~~arrangement of uses.~~

21 ~~(D) The uses in the matrix are listed in abbreviated form. Other similar~~
22 ~~uses, as may be included in a listing presented in the district regulations,~~
23 ~~shall be subject to the same regulations as are presented for a use listed~~
24 ~~on the matrix.~~

25 ~~(E) In those instances where a proposed use and/or an existing use on the~~
26 ~~abutting property is not listed in the matrix, the Zoning Administrator,~~
27 ~~using the matrix as a guide, shall determine to what extent buffering~~
28 ~~and screening shall be provided.~~

29 ~~(F) In addition to the standards set forth herein for a particular use, all uses~~
30 ~~allowed by special exception, or variance in a given district, shall be~~
31 ~~required to provide buffer yards as determined by the BZA or Board of~~
32 ~~Supervisors, as the case may be, using the matrix as a guide. In such~~
33 ~~event, the requirements of such special exception, variance, or proffered~~
34 ~~rezoning shall govern over the requirements of this Section.~~

35 **~~5-1406 Determination of Buffer Yard Requirements.~~** ~~To determine the type of~~
36 ~~buffer yard required between two (2) adjacent parcels or parcels separated by~~
37 ~~public streets, refer to the buffer yard and screening matrix, and identify the~~
38 ~~buffer yard required pursuant to one of the following procedures:~~

1 ~~(A) Proposed development adjacent to an improved property that is a~~
2 ~~pre-existing use.~~

3 ~~(1) If the proposed use is in the same land use category or is a more~~
4 ~~intensive than the pre-existing use, the proposed use must~~
5 ~~provide the buffer yard type as required by the Buffer Yard and~~
6 ~~Screening Matrix.~~

7 ~~(2) If the proposed use is less intensive than the existing use, the~~
8 ~~proposed use must provide the buffer yard type that would have~~
9 ~~been provided by the existing more intensive use as if it were~~
10 ~~subject to the requirements herein.~~

11 ~~(3) The Zoning Administrator may waive reduce and/or modify the~~
12 ~~requirement if it presents a substantial hardship or is considered~~
13 ~~unnecessary as identified in Section 5-1409.~~

14 ~~(B) Proposed development adjacent to a use developed subsequent to~~
15 ~~January 7, 2003. The proposed use must install plant units in order to~~
16 ~~bring the total buffer yard required between the two uses into~~
17 ~~conformance with the Buffer Yard and Screening Matrix.~~

18 ~~(C) Proposed Development Adjacent to a Vacant Property. The buffer~~
19 ~~yard type for a proposed development which will be constructed~~
20 ~~adjacent to vacant land, shall be based on the probable future use of the~~
21 ~~adjacent vacant land, using the Comprehensive Plan, Zoning Ordinance~~
22 ~~and Zoning District Map.~~

23 ~~(1) If the proposed use is more intensive than the probable future~~
24 ~~use of adjacent vacant land, then the proposed use must provide~~
25 ~~a buffer as required by the Buffer Yard and Screening Matrix.~~

26 ~~(2) If the subsequent use of the adjacent vacant land is more~~
27 ~~intensive than the probable use and the subsequent use is~~
28 ~~required to provide a buffer prescribed in the Buffer Yard and~~
29 ~~Screening Matrix, the buffer yard installed by the first use may~~
30 ~~be taken into consideration in considering a reduction of~~
31 ~~required buffer.~~

32 ~~(3) If the subsequent use of the adjacent vacant land is less~~
33 ~~intensive than the probable use the subsequent use must install~~
34 ~~the difference between the plant units installed by the pre-~~
35 ~~existing adjacent use and the number of plant units required by~~
36 ~~the Buffer Yard and Screening Matrix.~~

37 ~~(4) If the proposed use is less intensive than the probable future use~~
38 ~~of the vacant land, no buffer yard shall be required of the~~
39 ~~proposed use.~~

1 ~~(D) Contractual Reduction of Buffer Yard Abutting Vacant Land.~~
2 ~~When a land use is proposed adjacent to vacant land, the owners of both~~
3 ~~parcels may enter into a contractual relationship to provide for a buffer~~
4 ~~yard equivalent to the buffer yard which shall ultimately be required.~~
5 ~~Such a contract shall include:~~

6 ~~(1) A statement by the owner of the vacant land of an intent to~~
7 ~~develop at no greater than a specified land use category~~
8 ~~consistent with reduced buffer yards.~~

9 ~~(2) An agreement that the owner of the vacant land assumes all~~
10 ~~responsibility for additional buffer yards required by the~~
11 ~~development of his parcel with a more intense use than had been~~
12 ~~agreed upon.~~

13 ~~(3) The contract shall be in the form of a covenant or deed~~
14 ~~restriction, recorded in the Office of the Clerk of the Circuit~~
15 ~~Court of Loudoun County, Virginia, which shall run with the~~
16 ~~land.~~

17 ~~(E) Special Situations.~~

18 ~~(1) When the adjacent land is used for a wayside stand or other~~
19 ~~temporary use, the buffer yard type shall be determined as if the~~
20 ~~adjacent property were vacant as provided in Section 5-~~
21 ~~1406(C).~~

22 ~~(2) If any property adjoins any existing or planned arterial road,~~
23 ~~except in the A-3, A-10, AR-1, AR-2 or Village Conservation~~
24 ~~Overlay Districts or where the Buffer Yard Type 5 is required~~
25 ~~by this Section, the required buffer yard shall be in accordance~~
26 ~~with Buffer Yard Type 3. This requirement may be waived,~~
27 ~~modified, and/or reduced by the Zoning Administrator, where~~
28 ~~necessary to preserve existing mature trees. No buffer yard~~
29 ~~shall be required for the A-3 and A-10 districts where such~~
30 ~~property adjoins any existing or planned arterial road.~~

31 ~~(3) If any adjoining property is located within a zoned~~
32 ~~municipality, the applicant shall provide information regarding~~
33 ~~the applicable municipal zoning district regulations governing~~
34 ~~such adjoining property, so that the Zoning Administrator may~~
35 ~~determine which use established by this Ordinance is most~~
36 ~~equivalent. Requirements for buffer yards shall then be the~~
37 ~~same as if the adjoining property were zoned in the equivalent~~
38 ~~County zoning district.~~

39 ~~(4) Notwithstanding the buffering and screening requirements of~~
40 ~~Section 5-1414(A):~~

(a) ~~For any property that adjoins Route 50 between the Fairfax County line and Lenah Farm Lane on the north side and Trailhead Drive on the south side, the required buffer yard adjacent to Route 50 shall be in accordance with Buffer Yard Type 5.~~

(b) ~~For any property that adjoins Route 7 between Broad Run and the east corporate limit of Leesburg, the required buffer yard adjacent to Route 7 shall be in accordance with Buffer Yard Type 5.~~

~~5-1407 Buffer Yard and Screening Requirements.~~

(A) ~~**Location.** Buffer yards shall be located along the perimeter of a lot or parcel. Where a parcel extends into the center line of an existing road, the buffer yard shall begin at and extend inward from the ultimate right-of-way line of said road. Buffer yards shall extend to the lot line, parcel boundary or rights-of-way line, except where easements, covenants or natural features may require the buffer yard to be set back from the property line, in which event the buffer yard shall be in addition to such easements, covenants or natural features. Buffer yards shall be provided within the required minimum yard setback areas. If the minimum buffer width is larger than the yard setback, the minimum buffer width must be provided.~~

(1) ~~In the case of driveways, parking areas, and accessory structures permitted within required yard setbacks, at least fifty (50) percent of the area of the required minimum yard setback area shall consist of permeable materials.~~

(2) ~~If parking and/or loading is permitted within the required minimum yard setback area, then Section 5-1413 "Parking Lot Landscaping and Screening Requirements" shall prevail.~~

~~(B) Buffer/Screening Requirements in Buffer Yards.~~

(1) ~~Buffer yard requirements are stated in Section 5-1414(B).~~

(2) ~~Those plant materials identified in Section 5-1414(C) or their equivalents shall satisfy the requirements of this Section.~~

(3) ~~Whenever a wall, fence, and/or berm is required within a buffer yard, they shall be provided in addition to the plant units required.~~

~~5-1408 Use of Buffer Yards.~~ ~~A buffer yard may be used for passive recreation and it may contain pedestrian, bicycle or equestrian trails, provided that: a) the elimination of plant materials is minimized, b) the total width of the buffer is~~

maintained, and c) all other regulations of this Ordinance are met. Utility easements may be included within buffer yards provided that the utility requirements and buffer yard requirements are compatible and canopy trees are not planted within said easement. Vehicular entrances may cross a buffer yard. Signs, pursuant to Section 5-1200, may be located in the buffer yards.

5-1409 Buffer Yard Waivers and Modifications. Buffer yard requirements may be waived or modified by the Zoning Administrator in any of the following circumstances. The Zoning Administrator may attach conditions to any waiver or modification in order to assure that the results of the waiver or modification will be in accordance with the purpose and intent of this Section.

(A) Where the strict provisions of this Section would reduce the usable area of a lot configuration or size to a point which would preclude a reasonable use of the lot, buffer yards may be waived, reduced and/or modified by the Zoning Administrator, upon showing that the building and/or the yard has been designed to minimize adverse impact through a combination of architectural, landscape and/or other design techniques.

(B) The Zoning Administrator may waive, reduce and/or modify buffer yard requirements if in his opinion the topography of the lot providing the buffer yard and the lot being protected is such that the required buffer yard would not be effective.

(C) The Zoning Administrator may waive, reduce and/or modify buffer yard requirements for single family attached dwelling units where a six (6) foot permanent fence has been provided to enclose a privacy yard (for rear yards and side yards) and such fence is architecturally designed and coordinated with landscape techniques to minimize adverse impact to adjacent properties.

(D) The Zoning Administrator may waive, reduce or modify buffer yard requirements for any public use when such use has been specifically designed to minimize adverse impact on adjacent properties.

(E) Buffer Yard Exceptions. When a land use is proposed adjacent to a lake, wetland, or other natural area, which is to remain undeveloped, and which is at least three hundred (300) feet in width, the Zoning Administrator may waive, reduce, and/or modify the buffer requirements provided the intent of these regulations are preserved.

(F) The Zoning Administrator may waive, reduce and/or modify buffer yard requirements for side and rear yards where lots zoned MR-HI, GB, PD-IP, PD-GI, PD-OP, PD-RDP or CLI abut, upon finding that such waiver, reduction and/or modification is designed to complement proposed development of existing or proposed uses.

1 ~~(G) The Zoning Administrator may waive, reduce and/or modify buffer~~
2 ~~requirements for a telecommunications monopole which is co-located~~
3 ~~on a facility which is owned or controlled by a public use or fire and/or~~
4 ~~rescue company, or in areas planned or zoned for employment and~~
5 ~~industrial uses where such use is permitted by right, provided the site~~
6 ~~is architecturally designed and coordinated with landscape techniques~~
7 ~~to minimize adverse impacts to adjacent properties.~~

8 ~~(H) The Zoning Administrator, upon recommendation by the Loudoun~~
9 ~~County Sheriff's office with respect to public uses, or to meet~~
10 ~~requirements of the United States Government or agencies thereof~~
11 ~~relating to security or homeland defense, may waive, reduce or modify~~
12 ~~the screening requirements upon finding that the screening~~
13 ~~requirements create a security concern.~~

14 ~~(I) In the A-3, A-10, AR-1, and AR-2 zoning districts, the Zoning~~
15 ~~Administrator may permit the required buffer to surround the proposed~~
16 ~~use, rather than to be located on the property line as required by Section~~
17 ~~5-1407(A).~~

18 **~~5-1410 Maintenance.~~**

19 ~~(A) The owner, or his agent, shall be responsible for the maintenance, repair~~
20 ~~and replacement of all required landscape materials and screening and~~
21 ~~buffering as may be required by the provisions of this Section.~~

22 ~~(B) All plant material shall be tended and maintained in a healthy growing~~
23 ~~condition, replaced when necessary and kept free of refuse and debris.~~

24 ~~(C) Fences and walls shall be maintained in good repair. Openings within~~
25 ~~the barriers may be required by the Zoning Administrator for~~
26 ~~accessibility to an area for necessary maintenance.~~

27 **~~5-1411 Bond/Cash Deposit Requirements.~~** ~~In lieu of installation of the landscape~~
28 ~~materials prior to occupancy, the applicant may post a bond acceptable to the~~
29 ~~County, conditioned upon satisfactory installation of the landscaping proposed~~
30 ~~in the landscape plan.~~

31 **~~5-1412 Appeals.~~** ~~Any person aggrieved by a decision of the Zoning Administrator~~
32 ~~may appeal such decision in accordance with the provisions of Section 6-1700.~~

33 **~~5-1413 Parking Lot Landscaping and Screening Requirements.~~**

34 ~~(A) General. Parking lot landscape and screening plan shall comply with~~
35 ~~the standards in Section 5-1403 and 5-1404.~~

36 ~~(1) Existing vegetation which is suitable for use in compliance with~~
37 ~~the requirements of this Section when supplemented so as to~~

provide planting and screening in accordance with the purpose and intent of this Section, may be used as required planting. Additionally, vegetation which fulfills the requirements set forth herein for exterior parking lot screening may also be counted toward fulfilling the requirements for buffer yards set forth in other sections of these regulations.

- (2) ~~When non-residential parking lots, travelways, alleys, loading spaces and like uses adjoin land zoned or planned for residential use, there shall be an opaque barrier constructed to provide a separation between the two uses. This can be achieved by a solid type fence no less than six (6) feet in height, or with densely planted shrubs and berms to provide a visual barrier. Berms shall not exceed a slope of 2:1.~~

(B) ~~Interior Parking Lot Landscaping.~~

- (1) ~~Any parking lot, excepting single bay parking lots of twenty (20) spaces or less, shall be provided with landscaped open space along the perimeter of the parking area or areas, in the minimum rate of one (1) canopy tree per ten (10) spaces which shall be so located that no parking space is more than eighty (80) feet from a portion of the landscaped open space or parking island more than eighty (80) feet from a canopy tree. Landscaped areas between parking areas and buildings shall not be considered as parking lot landscaping.~~

- (2) ~~The primary landscaping materials used in parking lots shall be canopy trees. Where possible, grouping of such trees is encouraged. Shrubs and other live planting materials may be used to complement the tree landscaping, and shall count towards the required landscaping.~~

- (3) ~~The landscaping areas shall be reasonably dispersed throughout the parking lot, and shall have a minimum width of six (6) feet. There shall be a minimum six (6) foot wide landscape island at the end of every row of parking equal in length to the adjoining parking space.~~

- (4) ~~There shall be a minimum of one (1) canopy tree per required landscape island. Where more than one island is combined in a linear configuration, canopy trees shall be provided at a minimum equal to the number of required landscape islands.~~

- (5) ~~The interior dimensions of any planting area shall be sufficient to protect all landscaping materials planted therein.~~

~~(6) — Areas used principally for storage of vehicles do not require interior islands if such areas are screened from adjacent properties and public streets in accord with Section 5-1406 and 5-1407.~~

~~(C) — **Peripheral Parking Lot Landscaping.** Except where parking areas adjoin a buffer yard required by this Ordinance, if any parking lot contains twenty (20) or more spaces, peripheral parking lot landscaping shall be required as follows:~~

~~(1) — **When the property line abuts land other than street right-of-way.**~~

~~(a) — A landscaping strip ten (10) feet in width measured from the edge of pavement, shall be located between the parking lot and the abutting property lines, except where driveways or other openings may necessitate other treatment. Where abutting parcels share a common access drive or parking lot circulation travelway, no such landscaping strip shall be required, provided that equivalent planting materials are provided elsewhere on the development site.~~

~~(b) — Parking and vehicular traffic circulation lanes shall be screened with either berming, landscaping, or a combination of both to a minimum height of thirty (30) inches. Berming height of thirty inches shall not exceed a minimum slope of 2:1.~~

~~(c) — All service areas shall be screened from view through the use of evergreen plant materials and screen walls, compatible with the building design. Service area screen walls, solid fences or fences shall be softened with climbing vines, shrubs, or other plant materials. Plantings shall be a minimum height of six (6) feet and totally screen at least 75% of any one wall surface (exclusive of gates).~~

~~(d) — All utility equipment (i.e. meters, pedestals, transformers, etc.) not within the screened service area shall have a natural evergreen planting screen provided, but such plantings shall be planned and installed so as not to hinder the installation or maintenance of such utility equipment.~~

~~(e) — Peripheral plantings shall include six (6) shrubs per forty (40) linear feet of abutting land, and one of, or a~~

1 combination of the following, which need not
2 necessarily be installed on center:

3 (i) One understory tree per fifteen (15) linear feet;

4 (ii) One canopy tree per thirty-five (35) linear feet.

5 ~~(2) Where the property line abuts the street right-of-way.~~

6 ~~(a) A landscaping strip ten (10) feet in width, exclusive of~~
7 ~~a required sidewalk or trail, shall be located between the~~
8 ~~parking lot and right-of-way line.~~

9 ~~(b) Parking and vehicular traffic circulation lanes shall be~~
10 ~~screened with either berming, landscaping, or a~~
11 ~~combination of both to a minimum height of thirty (30)~~
12 ~~inches. Berming shall not have a slope steeper than 2:1.~~

13 ~~(c) All service and loading areas shall be screened from~~
14 ~~view through the use of evergreen plant materials and~~
15 ~~six (6) foot solid fences or screen walls compatible with~~
16 ~~the building design. Service and loading area screen~~
17 ~~walls or fences shall be softened with climbing vines,~~
18 ~~shrubs, or other plant materials. Plantings shall be a~~
19 ~~minimum mature height of six (6) feet at time of~~
20 ~~installation and totally screen at least seventy-five~~
21 ~~percent (75%) of any one wall surface (exclusive of~~
22 ~~gates).~~

23 ~~(d) All utility equipment (i.e. meters, pedestals,~~
24 ~~transformers, etc.) not within the screened service area~~
25 ~~shall have a natural evergreen planting screen provided,~~
26 ~~but such planting shall be planned and installed so as not~~
27 ~~to hinder the installation or maintenance of such utility~~
28 ~~equipment.~~

29 ~~(e) At least one (1) tree for each twenty-five (25) linear feet~~
30 ~~of land abutting any right-of-way shall be planted in the~~
31 ~~landscaping strip; however, this requirement shall not~~
32 ~~be construed as requiring the planting of trees on~~
33 ~~twenty-five (25) foot centers.~~

34 ~~(f) Where peripheral landscaping required by this Section~~
35 ~~conflicts with street planting regulations of the Virginia~~
36 ~~Department of Transportation, the more restrictive~~
37 ~~standards shall apply.~~

~~(D) Requirements for Parking Lots in Residential Districts. Where parking lots for more than ten (10) cars are permitted or required in residential districts, the following provisions shall be complied with:~~

~~(1) The lot may be used only for parking and not for any type of commercial loading, sales, dead storage, repair work, dismantling or servicing.~~

~~(2) A ten (10) foot wide landscaped open space area adjoining any street line or any lot zoned or planned for residential uses shall be provided, guarded with wheel bumpers or curb and gutter and planted in grass and/or shrubs.~~

~~5-1414 Buffer Yard and Screening Matrix.~~

~~(A) See Table 5-1414(A) below. Note: Also, please see Section 5-1406(E), Special Situations, which requires a specific Buffer Yard Type in certain situations. Please note that required buffer yards are a separate regulation in the Ordinance which may require a different width than a required yard, setback or building restriction line.~~

Table 5-1414(A)

PROPOSED LAND USE GROUPS	ADJACENT LAND USE GROUPS												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Group 1- Dwelling, Single-Family Detached	N/A	1	1	2	2	2	3	3	4	4	3	4	2
Group 2- Dwelling, Single-Family Attached	1	N/A	1	2	2	2	3	3	4	4	3	4	2
Group 3- Dwelling, Multi-Family Congregate Housing Facility Continuing Care Facility Orphanage or other similar institutions	1	1	N/A	1	1	1	1	2	4	4	3	4	2
Group 4- Day-Care Center Church, Chapel Nursery School Elementary School	2	2	1	N/A	1	1	2	2	3	4	3	4	2
Group 5- Middle and High School Community & Recreation Center, and Library Auditorium, Performing Arts Center and Assembly Hall, and Theater (indoor)	2	2	1	1	N/A	1	1	2	3	4	3	4	N/A

Table 5-1414(A)

PROPOSED LAND USE GROUPS	ADJACENT LAND USE GROUPS												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Municipal and Governmental Building and Structure Fire, Police, and Rescue Station Medical Care Facility Hospital													
Group 6 Financial Institution Office Business Service Establishment Retail Sales Establishment Health & Fitness Center Funeral Home, Mortuary, Crematory Personal Service Establishment	2	2	1	1	1	N/A	N/A	N/A	3	4	2	4	N/A
Group 7 Craft Beverage Manufacturing Restaurant Hotel/Motel	3	3	1	2	1	N/A	N/A	N/A	3	4	N/A	4	N/A
Group 8 Drive-in Bank Facility Fast Food Restaurant Drive Through Restaurant Auto-Service Station Car Wash Mobile Home Sales and Service Motor Vehicle Sales and Service Parking Lot/Valet Service Flex Industrial Warehousing & Storage Facility Data-center	3	3	2	2	2	N/A	N/A	N/A	N/A	2	2	4	N/A
Group 9 Utility Transmission Facility Public Utility Service Center, Storage Yard Telecommunication Facility Radio & Television Broadcasting Station, including Recording Studio Municipal or Governmental Storage Yards & Related Facility Water Treatment and Distribution Facility Kennel, outdoor	4	4	4	3	3	3	3	N/A	N/A	N/A	2	3	N/A
Group 10 Bus, Rail, and Truck Terminal Outdoor Storage, Vehicles Newspaper Offices and Distribution Service	4	4	4	4	4	4	4	2	3	N/A	N/A	2	N/A

Table 5-1414(A)

PROPOSED LAND USE GROUPS	ADJACENT LAND USE GROUPS												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Lumber & Building Material Yard and Storage Facility Wholesale Trade Office and Storage Facility Heavy Equipment Sale, Rental, and Service Sand, Gravel, Coal & Earth Sales and Storage Facility Boat Sales, Storage and Service Recycling Center Vehicle Wholesale Auction													
Group 11 Wholesale Printing Laundry, Cleaning, and Dyeing Plant Facilities for Manufacturing, Processing, Assembly, Packaging, Bottling, and Canning	3	3	3	3	3	2	N/A	2	2	N/A	N/A	3	N/A
Group 12 Asphalt or Concrete Mixing Plant General Construction Company, including Hauling, Road Paving, Roofing, and Sewer Metal Fabrication Shop Metal Salvage and Open Storage Yard and Operation Agriculture Processing Facility Outdoor Movie Theater Wood Processing Facility or Sawmill Forging Plant Rifle and Pistol Range, outdoor Sewage Treatment Facility Sanitary Landfill Rendering or Tanning Plants Petroleum or Chemical Refining or Production Ship Yards and Boat Manufacture Junk Yard Fuel Sales	4	4	4	4	4	4	4	4	3	2	3	N/A	N/A
Group 13 Farming, including livestock and horticultural activity Fur Bearing Animal Raising Stable and Equestrian Center	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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(B) — Buffer Yard.

Table 5-1414(B)

Required Plantings per 100 Linear Feet of Property Line

Buffer Yard Type	Canopy Trees	Understory Trees	Shrubs	Evergreen Trees	Other Requirements
(1) Type 1					
Front	2	0	0	0	10' minimum width 25' maximum width
Side/Rear	1	4	0	0	10' minimum width 25' maximum width
(2) Type 2					
Front	3	2	10	0	15' minimum width 25' maximum width
Side/Rear	2	4	10	2	20' minimum width 30' maximum width
(3) Type 3					
Front	3	3	20	0	20' minimum width 30' maximum width
Side/Rear	2	5	10	4	25' minimum width 30' maximum width
(4) Type 4					
Front	4	3	20	0	20' minimum width 30' maximum width
Side/Rear	2	5	10	8	25' minimum width 30' maximum width A Six foot high fence, wall, or berm providing a minimum opacity of 95%

(5) Buffer Yard Type 5:

(a) BUFFER YARD WIDTH: 100' Minimum

(b) REQUIRED PLANT UNITS PER 100 LINEAR FEET:

4 Canopy Trees

2 Understory Trees

50 Shrubs

2 Evergreen Trees

(See Section 5-1414(C)(5) below for permitted plants)

1 ~~(c) PLANTING SIZE: Notwithstanding the plant sizes~~
2 ~~specified in Section 5-1403(A)(2), the plants for the~~
3 ~~Buffer Yard Type 5 shall be the following minimum sizes~~
4 ~~at the time of planting:~~

5 ~~Canopy trees: 2.5 inch dbh caliper~~
6 ~~Understory trees: 8 foot height~~
7 ~~Evergreen trees: 8 foot height~~
8 ~~Shrubs: 30 inch height~~

9 ~~(d) DESIGN ELEMENTS SPECIFIC TO THE ROUTE 50~~
10 ~~CORRIDOR:~~

11 ~~(i) PLANT LOCATION: The plants required in~~
12 ~~Section 5-1414(B)(5)(b) above shall be installed~~
13 ~~on the parcel as follows:~~

14 ~~a. The plants shall be located within the~~
15 ~~first 50 feet of the required 100 foot~~
16 ~~Buffer Yard immediately adjacent to the~~
17 ~~right of way of Route 50.~~

18 ~~b. Each 100 foot segment of frontage shall~~
19 ~~contain the plants required per 100 linear~~
20 ~~feet.~~

21 ~~c. The plants shall be located in front of the~~
22 ~~linear element required in Section 5-~~
23 ~~1414(B)(5)(d)(ii) below.~~

24 ~~d. The plants and the linear element shall be~~
25 ~~configured to align with the plants and~~
26 ~~the linear element on adjacent parcels,~~
27 ~~thereby creating a uniformly landscaped~~
28 ~~frontage along the right of way, where~~
29 ~~feasible.~~

30 ~~(ii) LINEAR ELEMENT: A linear element of not~~
31 ~~less than 40% of a parcel's frontage shall be~~
32 ~~provided within the Buffer Yard Type 5 adjacent~~
33 ~~to Route 50 and shall consist of a stone faced~~
34 ~~feature and may also include a fence and/or~~
35 ~~hedgerow.~~

36 ~~a. The stone faced feature (i.e. wall, pillar,~~
37 ~~sign, and the like) shall be faced with~~
38 ~~materials having characteristics similar~~
39 ~~to native stone. Notwithstanding the~~

1 ~~Section 5-200 height limitation for~~
2 ~~fences in front yards, the stone faced~~
3 ~~feature shall be a minimum of 3 feet in~~
4 ~~height. If combined with a fence or~~
5 ~~hedgerow, the stone faced feature shall~~
6 ~~have a minimum length equal to 10% of~~
7 ~~a parcel's frontage.~~

8 ~~b. Notwithstanding the height limitation of~~
9 ~~Section 5-200 for fences in front yards,~~
10 ~~the fence shall be a maximum height of~~
11 ~~4.5 feet, as measured from the ground to~~
12 ~~its highest point, to include posts or other~~
13 ~~supporting structures. The fence shall be~~
14 ~~constructed of wood or a wood-like~~
15 ~~polymer in a rail, paddock, or horizontal~~
16 ~~board design and shall have a minimum~~
17 ~~opacity of 50%.~~

18 ~~c. The hedgerow shall consist of a~~
19 ~~minimum of 10 shrubs planted in a~~
20 ~~continuous row, planted 36 inches on~~
21 ~~center and at a minimum height of 30~~
22 ~~inches. The shrubs shall be chosen from~~
23 ~~the Buffer Yard Type 5 Plant List in~~
24 ~~Section 5-1414(C). The shrubs used in~~
25 ~~the hedgerow do not count towards~~
26 ~~fulfilling the required plant units in~~
27 ~~Section 5-1414(B)(5)(b) above.~~

28 ~~d. The linear element is not required to be a~~
29 ~~continuous element. However, if any~~
30 ~~portions of the linear elements overlap,~~
31 ~~then for the length of the overlapping~~
32 ~~elements only one element can be~~
33 ~~counted towards satisfying the required~~
34 ~~length.~~

35 ~~e. Areas of existing vegetation used to meet~~
36 ~~the Buffer Yard Type 5 plant~~
37 ~~requirements shall be excluded for the~~
38 ~~purposes of calculating the frontage~~
39 ~~length for determining the required~~
40 ~~minimum length of the linear element.~~

41 ~~f. The linear element does not have to be~~
42 ~~located parallel to the road, however, the~~

1 required length is measured parallel to
2 the road.

3 g. ~~The linear element can be used towards~~
4 ~~fulfilling the Peripheral Parking Lot~~
5 ~~Landscaping requirements in Section 5-~~
6 ~~1413(C).~~

7 ~~(e) DESIGN ELEMENTS SPECIFIC TO THE ROUTE 7~~
8 ~~CORRIDOR:~~

9 ~~(i) PLANT LOCATION: The plants required in~~
10 ~~Section 5-1414(B)(5)(b) above shall be installed~~
11 ~~on the parcel as follows:~~

12 a. ~~The plants may be located within the full~~
13 ~~100 foot width of the required Buffer~~
14 ~~Yard immediately adjacent to the right of~~
15 ~~way of Route 7.~~

16 b. ~~The total plants required for each 100~~
17 ~~foot segment of frontage shall contain~~
18 ~~the plants required per 100 linear feet,~~
19 ~~except that plants may be relocated~~
20 ~~within the buffer yard where existing~~
21 ~~environmental constraints or public~~
22 ~~utility easements prevent planting within~~
23 ~~a particular segment.~~

24 ~~(ii) POLLINATOR HABITAT: Plantings within the~~
25 ~~required Buffer Yard shall consist of plant~~
26 ~~material that supports pollinator habitat, as~~
27 ~~follows:~~

28 a. ~~A minimum of 50% of the plantings~~
29 ~~required by Section 5-1414(B)(5)(b)~~
30 ~~shall consist of native species as~~
31 ~~specified in the Facilities Standards~~
32 ~~Manual.~~

33 b. ~~A minimum of 75% of the understory~~
34 ~~trees and shrubs required by Section 5-~~
35 ~~1414(B)(5)(b) shall produce~~
36 ~~conspicuous flowers at some point~~
37 ~~during their growing season.~~

1 ~~(f) — USE OF BUFFER YARD TYPE 5: In addition to the~~
2 ~~uses specified in Section 5-1408, the following uses are~~
3 ~~permitted in the Buffer Yard Type 5:~~

4 ~~(i) — Storm water management and BMP facilities.~~
5 ~~Such facilities may not be located within the first~~
6 ~~50 feet adjacent to the right of way, unless the~~
7 ~~facility is designed as a water feature in~~
8 ~~accordance with Section 5-1414(B)(5)(f)(ii)~~
9 ~~below.~~

10 ~~(ii) — A water feature, defined as a permanent aqueous~~
11 ~~element to include a fountain, stream, waterfall,~~
12 ~~and/or cascade; a wet pond that includes a~~
13 ~~fountain, waterfall and/or cascade; or a~~
14 ~~bioretention facility and/or wetland. In the case~~
15 ~~where a water feature is incorporated in the~~
16 ~~design of the Buffer Yard Type 5 and located~~
17 ~~within the first 50 feet immediately adjacent to~~
18 ~~the right of way, the following variations are~~
19 ~~permitted:~~

20 ~~a. — The number of shrubs required by~~
21 ~~Section 5-1414(B)(5)(b) above may be~~
22 ~~reduced by 50% for the total amount of~~
23 ~~linear feet of frontage that is occupied by~~
24 ~~the water feature; and~~

25 ~~b. — Notwithstanding Section 5-~~
26 ~~1414(B)(5)(d)(i) and 5-1414(B)(5)(e)(i)~~
27 ~~above, regarding required plant~~
28 ~~locations, for the frontage occupied by~~
29 ~~the water feature, the required canopy~~
30 ~~trees are to be located between the right-~~
31 ~~of-way and the water feature and the~~
32 ~~required understory trees, evergreen~~
33 ~~trees and shrubs may be located around~~
34 ~~and behind the water feature~~

35 ~~(g) — REDUCTION: Notwithstanding Section 5-1409, the~~
36 ~~Buffer Yard width may be reduced to 50 feet subject to~~
37 ~~the approval of the Zoning Administrator at the time of~~
38 ~~site plan or preliminary subdivision application. An~~
39 ~~application for Buffer Yard reduction shall include a~~
40 ~~demonstration by the applicant that adherence to the~~
41 ~~100-foot Buffer Yard requirement would unreasonably~~
42 ~~constrain development due to topography or lot~~

dimensions. Moreover, evidence shall be provided that all other methods available to alleviate the constraint have been exhausted. The request shall include a plan depicting the Buffer Yard reduction and the quantity, type and location of the plant units required in Section 5-1414(B)(5)(b) above and the linear element required in Section 5-1414(B)(5)(d)(ii) above.

(h) ~~OTHER LANDSCAPING AND SCREENING:~~ Where the Ordinance requires the screening of parking, service and loading areas, and utility equipment from roads, such screening as may be necessary shall be in addition to the Buffer Yard Type 5 plantings and shall be provided within the Buffer Yard Type 5, but outside of the first 50 feet of the required 100 foot wide Buffer Yard as measured from the right of way.

~~(C) Plant Types.~~

(1) ~~Canopy Tree.~~ A deciduous tree, usually single trunked, with a definitely formed crown of foliage, which attains a mature height of at least 30 feet. Preferred species include, but are not limited to:

Common Name

American Sycamore
Ginkgo (Male)
Japanese Pagoda
Japanese Zelkova
Japonica Regent
Littleleaf Linden
London Plane
Pin Oak
Red Oak
Red Maple
Silver Linden
Sugar Maple
Sweet Gum
Thornless Honey Locust
Willow Oak
Yellowwood

Botanical Name

Platanus occidentalis
Ginkgo bilboa
Sophora japonica
Zelkova serrata
Sophora japonica regent
Tilia cordata
Plantanus acerifolia
Quercus palustris
Quercus borealis
Acer rubrum
Tilia tomentosa
Acer saccharum
Liquidambar styraciflua
Gleditsia triacanthos inermis
Quercus phellos
Cladrastis lutea

(2) ~~Evergreen Trees.~~ A non-deciduous tree used for the purposes of screening, weather barrier, or accent planting. Preferred species include, but are not limited to:

Common Name

Botanical Name

American Holly—	Llex opaca
Dark American Arborvitae	Thuja occidentalis nigra
Eastern Red Cedar	Juniperus virginiana
Norway Spruce	Picea abies
White Pine	Pinus strobus

(3) ~~**Understory Tree.** A deciduous or evergreen tree which attains a mature height of no greater than 30 feet. Understory trees often times prefer shade and grow naturally under a canopy of larger trees. Preferred species include, but are not limited to:~~

<u>Common Name</u>	<u>Botanical Name</u>
American Plum	Prunus americana
Amur Maple	Acer griseum
Dogwood	Cornus florida
Downy Serviceberry	Amelanchier arborea
Flowering Cherry	Prunus (various species)
Flowering Crabapple	Malus (various species)
Golden Raintree	Koelreuteria
Golden Chain	Laburnum Vossi
Red Bud	Cereus canadensis
Shadblow	Amelanchier canadensis
Washington Hawthorne	Crataegus plaenopyrum

(1) ~~**Shrub.** A deciduous or evergreen multi-trunked woody plant that usually attains a mature height of no greater than 10 feet. Preferred species include, but are not limited to:~~

<u>Common Name</u>	<u>Botanical Name</u>
Azalea	various species
Cotoneaster	various species
Chinese Holly	Llex cornuta
English Yew	Taxus baccata
Euonymus	various species
Japanese Holly	Llex crenata
Japanese Yew	Taxus cuspidata
Photinia	various species
Rhododendron	various species
Viburnum	various species

(2) ~~**Permitted Buffer Yard Type 5 Plants.**~~

(a) ~~**General Requirements.**~~

~~For the purpose of reducing the monoculture disease risk, no one plant species can be used for more than 300 linear feet of frontage.~~

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(b) ~~Boulevard Plants — Permitted Canopy Trees.~~

Botanical Name	Common Name	Acceptable Varieties & Cultivars	Suitability	Comments
<i>Acer rubrum</i> cvs.	Red Maple	'Brandywine' 'Red Sunset' 'October Glory'		
<i>Acer saccharum</i> cvs.	Green — Mountain Sugar Maple	'Green Mountain'		
<i>Aesculus hippocastanum</i>	Horsechestnut			
<i>Fagus grandifolia</i>	American Beech			
<i>Fagus sylvatica</i> cvs.	European Beech	Various		
<i>Liquidambar styraciflua</i> cvs.	Sweetgum	Various		
<i>Platanus x acerifolia</i> cvs.	London — Plane Tree	'Bloodgood'		
<i>Platanus occidentalis</i>	American Sycamore			
<i>Quercus falcata</i>	Southern Red Oak			
<i>Quercus phellos</i>	Willow Oak			
<i>Quercus shumardii</i>	Shumard Oak			
<i>Ulmus — Americana</i> cvs.	American Elm	'New Harmony'		
<i>Ulmus parvifolia</i> cvs.	Lacebark Elm	Various		

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(c) ~~Boulevard Plants—Alternative Canopy Trees.~~

The following canopy trees can be used as a substitute to the required canopy trees if approved by the Zoning Administrator.

Botanical Name	Common Name	Acceptable Varieties & Cultivars	Suitability	Comments
<i>Betula nigra</i>	River Birch	'Heritage'	Best adapted to moist soils; suitable for areas that are wet for a portion of the year, yet dry in summer and fall	
<i>Carya spp.</i>	Hickory			1" caliper allowed
<i>Gleditsia triacanthos</i> var. <i>inermis</i> cvs.	Thornless Common Honeylocust	'Skyline' 'Moraine'		Some disease and insect problems
<i>Quercus bicolor</i>	Swamp White Oak		Moist bottomlands and streambanks	
<i>Salix nigra</i>	Black Willow		Riparian areas only	
<i>Taxodium distichum</i> cvs.	Baldcypress	Various	Both wet areas and upland sites	Deciduous conifer

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(d) ~~Non-Boulevard Plants Permitted Canopy Trees.~~

Botanical Name	Common Name	Acceptable Varieties & Cultivars	Suitability	Comments
<i>Aesculus flava</i>	Yellow Buckeye			
<i>Betula lenta</i>	Black Birch			
<i>Celtis occidentalis</i> evs.	Hackberry	Various		
<i>Nyssa sylvatica</i> & evs.	Black Gum	Various		Deep tap root; large calipers not recommended
<i>Ostrya virginiana</i>	Eastern Hophornbeam			
<i>Prunus serotina</i>	Black Cherry			
<i>Quercus alba</i>	White Oak			
<i>Quercus coccinea</i>	Scarlet Oak			
<i>Quercus laevis</i>	Turkey Oak			
<i>Quercus nuttallii</i>	Nuttall Oak			
<i>Quercus palustris</i>	Pin Oak		Open areas	
<i>Quercus prinus</i>	Chestnut Oak			
<i>Quercus rubra</i>	Northern Red Oak			
<i>Quercus robur</i>	English Oak			
<i>Quercus stellata</i>	Post Oak			
<i>Quercus virginiana</i>	Live Oak			

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(e) ~~Boulevard Plants — Permitted Evergreen Trees.~~

Botanical Name	Common Name	Acceptable Varieties & Cultivars	Suitability	Comments
<i>Cedrus deodara</i> & cvs.	Deodara Cedar	Various		
<i>Cryptomeria japonica</i> cvs.	Lobbii—Japanese Cryptomeria	‘Lobbii’		
<i>Ilex</i> x <i>attenuata</i> cvs.	Foster’s—Hybrid Holly	‘Fosteri’ (Foster’s # 2)		
<i>Ilex</i> x ‘Nellie Stevens’	Nellie R. Stevens Holly			
<i>Ilex opaca</i>	American Holly			
<i>Juniperus virginiana</i> & cvs.	Eastern Redcedar	Various		
<i>Magnolia grandiflora</i> cvs.	Southern Magnolia	‘Claudia Wannamaker’ ‘Edith Bogue’		
<i>Magnolia virginiana</i> — var. <i>australis</i>	Sweetbay Magnolia			
<i>Picea abies</i>	Norway Spruce			
<i>Picea orientalis</i> & cvs.	Oriental Spruce	Various		
<i>Pinus taeda</i>	Loblolly Pine			

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1 (f) ~~Boulevard Plants Permitted Understory Trees.~~

Botanical Name	Common Name	Acceptable Varieties & Cultivars	Suitability	Comments
<i>Acer buergerianum</i>	Trident Maple			
<i>Aesculus sylvaticum</i>	Painted Buckeye			
<i>Amelanchier canadensis</i> evs.	Shadblow Serviceberry	'Autumn Brilliance'		
<i>Amalanchier laevis</i>	Allegheny Serviceberry			
<i>Asimina triloba</i>	Pawpaw			
<i>Carpinus caroliniana</i>	American Hornbeam			
<i>Castanea pumila</i>	Allegheny Chinkapin			
<i>Cercis canadensis</i> evs.	Eastern Redbud	Various		
<i>Cornus kousa</i> evs.	Kousa Dogwood	Various		
<i>Crataegus viridis</i> evs.	Green Hawthorn	'Winter King'		
<i>Diospyros virginiana</i>	Persimmon			
<i>Halesia carolinanum</i> & evs.	Silverbell	Various		
<i>Koelreuteria paniculata</i> & evs.	Golden Raintree	Various		
<i>Magnolia x 'Ballerina'</i>	Ballerina Magnolia			
<i>Oxydendron arboretum</i>	Sourwood			
<i>Parrotia persica</i> & evs.	Persian Perrotia	Various		
<i>Sassafras albidum</i>	Sassafras			
<i>Stewartia pseudocamellia</i>	Japenese Stewartia			
<i>Styrax japonicus</i> evs.	Japenese Snowbell	Various		

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~~(g) — Boulevard Plants — Permitted Hedgerow Shrubs~~

Botanical Name	Common Name	Acceptable Varieties & Cultivars	Suitability	Comments
<i>Buxus microphylla</i> evs.	Littleleaf Box	Various		
<i>Buxus sempervirens</i> evs.	Common Box	Various		
<i>Calycanthus floridus</i> evs.	Sweetshrub	Various		
<i>Hex glabra</i> evs.	Inkberry	'Nigra' Various		
<i>Myrica cerifera</i> evs.	Southern Waxmyrtle	Various		
<i>Prunus laurocerasus</i> evs.	Cherrylaurel	'Otto-Luyken' 'Schipkaensis'		'Schipkaensis' planted — 48 inches on center

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(h) ~~Boulevard Plants~~ ~~Permitted Non-Hedgerow Shrubs.~~

Botanical Name	Common Name	Acceptable Varieties & Cultivars	Suitability	Comments
<i>Aronia arbutifolia</i> evs.	Red Chokeberry	'Brilliantissima'		
<i>Buddleia davidii</i> evs.	Butterfly Bush	'Black Knight' 'Nanho Blue'		
<i>Callicarpa dichotoma</i> evs.	Purple Beautyberry	Various		
<i>Caryopteris x elandensis</i> evs.	Bluebeard	'Heavenly Blue'		
<i>Chimonanthus praecox</i>	Fragrant Wintersweet			
<i>Clethra alnifolia</i> evs.	Summersweet Clethra	'Hummingbird'		
<i>Cornus alba</i> evs.	Tatarian Dogwood	Various		
<i>Cornus sericea</i> evs.	Redosier Dogwood	Various		
<i>Corylopsis pauciflora</i>	Buttercup Winterhazel			
<i>Corylopsis spicata</i>	Spike Winterhazel			
<i>Cotinus coggygria</i> evs.	Common Smoketree	Various		
<i>Cotinus obovatus</i>	American Smoketree			
<i>Fothergilla gardenia</i> evs.	Dwarf Fothergilla	Various		
<i>Fothergilla major</i> evs.	Large Fothergilla	Various		
<i>Hydrangea macrophylla</i> evs.	Bigleaf Hydrangea	'All Summer Beauty'		
<i>Hydrangea quercifolia</i> evs.	Oakleaf Hydrangea	'Snow Queen'		
<i>Ilex verticillata</i> evs.	Winterberry	'Red Sprite' 'Sparkleberry'		
<i>Itea virginica</i> evs.	Virginia Sweetspire	'Little Henry'		
<i>Juniperus conferta</i> evs.	Shore Juniper	'Blue Pacific'		
<i>Juniperus chinensis</i> evs.	Chinese Juniper	Var. <i>sargentii</i> 'Henry'		

<i>Kalmia latifolia</i> cvs.	Mountain Laurel	Various		
<i>Rosa</i> cvs.	Rose	'Elsie Mae' 'Knock Out' 'Pink Knock Out'		
<i>Spiraea x bumalda</i> cvs.	Bumald-Spirea	'Limemound' 'Norman'		
<i>Viburnum carlesii</i> cvs.	Koreanspice Viburnum	Various		
<i>Viburnum dilatatum</i> cvs.	Linden Viburnum	'Erie' 'Iroquois' 'Catskill'		
<i>Viburnum nudum</i> cvs.	Smooth Witherod	'Winterthur'		
<i>Viburnum plicatum</i> var. <i>tomentosum</i> cvs.	Doublefile Viburnum	'Mariesii' 'Shasta'		
<i>Viburnum setigerum</i> cvs.	Tea-Viburnum	Various		
<i>Viburnum sieboldii</i> cvs.	Siebold Viburnum	'Seneca'		
<i>Viburnum x burkwoodii</i> cvs.	Burkwood Viburnum	'Mohawk'		
<i>Viburnum x</i> 'Conoy'	Conoy Viburnum			
<i>Viburnum x</i> 'Eskimo'	Eskimo Viburnum			
<i>Viburnum x juddii</i>	Judd Viburnum			
<i>Viburnum x</i> <i>pragense</i>	Prague Viburnum			
<i>Vitex agnus-castus</i> cvs.	Chastetree	Various		

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Section 5-1400 Landscaping, Buffer Yards, Screening, and Landscape Plans

5-1401 Purpose. The purpose and intent of this Section is to foster attractive and harmonious development through the use of landscaping; to minimize the harmful impacts of noise, dust and other debris, motor vehicle headlight glare or other artificial light intrusion; to protect property values by reducing visual impacts and land use conflicts; provide shade; enhance natural drainage systems; to contribute to ecosystem benefits; and to preserve and promote the health, safety and general welfare of the public.

5-1402 Applicability.

- (A) The provisions of this Section shall apply to all land development requiring a site plan, construction plans and profiles, subdivision, and/or a zoning permit application.
- (B) Exceptions. The exceptions below shall not apply to the building and parking setbacks of Section 5-1403 and the Cemetery, Burial Ground, and Grave Buffer of Section 5-1405.
- (1) Road Corridor Buffers required by Section 5-1403 and Buffer Yards required by Section 5-1404 shall not apply to zoning permit applications for single family detached dwellings and residential accessory uses and structures.
- (2) Road Corridor Buffers required by Section 5-1403 and Buffer Yards required by Section 5-1404 shall not be required at the time of subdivision application in the AR-1, AR-2, A-10, A-3, JMLA-20, JLMA-3, TR-10, and TR-3 Zoning Districts.
- (3) Road Corridor Buffers required by Section 5-1403 shall only apply along roads adjacent to the boundary of the PD-CC, PD-TC, PD-TRC, PD-TREC, PD-RV, PD-MUB, and the Route 28 Corridor Overlay Zoning Districts. All other roads within these Zoning Districts shall be subject to the street tree requirement for such Zoning Districts.
- (4) Buffer Yards required by Section 5-1404 shall not apply within the PD-CC, PD-CV, PD-TREC, PD-TRC, PD-TC, and PD-MUB Zoning Districts. Buffer Yards within these Zoning Districts shall be provided in accordance with the regulations for such Zoning Districts.
- (5) The Road Corridor Buffers required by Section 5-1403 and Buffer Yards required by Table 5-1404 shall not apply to any use subject to Section 5-1404(A)(6).

1 (6) The Road Corridor Buffers required by Section 5-1403 shall
2 not apply to roads that abut Agriculture, Horticulture, or
3 Animal Husbandry uses, or to Category B and Category C
4 roadways as provided by the Facilities Standards Manual.

5 (7) Road Corridor Buffers required by Section 5-1403 and
6 Buffer Yards required by Section 5-1404 shall not be
7 required at the time of boundary line adjustment, family
8 subdivision, single lot subdivision waiver, low density
9 development waiver, or dedication plat application.

10 (C) The provisions of this Section are intended to complement the
11 regulations of Section 5-1300 of this Ordinance. Trees planted to
12 fulfill the canopy requirements of Section 5-1300 also may fulfill
13 the requirements of this Section.

14 (D) Existing vegetation which is suitable for use in compliance with
15 the requirements of this Section, may be used as required planting
16 when supplemented by new vegetation, if needed, so as to provide
17 buffering and screening in accordance with the purpose and intent
18 of this Section. Such existing vegetation shall be shown on a Tree
19 Conservation Plan prepared in accordance with the Facilities
20 Standards Manual.

21 (E) Where any provision of this Section imposes restrictions or
22 standards different from those of Section 5-1300 or any other
23 County ordinance or regulation or other provision of law,
24 whichever provisions are more restrictive or impose higher
25 standards shall control, unless the intent is clearly otherwise.

26 **5-1403 Road Corridor Buffers and Setbacks**

27 **(A) Road Corridor Buffers and Setbacks, General Provisions.**

28 (1) Road Corridor Buffers and Setbacks shall be provided in
29 accordance with Table 5-1403(B), the Road Corridor Buffer
30 and Setbacks Matrix, except for development requiring a
31 subdivision application but not a site plan application,
32 which shall be subject to the requirements of Section 5-
33 1303(B). Road classifications shall be determined by the
34 Countywide Transportation Plan.

35 (2) The Road Corridor Buffers and Setbacks required by this
36 Section shall be provided in accordance with Section 1-
37 205(J), and extend across the length of the proposed
38 development site. The required width of the Road Corridor
39 Buffer may vary by up to 50% from the minimum width
40 required at any point along the required length, as long as
41 the width is not reduced to less than 10 feet and the total

1 area for the length of Road Corridor Buffer with varied
2 width is not reduced below the minimum area that would
3 have been required. Road Corridor Buffers may be set back
4 from the right-of-way line where easements, covenants or
5 natural features would prevent the required Road Corridor
6 Buffer from abutting the public street or private road, in
7 which case the required Road Corridor Buffer shall be
8 provided in addition to such easements, covenants, or
9 natural features.

10 (3) Certain roads within Loudoun County because of their
11 function, location and capacity require that uses be set back
12 a certain minimum distance from them. All other provisions
13 of this Ordinance notwithstanding, all buildings and
14 parking, except for agricultural structures and structures
15 located within Village Conservation Overlay Districts
16 (Section 4-2100) and the Joint Land Management Area
17 Districts (2-1000 thru 2-1300), shall be subject to the
18 setback provided in Table 5-1403(B) or the setback
19 provided in an approved corridor study whichever setback
20 is greater. Residences, accessory structures, and accessory
21 uses built before June 16, 1993 are exempt from this
22 provision pursuant to Section 1-403(D).

23 (4) For subdivisions that require open space, Road Corridor
24 Buffers shall not be located on individual residential lots of
25 20,000 square feet or less. When a Road Corridor Buffer is
26 located on an individual residential lot the Road Corridor
27 Buffer shall be located within an easement dedicated to the
28 County of Loudoun.

29 (5) For lots as they existed on June 16, 1993, the building
30 setback from a road in Table 5-1403(B) may be reduced on
31 shallow lots to allow a building area of up to 85 feet in
32 depth, measured forward from any required rear Buffer
33 Yard, yard, or setback, whichever is more restrictive. In no
34 case shall the modified building setback from the road be
35 less than the yard or setback required by the underlying
36 zoning district. In these cases, parking setbacks shall be
37 coterminous with building setbacks. No lot may be altered
38 or reconfigured to increase the degree of its shallowness.

(B) Road Corridor Buffer and Setbacks Matrix, Table 5-1403(B)

Road Corridor Buffer and Setbacks Matrix, Table 5-1403(B)			
Route Number or Road Type	Building Setback (feet)	Parking Setback (feet)	Buffer Type
Route 7: Fairfax County Line, West to Broad Run	50	50	3
Route 7: Broad Run west to east corporate limit of Leesburg	200	125	Gateway
Route 7: Bypass from the west corporate limit of Leesburg west to Clarke County	200	100	3
Route 50 between the Fairfax County line and Lenah Farm Lane on the north side and Trailhead Drive on the south side	*	*	Gateway
Route 267	150	100	3
Route 50: Northstar Boulevard west to Fauquier County line	100	75	3
Route 15	100	75	3
Route 28	100	75	3
Route 9	100	75	3
Route 287	100	75	3
Route 606	100	75	3
Other Arterial Roads	100	75	3
Other Major Collector Roads	75	35	2
Minor Collector Roads	*	*	2
All other roads in Nonresidential Districts	*	25**	1
All other roads in A-3, A-10, AR, CR, TR, JLMA, PD-AAAR, PD-CV, and R (including PD-H administered as R) Districts	*	*	1
Ramps at grade separated interchanges associated with the roads listed above	75	35	3
W&OD Trail	25	*	2
* As specified in applicable district regulations			
** unless otherwise specified in applicable district regulations			

(C) **Road Corridor Buffer Types.** The intent of the 4 Road Corridor Buffer Types that appear in Table 5-1403(B) are described below. All vegetative material within the Buffer Yard Types below shall meet the criteria of the FSM.

- (1) Road Corridor Buffer Type 1. This buffer is intended to function as an intermittent visual obstruction.
- (2) Road Corridor Buffer Type 2. This buffer is intended to function as a semi-opaque screen.
- (3) Road Corridor Buffer Type 3. This buffer is intended to provide a strong impression of total separation between the road and the parcel.
- (4) Gateway Corridor Buffer. This buffer is intended to provide a boulevard environment creating a sense of enclosure and transition to mark County gateways.

(D) **Road Corridor Buffer Width and Plant Requirements, Table 5-1403(D)**

Table 5-1403(D) Road Corridor Buffer Width and Plant Requirements		
Road Corridor Buffer Type	Width (feet)	Number of Plant Units ² Per 100 feet of Right-of-Way or Easement ¹
1	10	20
2	15	60
3	20	95
Gateway	100	*
¹ Vehicle entrance may be excluded from length of right-of-way or easement calculation. As measured from where the buffer yard intersects the entrance travelway. ² See Table 5-1408(B)(1) for Plant Unit equivalents. *The Gateway Corridor Buffer is subject to the requirements specified in Section 5-1403(E)		

(E) Specific Requirements for Gateway Corridor Buffer

Table 5-1403(E) Gateway Corridor Buffer Plant Requirements		
Plant Material	Minimum Size (at time of planting)	Number of Plants per 100 feet of R/W or Easement Line
Large Deciduous Trees	2-inch caliper	4
Small Deciduous Trees	2-inch caliper	2
Evergreen Trees	8-foot height	2
Shrubs	24-inch height	50

(1) Design Elements Specific to the Route 50 Corridor:

(a) Plant Location: The plants required in Table 5-1403(E) above shall be installed on the parcel as follows:

- (i) The plants shall be located within the first 50 feet of the required 100 foot Buffer Yard immediately adjacent to the right of way of Route 50.
- (ii) Each 100 foot segment of frontage shall contain the plants required per 100 linear feet.
- (iii) The plants shall be located in front of the linear element required in Section 5-1403(E)(1)(b) below.
- (iv) The plants and the linear element shall be configured to align with the plants and the linear element on adjacent parcels, thereby creating a uniformly landscaped frontage along the right-of-way, where feasible.

(b) Linear Element: A linear element shall be provided within the Gateway Corridor Buffer for at least 40% of a parcel's frontage adjacent to Route 50 and shall consist of a stone-faced feature and may also include a fence and/or hedgerow.

- (i) The stone-faced feature (i.e. wall, pillar, sign, and the like) shall be faced with materials having characteristics similar to native stone. Notwithstanding the Section 5-200 height

1 limitation for fences in front yards, the stone-
2 faced feature shall be a minimum of 3 feet in
3 height. If combined with a fence or hedgerow,
4 the stone-faced feature shall have a minimum
5 length equal to 10% of a parcel's frontage.

6 (ii) Notwithstanding the height limitation of
7 Section 5-200 for fences in front yards, the
8 fence shall be a maximum height of 4.5 feet,
9 as measured from the ground to its highest
10 point, to include posts or other supporting
11 structures. The fence shall be constructed of
12 wood or a wood-like polymer in a rail,
13 paddock, or horizontal board design and shall
14 have a minimum opacity of 50%.

15 (iii) The hedgerow shall consist of a minimum of
16 10 shrubs planted in a continuous row, planted
17 36 inches on center and at a minimum height
18 of 24 inches. The shrubs used in the hedgerow
19 do not count towards fulfilling the required
20 plants in Table 5-1403(E) above.

21 (iv) The linear element is not required to be a
22 continuous element. However, if any portions
23 of the linear elements overlap, then for the
24 length of the overlapping elements only one
25 element can be counted towards satisfying the
26 required length.

27 (v) Areas of existing vegetation used to meet the
28 Gateway Corridor Buffer plant requirements
29 shall be excluded for the purposes of
30 calculating the frontage length for
31 determining the required minimum length of
32 the linear element.

33 (vi) The linear element does not have to be located
34 parallel to the road.

35 (vii) The linear element can be used towards
36 fulfilling the Peripheral Parking Lot
37 Landscaping requirements in Section 5-
38 1407(B).

39 (2) Design Elements Specific to the Route 7 Corridor:

1 (a) Plant Location: The plants required in Table 5-
2 1403(E) above shall be installed on the parcel as
3 follows:

4 (i) The plants may be located within the full 100-
5 foot width of the required Buffer Yard
6 immediately adjacent to the right of way of
7 Route 7.

8 (ii) The total plants required for each 100-foot
9 segment of frontage shall contain the plants
10 required per 100 linear feet, except that plants
11 may be relocated within the Buffer Yard
12 where existing environmental constraints or
13 public utility easements prevent planting
14 within a particular segment.

15 (b) Pollinator Habitat: Plants within the required Buffer
16 Yard shall consist of plant material that supports
17 pollinator habitat, as follows:

18 (i) A minimum of 50% of the plants required by
19 Section 5-1403(E) shall consist of native
20 species as specified in the Facilities Standards
21 Manual.

22 (ii) A minimum of 75% of the small deciduous
23 trees and shrubs required by Section 5-
24 1403(E) shall produce conspicuous flowers at
25 some point during their growing season.

26 (3) Use of Gateway Corridor Buffer: In addition to the uses
27 specified in Section 5-1408(C), the following uses are
28 permitted in the Gateway Corridor Buffer:

29 (a) Storm water management and BMP facilities. Such
30 facilities may not be located within the first 50 feet
31 adjacent to the right-of-way, unless the facility is
32 designed as a water feature in accordance with
33 Section 5-1403(E)(3)(b) below.

34 (b) A water feature, defined as a permanent aqueous
35 element to include a fountain, stream, waterfall,
36 and/or cascade; a wet pond that includes a fountain,
37 waterfall and/or cascade; or a bioretention facility
38 and/or wetland. In the case where a water feature is
39 incorporated in the design of the Gateway Corridor
40 Buffer and located within the first 50 feet

1 immediately adjacent to the right-of-way, the
2 following variations are permitted:

3 (i) The number of shrubs required by Section 5-
4 1403(E) above may be reduced by 50% for the
5 total amount of linear feet of frontage that is
6 occupied by the water feature; and

7 (ii) Notwithstanding Section 5-1403(E)(1)(a) and
8 5-1403(E)(2)(a) above, regarding required
9 plant locations, for the frontage occupied by
10 the water feature, the required large deciduous
11 trees are to be located between the right-of-
12 way and the water feature and the required
13 small deciduous trees, evergreen trees and
14 shrubs may be located around and behind the
15 water feature.

16 (4) Reduction: The required width of the Gateway Corridor
17 Buffer may be reduced to 50 feet subject to the Modification
18 and Waiver provisions of Section 5-1409.

19 (5) Other Landscaping and Screening: Where the Ordinance
20 requires the screening of parking, service and loading areas,
21 and utility equipment from roads, such screening as may be
22 necessary shall be in addition to the Gateway Corridor
23 Buffer plantings and shall be provided within the Gateway
24 Corridor Buffer, but outside of the first 50 feet of the
25 required 100-foot-wide Buffer Yard as measured from the
26 right-of-way.

27 **5-1404 Buffer Yards**

28 **(A) Buffer Yards, General Provisions.**

29 (1) Side and Rear Buffer Yards shall be provided on the
30 developing parcel in accordance with Table 5-1404(B), the
31 Use Buffer Yard Matrix, and in accordance with the
32 provisions of this Section.

33 (2) Side and Rear Buffer Yard Types shall be determined based
34 on the proposed use group of the developing parcel and the
35 existing use group of the adjacent parcel, in accordance with
36 Table 5-1404(B).

37 (3) In those instances where a proposed use and/or an existing
38 use on a parcel is not identifiable under the use groups in
39 Table 5-1404(B), the Zoning Administrator, using Table 5-
40 1404(B) as a guide, shall determine the appropriate Buffer

Yard Type for the developing parcel.

- (4) Where a structure is proposed to contain more than one use group under Table 5-1404(B) the more stringent requirements of Table 5-1404(B) shall apply.
 - (5) Where a developing parcel and/or an adjacent parcel or parcels contain multiple use groups, the Buffer Yard Type required by Table 5-1404(B) may vary on the developing parcel to correspond to the location of each use group on the adjacent parcel. When the adjacent parcel is used for a wayside stand or temporary use, the Buffer Yard Type shall be determined as if the adjacent parcel were vacant as provided in Table 5-1404(B).
 - (6) Specific Uses in Section 5-600 that reference this section for Landscaping, Buffering, and Screening requirements shall provide the following between the Specific Use and any existing adjacent parcel 4 acres or less in size or any existing adjacent parcel that contains a dwelling unit within 300 feet of the parcel containing the Specific Use:
 - (a) A minimum 50-foot setback measured from the property line;
 - (b) A 6-foot high fence, wall, or berm providing a minimum opacity of 95%, or equivalent natural topography, and/or a Buffer Yard Type B for side and rear yards, and a Road Corridor Buffer Type 2 for front yards.
 - (c) The required fence, wall, or berm for side or rear yards may be configured to surround the Specific Use. The Buffer Yard Type B for side or rear yards may be configured to surround the proposed use so long as the intent of the Buffer Yard Type B is met as described in Section 5-1404(C).
 - (d) Existing vegetation, and trees may be used to meet the requirements of this section in accordance with Section 5-1402(D).
- (B) **Use Buffer Yard Matrix, Table 5-1404(B).** Note that required Buffer Yards may require a different width than a required yard, setback or building restriction line.

1 **Table 5-1404(B). Use Buffer Yard Matrix¹**

		Adjacent Use												
		Single Family Detached	Single Family Attached	Multi-Family	Group Living	Agriculture/Horticulture/Animal Husbandry and Passive Uses	Community and Active Recreation Uses ²	Institutional/ Civic	Office and Conference/Training Centers	Commercial/Retail	Flex-Industrial Uses and Utilities	Heavy Industrial and Aviation	Vacant Land, Located in a Residential Zoning District or Land Bay Approved for Residential Use	Vacant Land, Located in all Other Districts or Land Bays
Proposed Use	Use Group	1	2	3	4	5	6	7	8	9	10	11	12	13
Single Family Detached	1	N/A	A	A	A	A	A	A	A	A	B	B	N/A	A
Single Family Attached	2	B	N/A	A	A	B	A	A	A	A	B	B	A	A
Multi-Family	3	B	A	N/A	A	B	A	A	A	A	B	B	B	A
Group Living	4	B	A	A	N/A	B	A	A	A	A	B	B	B	A
Agriculture/Horticulture/Animal Husbandry and Passive Uses	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Community and Active Recreation Uses ²	6	B	A	A	A	N/A	N/A	A	A	A	B	B	B	A
Institutional/ Civic	7	B	B	B	A	N/A	B	N/A	A	A	B	B	B	A
Office and Conference/Training Centers	8	B	B	B	B	N/A	B	B	N/A	A	A	B	B	A
Commercial/Retail	9	B	B	B	B	N/A	B	A	A	N/A	A	B	B	A
Flex-Industrial Uses and Utilities	10	C	C	C	C	N/A	C	C	B	B	N/A	B	C	C
Heavy Industrial and Aviation	11	C	C	C	C	N/A	C	C	C	C	C	N/A	C	C
Vacant Land, Located in a Residential Zoning District or Land Bay Approved for Residential Use	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vacant Land, Located in all Other Districts or Land Bays	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

¹Buffer yards A, B, and C are described in greater detail in Section 5-1404(C).
²Buffer yards shall not be required between playgrounds or passive uses when located internal to a residential neighborhood.

2
3
4

(C) **Buffer Yard Types.** The intent of the 3 Buffer Yard Types that appear in Table 5-1404(B) is described below. All vegetative material within the Buffer Yard Types below shall meet the criteria of the FSM.

- (1) Buffer Yard Type A: Aesthetic. This Buffer Yard Type is intended to function as an intermittent visual obstruction, and create the impression of spatial separation without eliminating visual contact between uses.
- (2) Buffer Yard Type B: Semi-opaque. This Buffer Yard Type is intended to function as a semi-opaque screen between uses.
- (3) Buffer Yard Type C: Opaque. This Buffer Yard Type is intended to provide the greatest degree of screening feasible and minimize visual contact between uses, creating a strong impression of total separation.

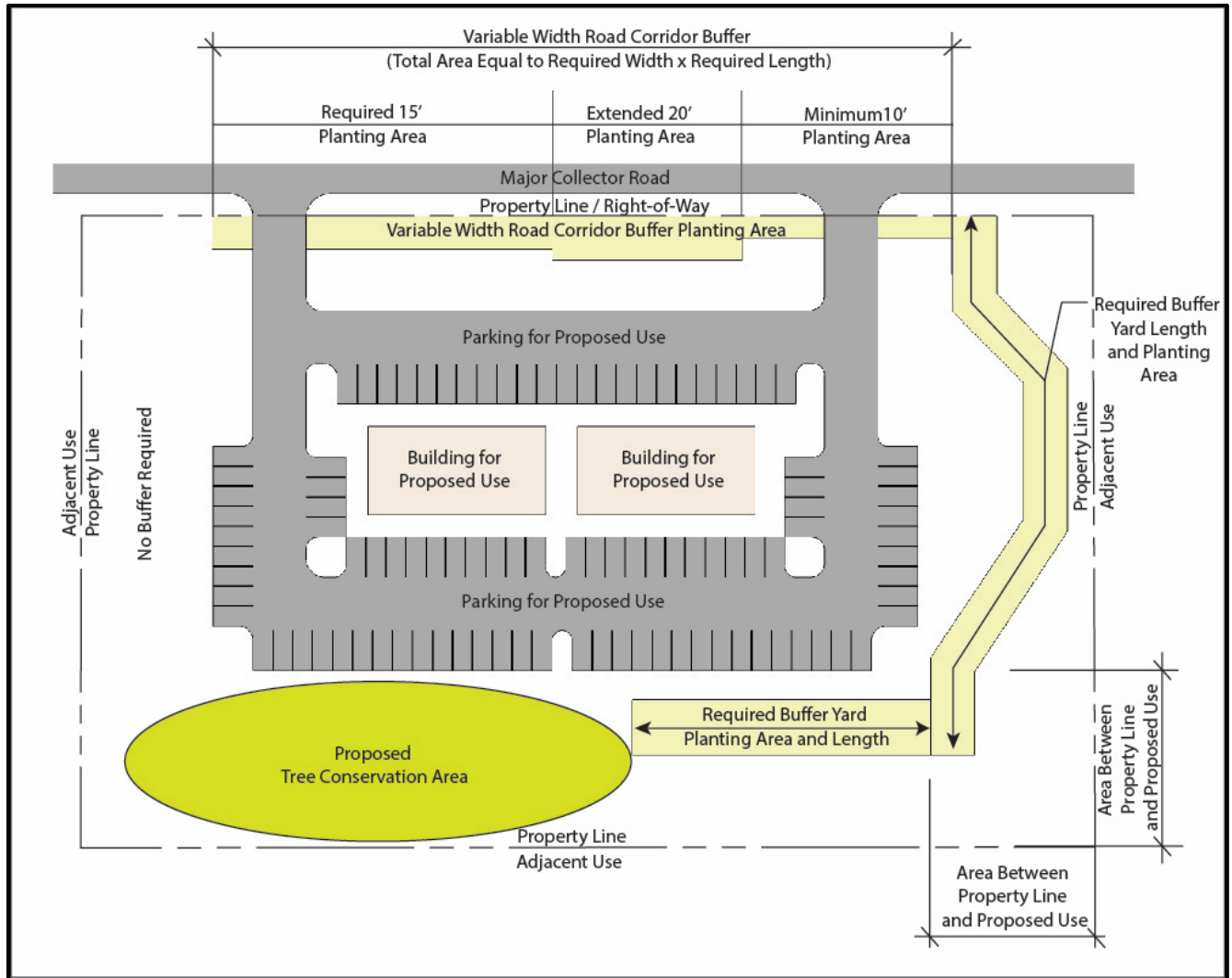
(D) **Buffer Yard Widths and Plant Requirements.**

Table 5-1404(D). Buffer Yard Width and Plant Requirements		
Buffer Yard Type	Width (feet)	Number of Plant Units ¹ Per 100 Linear feet of Required Buffer Yard
A	10	30
B	20	80
C	25	120*
¹ See Table 5-1408(B)(1) for Plant Unit equivalents. *A 6-foot high fence, wall, and/or berm, providing a minimum opacity of 95% is required to run the length of the required Buffer Yard between the proposed use and the required plant units. Required plant units may be planted on a berm.		

(E) **Buffer Yard Location.**

- (1) Required buffer yards shall be provided between the property line and the proposed use, and may be configured to surround the proposed use so long as the intent of the required Buffer Yard Type is met as described in Section 5-1404(C).
- (2) The location of required buffer yards may vary between the property line and the proposed use so long as the required plant units are planted within the required width throughout the full length of the buffer yard.

Buffer Yard Location Example



5-1405 Cemetery, Burial Ground, and Grave Buffer: All existing cemeteries, burial grounds, and graves shall be subject to this section.

(A) Exceptions. The Cemetery, Burial Ground, or Grave Buffer shall not apply to the following:

- (1) A cemetery, or an existing cemetery's expansion, legally established after January 7, 2003.
- (2) A cemetery, burial ground, or grave for animal remains.
- (3) A cemetery, burial ground, or grave accessory to a religious assembly use.
- (4) A cemetery, burial ground, or grave from which all human remains have been removed in accordance with the Code of

Virginia.

(B) The delineated perimeter boundary of a cemetery, burial ground, or grave shall be physically demarcated with a fence between a minimum of 3 feet and a maximum of 4 feet in height, or other perimeter demarcation as approved by the Zoning Administrator. No land disturbing activity shall be permitted within the delineated perimeter boundary of the cemetery, burial ground, or grave except for the following:

- (1) Removal and reinternment of burials in accordance with the Code of Virginia;
- (2) Land disturbing activity associated with the excavation and filling of grave shafts for new burials;
- (3) Clearing of invasive vegetation on the surface, excluding any species that were planted in association with burials; and
- (4) Construction of the perimeter demarcation.

(C) **Protection Buffer.** A 25-foot protection buffer shall be established outside of and abutting the delineated perimeter boundary of the cemetery, burial ground, or grave, or property line in accordance with Section 5-1405(E), to protect the physical integrity of existing burials and to preserve the natural and cultural features associated with the cultural landscape.

- (1) No land disturbing activity shall be permitted within the protection buffer except for the following:
 - (a) Land disturbing activity associated with construction of the perimeter demarcation required by Section 5-1405(B)
 - (b) Construction associated with pedestrian access; and
 - (c) Clearing of invasive vegetation on the surface, excluding any species that were planted in association with burials.

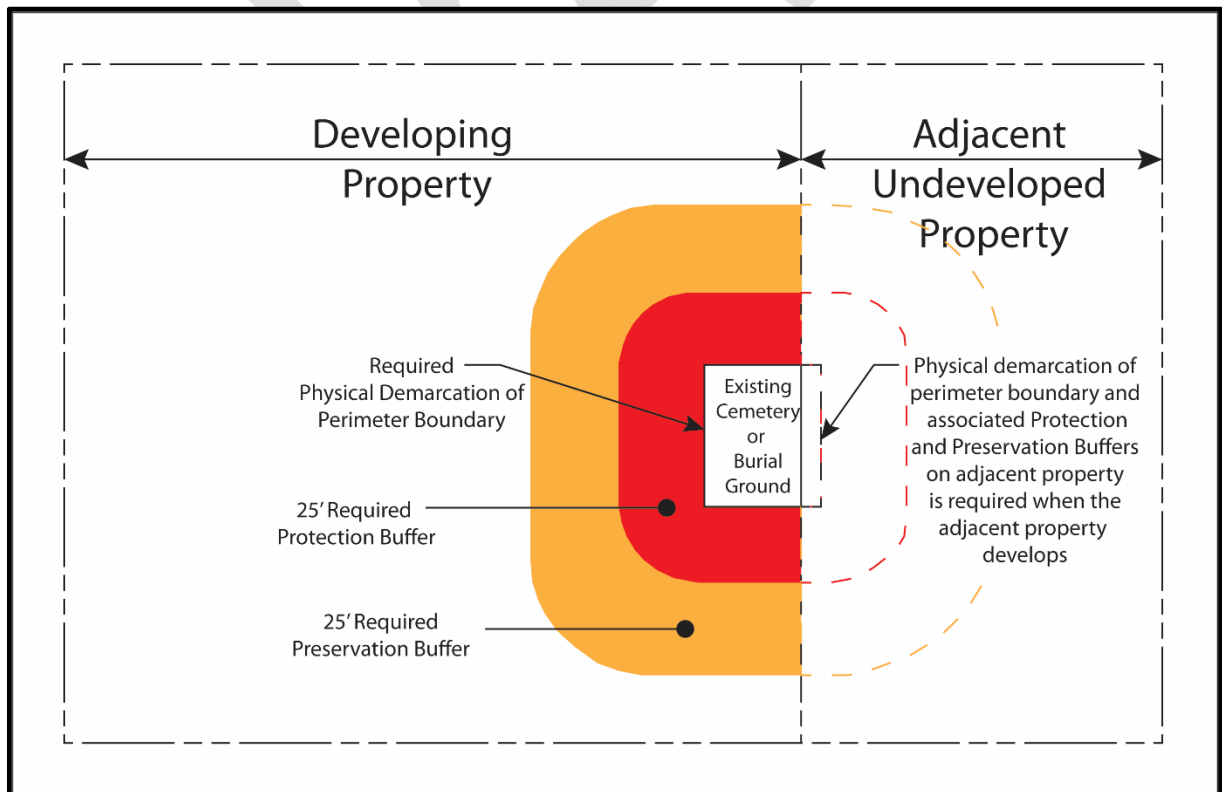
- (2) The protection buffer may be modified only by Minor Special Exception in accordance with the provisions of Section 6-1300.

(D) **Preservation Buffer.** An additional 25-foot preservation buffer shall be established outside of and abutting the protection buffer required under Section 5-1405(C) above, or property line in

1 accordance with Section 5-1405(E), to create separation from
2 adjacent land uses to preserve the historic context of the existing
3 cemetery, burial ground, or grave. Historic context shall include
4 physical characteristics such as, without limitation, vegetation,
5 topography, water courses, monuments, enclosures, and other
6 cultural features associated with the cemetery, burial ground, or
7 grave.

- 8 (1) No land disturbing activity shall be permitted within the
9 preservation buffer except for the following:
- 10 (a) Land disturbing activity associated with construction
11 of the perimeter demarcation required by Section 5-
12 1405(B);
- 13 (b) Construction associated with pedestrian access; and
- 14 (c) Clearing of invasive vegetation on the surface.
- 15 (2) The Zoning Administrator may approve a waiver or
16 modification of the preservation buffer in accordance with
17 the requirements of Section 5-1409.
- 18
- 19

Cemetery, Burial Ground, and Grave Buffer Example



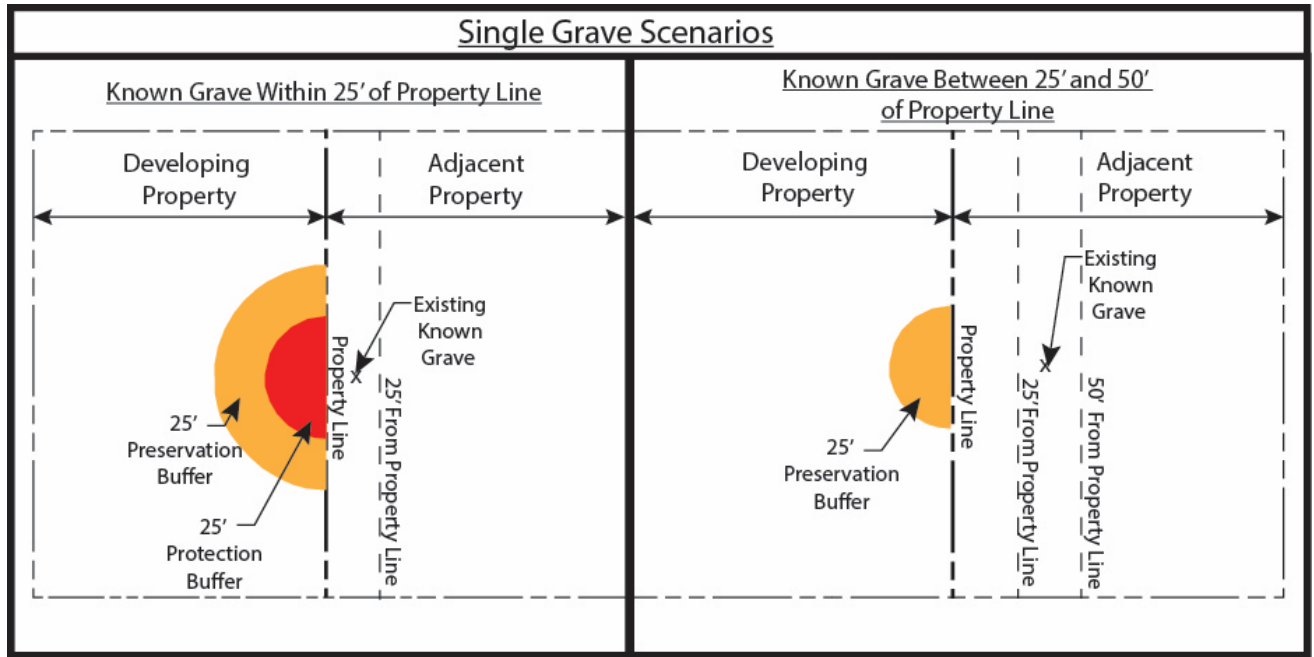
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3 (E) **Off-site Cemetery, Burial Ground, or Grave Buffer.** When a
4 developing parcel is located adjacent to a parcel containing an
5 existing cemetery, burial ground, or grave for which the perimeter
6 boundary has not been delineated, the location of the protection
7 buffer and preservation buffer shall be determined as follows:

8 (1) If a known grave on the adjacent parcel is located less than
9 50 feet but no closer than 25 feet from the parcel line, and
10 no evidence of a grave is found on the developing parcel,
11 then the developing parcel shall provide a Preservation
12 Buffer measured from the parcel line that is equal in length
13 to the extent of any known graves.

14 (2) If a known grave on the adjacent parcel is located less than
15 25 feet from the parcel line, and no evidence of a grave is
16 found on the developing parcel, then the developing parcel
17 shall provide a Protection Buffer measured from the parcel
18 line that is equal in length to the extent of any known graves,
19 and a Preservation Buffer.

20 (3) If the closest known grave on the adjacent parcel is located
21 50 feet or greater from the parcel line, and no evidence of a
22 grave is found on the developing parcel, then no Cemetery,
23 Burial Ground, or Grave Buffer shall be required on the
24 developing parcel.
25

Off-site Cemetery, Burial Ground, and Grave Buffer Example



5-1406 Screening of Certain On-site Functions

(A) On-site functions, to include loading areas, dumpsters, outside storage areas, maintenance areas, mechanical equipment, and utility equipment, shall be screened from view from all public streets and adjoining parcels using at least one of the following screening options:

- (1) An opaque fence or wall that is a minimum of 6 feet in height, the height of the fence or wall shall be no lower than the function/items being screened. An aesthetically compatible gate shall be provided, if applicable.
- (2) A berm that is a minimum of 3 feet in height with evergreen plantings that are a minimum of 6 feet in height at time of planting.
- (3) For mechanical and similar equipment, any architectural element compatible with the building that screens the view of the equipment.

5-1407 Parking Area Landscaping and Screening Requirements.

(A) **Interior Parking Area Landscaping:** Any parking area that contains 20 or more parking spaces, except areas used for accessory storage of vehicles, shall include interior parking area landscaping, as follows:

- (1) At least 5% of the gross area of the parking area shall be

1 composed of landscaped open space. The gross area of the
2 parking area shall consist of all parking spaces, vehicular
3 travelways, and designated crosswalks within the parking
4 area, but shall not include other pedestrian facilities within
5 the parking area.

6 (2) Any individual area used as landscaped open space provided
7 to meet the requirements of this section shall be no less than
8 130 square feet in size.

9 (3) Landscaped open space shall be provided at each end of
10 every row of parking spaces, and shall be equal in length to
11 the adjoining parking space. Where less than 8 parking
12 spaces are proposed in a single row, landscaped open space
13 shall be required at only one end of the row.

14 (4) Landscaped open space shall be planted with a minimum of
15 10 plant units per 150 square feet and shall be designed in
16 such a way that no parking space is more than 80 feet from
17 a large deciduous tree.

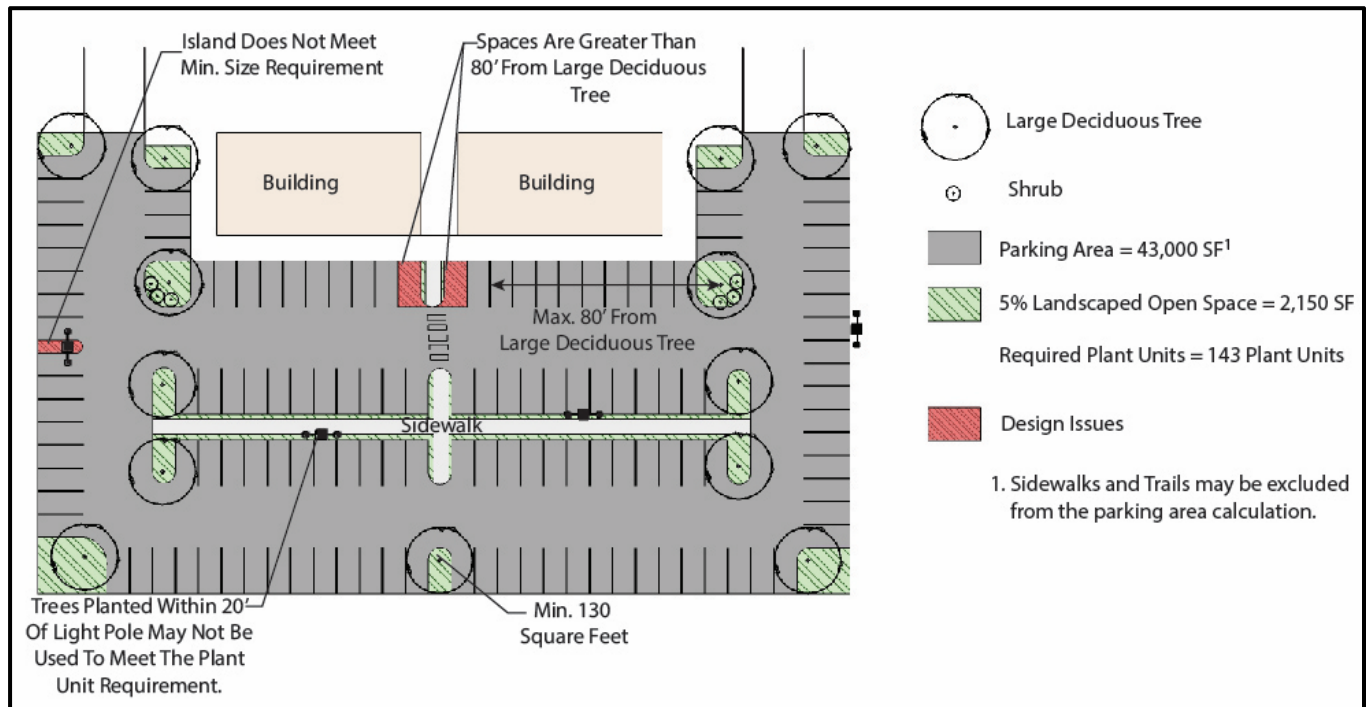
18 (5) A minimum of 75% of the total plant units required for
19 landscaped open space shall consist of large deciduous
20 trees. Perennials shall be used only where taller vegetation
21 would conflict with County and VDOT sight distance
22 standards.

23 (6) Evergreen trees shall not be used to meet the minimum
24 interior parking area landscaping plant unit requirement.

25 (7) No trees or shrubs shall be planted closer than 3 feet to any
26 curb or paved area unless planted within an approved bio-
27 retention structure.

28 (8) Light poles may be placed within landscape islands. Large
29 or small deciduous trees planted within 20 feet of a light
30 pole shall not be used to meet the minimum interior parking
31 area landscaping plant unit requirement.

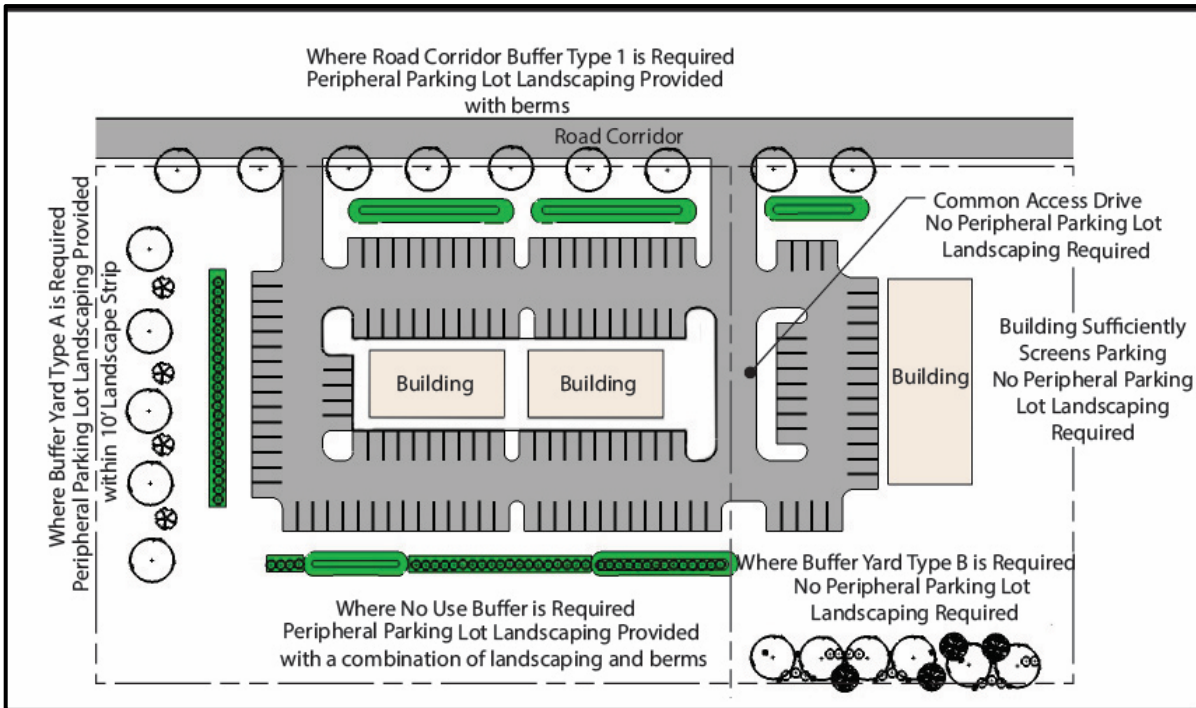
Interior Parking Area Landscaping Example



(B) **Peripheral Parking Area Landscaping:** Except where a parking area adjoins a Buffer Yard Type B or C, a Road Corridor Buffer Type 2 or 3, or a Gateway Corridor Buffer, any parking area that contains 20 or more parking spaces shall include peripheral parking area landscaping as follows:

- (1) Parking areas and parking area travelways that are not screened by buildings or other structures shall be screened with either berms or landscaping, or a combination of both, to a minimum height of 30 inches. Berms shall not have a grade steeper than 2:1. Such berms and/or landscaping shall be located between the parking area and the parcel line or right of way. Where the boundary between abutting parcels is located within a parking area travelway, no such screening shall be required.
- (2) Where landscaping is proposed, a minimum of 50 plant units per 100 linear feet shall be required within a continuous landscape strip 10 feet in width. A minimum of 75% of the total plant units required shall consist of evergreen shrubs.
- (3) No trees or shrubs shall be planted closer than 3 feet to any curb or paved area unless planted within an approved bio-retention structure.

Peripheral Parking Area Landscaping Example



5-1408 General Landscape Provisions

(A) Landscape Plan.

- (1) A landscape plan in accordance with the Facilities Standards Manual shall be submitted as part of every site plan required by Section 6-701, and construction plans and profiles if applicable.
 - (a) All landscaping and screening required by this Section shall be depicted on such landscape plan, which shall be designed by a licensed landscape architect or other licensed or certified professional in accordance with the Facilities Standards Manual.
 - (b) All landscaping and screening depicted on such landscape plan shall be installed or bonded in accordance with current County requirements prior to issuance of any Certificate of Occupancy.

(B) Plant Unit Requirements.

- (1) The number of Plant Units that a particular plant type shall be considered to be equivalent to shall be determined in accordance with Table 5-1408(B)(1), Plant Unit Equivalents.

Table 5-1408(B)(1), Plant Unit Equivalents

Plant Type	Plant Units per One (1) Plant Type
Large Deciduous Tree	10
Evergreen Tree	6
Small Deciduous Tree	5
Shrub	2
Ornamental Grass	1
Perennial	0.25

(2) The following requirements shall apply to the plant types used to meet the Plant Unit requirements for each Buffer Yard or Road Corridor Buffer provided. Maximum percentages shall apply solely in determining the quantity of a given plant type that can be counted towards meeting a Plant Unit requirement, and shall not preclude the installation of additional plant material from that plant type, if desired.

(a) A maximum of 50% of the required plant units may be large deciduous trees.

(i) Exception. The Road Corridor Buffer Type 1 may be planted with 100% large deciduous trees.

(b) A maximum of 50% of the required plant units may be evergreen trees. A minimum of 10% of the required plant units for a Type C Buffer shall be evergreen trees.

(c) A maximum of 60% of the required plant units may be small deciduous trees.

(d) A maximum of 30% of the required plant units may be shrubs. When shrubs are used, a minimum of one-third (1/3) shall be evergreen.

(e) The use of ornamental grasses and perennials is encouraged. When used, a maximum of 25% of the required plant units may be ornamental grasses and/or perennials.

(f) Walls, fences, and/or berms shall not be counted towards required plant units.

(C) Use of Buffer Yards and Road Corridor Buffers.

(1) Passive recreation and pedestrian, bicycle or equestrian

trails are permitted in Buffer Yards and Road Corridor Buffers, provided that Plant Unit requirements are met.

(2) Utility easements may be located within Buffer Yards and Road Corridor Buffers provided that Plant Unit requirements are met with plant types that are compatible with the utility easement.

(3) Driveway entrances and entrances connecting adjacent parking lots or developments may traverse a Buffer Yard or Road Corridor Buffer generally perpendicular to the direction that the length of the Buffer Yard or Road Corridor Buffer is measured.

(4) Signs, pursuant to Section 5-1200, may be located in Buffer Yards and Road Corridor Buffers.

(5) Storm water management features such as bioretention areas and rain gardens may be located in Buffer Yards and Road Corridor Buffers provided that Plant Unit requirements are met.

(D) **Landscape Installation.** The installation of all required plant material shall be in accordance with the Facilities Standards Manual.

(1) At the time of planting, all trees and shrubs shall meet the requirements of the American National Standards Institute, American Standard for Nursery Stock, ANSI Z60.1-2014. The minimum sizes required for each plant type are as follows:

(a) All deciduous trees shall have a minimum caliper of 1 inch.

(b) Evergreen trees shall be a minimum of 6 feet in height

(c) Shrubs shall have a minimum height of 18 inches.

(2) No minimum height is required for ornamental grasses or perennials. Ornamental grasses and perennials shall be located within a defined planting bed.

(E) **Maintenance.** The owner, or his agent, shall be responsible for the maintenance, repair and replacement of all plant material required by this Section.

- (1) All plant material shall be tended and maintained in a healthy growing condition, replaced when necessary and kept free of refuse and debris.
- (2) Fences and walls shall be maintained in good repair. Openings within fences and walls may be required by the Zoning Administrator for accessibility to an area for necessary maintenance.

5-1409 Waivers and Modifications.

(A) **Zoning Administrator Waivers and Modifications.** Unless otherwise specified, the Zoning Administrator may approve waivers or modifications to the requirements of this section as part of the site plan, subdivision, and/or zoning permit process upon finding that site conditions make a specific requirement either impracticable or ineffective relative to accomplishing the impact mitigation and site design objectives of this Section.

(1) **Justification.** Site conditions that may justify a waiver or modification include, but are not limited to, the following:

- (a) Topography, soil, vegetation, or other existing environmental features are such that full compliance is impossible or impracticable.
- (b) Improved environmental quality would result from implementation of modified requirements.
- (c) Space limitations, unusually shaped lots, and/or existing utility easements.
- (d) Change of use on a developed site increases the required Buffer Yard to more than what is feasible to provide.
- (e) Safety or security conditions make modified requirements necessary.
- (f) Existing development patterns on surrounding properties would enable implementation of the applicable Place Type of the General Plan with modified requirements.

(2) **Conditions.** The Zoning Administrator may impose conditions upon any waiver or modification in order to ensure that the purpose and intent of this Section continue to be met.

(3) **Application.** Each request for a waiver or modification shall include the following components:

(a) **Written Narrative.** A written narrative justifying the request that identifies the specific requirement of this Section for which the modification or waiver is requested, provides a description of the site conditions that necessitate the modification and waiver request, and explains how the approval of the waiver or modification will provide equal or enhanced mitigation of impacts between uses and/or site design than what otherwise would have been required by this Section.

(i) **Exception – Cemetery, Burial Ground, and Grave Treatment Plan.** The written narrative shall describe how the modified buffer will achieve the purpose and intent of the required preservation buffer, and address how the historic context of the cemetery, burial ground, or grave will be preserved through the proposed alternative mitigation techniques.

(b) **Design.** An exhibit that clearly depicts and tabulates the quantity, type, location, and size of all proposed plant units and any other proposed design elements. Additional site elevations, plan views, perspectives, and/or pictures may be required by the Zoning Administrator.

(i) **Exception - Reduction of Gateway Corridor Buffer.** When a reduction in the width of a Gateway Corridor Buffer is requested pursuant to Section 5-1403(E)(4), the design elements specified by Section 5-1403(E)(1) or Section 5-1403(E)(2), as applicable, also shall be depicted.

(ii) **Exception – Cemetery Burial Ground and Grave Treatment Plan.** When a waiver or modification is requested to modify the cemetery, burial ground, and grave preservation buffer required by Section 5-1405(D), a Cemetery, Burial Ground, and Grave Treatment Plan shall be required in accordance with the Facilities Standards Manual. The Cemetery, Burial Ground, and Grave Treatment Plan shall indicate how the

1 modified buffer will achieve the purpose and
2 intent of the required preservation buffer, and
3 address how the historic context of the
4 cemetery, burial ground, or grave is being
5 preserved through alternative mitigation
6 techniques.

7 **(B) Legislative Modifications**

- 8 (1) **Road Corridor Building and Parking Setbacks.** The
9 Road Corridor building and parking setbacks of Table 5-
10 1403(B) may be modified by Minor Special Exception
11 approval in accordance with Section 6-1300 upon a finding
12 that such modification is necessary to maintain consistency
13 with the streetscape established by existing development on
14 adjacent properties.
- 15 (2) The Board of Supervisors or the Board of Zoning Appeals
16 may modify the requirements of this Section as part of an
17 approval action of a special exception, variance, or as part
18 of proffered conditions. In such event, the requirements of
19 such approval shall govern.
- 20

ARTICLE 1
GENERAL REGULATIONS

1-205 Limitations and Methods for Measurements of Lots, Yards and Related Terms. Notwithstanding this section of the Ordinance, required buffer yards are a separate regulation in the Ordinance which may require a different width than a required yard, setback or building restriction line.

(A) **Lot Access Requirements.** No structure requiring a building permit shall be erected upon any lot which does not have frontage on a Class I, Class II, Class III road, or private access easement as specified in the individual district regulations, except as specifically provided for herein and the Land Subdivision and Development Ordinance (LSDO).

(1) New access points (private or public) to arterial or major collector roads shall be limited to locations at existing median breaks, planned median breaks or other locations approved by Loudoun County or VDOT.

(B) **Regular Lots, Width Measurements.** The width of a regular lot shall be determined by measurement across the rear of the required front yard. The distance between side lot lines at the points where they intersect with a street line shall not be less than eighty percent (80%) of the required width, measured along the street line. However, in cases where lots front on curved or circular (cul-de-sac) streets, the radii of which do not exceed ninety (90) feet, the distances between side lot lines where they intersect with the street line may be reduced to sixty percent (60%) of the required width, measured along the street line. Yards and street lines shall be measured along the arc of the curve for curvilinear yards and street lines. Lot width shall be measured only along continuous frontage facing one street. The minimum width of a lot on a private access easement shall be determined by measurement along the front yard around the private access easement extended into the lot.

(C) **Regular Lots, Determination of Front Yard.**

(1) On regular interior lots, the front shall be construed to be the portion nearest the street.

(2) On regular corner lots, except as provided for in subparagraph (3) below, the front shall be construed to be the shorter boundary fronting on a street. If the lot has equal frontage on two or more streets, the front of the lot shall be determined and shown on the subdivision plat or site plan by

the prevailing building pattern, or the prevailing lot pattern if a building pattern has not been established.

(3) In an agricultural zoning district (A-3, A-10, AR-1 and AR-2), the front of the lot shall be determined and shown on the subdivision plat or site plan by the prevailing building pattern, or prevailing lot pattern if a building pattern has not been established, provided that the shortest boundary fronting on a street in an agricultural zoning district is eighty percent (80%) or more of the required lot width.

(4) On regular through corner lots, the front shall be construed to be the shorter boundary fronting the street, provided that if the shortest boundary fronting on a street is eighty percent (80%) or more of the length of the longest boundary fronting on a street, the applicant may select either frontage if lot width requirements are met.

(5) On regular through lots, unless otherwise determined by the Zoning Administrator due to the prevailing building pattern, the front shall be construed to be the shorter boundary fronting on a street. If the lot has equal frontage on two streets, the front of the lot shall be determined and shown on the preliminary and final subdivision plats and site plans by the prevailing building pattern, or the prevailing lot pattern if a building pattern has not been established.

(D) Regular Lots, Yards Adjacent to Street.

(1) Front yards of at least the depth required in the district shall be provided across the entire frontage of a regular lot.

(2) Other yards adjacent to streets shall be provided across or along the entire portion of the lot adjacent to the street.

(3) Street line for measurement of required yards adjacent to streets. Where the lot line adjacent to a street is straight, required yards shall be measured from such line, extended in the case of rounded corners. On convex or concave lots, front, side and rear yards, as applicable, shall be parallel to or concentric with, the street line. Depth of required yards adjacent to streets shall be measured perpendicular or radially to such straight street lines.

(E) Rear Yards on Interior Regular Lots. Rear yards on interior regular lots shall be provided of at least the depth required for the district, and shall run across the full width of the lot at the rear.

1 Depth of a required rear yard shall be measured in such a manner
2 that the yard is a strip of land with minimum depth required by
3 district regulations with its inner edge parallel to or concentric with
4 its outer edge.

5 (F) **Yards on Corner Lots.** Corner lots shall be deemed to have no rear
6 yards, only two (2) front yards which are adjacent to the streets and
7 two (2) side yards, provided that if two (2) different side yards are
8 required in a district, the larger available yard shall be used.
9 Notwithstanding anything to the contrary contained in this
10 Ordinance, setbacks on corner lots shall be sufficiently large to
11 comply with VDOT sight distance requirements or Section 5-300
12 whichever is greater.

13 (G) **Side Yards on Regular Lots.** Side yards on regular lots are defined
14 as running from the required front yard line to the required rear yard
15 line. On regular through lots the required side yard shall run from
16 the required front yard line to the second required front yard line.
17 On corner lots the required side yards shall run from the point where
18 side yard lines intersect, to the required front yard lines.

19 (H) **Irregular Lots, Dimensional Requirements.** An irregular lot shall
20 be considered to meet the dimensional requirements of the district
21 in which located, provided:

22 (1) Lot area shall meet district requirements for the proposed
23 use. Lot width need not meet district requirements if
24 requirements set forth below are met.

25 (2) Open space in required yards and elsewhere on the lot shall
26 be not less than as required for the use in the district on a
27 regular rectangular lot of required minimum width and area.

28 (3) Building area remaining after required yards have been
29 provided shall have dimensions and locations appropriate for
30 all buildings proposed.

31 (I) **Irregular Lots, Yard Requirements.** In general, all yards shall
32 provide at least the same separation from all lot lines as required for
33 minimum side yards in the district, provided, however, that where
34 district regulations permit building to the lot line of a regular lot
35 under specified circumstances, the same regulations shall apply on
36 an irregular lot, except as provided with relation to accessory
37 buildings and structures in Section 5-200. Additionally, if an
38 irregular lot abuts a street at any point, a distance equal to the
39 required yard on a regular lot adjacent to a street in the district shall
40 be provided.

- (J) **Road Corridor Buffer and Setback and Other Setback Measurement From Streets.** All Road Corridor Buffers and Setbacks and other setbacks from public streets shall be measured from the wider of (a) the existing dedicated right-of-way, or (b) the right-of-way proposed in the Comprehensive Plan or (c) the minimum dedicated right-of-way permitted for VDOT acceptance of the right-of-way for maintenance. For public streets, If no dedicated right-of-way exists, or if no construction plans are approved for the road or if less than the minimum right-of-way exists, the right-of-way shall be assumed to be centered on the existing travelway. All Road Corridor Buffers and Setbacks and other setbacks from private roads shall be measured from the outer edge of the associated easement.

1-403 Nonconforming Structures.

- (A) **Repair or Reconstruction of Nonconforming Structure.** Repairs, restoration and maintenance, including structural repairs, may be made to a nonconforming structure. Except as provided for in Section 4-1500, if a nonconforming structure is damaged or destroyed by a casualty or event beyond the owner's reasonable control, the owner may repair or replace such structure provided the degree of non-conformity is not increased.
- (B) **Alteration or Enlargement of Nonconforming Structure.** A nonconforming structure shall not be enlarged, increased, nor extended to occupy a greater area of land than was occupied at the effective date of adoption or amendment of this Ordinance unless such improvements do not increase the degree of nonconformity. Notwithstanding the foregoing, a legal, non-conforming residential structure shall not be considered to have been enlarged, increased or extended within the meaning of this subsection if the addition to an existing structure is less than 50% of the existing square footage on the effective date of this Ordinance, and the yard requirements of the zoning classification which applied to the construction of such residences prior to the effective date of this Ordinance are maintained.
- (C) **Moving of Nonconforming Structure.** A nonconforming structure shall not be moved in whole or in part to any other location unless every portion of such structure and the use thereof is made to conform with all requirements of this Ordinance and other applicable County Ordinances.
- (D) **Pre-existing Structures in Subsequently Created Setback areas.** Residences, accessory structures, and accessory uses built before June 16, 1993 may increase their footprint existing on that date up

1 to 50% and are exempt from the setbacks of Section ~~5-900-5-~~
2 1403(B) but must maintain the setback created by the front of the
3 residence even if the setback so created is less than what is required
4 by this Ordinance.
5

DRAFT

ARTICLE 2
NON-SUBURBAN DISTRICT REGULATIONS

Section 2-100

AR-1 Agricultural Rural-1

2-101

Development Options. Land within the AR-1 zoning district may be subdivided under one of the three development options identified below. Nothing in this section shall preclude the opportunity for a property owner to file for a Family Subdivision in accordance with the requirements of the Land Subdivision and Development Ordinance.

(A) **Base Density Division Option.** A Base Density Division meeting the following standards and criteria may be permitted in accordance with the procedures outlined in the Land Subdivision and Development Ordinance (LSDO) for such division:

(1) **Lot Yield.** Under the Base Density Division Option, the maximum lot yield shall be one lot per 20 acres.

(2) **Permitted Uses.** The uses permitted on lots developed in accordance with the Base Density Division Option are identified in Table 2-102 and are subject to the Additional Regulations for Specific Uses of Section 5-600.

(3) **Lot and Building Requirements.**

(a) **Minimum Lot Size.** 20 acres.

(b) **Minimum Lot Width.** 175 feet.

(c) **Minimum Yards.** Except where a greater setback is required by Section ~~5-1403(B)5-900~~, no structure shall be located within 25 feet of any property line or within 35 feet from any other road right-of-way, private access easement, and/or prescriptive easement.

(d) **Maximum Lot Coverage.** 25%, but only 10% may be used for residential or non-residential structures excluding agricultural, horticultural, and animal husbandry structures not open to the public.

(e) **Maximum Building Height.** 35 feet, excluding agricultural, horticultural, and animal husbandry structures not open to the public.

Section 2-200

AR-2 Agricultural Rural-2

2-203

Development Options. Land within the AR-2 zoning district may be subdivided under one of the three development options identified below. Nothing in this section shall preclude the opportunity for a property owner to file for a Family Subdivision in accordance with the requirements of the Land Subdivision and Development Ordinance.

(A) **Base Density Division Option.** A Base Density Division meeting the following standards and criteria may be permitted in accordance with the procedures outlined in the Land Subdivision and Development Ordinance (LSDO) for such division:

(1) **Lot Yield.** Under the Base Density Division Option, the maximum lot yield shall be one lot per 40 acres.

(2) **Permitted Uses.** The uses permitted on lots developed in accordance with the Base Density Division Option are identified in Table 2-202 and are subject to the Additional Regulations for Specific Uses of Section 5-600.

(3) **Lot and Building Requirements.**

(a) **Minimum Lot Size.** 40 acres.

(b) **Minimum Lot Width.** 175 feet.

(c) **Minimum Yards.** Except where a greater setback is required by Section ~~5-1403(B)5-900~~, no structure shall be located within 25 feet of any property line or within 35 feet from any other road right-of-way, private access easement, and/or prescriptive easement.

(d) **Maximum Lot Coverage.** 25%, but only 10% may be used for residential or non-residential structures excluding agricultural, horticultural, and animal husbandry structures not open to the public.

(e) **Maximum Building Height.** 35 feet, excluding agricultural, horticultural, and animal husbandry structures not open to the public.

Section 2-300

A-10 Agriculture

2-304

Lot Requirements (See Section 1-205).

- (A) **Size.** Ten (10) acres minimum.
- (B) **Width.** Three hundred (300) feet minimum for lots fronting on Class I Roads; two hundred (200) feet minimum for lots fronting on Class II or III Roads; and fifty (50) feet minimum for lots fronting on a private access easement.
- (C) **Yards.** Except where a greater setback is required by Section ~~5-1403(B)5-900~~, no building shall be located within twenty five (25) feet of any property line or within fifty (50) feet from any other road right-of-way, private access easement, and/or prescriptive easement.
- (D) **Length/Width Ratio.** 5:1 maximum.

Section 2-400

A-3 Agricultural Residential.

2-404

Lot Requirements (See Section 1-205).

- (A) **Size.** Three (3) acres minimum.
- (B) **Width.** Three hundred (300) feet minimum for lots fronting on Class I Roads; two hundred (200) feet minimum for lots fronting on Class II or III Roads; and fifty (50) feet minimum for lots fronting on a private access easement.
- (C) **Length/Width Ratio.** 5:1 maximum.
- (D) **Yards.** Except where a greater setback is required by Section ~~5-1403(B)5-900~~, no building shall be located within twenty five (25) feet of any property line or thirty five (35) feet from any other road right of way, private access easement, and/or prescriptive easement.

Section 2-500

Countryside Residential-1: CR-1

2-506

Lot Requirements for Lots Served by Public Sewer/Cluster Option.

- (A) **Size.** Twenty thousand (20,000) square feet minimum.

- (B) Width. Seventy-five (75) feet minimum.
- (C) Yards. Each lot shall provide the following yards:
- (1) Front. Twenty-five (25) feet minimum.
 - (2) Side. Nine (9) feet minimum.
 - (3) Rear. Twenty-five (25) feet minimum.
- (D) Length/Width Ratio. 5:1 maximum.
- (E) Minimum Open Space Area. Open space shall be provided in a sufficient amount such that gross density of one lot per forty thousand (40,000) square feet is maintained calculated based on the overall parcel. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.
- (F) ~~Minimum Buffer/Setback. A permanent building setback of Fifty (50) feet in depth with a Category 1 Buffer Yard (Section 5-1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of twenty thousand (20,000) square feet or greater. Such buffer may be included in open space calculations.~~ **[RESERVED]**
- (G) Utilities. Public sewer facilities must be provided to the site. Nothing herein shall be construed as requiring the extension of central or municipal utilities to any site or property.

2-507 Lot Requirements for Compact Cluster Development Option.

- (A) Size. Fifteen thousand (15,000) square feet minimum.
- (B) Width. Sixty (60) feet minimum.
- (C) Yards. Each lot shall provide the following yards:
- (1) Front. Fifteen (15) feet minimum.
 - (2) Side. Nine (9) feet minimum.
 - (3) Rear. Twenty-five (25) feet minimum.
- (D) Length/Width Ratio. 5:1 maximum.
- (E) Minimum Open Space Area. Open space shall be provided in a sufficient amount such that gross density of one lot per forty

thousand (40,000) square feet is maintained calculated based on the overall parcel. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

(F) ~~Minimum Buffer/Setback. A permanent building setback of fifty (50) feet in depth with a Category 1 Buffer Yard (Section 5-1414[B]) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of fifteen thousand (15,000) square feet or greater. Such buffer may be included in open space calculations.~~ [RESERVED]

(G) Utilities. Both public water and public sewer facilities must be provided to serve the site. Nothing herein shall be construed as requiring the extension of central or municipal utilities to any site or property.

(H) Lot Design Requirements.

(1) Street trees planted pursuant to Section 5-1300 shall be regularly spaced.

(2) Garages shall be set back at least twenty (20) feet behind the front line of buildings.

(I) Other Requirements.

(1) Blocks shall generally be in a grid pattern, with interconnecting streets and alleys.

(2) Parallel parking may be provided on streets in front of residential lots, except for lots fronting on collector or arterial roads.

2-511 Development Setback and Access from Major Roads. In designing residential development, the lot access requirements- of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 2-600 Countryside Residential-2: CR-2

2-607 Lot Requirements for Compact Cluster Development Option.

(A) Size. Ten thousand (10,000) square feet minimum.

(B) Width. Fifty (50) feet minimum.

(C) Yards. Each lot shall provide the following yards:

(1) Front. Fifteen (15) feet minimum.

(2) Side. Nine (9) feet minimum.

(3) Rear. Twenty five (25) feet minimum.

(D) Length/Width Ratio: 5:1 maximum.

(E) Minimum Open Space Area. Open space shall be provided in a sufficient amount such that gross density of one lot per twenty thousand (20,000) square feet is maintained calculated based on the overall parcel. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

(F) ~~Minimum Buffer/Setback. A permanent building setback of fifty (50) feet in depth with a Category 1 Buffer Yard (Section 5-1414[B]) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of twenty thousand (20,000) square feet or greater. Such buffer area may be included in open space calculations.~~ **[RESERVED]**

(G) Utilities: Both public water and public sewer facilities must be provided to the site. Nothing herein shall be construed as requiring the extension of central or municipal utilities to any site or property.

(H) Lot Design Requirements.

(1) Street trees planted pursuant to Section 5-1300 shall be regularly spaced.

(2) Garages shall be set back at least 20 feet behind the front line of buildings.

(I) Other Requirements.

(1) Blocks shall generally be in a grid pattern, with interconnecting streets and alleys.

(2) Parallel parking may be provided on streets in front of residential lots, except for lots fronting on collector or arterial roads.

2-612

Development Setback and Access from Major Roads. In designing residential development, the lot access requirements of Section 1-205(A)

1 and the building and parking setback requirements of Section ~~5-900-5-~~
2 1403(B) shall be observed

3 **Section 2-700**

Countryside Residential-3: CR-3

4 **2-707**

Lot Requirements for Compact Cluster Development Option.

5 (A) Size. Ten thousand (10,000) square feet minimum to fifteen
6 thousand (15,000) square feet maximum.

7 (B) Width. Fifty (50) feet minimum.

8 (C) Yards. Each lot shall provide the following yards:

9 (1) Front. Fifteen (15) feet minimum.

10 (2) Side. Nine (9) feet minimum.

11 (3) Rear. Twenty five (25) feet minimum.

12 (D) Length/Width Ratio: 5:1 maximum.

13 (E) Minimum Open Space Area. Open space shall be provided in a
14 sufficient amount such that a gross density of one lot per fifteen
15 thousand (15,000) square feet is maintained, calculated based on the
16 overall parcel. Open space shall be preserved by means of a
17 permanent open space easement acceptable to the Board of
18 Supervisors.

19 (F) ~~Minimum Buffer/Setback. A permanent building setback of fifty~~
20 ~~(50) feet in depth with a Category 1 Buffer Yard (Section 5-~~
21 ~~1414(B)) shall be provided where a cluster development adjoins an~~
22 ~~existing or planned residential district, land bay, or development,~~
23 ~~which has a minimum allowable lot size of fifteen thousand (15,000)~~
24 ~~square feet or greater. Such buffer area may be included in open~~
25 ~~space calculations.~~ **[RESERVED]**

26 (G) Utilities. Both public water and public sewer shall be provided to
27 serve the site. Nothing herein shall be construed as requiring the
28 extension of central or municipal utilities to any site or property.

29 (H) Lot Design Requirements.

30 (1) Street trees planted pursuant to Section 5-1300 shall be
31 regularly spaced.

32 (2) Garages shall be set back at least twenty (20) feet behind the
33 front line of buildings.

(I) Other Requirements.

(1) Blocks shall generally be in a grid pattern, with interconnecting streets and alleys.

(2) Parallel parking may be provided on streets in front of residential lots, except for lots fronting on collector or arterial roads.

2-712 Development Setback and Access from Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 2-800 Countryside Residential-4: CR-4

2-812 Development Setback and Access from Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 2-900 RC Rural Commercial District.

2-908 ~~[RESERVED]Administrative Waivers and Modifications of Buffering and Screening Requirements and Parking Lot Landscaping and Screening Requirements.~~

~~(A) Uses that are subject to parking lot landscaping and screening as required by Section 5-1413, and buffering and screening as required by Section 2-907, may pursue an administrative waiver and modification process, whereby the parking lot landscaping and screening may be waived, reduced or modified by the Zoning Administrator, where the strict adherence to the provisions of Section 5-1413 would reduce the usable area of a lot to a point which would preclude reasonable use of the lot, or the expansion of an existing use (provided required setbacks are met) for a permitted or special exception use. Parking lot landscaping and screening may be waived reduced or modified by the Zoning Administrator, if it is demonstrated that the site has been designed to minimize adverse impacts through a combination of architectural, landscape and/or other design techniques.~~

2-910 Development Setback and Access From Major Roads. In designing nonresidential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 2-1000 Joint Land Management Area-1 District: JLMA-1

1 **2-1005 General Development Requirements.** The following general
2 development requirements shall apply to all development in the JLMA-1
3 district.

4 (A) **Minimum Open Space.** Thirty (30) percent. Active recreational
5 uses may be located within the open space.

6 (B) **Maximum Gross Density.** The maximum gross residential density
7 shall be one (1) unit per forty thousand (40,000) square feet,
8 calculated based on the overall parcel, excluding roads. Open space
9 shall be preserved by means of a permanent open space easement
10 acceptable to the Board of Supervisors.

11 (C) **Utilities.**

12 (1) Both municipal water and municipal sewer facilities must be
13 provided to every development site, if available as
14 determined by the Zoning Administrator, in consultation
15 with the Town, and if the Town permits the connection. If
16 municipal water and/or municipal sewer facilities are not
17 available, or if the Town does not permit the connection,
18 development may be served by an individual water supply
19 system (private well) and/or an individual sewage disposal
20 system.

21 (2) Notwithstanding subsection 2-1005(C)(1) above, Town
22 owned or County owned and operated public uses shall be
23 required to connect to municipal water and/or municipal
24 sewer facilities only if the existing municipal water line
25 and/or municipal sewer line is within three hundred (300)
26 feet of the property line of the parcel being developed and if
27 the Town permits such connection, unless the County and
28 Town agree that the presence of other physical or
29 geographical constraints would make the connection
30 unreasonable. Otherwise, such Town or County public uses
31 may use communal systems or an individual water supply
32 system (private well) and/or individual sewage disposal
33 system.

34 (3) Notwithstanding subsection 2-1005(C)(1) above, any
35 development on a lot existing prior to January 7, 2003, that
36 does not require the approval of any type of subdivision or site
37 plan application in order to be developed may use an
38 individual water supply system (private well) and/or
39 individual sewage disposal system, provided, however, that if
40 such development is required to connect to a public/municipal
41 sewer pursuant to the Codified Ordinances of Loudoun

County, then an individual sewage disposal system shall not be permitted. For the purposes of this Section 2-1005(C)(3), and notwithstanding the provisions of Section 1243.03(B) of the Land Subdivision and Development Ordinance, lots established by or resulting from the recordation of a boundary line adjustment (BLAD) after January 7, 2003, where all of the lots involved in the BLAD existed prior to January 7, 2003, shall be deemed to have existed prior to January 7, 2003.

- (4) All utility distribution lines shall be placed underground. Private wells, septic systems, and communal systems may be located within the open space.

(D) **Neighborhood Development Standards.** To ensure new development in the JLMA-1 district reinforces existing development patterns in the adjacent town to the maximum extent feasible, reduces the need for automobile trips, minimizes the need for additional road improvements, and encourages walking to employment, shopping, and public facilities, development in this district shall meet the following requirements:

(1) **Street System/Connectivity.**

(a) **Connections to Existing Streets.** Connections to the existing or planned street system shall be made to the maximum extent feasible. All development plans shall incorporate and continue all streets stubbed to or shown as stubbed to the boundary of the development by previously approved development plans/plats or existing development.

(b) **Provision for Future Connections to Adjoining Land.** All developable land shall provide for future public street connections to adjacent developable parcels by providing a local street connection at least every six hundred sixty (660) feet along each subdivision plat boundary that abuts potentially developable or re-developable land, except that such street connections are not required on steep slopes, MDOD sensitivity areas, or FOD pursuant to Sections 5-1508, 4-1600, and 4-1500.

(c) **Block Form and Size.** To the maximum extent feasible, blocks within developments shall maintain a rectilinear pattern except where deviation is necessitated by topographic or environmental

1 considerations. Blocks shall measure not less than
2 three hundred (300) nor more than six hundred sixty
3 (660) feet along each side, as measured from the edge
4 of the right-of-way, except where deviation is
5 necessitated by topographic or environmental
6 considerations, or where deviation is required to
7 comply with regulations concerning steep slopes,
8 MDOD sensitivity areas, or FOD pursuant to
9 Sections 5-1508, 4-1600 and 4-1500.

10 (d) **Avoidance of Certain Street Types.** Cul-de-sacs
11 and "P-loop" streets shall be avoided except where
12 necessitated by topographic or environmental
13 considerations.

14 (e) **Provision of "T" Intersections.** "T" intersections
15 are encouraged in locations where views of
16 important civic, public or open space areas can be
17 highlighted.

18 (2) **Variation of Lot Sizes.**

19 (a) **General Rule.** In all new residential subdivisions
20 containing ten (10) or more lots, a mixture of lot sizes
21 and dimensions shall be provided in order to allow
22 for a variety of housing opportunities and avoid
23 monotonous streetscapes. For example, larger and
24 wider lots are encouraged on corners. Smaller lots
25 are encouraged adjacent to parks and open spaces.
26 No more than sixty percent (60%) of all lots shall be
27 similar in total lot area. For purposes of this
28 subsection, "similar" lot areas shall be defined as
29 within 500 square feet of each other.

30 (b) **Exception.** Up to seventy percent (70%) of the lots
31 within the subject subdivision may be similar if the
32 Zoning Administrator, pursuant to Section 6-401,
33 makes a finding that, notwithstanding deviation from
34 the sixty percent (60%) standard stated above, lot
35 sizes and dimensions are sufficiently varied, for
36 different housing types, to avoid monotonous
37 streetscapes.

38 (c) **Dispersion of Lot Sizes.** Similar lot sizes shall be
39 distributed throughout a subdivision rather than
40 consolidated in one area, unless the Zoning
41 Administrator, pursuant to Section 6-401, makes a

1 finding that the intent of this district and of the
2 Zoning Ordinance will be better served by a design
3 that tends to consolidate lots of similar sizes.

4 (3) **Sidewalks.**

5 (a) **Provision of Sidewalks and/or Trails.** Sidewalks
6 and/or trails shall be provided, at a minimum, along
7 one side of all streets to provide pedestrian access to
8 the town or neighborhood center, public buildings,
9 schools, parks, and other destinations, or greater if
10 required by the Facilities Standards Manual.

11 (b) **Sidewalk and/or Trail Connections.** Connections
12 to existing or planned sidewalks and/or trails shall be
13 made at the property boundaries of the project by
14 incorporating and continuing all sidewalks and/or
15 trails stubbed to or shown as stubbed to the boundary
16 of the development by previously approved
17 development plans/plats or existing development.
18 All development plans shall provide for future
19 sidewalk and/or trail connections to adjacent
20 developable parcels at planned or current local street
21 connections along each subdivision plat boundary.

22 (4) **Civic and Open Space.**

23 (a) **Variety of Spaces to Be Provided.** A variety of
24 greens, parks or natural open spaces shall be located
25 throughout the development, where appropriate, to
26 provide community identity.

27 (b) **Access to Civic Spaces.** Direct and convenient
28 pedestrian and bicycle access shall be provided on
29 the site being developed to adjacent residential land
30 uses and to the civic and open space.

31 (c) **Configuration of Park Access.** Land dedicated for
32 parks shall be bordered on at least one side by public
33 streets, preferably local or collector streets.

34 (5) **Other Design Requirements.**

35 (a) **Street Trees.** Street trees planted pursuant to
36 Section 5-1300 shall be planted at a density of no less
37 than one (1) canopy shade tree per twenty-five (25)
38 feet on average, and shall be placed in arrangements
39 consistent with the existing landscape of the vicinity.

(b) **Garages.** Garages shall be set back at least four (4) feet behind the plane of the front door of the principal building. Garages shall have vehicular access only from the side or rear of the lot.

(c) **On-Street Parking.** Parallel parking may be provided on streets in front of residential lots, except for lots fronting on collector or arterial roads.

(E) **Compatibility Standards.**

(1) A minimum buffer width of twenty-five (25) feet with a Buffer Yard Type 2-A ~~buffer yard~~ shall be provided between existing agricultural uses and residential development sites.

(2) On non-residential development sites:

(a) Areas for loading, delivery, and waste collection receptacles shall be sited so as to reduce the impact on surrounding properties to the maximum extent feasible, with highest priority given to reducing the impact on residential properties.

(b) Outdoor lighting shall be directed towards the interior of the development site and shall be shielded to prevent all direct illumination of other properties.

Section 2-1100 Joint Land Management Area-2 District: JLMA-2

2-1105 General Development Requirements. The following general development requirements shall apply to all development in the JLMA-2 district.

(A) **Minimum Open Space.** Thirty (30) percent. Active recreational uses may be located within the open space.

(B) **Maximum Gross Density.** The maximum gross residential density shall be one (1) unit per twenty thousand (20,000) square feet, calculated based on the overall parcel, excluding roads. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

(C) **Utilities.**

(1) Both municipal water and municipal sewer facilities must be provided to every development site, if available as determined by the Zoning Administrator, in consultation with the Town, and if the Town permits the connection. If

1 municipal water and/or municipal sewer facilities are not
2 available, or if the Town does not permit the connection,
3 development may be served by an individual water supply
4 system (private well) and/or an individual sewage disposal
5 system.

6 (2) Notwithstanding subsection 2-1105(C)(1) above, Town owned
7 or County owned and operated public uses shall be required to
8 connect to municipal water and/or municipal sewer facilities
9 only if the existing municipal water line and/or municipal
10 sewer line is within three hundred (300) feet of the property line
11 of the parcel being developed and if the Town permits such
12 connection, unless the County and Town agree that the
13 presence of other physical or geographical constraints would
14 make the connection unreasonable. Otherwise, such Town or
15 County public uses may use communal systems or an
16 individual water supply system (private well) and/or individual
17 sewage disposal system.

18 (3) Notwithstanding subsection 2-1105(C)(1) above, any
19 development on a lot existing prior to January 7, 2003, that
20 does not require the approval of any type of subdivision or site
21 plan application in order to be developed may use an
22 individual water supply system (private well) and/or
23 individual sewage disposal system, provided, however, that if
24 such development is required to connect to a public/municipal
25 sewer pursuant to the Codified Ordinances of Loudoun
26 County, then an individual sewage disposal system shall not
27 be permitted. For the purposes of this Section 2-1105(C)(3),
28 and notwithstanding the provisions of Section 1243.03(B) of
29 the Land Subdivision and Development Ordinance, lots
30 established by or resulting from the recordation of a boundary
31 line adjustment (BLAD) after January 7, 2003, where all of
32 the lots involved in the BLAD existed prior to January 7,
33 2003, shall be deemed to have existed prior to January 7,
34 2003.

35 (4) All utility distribution lines shall be placed underground.
36 Private wells, septic systems, and communal systems may
37 be located within the open space.

38 (D) **Neighborhood Development Standards.** To ensure new
39 development in the JLMA-2 district reinforces existing
40 development patterns in the adjacent towns to the maximum extent
41 feasible, reduces the need for automobile trips, minimizes the need
42 for additional road improvements, and encourages walking to

1 employment, shopping, and public facilities, development in this
2 district shall meet the following requirements:

3 (1) **Street System/Connectivity.**

4 (a) **Connections to Existing Streets.** Connections to
5 the existing or planned street system shall be made to
6 the maximum extent feasible. All development plans
7 shall incorporate and continue all streets stubbed to
8 or shown as stubbed to the boundary of the
9 development by previously approved development
10 plans/plats or existing development.

11 (b) **Provision for Future Connections to Adjoining**
12 **Land.** All developable land shall provide for future
13 public street connections to adjacent developable
14 parcels by providing a local street connection at least
15 every six hundred sixty (660) feet along each
16 subdivision plat boundary that abuts potentially
17 developable or re-developable land, except that such
18 street connections are not required on steep slopes,
19 MDOD sensitivity areas, or FOD pursuant to
20 Sections 5-1508, 4-1600, and 4-1500.

21 (c) **Block Form and Size.** To the maximum extent
22 feasible, blocks within developments shall maintain
23 a rectilinear pattern except where deviation is
24 necessitated by topographic or environmental
25 considerations. Blocks shall measure not less than
26 three hundred (300) nor more than six hundred sixty
27 (660) feet along each side, as measured from the edge
28 of the right-of-way, except where deviation is
29 necessitated by topographic or environmental
30 considerations, or where deviation is required to
31 comply with regulations concerning steep slopes,
32 MDOD sensitivity areas, or FOD pursuant to
33 Sections 5-1508, 4-1600 and 4-1500.

34 (d) **Avoidance of Certain Street Types.** Cul-de-sacs
35 and “P-loop” streets shall be avoided except where
36 necessitated by topographic or environmental
37 considerations.

38 (e) **Provision of “T” Intersections.** “T” intersections
39 are encouraged in locations where views of
40 important civic, public or open space areas can be
41 highlighted.

1 (2) **Variation of Lot Sizes.**

2 (a) **General Rule.** In all new residential subdivisions
3 containing ten (10) or more lots, a mixture of lot sizes
4 and dimensions shall be provided in order to allow
5 for a variety of housing opportunities and avoid
6 monotonous streetscapes. For example, larger and
7 wider lots are encouraged on corners. Smaller lots
8 are encouraged adjacent to parks and open spaces.
9 No more than sixty percent (60%) of all lots shall be
10 similar in total lot area. For purposes of this
11 subsection, "similar" lot areas shall be defined as
12 within 500 square feet of each other.

13 (b) **Exception.** Up to seventy percent (70%) of the lots
14 within the subject subdivision may be similar if the
15 Zoning Administrator, pursuant to Section 6-401,
16 makes a finding that, notwithstanding deviation from
17 the sixty percent (60%) standard stated above, lot
18 sizes and dimensions are sufficiently varied, for
19 different housing types, to avoid monotonous
20 streetscapes.

21 (c) **Dispersion of Lot Sizes.** Similar lot sizes shall be
22 distributed throughout a subdivision rather than
23 consolidated in one area, unless the Zoning
24 Administrator, pursuant to Section 6-401, makes a
25 finding that the intent of this district and of the
26 Zoning Ordinance will be better served by a design
27 that tends to consolidate lots of similar sizes.

28 (3) **Sidewalks.**

29 (a) **Provision of Sidewalks and/or Trails.** Sidewalks
30 and/or trails shall be provided, at a minimum, along
31 one side of all streets to provide pedestrian access to
32 the town or neighborhood center, public buildings,
33 schools, parks, and other destinations, or greater if
34 required by the Facilities Standards Manual.

35 (b) **Sidewalk and/or trail Connections.** Connections to
36 existing or planned sidewalks and/or trails shall be
37 made at the property boundaries of the project by
38 incorporating and continuing all sidewalks and/or
39 trails stubbed to or shown as stubbed to the boundary
40 of the development by previously approved
41 development plans/plats or existing development.

1 All development plans shall provide for future
2 sidewalk and/or trails connections to adjacent
3 developable parcels at planned or current local street
4 connections along each subdivision plat boundary.

5 (4) **Civic and Open Space.**

6 (a) **Variety of Spaces to Be Provided.** A variety of
7 greens, parks or natural open spaces shall be located
8 throughout the development, where appropriate, to
9 provide community identity.

10 (b) **Access to Civic Spaces.** Direct and convenient
11 pedestrian and bicycle access shall be provided
12 adjacent residential land uses and to the civic and
13 open space.

14 (c) **Configuration of Park Access.** Land dedicated for
15 parks shall be bordered on at least one side by public
16 streets, preferably local or collector streets.

17 (5) **Other Design Requirements.**

18 (a) **Street Trees.** Street trees planted pursuant to
19 Section 5-1300 shall be planted at a density of no less
20 than one canopy shade tree per twenty-five (25) feet
21 on average, and shall be placed in arrangements
22 consistent with the existing landscape of the vicinity.

23 (b) **Garages.** Garages shall be set back at least four (4)
24 feet behind the plane of the front door of the principal
25 building. Garages shall have vehicular access only
26 from the side or rear of the lot.

27 (c) **On-Street Parking.** Parallel parking may be
28 provided on streets in front of residential lots, except
29 for lots fronting on collector or arterial roads.

30 (E) **Compatibility Standards.**

31 (1) A minimum buffer width of twenty-five (25) feet with a
32 Buffer Yard Type ~~2-B~~ buffer yard shall be provided between
33 existing agricultural uses and residential development sites.

34 (2) On non-residential development sites:

35 (a) Areas for loading, delivery, and waste collection
36 receptacles shall be sited so as to reduce the impact

on surrounding properties to the maximum extent feasible, with highest priority given to reducing the impact on residential properties.

- (b) Outdoor lighting shall be directed towards the interior of the development site and shall be shielded to prevent all direct illumination of other properties.

Section 2-1300 JLMA-20 (Joint Land Management Area – 20)

2-1304 Lot and Building Requirements. Table 2-1304 identifies the lot and building requirements that apply to all development in the JLMA-20 district.

TABLE 2-1304
JLMA-20 LOT AND BUILDING REQUIREMENTS

Minimum Lot Size	20 acres
Minimum Lot Width	200 feet on paved roads; 50 feet on unpaved roads
Section 1.01 Minimum Yards	Except where a greater setback is required by Section 5-9005-1403(B) , no building shall be located within 25 feet of any property line or 35 feet from any other road right-of-way, private access easement, and/or prescriptive easement.
Maximum Lot Coverage	25%, but only 10% may be used for residential structures excluding agricultural, horticultural, and animal husbandry structures not open to the public.
Maximum Building Height	40 feet. No restriction for buildings used exclusively for agriculture, horticulture and animal husbandry, or for General Government Use.
Lot Access	Access to individual lot provided by privately owned and maintained travelway which shall either be: <ul style="list-style-type: none">• A private access easement that complies with the requirements of Chapter 4:Transportation of the Facilities Standards Manual; or• A private lane that:<ul style="list-style-type: none">■ Is within a 24' private easement;■ Is at least 12' in width;■ If paved, is 2" over a 4" base;■ If gravel is 6"; and■ Has a minimum grade of 10% with a Minimum 30' centerline curve radius.

	<ul style="list-style-type: none"> Private access easement or private lane may serve as frontage in-lieu of public road frontage up to 25 lots. <p>Plat of division shall contain note and provide for maintenance of private access easement or private lane.</p>
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Section 2-1400 TR-10 (Transitional Residential - 10)

2-1403 Development Standards.

- (A) **General.** All development in the TR-10 district, unless exempted pursuant to Section 2-1403(B) shall be developed consistent with Section 5-701 (TR Districts Lot Standards) and Section ~~5-9005-1403(B)~~.
- (B) **Exemptions.** The development of a lot existing on January 7, 2003, is exempted from the standards and requirements of Section 5-701 (TR Districts Lot Standards). The development of such lot shall be subject to the development standards of Table 2-1403(B).

TABLE 2-1403(B): TR-10 BUILDING REQUIREMENTS FOR EXISTING LOTS (Lots Existing Prior to January 7, 2003)	
Minimum Required Yards	Except where a greater setback is required by Section 5-9005-1403(B) , no building shall be located within 25 feet of any property line or 35 feet from any other road right-of-way, private access easement, and any prescriptive easement.
Maximum Floor Area Ratio	0.05
Maximum Building Height	40 feet. No restriction for buildings used exclusively for agriculture, horticulture and animal husbandry.

Section 2-1500 TR-3 (Transitional Residential-3)

2-1503 Development Standards.

- (A) **General.** All development in the TR-3 districts, unless exempted pursuant to Section 2-1503(B), shall be developed consistent with Section 5-701 (TR Districts Lot Standards) and Section ~~5-9005-1403(B)~~.
- (B) **Exemptions.** The development of a lot existing on January 7, 2003, is exempted from the standards and requirements of Section 5-701

(TR Districts Lot Standards). The development of such lot shall be subject to the development standards of Table 2-1503(B).

TABLE 2-1503(B): TR-3 BUILDING REQUIREMENTS FOR EXISTING LOTS (Lots Existing Prior to January 7, 2003)	
Minimum Required Yards	Except where a greater setback is required by Section 5-9005-1403(B) , no building shall be located within 25 feet of any property line or 35 feet from any other road right-of-way, private access easement, and any prescriptive easement.
Maximum Floor Area Ratio	0.05
Maximum Building Height	40 feet. No restriction for buildings used exclusively for agriculture, horticulture and animal husbandry.

Section 2-1600 TR-2 (Transitional Residential - 2)

2-1603 Development Standards.

- (A) **General.** All development in the TR-2 district, unless exempted pursuant to Section 2-1603(B) shall be developed consistent with Section 5-701 (TR Districts Lot Standards) and Section ~~5-9005-1403(B)~~.
- (B) **Exemptions.** The development of a lot existing on the date of adoption is exempted from the standards and requirements of Section 5-701 (TR Districts Lot Standards). The development of such lot shall be subject to the development standards of Table 2-1603(B).

TABLE 2-1603(B): TR-2 BUILDING REQUIREMENTS FOR EXISTING LOTS (Lots Existing Prior to January 7, 2003)	
Minimum Required Yards	Except where a greater setback is required by Section 5-9005-1403(B) , no building shall be located within 25 feet of any property line or 35 feet from any other road right-of-way, private access easement, and any prescriptive easement.
Maximum Floor Area Ratio	0.05
Maximum Building Height	40 feet. No restriction for buildings used exclusively for agriculture, horticulture and animal husbandry.

Section 2-1700 TR-1 (Transitional Residential - 1)

2-1703 Development Standards.

- (A) **General.** All development in the TR-1 districts, unless exempted pursuant to Section 2-1703(B) shall be developed consistent with Section 5-701 (TR Districts Lot Standards) and Section ~~5-9005-~~1403(B).
- (B) **Exemptions.** The development of a lot existing on January 7, 2003 is exempted from the standards and requirements of Section 5-701 (TR Districts Lot Standards). The development of such lot shall be subject to the development standards of Table 2-1703(B).

**TABLE 2-1703(B):
TR-1 BUILDING REQUIREMENTS FOR EXISTING LOTS
(Lots Existing Prior to January 7, 2003)**

Minimum Required Yards	Except where a greater setback is required by Section 5-9005- <u>1403(B)</u> , no building shall be located within 25 feet of any property line or 35 feet from any other road right-of-way, private access easement, and any prescriptive easement.
Maximum Floor Area Ratio	0.05
Maximum Building Height	40 feet. No restriction for buildings used exclusively for agriculture, horticulture and animal husbandry.

**ARTICLE 3
SUBURBAN DISTRICT REGULATIONS**

Section 3-100

R-1 Single Family Residential.

3-101

Lot Requirements for Cluster Developments reducing lot size up to 20%.

- (A) **Size.** 32,000 square feet minimum.
- (B) **Width.** 140 feet minimum.
- (C) **Yards.** Each lot shall provide the following yards:
 - (1) **Front.** 30 feet minimum.
 - (2) **Side.** Minimum of twelve (12) feet on one side and nine (9) feet on the other side.
 - (3) **Rear.** 30 feet minimum.
- (D) **Length/Width Ratio:** 5:1 maximum.
- (E) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 40,000 square feet is maintained, calculated based on the overall parcel. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

~~(F) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 40,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-102

Lot Requirements for Cluster Development Reducing Lot Sizes 20% to 50% Pursuant to Section 6-1400.

- (A) **Size.** 20,000 square feet minimum.
- (B) **Width.** 100 feet minimum.
- (C) **Yards.** Each lot shall provide the following yards:
 - (1) **Front.** 25 feet minimum.

(2) **Side.** Minimum of twelve (12) feet on one side and nine (9) feet on other side.

(3) **Rear.** 25 feet minimum.

(D) **Length/Width Ratio.** 5:1 maximum.

(E) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 40,000 square feet is maintained, calculated based on the overall. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

~~(F) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 40,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-107

Development Setback and Access From Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 3-200

R-2 Single Family Residential.

3-205

Lot Requirements for Traditional Design Option.

(A) **Size.** 10,000 square feet minimum.

(B) **Width.** 75 feet minimum.

(C) **Yards.** Each lot shall provide the following yards:

(1) **Front.** 15 feet minimum.

(2) **Side.** 9 feet minimum.

(3) **Rear.** 25 feet minimum.

(D) **Length/Width Ratio.** 5:1 maximum.

(E) **Lot Design Requirements.**

(1) Street trees planted pursuant to Section 5-1300 shall be regularly spaced.

(2) Garages shall be set back at least 20 feet behind the front line of buildings.

(F) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 20,000 square feet is maintained, calculated based on the overall. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

(G) ~~**Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a traditional development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 20,000 square feet or greater. Such buffer area may be included in open space calculations.~~ **[RESERVED]**

(H) **Other Requirements.**

(1) Blocks shall generally be in a grid pattern with interconnecting streets and alleys.

(2) Parallel parking may be provided on streets in front of residential lots, except for lots fronting on collector or arterial roads.

3-206 Lot Requirements for Cluster Development reducing lot sizes up to 20%.

(A) **Size.** 16,000 square feet minimum.

(B) **Width.** 80 feet minimum.

(C) **Yards.** Each lot shall provide the following yards:

(1) **Front.** 25 feet minimum.

(2) **Side.** 9 feet minimum.

(3) **Rear.** 25 feet minimum.

(D) **Length/Width Ratio:** 5:1 maximum.

(E) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 20,000

square feet is maintained, calculated based on the overall parcel. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

- (F) ~~Minimum Buffer. A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 20,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-207 Lot Requirements for Cluster Development Reducing Lot Sizes From 20% to 50% Pursuant to Section 6-1400.

- (A) **Size.** 10,000 square feet minimum.
- (B) **Width.** 80 feet minimum.
- (C) **Yards.** Each lot shall provide the following yards:
- (1) **Front.** 25 feet minimum.
 - (2) **Side.** 9 feet minimum.
 - (3) **Rear.** 25 feet minimum.
- (D) **Length/Width Ratio:** 5:1 maximum.
- (E) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 20,000 square feet is maintained, calculated based on the overall. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

- (F) ~~Minimum Buffer. A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 20,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-212 Development Setback and Access From Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 3-300

R-3 Single Family Residential.

3-305

Lot Requirements for Traditional Design Option.

- (A) **Size.** 8,000 square feet minimum.
- (B) **Width.** 50 feet minimum.
- (C) **Yards.** Each lot shall provide the following yards:
 - (1) **Front.** 15 feet minimum.
 - (2) **Side.** 9 feet minimum.
 - (3) **Rear.** 25 feet minimum.
- (D) **Length/Width Ratio:** 5:1 maximum.
- (E) **Lot Design Requirements.**
 - (1) Street trees planted pursuant to Section 5-1300 shall be regularly spaced.
 - (2) Garages shall be set back at least twenty (20) feet behind the front line of buildings.
- (F) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 15,000 square feet is maintained, calculated based on the overall parcel size. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.
- (G) ~~**Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a traditional development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 15,000 square feet or greater. Such buffer area may be included in open space calculations.~~ **[RESERVED]**
- (H) **Other Requirements.**
 - (1) Blocks shall generally be in a grid pattern, with interconnecting streets and alleys.
 - (2) Parallel parking may be provided on streets in front of residential lots, except for lots fronting on collector or arterial roads.

3-306 Lot Requirements for Cluster Development Reducing Lot Sizes Up to 20%.

- (A) **Size.** 12,000 square feet minimum.
- (B) **Width.** 75 feet minimum.
- (C) **Yards.** Each lot shall provide the following yards:
 - (1) **Front.** 25 feet minimum.
 - (2) **Side.** 9 feet minimum.
 - (3) **Rear.** 25 feet minimum.
- (D) **Length/Width Ratio:** 5:1 maximum.
- (E) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 15,000 square feet is maintained, calculated based on the overall parcel size. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

~~(F) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 15,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-307 Lot Requirements for Cluster Development Reducing Lot Sizes From 20% To 50% Pursuant to Section 6-1400.

- (A) **Size.** 8,000 square feet minimum.
- (B) **Width.** 60 feet minimum.
- (C) **Yards.** Each lot shall provide the following yards:
 - (1) **Front.** 25 feet minimum.
 - (2) **Side.** 9 feet minimum.
 - (3) **Rear.** 25 feet minimum.
- (D) **Length/Width Ratio.** 5:1 maximum.

(E) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 15,000 square feet is maintained, calculated based on the overall parcel size. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

~~(F) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 15,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-313 Development Setback And Access From Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 3-400 R-4 Single Family Residential.

3-405 Lot Requirements for Traditional Design Option.

(A) **Size.** 6,000 square feet minimum.

(B) **Width.** 50 feet minimum.

(C) **Yards.** Each lot shall provide the following yards:

(1) **Front.** 15 feet minimum.

(2) **Side.** 9 feet minimum.

(3) **Rear.** 25 feet minimum.

(D) **Length/Width Ratio:** 5:1 maximum.

(E) **Lot Design Requirements.**

(1) Street trees planted pursuant to Section 5-1300 shall be regularly spaced.

(2) Garages shall be setback at least 20 feet behind the front line of buildings.

(F) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 10,000

square feet is maintained, calculated based on the overall parcel size. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

(G) ~~**Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a traditional development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 10,000 square feet or greater. Such buffer area may be included in open space calculations.~~ **[RESERVED]**

(H) **Other Requirements.**

- (1) Blocks shall generally be in a grid pattern, with interconnecting streets and alleys.
- (2) Parallel parking may be provided on streets in front of residential lots, except for lots fronting on collector or arterial roads.

3-406 Lot Requirements for Cluster Development Reducing Lot Sizes Up to 20%.

(A) **Size.** 8,000 square feet minimum.

(B) **Width.** 75 feet minimum.

(C) **Yards.** Each lot shall provide the following yards.

(1) **Front.** 25 feet minimum.

(2) **Side.** 9 feet minimum.

(3) **Rear.** 25 feet minimum.

(D) **Length/Width Ratio:** 5:1 maximum.

(E) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 10,000 square feet is maintained, calculated based on the overall parcel size. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

~~(F) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-~~

~~1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 10,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-407 Lot Requirements For Cluster Development Reducing Lot Sizes From 20% to 50% Pursuant to Section 6-1400.

- (A) **Size.** 6,000 square feet minimum.
- (B) **Width.** 50 feet minimum.
- (C) **Yards.** Each lot shall provide the following yards.
 - (1) **Front.** 25 feet minimum.
 - (2) **Side.** 9 feet minimum.
 - (3) **Rear.** 25 feet minimum.
- (D) **Length/Width Ratio:** 5:1 maximum.
- (E) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 10,000 square feet is maintained, calculated based on the overall parcel size. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.

~~(F) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a cluster development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 10,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-412 Development Setback and Access from Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 3-500 R-8 Single Family Residential.

3-507 Lot Requirements for Traditional Design Option for Single Family Detached.

- (A) **Size.** 5,000 sq. ft. minimum, exclusive of major floodplain.
- (B) **Width.** 50 feet minimum.
- (C) **Yards.** Each lot shall provide the following yards.
- (1) **Front.** 15 feet minimum.
 - (2) **Side.** 9 feet minimum.
 - (3) **Rear.** 25 feet minimum.
- (D) **Length/Width Ratio:** 5:1 maximum.
- (E) **Lot Design Requirements.**
- (1) Street trees planted pursuant to Section 5-1300 shall be regularly spaced.
 - (2) Garages shall be setback at least 20 feet behind the front line of buildings.
- (F) **Minimum Open Space Area.** Open space shall be provided in a sufficient amount such that a gross density of one lot per 6,000 square feet is maintained, calculated based on the overall parcel size. Open space shall be preserved by means of a permanent open space easement acceptable to the Board of Supervisors.
- (G) ~~**Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a traditional development adjoins an existing or planned residential district, land bay, or development which has a minimum allowable lot size of 6,000 square feet or greater. Such buffer area may be included in open space calculations.~~ **[RESERVED]**
- (H) **Other Requirements.**
- (1) Blocks shall generally be in a grid pattern, with interconnecting streets or alleys.
 - (2) Parallel parking may be provided on streets in front of residential lots, except for lots fronting on collector or arterial roads.

3-509 Additional Development Standards.

- (A) **Active Recreation Space.** A minimum of 5,000 square feet of active recreation space shall be provided for each development of

ten (10) units. Thereafter, an additional 100 square feet of such space shall be provided for each single family detached, manufactured housing or duplex unit and 200 square feet for each attached dwelling unit, triplex unit, quadruplex unit, townhouse, and multi-family unit in excess of 10 units. All such active recreation space shall be accessible to all residents by means of internal pedestrian walkways.

(B) **Off Street Parking.** No off street parking for multifamily dwellings shall be permitted in areas between buildings and streets, unless such parking areas are sufficiently bermed and screened so that the parking areas are not visible from the street.

~~(C) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a development adjoins an existing or planned residential district, land bay or development which has a minimum allowable lot size of 6,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-511

Development Setback and Access from Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-900-5-1403(B) shall be observed.

Section 3-600

R-16 Townhouse/Multifamily Residential.

3-608

Additional Development Standards.

(A) **Active Recreation Space.** A minimum of 5,000 square feet of active recreation space shall be provided for each development of ten (10) units. Thereafter, an additional 200 square feet minimum shall be provided for each manufactured housing, attached dwelling unit, triplex unit, quadruplex unit, townhouse and multi-family unit in excess of 10 units. All such active recreation space shall be accessible to all residents by means of internal pedestrian walkways.

(B) **Off Street Parking.** No off street parking for multifamily dwellings shall be permitted in areas between buildings and streets, unless such parking areas are sufficiently bermed and screened so that the parking areas are not visible from the street.

~~(C) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a development adjoins an existing or planned residential district, land bay or development which has a~~

~~minimum allowable lot size of 8,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-610 Development Setback and Access From Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 3-700 R-24 Multifamily Residential.

3-708 Additional Development Standards.

(A) **Active Recreation Space.** A minimum of 5,000 square feet of active recreation space shall be provided for each development of ten (10) units. Thereafter, an additional 200 square feet minimum shall be provided for each multi-family unit in excess of ten (10) units. All such active recreation space shall be accessible to all residents by means of internal pedestrian walkways.

(B) **Off Street Parking.** No off-street parking for multifamily dwellings shall be permitted in areas between buildings and streets, unless such parking areas are sufficiently bermed and screened so that the parking areas are not visible from the street.

~~(C) **Minimum Buffer.** A permanent common open space buffer of fifty (50) feet in depth with a Category 2 Buffer Yard (Section 5-1414(B)) shall be provided where a development adjoins an existing or planned residential district, land bay or development which has a minimum allowable lot size of 8,000 square feet or greater. Such buffer area may be included in open space calculations.~~

3-710 Development Setback and Access from Major Roads. In designing residential development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 3-800 GB General Business.

3-805 Lot Requirements.

(A) **Size.** 20,000 square feet minimum, exclusive of major floodplain.

(B) **Width.** 100 feet minimum.

(C) **Yards.** Each lot shall provide the following yards:

- (1) **Front.** 50 feet minimum.
- (2) **Side.** 20 feet minimum for interior side yard; 100 feet minimum side yard abutting an existing or planned residential use.
- (3) **Rear.** 50 feet minimum; 100 feet abutting an existing or planned residential use.
- (4) **Development Setback and Access From Major Roads.** In designing commercial development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section ~~5-9005-1403(B)~~ shall be observed.

Section 3-900

CLI – Commercial Light Industrial.

3-905

Lot Requirements.

- (A) **Size.** One (1) acre minimum. Any lot less than two (2) acres shall have no direct access to Route 50, regardless of whether Section 3-907(F) is met.
- (B) **Width.** 200 feet minimum.
- (C) **Depth.** 200 feet minimum.
- (D) **Yards.**
 - (1) **Adjacent to Roads.** Except where a greater setback is required by Section ~~5-9005-1403(B)~~, thirty five (35) feet for building; twenty five (25) feet for parking.

3-907

Performance Criteria. The purpose of the following sections is to achieve a design whereby buildings are located, oriented and designed to respect the natural landscape, principles of energy conservation, relationships to surrounding properties and buildings, views from major arterials, site access and circulation needs, and the desired overall character of the district as a principal gateway into Loudoun County.

- (A) **Transportation Design.** Transportation elements shall be designed to encourage smooth traffic flow with controlled turning movements and minimum hazards to vehicular or pedestrian traffic at intersections with traffic controls such as traffic lights, stop signs or traffic calming features. Left-turn storage and right turn lanes and/or traffic dividers shall be required where existing or anticipated

heavy flows indicate need. In general, minor streets shall not be connected with streets outside the district in such a way as to encourage the use of such minor streets by substantial amounts of through traffic. To the maximum extent feasible, land development applications shall identify opportunities and methods for shared access and inter-parcel linkages.

(B) ~~**Buffering and Screening.** Yards, berms, vegetative screening, fences, or walls shall be provided to buffer residential districts and public streets from uses allowed in this district. In particular, outdoor storage, off-street parking areas and service areas for loading and unloading and for storage and collection of materials, supplies, and/or refuse and garbage, shall be screened so that such areas are not visible from any public right of way and/or residential use. Areas for the collection and storage of refuse and outdoor storage areas shall be fully enclosed by a structure composed of opaque materials. Such materials shall be compatible with those used in the exterior construction of the principal building.~~ **[RESERVED]**

(C) **Landscaped Open Space.** Minimum landscaped open space on any individual lot shall not be less than .10 times the buildable area of the lot.

(D) **Off-Street Parking and Loading Facilities.** All off-street parking spaces shall be within 500 feet by safe and convenient pedestrian routes of entrances to the buildings the parking spaces are intended to serve. No off-street parking or loading facilities shall be located in required landscaped yards. Off-street parking areas shall, to the maximum extent feasible, be located to the rear of the buildings.

(E) **Accessory Uses.** The following accessory uses shall be permitted in the district:

(1) Warehousing, indoor storage and distribution associated with a permitted use, but excluding the bulk storage of gasoline, petroleum products, natural gas and chemicals.

(2) Retail sales and personal service uses for permitted and/or special exception uses, not to exceed twenty-five percent (25%) of the floor space of the principal use of the building.

(3) Outdoor storage for permitted and/or special exception uses, not to exceed twenty-five percent (25%) of the gross lot area. No storage of any kind shall be permitted within any required yard.

(4) Restaurant and restaurant carry-out.

1 (F) **Access Limitation for Certain Uses.** For all uses listed in Section
2 3-903 unless otherwise stated, and all uses listed in Section 3-904,
3 such uses shall be permitted to have direct access to Route 50 (i)
4 only if the property owner can demonstrate that the subject property
5 does not have legal access to any public road other than Route 50
6 and does have legal access to the location of a planned Route 50
7 Parallel Road, as shown on the Countywide Transportation Plan
8 (CTP), as amended, and (ii) provided that such access, if permitted,
9 shall be limited to right-turn-in and right-turn-out entrances to and
10 from Route 50 only as approved by VDOT. Prior to approval of a
11 site plan for these uses, property owners must execute and record an
12 instrument, in form as reviewed and approved by the County, which
13 obligates such owner and successors to relinquish all such direct
14 access rights and close off all direct access to Route 50, at no cost to
15 the County or VDOT, or permit the County or VDOT to close off
16 all direct access without compensation, when alternative access to
17 the site becomes available via public or private street adjacent to the
18 owner's parcel or via other means, such as an available private
19 access easement that provides access to any such public or private
20 street.

21 (G) **Vehicular Access and Circulation.** Primary access and through
22 vehicular traffic impacting residential neighborhoods shall be
23 avoided. Minor streets shall not be connected with streets outside
24 the district in such a way as to encourage the use of such minor
25 streets by through and construction traffic.

26 (H) **Pedestrian Access and Circulation.** Pedestrian ways shall be
27 incorporated into each development so as to minimize conflicts with
28 vehicular traffic and to enable safe and convenient pedestrian access
29 to all buildings, parking and other facilities. Pedestrian ways shall
30 be extended to adjacent properties and shall connect uses within
31 individual developments. Land development applications shall
32 delineate the on-site pedestrian system and provide connections to
33 such systems in adjacent developments as well as public networks,
34 if applicable.

35 (I) **Utility Requirements.** All new utility distribution lines in the CLI
36 district shall be placed underground.

37 (J) **Prohibited Uses.** The following manufacturing uses shall not be
38 permitted:

39 (1) Distillation of coal, wood or bones.

40 (2) Fertilizer manufacture.

- (3) Fireworks.
- (4) Garbage incineration other than in municipal plants.
- (5) Mixing or batching plants for asphalt, concrete, brick or other paving and construction materials.
- (6) Petroleum, alcohol or asphalt refining, mixing or manufacture or storage.
- (7) Material recovery facility.
- (8) Any other use similar to the above excepted uses which is likely to be injurious or noxious by reason of odor, fumes, dust, smoke, vibration, noise or other causes.

(K) Uniform Landscaping for Front Yard Areas Adjacent to Route 50.

- (1) All parcels with frontage on Route 50 shall include landscaping in accordance with the ~~Type 5~~ Gateway Corridor Buffer Yard ~~in under~~ Section ~~5-1414(B)(1)~~ 5-1403(E).

- (L) Compatibility.** Architectural treatment of buildings, to include materials, color, and style, shall be compatible with buildings located within the same project. Compatibility may be achieved through the use of similar building massing, scale, materials, colors, and other architectural features. For the purposes of this section, a project is defined as a development that is planned, developed or managed as a unit.

- (M) Building Orientation.** The front facade and principal public entrance of all buildings shall be oriented toward an adjacent public street.

- (N) Screening of Mechanical Equipment.** Mechanical equipment, whether ground level or rooftop, shall be screened from view from adjacent properties and public rights-of-way in accordance with ~~Buffer Yard Type 3~~ Section 5-1406, ~~screened from view from adjacent properties and public rights-of-way~~ and designed to be perceived as an integral part of the principal building. For the purposes of this section, mechanical equipment shall include, but not be limited to, satellite dishes, exhaust fans, HVAC equipment, and roof access ladders. In cases where parapets are used to screen rooftop equipment, the maximum height of the parapet shall be equal to the top of the highest mechanical unit but shall not exceed the maximum height allowed in the district by more than 3 feet.

(O) **Auxiliary Uses.** The uses listed below shall be permitted on a stand-alone basis, if they are auxiliary to the district and are developed as part of a unified plan for development, in accordance with Section 3-906(D)(1)(b), that contains at least one of the following permitted uses: (i) Establishment for assembly, fabrication, processing, production and/or manufacturing of goods or products; (ii) Flex-industrial uses; (iii) Office, administrative, medical, business and professional; (iv) Research, experimental, testing or development activities; (v) Educational institution; (vi) Hotel/motel; (vii) Museum or Exhibition Facility.

(1) Restaurant, including fast food with drive-through.

(2) Convenience food store.

(3) Bank or financial institution, pursuant to Section 5-659.

(4) Personal service establishments.

(5) Banquet/Event Facility, 25,000 sq. ft. or less.

(P) **Continuing Care Facility.** Continuing Care Facilities shall be permitted in the CLI zoning district subject to the following additional provisions:

(1) **Size, Density and Location.** The maximum lot size shall not exceed twenty (20) acres. The maximum density shall not exceed 16 units per acre. The use shall only be located as follows:

(a) In areas served by public water and sanitary sewer.

(b) With access only from a collector road.

(c) Buildings and parking shall be setback a minimum of three hundred (300) feet from Route 50.

(2) **Required Uses.** All continuing care facilities located in the CLI zoning district shall provide the following, subject to the requirements and limitations of these regulations:

(a) A minimum of two (2) of the following types of care shall be provided:

(i) Congregate Living Facility, limited to a maximum of sixty-five percent (65%) of the total number of units provided.

(ii) Adult Assisted Living.

(iii) Nursing Home.

(b) Clubhouse or common areas, solely for the residents, employees and their guests, including but not limited to meeting rooms, auditorium, theater, business office, and recreational facilities and other uses related to adult age-restricted community living.

(c) Ancillary retail uses only for continuing care facilities, such as grocery/convenience food store, pharmacy, medical services, barber shop, beauty shop, personal care facilities, eating and drinking establishments, library, bank and financial institutions (without drive-through), business services, laundry, cleaners, or other similar retail uses. The floor area for retail and community service uses shall not exceed ten percent (10%) of the gross residential floor area of the buildings.

(d) Swimming pool.

(e) Health and fitness center.

(f) Bus shuttle service.

(g) A minimum of thirty-five percent (35%) of the total land area shall consist of parks and/or open space.

(3) **Yard Requirements.** Notwithstanding the requirements found in Section 3-905(D), the following yards shall be provided:

(a) **Adjacent to roads.** Except where a greater setback is required by Section ~~5-9005-1403(B)~~, thirty-five (35) feet for buildings and twenty-five (25) feet for parking. No parking, outdoor storage, areas for collection of refuse, or loading space shall be permitted in areas between buildings and streets where such uses are visible from any road.

(b) **Adjacent to Nonresidential Districts and Uses.** No building shall be permitted closer than fifty (50) feet to any nonresidential district, any existing or planned nonresidential district, or land bay or lot allowing nonresidential uses. No parking shall be permitted closer than twenty-five (25) feet to any such area. No

1 parking, outdoor storage, areas for collection of
2 refuse, or loading space shall be permitted in areas
3 between buildings and such nonresidential districts,
4 existing or planned nonresidential districts, or land
5 bays allowing nonresidential uses where such uses
6 are visible from said nonresidential areas.

7 (4) **Development Criteria.** The following recreational,
8 educational, and cultural facilities solely for the residents,
9 employees and their guests shall be located on site or
10 within ten (10) miles of the site. If facilities are not
11 provided on site, a guaranteed use of and vehicular or
12 other guaranteed means of transportation to such facilities
13 for the residents of the development shall be provided.

14 (a) Golf course (minimum 18 holes).

15 (b) Chapel.

16 (c) Medical care facility, outpatient only.

17 (d) Recreation space, passive.

18 (5) **Age of Residents.** Continuing care facilities in the CLI
19 zoning district shall be subject to a homeowner's
20 association, as evidenced by a Declaration of Covenants
21 reviewed and approved by the County that specifies the
22 age-restricted nature of the proposed use. A development
23 designated for an age-restricted development shall be in
24 accordance with Virginia Code, Section 36-96.7, as
25 amended, and shall include in the homeowner's association
26 Declaration of Covenants policies and procedures which:

27 (a) Ensure that at least eighty percent (80%) of the
28 units are occupied by at least one person 55 years
29 of age or older per unit; and

30 (b) Demonstrate intent by the owner or manager to
31 provide housing for persons 55 years of age or older.

32
33 **Section 3-1000 MR-HI Mineral Resources – Heavy Industry.**

34 **3-1005 Lot Requirements.**

35 **(A) Mineral Resource Extraction and Processing (MREP) uses:**

- (1) **Size.** 3 acres minimum, exclusive of major floodplain.
- (2) **Width.** 300 feet minimum fronting on Class I roads; 200 feet fronting on Class II roads or private access easements.
- (3) **Depth.** 500 feet minimum.
- (4) **Length/Width Ratio.** 3.5 times lot width maximum.
- (5) **Yards.** No structure or use shall be located within fifty (50) feet of any property line.
- (6) **Development Setback and Access From Major Roads.** In designing industrial development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

(B) Other uses:

- (1) **Size.** 1 acre minimum, exclusive of major floodplain.
- (2) **Width.** 100 feet minimum fronting on Class I or II roads or private access easements.
- (3) **Depth.** No minimum.
- (4) **Length/Width Ratio.** 3.5 times lot width maximum.
- (5) **Yards.**
 - (a) **Front Yard.** No structure or use shall be located within 30 feet of the front property line.
 - (b) **Side Yard.** No structure or use shall be located within 15 feet of the side yard. When an MR-HI lot is developed adjacent to a non-MR-HI lot, the minimum side yard will increase to 50 feet.
 - (c) **Rear Yard.** No structure or use shall be located within 25 feet of the rear yard. When an MR-HI lot is developed adjacent to a non-MR-HI lot, the minimum rear yard will increase to 50 feet.
- (6) **Development Setback and Access From Major Roads.** Pursuant to the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B).

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**ARTICLE 4
SPECIAL & OVERLAY DISTRICTS**

Section 4-100 Planned Development-Housing.

4-101 Convenience Establishments.

- (A) **Uses permitted.** For purposes of these regulations, convenience establishments are defined as small establishments designed and intended to serve the daily or frequent trade or service needs of the immediately surrounding population. Such establishments, as permitted in PD-H districts, include groceries, variety stores, pharmacies pursuant to Section 5-659, coin-operated laundry and dry cleaning agencies, tailoring and dressmaking shops, beauty shops, barber shops, professional offices, carry-out restaurants and similar small scale uses. Specifically excluded are automobile service stations, repair garages, drive-in eating and drinking establishments.
- (B) **Location grouping.** Convenience establishments shall be located only in portions of PD-H districts: (a) not served by similar facilities within walking distance; and (b) near dwelling unit densities of at least six (6) units per acre, as to provide substantial walk-in trade. Where more than one convenience establishment of this nature is proposed, they shall be grouped, arranged and designed for maximum pedestrian convenience. Vehicular access and parking areas shall be combined where such combination will result in improvement in public convenience and vehicular circulation.
- (C) **Control of potential adverse effects.** Convenience establishments shall not have substantial adverse effects on residential uses within the district or adjoining residential districts by reason of their location, design, construction, manner or timing of operation, signs, lighting, parking or access arrangements. Landscaped open space shall be utilized to protect the residential character of the PD-H and surrounding districts.
- (D) **Maximum size of establishments.** No individual convenience establishment established under the provisions of this Section shall have a gross floor area in excess of 5,000 square feet, and no combination of such establishments in any one location shall have a total gross floor area of more than 10,000 square feet.
- (E) **Lot Area, Width and Coverage.** No minimum lot area or width requirements are set for convenience establishments, but lot coverage by all buildings shall not exceed thirty percent (30%) of the net area of the lot or building site.

1 (F) **Yards: Building Spacing.** Yards shall have the same or greater
2 depth as required for adjoining uses. Where space is left between
3 buildings on the lot or building site, it shall be at least twenty five
4 (25) feet in width.

5 (G) **Open Space.** Non-vehicular open space in an amount equal to at
6 least fifteen percent (15%) of the net area of the site, exclusive of
7 adjoining streets, shall be provided. Such space shall be landscaped
8 or otherwise appropriately improved for general amenity to provide
9 convenient pedestrian circulation, play areas for children, passive
10 recreation areas and the like.

11 (H) **Off-street parking and multiple use of access.** Off-street parking
12 spaces shall be two-thirds of that required for the PD-CC
13 neighborhood center. Where appropriate to the general design of
14 the district and timing of operations of the uses involved,
15 accessways may be so located as to serve other uses in the district if
16 such multiple use will not lead to congestion or hazards to pedestrian
17 or vehicular traffic.

18 (I) **Access.** The lot access requirements of Section ~~5-9001-205(A)~~ shall
19 be observed.

20 (J) **Signs.** Sign limitations shall be as provided in Section 5-1200 of
21 this ordinance, with business signs limited as provided in Section 5-
22 1204(D).

23 **4-109 Site Planning - External Relationships.** Site planning within the PD-H
24 district shall provide protection of the development from potentially adverse
25 surrounding influences, and protection of surrounding areas from
26 potentially adverse influences within the development. In particular and
27 without limitation, the proposed development shall demonstrate the
28 following features:

29 (A) Principal vehicular access points shall be designed to encourage
30 smooth traffic flow with controlled turning movements and
31 minimum hazards to vehicular or pedestrian traffic. In general,
32 minor streets shall not be connected with streets outside the district
33 in such a way as to encourage the use of such minor streets by
34 substantial amounts of through traffic.

35 (B) **Protection of visibility - pedestrian/cyclist.** Where there is
36 pedestrian or bicycle access to a street, no impediment to visibility
37 more than 2-1/2 feet above the level of the center of the street shall
38 be allowed within the visibility triangle required in Section 5-300(B)
39 or VDOT standard, whichever is greater.

(C) ~~Uses adjacent to single-family, agricultural, or residential districts or land bays allowing residential uses. Where residential uses in a PD-H district adjoin a single-family residential, agricultural, or residential district or land bay allowing residential uses, or a commercially zoned development approved subject to proffers prior to adoption of this ordinance, the development shall provide for either:~~ **[RESERVED]**

~~(1) Single family dwellings on minimum lots of (20,000) square feet or greater, exclusive of major floodplain, along such perimeter; or,~~

~~(2) A permanent open space buffer along such perimeter at least fifty (50) feet in width, landscaped with a Type 2 Buffer Yard.~~

(D) Planned shopping centers and convenience establishments adjacent to single family or agricultural residential districts or land bays allowing residential uses shall provide a permanent open space buffer at least (75) feet in width with a ~~Type 3~~ Buffer Yard Type B. Other nonresidential uses in such perimeter areas shall provide the yards required by Section 4-305(B)(2) or Section 4-505(B)(2), ~~as applicable and at least fifty (50) feet of the required yards shall be devoted to a permanent open space buffer with a Type 3 Buffer Yard.~~

(E) **Height limitations at edges of PD-H districts.** Except along boundaries where adjoining districts permit greater heights within similar areas, height limitations shall be limited to an imaginary plane leaning inward from district boundaries at an angle representing an increase in height of one (1) foot for every one (1) foot of horizontal distance perpendicular to the district boundary. No portion of any building in such district shall project through said imaginary plane.

4-110 Site Planning - Internal Relationships. The PD-H district shall provide the following:

(A) **Maximum Height Restrictions.** Dwellings and other uses allowed in residential zoning districts: as provided in the applicable R District. Commercial, industrial and office buildings: as provided in the applicable PD-CC, PD-OP, and PD-IP Districts, per Section 4-200, 4-300, and 4-500.

(B) All arterial and collector streets serving a PD-H District, and all streets of any size serving residential (except townhouse and multifamily), commercial, office, institutional and industrial uses

1 within a PD-H district, shall be designed and constructed to VDOT
2 standards for inclusion in the state highway system. Roads serving
3 townhouse and multifamily uses only may be designed and
4 constructed to private streets standards set forth in the Facilities
5 Standards Manual, provided the following conditions are met:

6 (1) All residences served by a private road shall be subject to a
7 recorded covenant expressly requiring private maintenance
8 of such road in perpetuity and the establishment,
9 commencing with the initial record plat, of a reserve fund for
10 repairs to such road.

11 (2) The record plat and protective covenants for such
12 development shall expressly state that the County and
13 VDOT have no, and will have no, responsibility for the
14 maintenance, repair, or replacement of private roads.

15 (3) Sales brochures or other literature and documents provided
16 by the seller of lots served by such private roads shall include
17 information regarding responsibility for maintenance, repair,
18 replacement, and covenants pertaining to such lots including
19 a statement that the County has no, and will have no,
20 responsibility for the maintenance, repair, or replacement of
21 private roads.

22 (C) Streets, drives, parking and service areas shall provide immediate,
23 safe and convenient access and circulation for dwelling units and
24 project facilities and for service and emergency vehicles including
25 fire-fighting equipment, furniture moving vans, fuel trucks, garbage
26 collection, deliveries, and snow removal. Streets shall not be laid
27 out so as to encourage outside or through traffic to traverse the
28 development on minor streets.

29 (D) Vehicular access to public streets, from off-street parking and
30 service areas serving less than eighty (80) dwelling units, may be
31 directly to the street via a single point of access. Vehicular access,
32 from off street parking and service areas serving eighty (80) or more
33 units, shall require two (2) or more points of access. Determination
34 of number of the actual dwelling units served shall be based on
35 normal routing of traffic anticipated in the development.

36 (E) Vehicular access from off-street parking and service areas shall be
37 designed to minimize the number of curb cuts and to promote safe
38 traffic flow.

39 (F) **Ways for pedestrians and cyclists; use by emergency or service**
40 **vehicles.** Ways shall be provided to all dwelling units, project

facilities and principal off-site destinations. Accessways to be used by children as routes to school or other destinations shall be so located and safeguarded as to minimize contacts with automotive traffic. Street crossings shall be held to a minimum on such walkways. Pedestrian ways may be combined with other easements and used only by emergency or service vehicles.

(G) **Protection of visibility - cyclists and pedestrians.** Visibility clearance at intersections shall be as provided in Section 5-300.

(H) Recycling collection centers shall be designed and located in accordance with the provisions of Section 5-607 of this Ordinance and the requirements of the Facilities Standards Manual.

(I) ~~Uses adjacent to single-family residential, or agricultural and residential districts or land bays allowing residential uses. Where residential uses in a PD-H district adjoin a single-family residential, agricultural, residential district or land bay allowing residential uses, the development shall provide for either:~~ **[RESERVED]**

~~(1) Single family dwellings on minimum lots of (20,000) square feet or greater, exclusive of major floodplain, along such perimeter, or;~~

~~(2)(1) A permanent open space buffer along such perimeter at least fifty (50) feet in width, landscaped with a Type 2 Buffer Yard.~~

(J) Planned shopping centers and convenience establishments adjacent to single-family residential, agricultural-residential districts shall provide a permanent open space buffer at least seventy-five (75) feet in width with a **Buffer Yard Type B** ~~Type 3 Buffer Yard~~. Other nonresidential uses in such perimeter areas shall provide the yards required by Section 4-305(B)(2) or Section 4-505(B)(2), ~~as applicable and at least fifty (50) feet of the required yards shall be devoted to a permanent open space buffer with a Type 3 Buffer Yard.~~

Section 4-200

PD-CC Planned Development - Commercial Center.

4-206

Building Requirements.

(A) **Lot Coverage.** No maximum.

(B) **Floor Area Ratio.** .40 maximum with surface parking lots; .60 maximum if parking structures are provided; 2.0 maximum on individual lots within a commercial center, provided the commercial

center is developed in accordance with a proffered concept development plan which limits the maximum overall FAR of the center to no more than .40 FAR.

(C) **Building Height.** No building in any commercial center shall exceed forty-five (45) feet; except that in small regional and regional centers a building may be erected to a maximum of fifty (50) feet in a Small Regional Center and one hundred (100) feet in a Regional Center district if it is set back from public streets or from lot lines that do not constitute boundaries of districts with lower maximum height restrictions, in addition to each of the required minimum yard dimensions, a distance of not less than one (1) foot for each one (1) foot of height that it exceeds the forty-five (45) foot limit.

(D) **Vehicular Access.** Primary access shall be prohibited on residential neighborhood streets. This prohibition does not apply to collector roads through residential neighborhoods. Each commercial center shall provide a vehicular circulation plan that minimizes direct vehicular access to parking stalls from major cartways, and provides other on and off-site improvements to enhance pedestrian and vehicular circulation. Minor streets shall not be connected with streets outside the district in such a way as to encourage the use of such minor streets by through and construction traffic. In addition, each commercial center shall provide convenient and coordinated vehicular access to public roadways only as follows:

(1) **Neighborhood Centers.** Local access roads.

(2) **Community Centers.** Collector roads.

(3) **Small Regional Centers.** Major collector roads.

(4) **Regional Centers.** Controlled access onto arterial roads.

(E) **Development Setback and Access from Major Roads.** In designing a planned shopping center development, the lot access requirements of Section 1-205(A) and the building and parking setback requirements of Section 5-9005-1403(B) shall be observed.

Section 4-300 PD-OP Planned Development - Office Park.

4-305 Lot Requirements.

(A) **Size.** One (1) acre minimum, exclusive of major floodplain.

(B) **Yards.**

- (1) **Adjacent to roads.** Except where a greater setback is required by Section ~~5-9005-1403(B)~~, no building shall be permitted closer than thirty-five (35) feet to the right-of-way from any road and no parking shall be permitted closer than twenty-five (25) feet to the right-of-way from any road. No outdoor storage, areas for collection of refuse, or loading space shall be permitted in such setbacks.

4-307 Use Limitations.

- (A) **Accessory Uses.** The following accessory uses shall be permitted provided they are located in the same building as the permitted principal uses primarily served, and provided they occupy in the aggregate not more than twenty-five percent (25%) of the floor area of such building:

- (1) Central reproduction and mailing services, and the like.
- (2) Quick print shop.
- (3) Restaurant, including carry-out, but excluding drive-through.
- (4) Pharmacies, laboratories, testing, engineering, and research, and establishments for the production, fitting or sale of optical or prosthetic appliances.
- (5) Personal service establishment.
- (6) Convenience food store.
- (7) Retail sales establishment.

- (B) **Accessory Structures and Uses.** As an accessory use, parking garages or areas for commuter parking may be permitted, but spaces for this purpose shall be provided in addition to the required parking spaces provided for in Section 5-1100.

- (C) **Landscaped Open Space.** Landscaped open space on any individual lot shall not be less than .20 times the buildable area of the lot. Such open space shall be landscaped and maintained in accord with Section 5-1400.

- (D) **Utility Requirements.** All new utility distribution lines located on PD-OP zoned land shall be placed underground.

- (E) **Site Planning.** Within any PD-OP district, landscaping, buffering, and screening shall be used to screen outdoor storage, areas for

collection of refuse, loading areas and parking from streets, agricultural and residential uses.

(F) **Access from Major Roads.** Access from adjacent public roads shall comply with Section ~~5-9001-205(A)~~ of this Ordinance.

(1) Primary access shall be prohibited on residential neighborhood streets. This prohibition does not apply to collector roads through residential neighborhoods.

Section 4-400 PD-RDP Planned Development - Research and Development Park.

4-405 Lot Requirements.

(A) **Size.** Two (2) acres minimum, exclusive of major floodplain.

(B) **Yards.**

(1) **Adjacent to roads.** Except where a greater setback is required by Section ~~5-9005-1403(B)~~, no building shall be permitted closer than thirty-five (35) feet to any roads and no parking shall be permitted closer than twenty-five (25) feet to the right-of-way of any road. No outdoor storage, areas for collection of refuse, or loading space shall be permitted in such setbacks.

4-407 Use Limitations.

(A) **Landscaped Open Space.** Landscaped open space on any individual lot shall not be less than .20 times the buildable area of the lot.

(B) **Buffering/Screening.** Landscaping, buffering, and screening shall be used to screen outdoor storage, areas for collection of refuse, loading area and parking from streets and agricultural and residential uses.

(C) **Accessory Structures and Uses.** As an accessory use, parking garages or areas for commuters may be permitted, but spaces for this purpose shall be provided in addition to the required parking spaces provided for in Section 5-1100. Accessory structures and uses other than for commuter parking shall be permitted only where said uses and structures are customarily accessory and clearly incidental and subordinate to the permitted principal use and structures, not to exceed 20% of the total floor area of the building.

(D) **Loading Areas.** No loading area shall be permitted within the required yard of any building. All loading shall be placed at the rear

or side of the building. Loading areas shall be screened from view of adjoining land not in the PD-RDP district and from public streets.

(E) **Minimum Floor Space Mix.** At build-out, a minimum of twenty (20%) percent of total floor space in the park shall be committed to research and development uses or to Educational Institutions or schools, public or private.

(F) **Utility Requirements.** All new utility distribution lines located on PD-RDP zoned land shall be placed underground.

(G) **Access from Major Roads.** Access from adjacent public roads shall comply with Section ~~5-9001-205(A)~~ of this Ordinance.

(1) Primary access shall be prohibited on residential neighborhood streets. This prohibition does not apply to collector roads through residential neighborhoods.

Section 4-500

PD-IP Planned Development - Industrial Park.

4-503

Permitted Uses. The following uses shall be permitted in any PD-IP district, subject to the requirements and limitations of these regulations.

(A) Adult day care center.

(B) Agriculture, horticulture, forestry, or fishery.

(C) Commuter parking lot.

(D) Distribution facility.

(E) Facility for lessons in dance, gymnastics, judo and sports training.

(F) Flex industrial use, pursuant to Section 5-608.

(G) Office, administrative, business and professional, (i.e. office uses) provided:

(1) Office uses are an integral design element of a site plan for an industrial site or park containing not less than 40,000 square feet of gross floor area; and

(2) Office uses shall be located no further than 100 feet from the setback, as established by Section ~~5-9005-1403(B)~~, of an arterial or major collector road; and

4-505

Lot Requirements.

(A) **Size.** One (1) acre minimum, exclusive of major floodplain.

(B) **Yards.**

- (1) **Adjacent to roads.** Except where a greater setback is required by Section ~~5-9005-1403(B)~~, no building shall be permitted closer than thirty-five (35) feet to the right-of-way from any road and no parking shall be permitted closer than twenty-five (25) feet to the right-of-way from any road. No outdoor storage, areas for collection of refuse, or loading space shall be permitted in such setbacks.

4-507 Use Limitations.

(A) **Accessory Structures and Uses.** As an accessory use, parking garages or areas for commuters may be permitted, but spaces for this purpose shall be provided in addition to the required parking spaces provided in Section 5-1100.

(B) **Landscaped Open Space.** Landscaped open space on any individual lot shall not be less than .20 times the buildable area of the lot.

(C) **Screening and Buffering.** Landscaping, buffering, and screening shall be used to screen outdoor storage, areas for collection of refuse, loading area, and parking from streets and agricultural and residential uses.

(D) **Outdoor Storage, Accessory.**

- (1) No storage of any kind shall be permitted within any front yard, except for underground bulk storage of gasoline or petroleum products.

- (2) Underground bulk storage of gasoline or petroleum products shall not be permitted, except for automobile service stations or as incidental to manufacturing and research and development operations or the servicing of company owned or lease vehicles within enclosed areas defined in (3) below.

- (3) Outdoor storage of new and reusable materials, equipment, and vehicles shall be permitted within enclosed areas which are composed of mixed wood, masonry walls, plantings, or other suitable barriers approved by the Zoning Administrator. Such areas must be buffered and screened on the periphery of the storage area.

(4) Waste materials must be stored in a closed container. The burning of waste materials is prohibited.

(E) **Retail Sales as an accessory use.** Warehousing facilities may have retail sales as an accessory use in accordance with the following:

(1) Such warehousing facility stores goods for at least one retail establishment located in a zoning district where retail is a permitted principal use.

(2) At least seventy-five (75) percent of the gross floor area of the facility is devoted to warehousing facility use that is not a display area or retail sales area and is not accessible to the public.

(3) Such use shall be designed so that pedestrian and vehicular circulation are coordinated with that on-site and on adjacent properties and vehicular access to the site shall be provided via the internal circulation system of the industrial park.

(4) Such use shall be designed to provide safe and convenient access and to minimize any potential conflicts between industrial service and delivery vehicles, passenger vehicles and pedestrian traffic.

(5) Any improvements, such as but not limited to additional parking spaces, travel aisles, additional landscaping, and additional floor area required as the result of the introduction of retail uses to an area designed and developed for industrial uses shall be provided.

(6) All business, service, storage and display of goods shall be conducted within a completely enclosed building, and all refuse shall be in completely enclosed facilities.

(7) Notwithstanding the requirements of Section 5-1102 Parking, the retail use shall require one (1) parking space per 500 gross square feet.

(8) No additional signs are permitted for the retail use; signage for the warehousing facility shall be as provided for in Section 5-1204(D).

(9) Submission and approval of a site plan or amended site plan, as appropriate, prior to the establishment of retail sales is required to demonstrate compliance with the aforementioned Use Limitations.

(F) **Vehicular Access.** Principal vehicular access points shall be designed to encourage smooth traffic flow with controlled turning movements and minimum hazards to vehicular or pedestrian traffic. Minor streets shall not be connected with streets outside the district in such a way as to encourage the use of such minor streets by through traffic. Principal vehicular access routes for public schools shall be designed to avoid through traffic by vehicles serving adjacent industrial properties.

(G) **Development Setback and Access from Major Roads.** In designing an industrial park development, the following requirements shall be observed:

- (1) **Access from Major Roads.** Access from adjacent public roads shall comply with Section ~~5-900~~1-205(A) of this Ordinance. Notwithstanding the foregoing, schools shall be permitted emergency access to an arterial or major collector road.
- (2) Primary access shall be prohibited on residential neighborhood streets. This prohibition does not apply to collector roads through residential neighborhoods.

Section 4-600

PD-GI Planned Development - General Industry.

4-605

Lot Requirements.

(A) **Size.** One (1) acre minimum.

(B) **Yards.**

(1) **Adjacent to roads.** Except where a greater setback is required by Section ~~5-9005-1403(B)~~, no building shall be permitted closer than thirty-five (35) feet to any road and no parking shall be permitted closer than twenty-five (25) feet to the right-of-way from any road. No outdoor storage, areas for collection of refuse, or loading space shall be permitted in such setbacks.

(2) **Adjacent to Agricultural and Residential Districts and Land Bays Allowing Residential Uses.** No building, outdoor storage, areas for collection of refuse, or loading area shall be permitted closer than one hundred (100) feet to any agricultural district, any existing or zoned residential district, or land bay allowing residential uses. No parking shall be permitted closer than fifty (50) feet to any such

1 districts and uses. No parking, outdoor storage, areas for
2 collection of refuse, or loading space shall be permitted in
3 areas between buildings and such agricultural districts,
4 existing or planned residential districts, or land bays
5 allowing residential uses where vehicles in such uses are
6 visible from the said agricultural and residential areas.
7 When a PD-GI lot, parcel and/or landbay is developed
8 adjacent to an agricultural district, an existing or zoned
9 residential district, or land bay allowing residential uses,
10 which was zoned for agricultural or residential uses
11 subsequent to the adoption of this zoning ordinance and
12 subsequent to zoning of the subject property as PD-GI, the
13 setback required in (B)(3) below shall apply.

- 14 (3) **Adjacent to Other Nonresidential Districts.** Fifteen (15)
15 feet for buildings, parking, outdoor storage, and loading
16 areas, except where a greater area is required by Section 5-
17 1400. In the event that a single parcel is zoned for more than
18 one non-residential zoning district, the applicable yard
19 requirement shall be applied only at the property line and not
20 at the zoning district line.

21 (4) **Yards Between Buildings.**

- 22 (a) Where individual lots or building sites are provided,
23 the minimum required yards between buildings on
24 adjacent lots or building sites shall be thirty (30) feet,
25 unless a greater buffer yard is required by Section 5-
26 14005-1414(A), Buffer Yard and Screening Matrix.
27 Driveways, parking, and covered entrances may be
28 within such yards, however, no such facility may be
29 closer than five (5) feet to lot lines. Covered
30 walkways connecting buildings, or connecting
31 buildings with parking areas, shall be permitted in
32 such yards.

- 33 (b) Where there is more than one building on an indi-
34 vidual lot or building site, spacing between such
35 buildings shall be as required for fire protection, but
36 if space is left between buildings, it shall be at least
37 twenty-five (25) feet in minimum dimension.
38 Covered walkways connecting buildings, or
39 connecting buildings with parking areas are
40 permitted in such yards and may traverse such space.

1 (A) **Accessory Structures and Uses.** As an accessory use, parking
2 garages or areas for commuters may be permitted, but spaces for this
3 purpose shall be provided in addition to the required parking spaces
4 provided for in Section 5-1100. Accessory structures and uses other
5 than for commuter parking shall be permitted only where said uses
6 and structures are customarily accessory and clearly incidental and
7 subordinate to the permitted principal use and structures.

8 (B) **Landscaped Open Space.** Minimum landscaped open space on any
9 individual lot shall not be less than .20 times the buildable area of
10 the lot. Such landscaped open space shall be used to enhance the
11 appearance of the lot.

12 (C) **Screening and Buffering.** Landscaping, buffering, and screening
13 shall be used to screen outdoor storage, areas for collection of refuse,
14 loading areas and parking from streets and agricultural and
15 residential uses.

16 (D) **Outdoor Storage.**

17 (1) No storage of any kind shall be permitted within any front
18 yard, except for underground bulk storage of gasoline or
19 petroleum products.

20 (2) Underground bulk storage of gasoline or petroleum products
21 shall not be permitted, except for automobile service stations
22 or as incidental to manufacturing and research and
23 development operations or the servicing of company owned
24 or leased vehicles within enclosed areas defined in (3)
25 below.

26 (3) Outdoor storage of waste materials, equipment, supplies and
27 vehicles shall be buffered and screened on the periphery of
28 the storage area.

29 (4) Waste materials must be stored in a closed container. The
30 burning of waste materials is prohibited.

31 (5) Parking of two-axle vehicles such as automobiles, pick-up
32 trucks, and/or service vans utilized in connection with a
33 permitted use.

34 (E) **Vehicular Access.** Principal vehicular access points shall be
35 designed to encourage smooth traffic flow with controlled turning
36 movements and minimum hazards to vehicular or pedestrian traffic.
37 Minor streets shall not be connected with streets outside the district
38 in such a way as to encourage the use of such minor streets by
39 through traffic. Principal vehicular access routes for public schools

shall be designed to avoid through traffic by vehicles serving adjacent industrial properties.

(F) **Development Setback and Access from Major Roads.** In designing a general industrial development, the following requirements shall be observed:

(1) **Access from Major Roads.** Access from adjacent public roads shall comply with Section ~~5-9001-205(A)~~ of this Ordinance. Notwithstanding the foregoing, schools shall be permitted emergency access to an arterial or major collector road.

(2) Primary access shall be prohibited on residential neighborhood streets. This prohibition does not apply to collector roads through residential neighborhoods.

Section 4-700 PD-SA Planned Development - Special Activity.

4-705 Lot Requirements.

(A) **Size.** Ten (10) acres, exclusive of major floodplain.

(B) **Yards.**

(1) **Adjacent to roads.** Except where a greater setback is required by Section ~~5-9005-1403(B)~~, no building shall be permitted closer than thirty-five (35) feet to any road and no parking shall be permitted closer than twenty-five (25) feet to the right-of-way from any road. No outdoor storage, areas for collection of refuse, or loading space shall be permitted in such setbacks.

4-707 Use Limitations.

(A) **Accessory Structures and Uses.** As an accessory use, parking garages or areas for commuters may be permitted, but spaces for this purpose shall be provided in addition to the required parking spaces provided for in Section 5-1100. Accessory structures and uses other than for commuter parking shall be permitted only where said uses and structures are customarily accessory and clearly incidental and subordinate to the permitted principal use and structures.

(B) **Landscaped Open Space.** Landscaped open space on any individual lot shall not be less than .20 times the buildable area of the lot.

(C) **Screening and Buffering.** Landscaping, buffering, and screening shall be used to screen outdoor storage, areas for collection of refuse, loading areas and parking from streets and agricultural and residential uses.

(D) **Access from Major Roads.** In designing special activity development, the lot access requirements of Section ~~5-9001-205(A)~~ shall be observed.

Section 4-800 PD-TC Planned Development - Town Center.

4-805 Lot Requirements.

(A) **Town Center Core.**

(1) **Width.** No minimum; except the minimum lot width for single-family attached dwellings shall be 16 feet and the minimum lot width for single-family detached dwellings shall be 25 feet. The maximum lot width for single-family detached dwellings shall be 35 feet.

(2) **Depth.** No minimum; the maximum lot depth for single-family attached dwellings and single-family detached dwellings shall be 70 feet.

(3) **Yards,** within the Town Center Core.

(a) **Front.** No minimum; 25 feet maximum.

(b) **Side.** No minimum; except 5 feet minimum for a nonresidential use abutting a lot used or planned for single-family attached dwellings or single-family detached dwellings. The 5 feet minimum for non-residential uses shall not apply to buildings containing dwellings above nonresidential uses.

(c) **Rear.** No minimum; except 15 feet minimum for a rear yard of a nonresidential use abutting a lot used or planned for single-family attached dwellings or single-family detached dwellings. The 15 feet minimum for non-residential uses shall not apply to buildings containing dwellings above nonresidential uses.

(B) **Town Center Fringe.**

(1) **Width.** No minimum; except 25 feet minimum for single-family detached dwellings; 16 feet minimum for single-family attached dwellings.

(2) **Depth.** No minimum; the maximum lot depth for single-family attached dwellings and single-family detached dwellings shall be 80 feet.

(3) **Yards, within the Town Center Fringe.**

(a) **Front.** 5 feet minimum; 35 feet maximum.

(b) **Side.** No minimum; except 10 feet minimum for a nonresidential use abutting a lot used or planned for single-family attached dwellings or single-family detached dwellings. The 10 feet minimum for nonresidential uses shall not apply to buildings containing dwellings above nonresidential uses.

(c) **Rear.** No minimum; except 15 feet minimum for a nonresidential use abutting a lot used or planned for residential use. The 15 feet minimum for nonresidential uses shall not apply to buildings containing dwellings above nonresidential uses.

(C) **Other yard requirements.**

(1) **Adjacent to roads.** Yard requirements for buildings, to include structured parking, shall be in accordance with Section 4-805(A)(3) and 4-805(B)(3), except where a greater setback is required by Section ~~5-9005-1403(B)~~. No outdoor storage, areas for collection of refuse, or loading space shall be permitted in required front setbacks or in any front yard. No off-street surface parking shall be permitted closer than 10 feet to the right-of-way of any road, except where a greater setback is required by Section ~~5-9005-1403(B)~~.

(2) **Adjacent to Other Districts.** 20 feet for buildings and parking, and 35 feet for outdoor storage and loading areas, except where a greater area is required by Section 5-1400.

4-808 Land Use Arrangement.

(A) **Generally.**

(1) The Town Center district shall be planned around interconnecting streets and blocks, while maintaining respect for the natural landscape.

- (2) A Town Center Core shall have a town green of no less than 40,000 square feet. In a Town Center Core of 30 to 60 acres, the town green may be a minimum of 10,000 square feet, with other greens and/or outdoor plazas open to the public provided elsewhere in the district, provided the square footage of all such areas totals 40,000 square feet, inclusive of the town green. The required town green may be located within the Town Center Fringe and adjacent to the Town Center Core if a public plaza of no less than 10,000 square feet is located within the Town Center Core. An additional 10% of the land area of a district above the base 60 acres shall be devoted to usable open space in the form of greens, pocket parks and/or outdoor plazas open to the public, and at least 50% of this additional area shall be located in the Town Center Fringe.
- (3) A minimum of 25% and a maximum of 50% of the total gross floor area within the district shall be devoted to residential use.
- (4) A minimum of 3% of the total gross floor area within the district shall be for civic uses and/or other public uses, educational uses, cultural uses, or community rooms and buildings which are located and arranged to generate pedestrian activity.
- (5) On-street parking shall be provided generally throughout the district. Where streets and travelways within the district have been designed pursuant to County and Virginia Department of Transportation (VDOT) standards to accommodate on-street parking, such on-street parking may be used to meet the requirements of Section 5-1100 for nonresidential uses within the district.
- (6) The Buffer Yard and Screening requirements of Section ~~5-1414(A)~~ 5-1404 ~~and 5-1414(B)~~ shall not be applicable between uses on adjacent lots developed within the district.
- (7) Pedestrian linkages shall be established within and between blocks in the district and, to the extent possible, between the district and surrounding neighborhoods or activity centers.
- (8) Continuous sidewalks that provide a minimum walkway width of 5 feet shall be provided along both sides of all streets, excluding alleys. Such sidewalks shall be a minimum of 12 feet wide within the Town Center Core and 9 feet wide within the Town Center Fringe. Outdoor dining,

entertainment, planting, and furniture areas, and other pedestrian amenities, such as benches, transit shelters, kiosks, lamp posts, public art and the like, may be located within sidewalks, but shall not encroach within this minimum 5-foot walkway.

(9) Street trees shall be planted along both sides of all streets within the district at a minimum density of 1 canopy tree per 40 lineal feet or 1 understory tree per 15 lineal feet of street frontage, excluding alleys. Such trees shall have a minimum caliper of 2 inches at time of planting and a height at maturity of 15 feet or more.

(10) All off-street surface parking lots and parking areas shall be landscaped in accordance with Section ~~5-14135-1407~~. The location of off-street surface parking lots and parking areas shall not interfere with the reasonable continuity of building facades and pedestrian activity.

(11) All above-grade parking structures shall be designed in a manner that is compatible with nearby building architecture to minimize visual impact. Such above-grade parking structures shall feature ground floor treatments that add to the quality of its surroundings.

(12) All new utility distribution lines shall be placed underground.

(B) Town Center Core.

(1) The Town Center Core shall be composed of blocks, and the maximum perimeter of each block shall be 1,600 feet as measured at the edge of the right-of-way, excluding alleys. The perimeter of each block may be increased up to a maximum of 3,200 feet when a through-block pedestrian linkage is provided. Such pedestrian linkage shall be a minimum 20 feet wide and located within a public access easement granted to the County that extends the full length of the pedestrian linkage. Vehicular access shall be prohibited on any such pedestrian linkage except for emergency and/or maintenance purposes.

(2) At least 50% of the total of all block frontages within the Town Center Core, excluding frontages along alleys, shall be occupied by pedestrian oriented businesses on the ground floor. This requirement shall not apply to that portion of a block frontage that contains the following uses:

(a) Full-block town green; or

(b) Green and/or outdoor plaza open to the public with a minimum depth and width of 10 feet and minimum total area of 300 square feet, excluding adjoining sidewalks and through-block pedestrian linkages. Such green and/or outdoor plaza shall be located adjacent to or between building entrances, and shall be designed to create areas for pedestrian activity that are integrated with the surrounding uses on the block. Such green and/or outdoor plaza shall include landscaped and/or hardscaped areas and a mix of amenities, such as seating, public entertainment and active recreation, raised planters, fountains, public art, and/or such other features determined to be acceptable by the Zoning Administrator.

(3) The principal entrance of buildings shall be oriented towards the street or shall abut a green, outdoor plaza open to the public, or the town green.

(4) Off-street parking facilities shall have access from alleys or from streets at locations which accommodate safe pedestrian circulation.

(5) Outdoor storage, areas for collection of refuse, and loading areas shall be screened from streets, excluding alleys, and residential uses using opaque material.

(C) Town Center Fringe.

(1) The Town Center Fringe shall be composed of blocks, and the maximum perimeter of each block shall be 1,600 feet as measured at the edge of the right-of-way, excluding alleys. The perimeter of each block may be increased up to a maximum of 3,200 feet when a through-block pedestrian linkage is provided. Such pedestrian linkage shall be a minimum 20 feet wide and located within a public access easement granted to the County that extends the full length of the pedestrian linkage. Vehicular access shall be prohibited on any such pedestrian linkage except for emergency and/or maintenance purposes.

(2) Landscaping, buffering, and screening shall be used to screen outdoor storage, areas for collection of refuse, loading areas and parking from streets and residential uses. Outdoor storage of waste materials and any other type of equipment

and supplies shall be buffered and screened along the periphery of the storage area.

- (D) **Access from Major Roads.** The lot access requirements of Section ~~5-9001-205(A)~~ shall be observed. Primary access to the district shall be prohibited on residential neighborhood streets. This prohibition shall not apply to minor collector or major collector roads through residential neighborhoods.

Section 4-900 PD-CV Planned Development – Countryside Village.

4-911 Development Standards.

(A) Block Form and Size.

- (1) Blocks of a generally rectangular shape shall be the main organizing feature of the Village Neighborhood and Village Core. While topography, existing vegetation, stream channels and design intentions shall influence block shape and size, the length of such blocks in the Village Core and Village Neighborhood interior shall be no less than three hundred (300) feet nor more than six hundred (600) feet as measured along front lot lines, between intersections of streets. The block length along the periphery of the Village Neighborhood bordering the Conservancy Area shall be a maximum of one thousand (1000) feet to facilitate a visual transition towards the Conservancy Area.

- (2) The blocks of the Village Core shall be subdivided into generally rectangular shaped lots, having frontage on a street. The layout of such lots shall respond to environmental factors, the proposed use, and design intentions.

(B) Variation of Lot Sizes and Building Types.

- (1) Single-family detached development in the Village Neighborhood shall incorporate a variety of lot sizes, building types and/or forms (Typical drawing required).

- (2) **General Rule.** In all single-family detached subdivisions in the Village Neighborhood containing ten (10) or more lots, a mixture of lot sizes and dimensions shall be provided in order to allow a variety of housing opportunities and avoid monotonous streetscapes. For example, larger and wider lots are encouraged on corners. Smaller lots are encouraged

adjacent to parks and open spaces. No more than sixty percent (60%) of all lots shall be similar in total lot area. For purposes of this subsection, "similar" lot areas shall be defined as within five hundred (500) square feet of each other.

(3) **Exception.** Up to seventy percent (70%) of the lots within the subject subdivision may be similar if the Zoning Administrator, pursuant to Section 6-401, makes a finding that, notwithstanding deviation from the sixty percent (60%) standard stated above, lot sizes and dimensions are sufficiently varied for different building types and forms, to avoid monotonous streetscapes.

(4) **Dispersion of Lot Sizes.** Similar lot sizes shall be distributed throughout a subdivision rather than consolidated in one area, unless the Zoning Administrator, pursuant to Section 6-401, makes a finding that the intent of this district and of the Zoning Ordinance shall be better served by a design that tends to consolidate lots of similar sizes.

(C) **Village Core Features.** The Village Core shall incorporate on-site amenities or features listed below:

(1) A centrally located park, green, or square and at least one additional park, square, green or plaza, pursuant to Section 4-911(D), below.

(2) A water feature, such as a lake, pond, or fountain, which is easily accessible by pedestrians, and includes or integrates seating areas for pedestrians.

(3) A minimum of fifty (50) and a maximum of one hundred (100) square feet of retail and office space, as specified under the **Retail Sales and Service Use Category** and **Office Use Category**, is required per dwelling unit in the village. A grocery store, if provided, shall count towards the minimum amount of retail space required, but shall not be subject to the maximum limit of required retail space.

(4) A minimum of two civic uses, pursuant to the **Use list** in Section 4-908.

(5) Bicycle and Pedestrian accommodations as defined by the Loudoun County Bicycle and Pedestrian Mobility Master Plan.

(6) The phasing for construction of on-site amenities within the Village Core shall meet the following minimums:

(a) Zoning permits for at least twenty-five percent (25%) of the **Retail Sales and Service Use Category** and **Office Use Category** as specified in [3] above, must be obtained, and all other on-site amenities required in the Village Core [(1), (2), (4) and (5)] above, must be provided prior to the issuance of zoning permits for more than 75% of all residential units proposed in the Countryside Village.

(b) Zoning permits for at least fifty percent (50%) of the **Retail Sales and Service Use Category** and **Office Use Category** as specified in [3] above, must be obtained prior to the issuance of zoning permits for more than ninety percent (90%) of all residential units proposed in the Countryside Village.

(c) All zoning permits for the **Retail Sales and Service Use Category** and **Office Use Category** as specified in [3] above, must be obtained prior to the issuance of zoning permits for all residential units proposed in the Countryside Village.

(D) **Greens, Parks, Squares and Plazas.**

(1) **Area Requirement.**

(a) 3 acres minimum for a community park.

(b) 40,000 sq. ft. minimum for a neighborhood park.

(c) 10,000 sq. ft. minimum for other greens, parks and squares.

(d) 3000 sq. ft. minimum for a plaza.

(2) **Minimum Width.** The smallest dimension of the green, park, square or plaza shall be:

(a) 100 feet for a community or neighborhood park

(b) 60 feet for other greens, parks and squares.

(c) 50 feet for a plaza.

(3) No residential unit in the Village Neighborhood shall be located more than one thousand five hundred (1500) feet from a neighborhood park, community park, square or green. Such parks, squares and greens must be interspersed throughout the Village Neighborhood.

(4) Greens, parks, squares and plazas shall be located in visually prominent areas. In the Village Core, they shall be located in conjunction with civic uses or commercial uses.

(5) Athletic fields may be located along collector roads, other than those listed in Table 4, and may be accessed therefrom. Such fields shall be buffered from all roads and residential development with a permanent common open space buffer of fifty (50) feet in depth with required landscaping equivalent to that of a ~~Category 2 Buffer Yard (Section 5-1414(B))~~ Road Corridor Buffer Type 2 (Section 5-1403(D)) and a Buffer Yard Type B (Section 5-1404(D)).

(E) Frontage/Entrance Standards in the Village Core.

(1) The front of any commercial building shall be oriented towards the street or main village green or square. A minimum of sixty percent (60%) of any commercial building façade facing the front lot line shall abut the front lot line or sidewalk. The main entrance to such commercial building shall be from the front.

(2) Commercial buildings fronting on the same street and located on the same block shall be attached except where pedestrian ways are located between buildings.

(F) Buffering and Screening. The buffering and screening requirements of Section 5-~~1400-1403 of this Ordinance~~ shall not apply within the PD-CV district, except for the building and parking setbacks under Section 5-1403(B) and the road corridor buffer adjacent to any existing or planned arterial road under Section 5-1403(B). The buffer and screening requirements of Section 5-1404 shall not apply within the PD-CV district. -with the exception of parking lot landscaping in Section 5-1413, and, properties adjacent to any existing or planned arterial road that must meet the requirement in Section 5-1406(E)(2). ~~Notwithstanding this requirement, buffering~~ Buffering and screening standards may be required as part of the special exception process.

4-913

Access from Major Roads. Unless otherwise specified in this section, the ~~standards lot access requirements~~ of Section ~~5-9001-205(A)~~ shall apply.

1
2
3 **Section 4-1000 PD-TREC Planned Development - Transit Related Employment**
4 **Center.**

5 **4-1006 Lot Requirements.**

6 **(A) Yards.**

7 (1) **Front.** No minimum. In the Inner Core, buildings shall be
8 located a maximum of 10 feet from the front property line;
9 however, if the building fronts on a plaza or courtyard open
10 to the public, the maximum front yard shall be 25 feet per
11 Section 4-1012(A)(1).

12 (2) **Side.** No requirement.

13 (3) **Rear.** No requirement.

14 **(B) Other Yard Requirements.**

15 (1) Yards Adjacent to Roads. Notwithstanding Unless greater
16 setbacks are required under Section 5-900(A)(2) and (C), 5-
17 1403(B), no building shall be permitted closer than one
18 hundred (100) feet to the right-of-way of any arterial road
19 unless a component of an “urban deck,” as defined by Article
20 8. No parking shall be located within fifty (50) feet of the
21 right-of-way of any arterial road.

22 **4-1017 Street Trees.** Trees shall be planted on both sides of the street at a density
23 of one tree per twenty five (25) linear feet along all areas dedicated for use
24 for vehicular access. Such trees shall have a minimum caliper of 1 (one)
25 inch and a height at maturity of 15 (fifteen) feet or more. If in the opinion
26 of the Planning Commission at time of review of the Final Development
27 Plan, upon the advice of the County Urban Forester/Arborist, street trees
28 will not survive in a given location, substitute plantings or substitute
29 locations may be provided.
30

31 **4-1019 Development Setback and Access from Major Roads.** The lot access
32 requirements of Section 1-205(A) and the building and parking setback
33 requirements of Section 5-9005-1403(B) shall be observed.

34 (A) In the Inner Core, buildings shall be located at a maximum of 10 feet
35 from the front property line; however, if the building fronts on a
36 plaza or courtyard open to the public, the maximum setback shall be
37 25 feet per Section 4-1006 (A) (1).

1
2 **Section 4-1100 PD-TRC-Transit Related Center**

3 **4-1106 Lot Requirements.**

- 4 (A) **Size.** No minimum, except 2,400 square feet for single-family
5 detached and 1,600 square feet for single family attached dwellings.
- 6 (B) **Width.** No minimum.
- 7 (C) **Depth.** No minimum.
- 8 (D) **Yards.**
- 9 (1) Front. No minimum.
- 10 (2) Side. No requirement.
- 11 (3) Rear. No requirement.
- 12 (E) **Other yard requirements.**

13 (1) **Adjacent to roads.** Unless greater setbacks are required
14 under ~~Notwithstanding the provisions of~~ Section 5-900
15 ~~(A)(2) and (C), 5-1403(B),~~ no building shall be permitted
16 closer than one hundred (100) feet to the right-of-way of any
17 arterial road unless a component of an “urban deck” as
18 defined in Article 8. No parking shall be located within fifty
19 (50) feet of the right-of-way of any arterial road.

20 **4-1118 Landscaping, Buffering and Screening.**

21 (A) Landscaping, buffering, and screening shall be used to screen
22 outdoor storage, areas for collection of refuse, loading areas and
23 parking from streets and residential uses in accordance with Section
24 5-1406.

25 (A)(B) For individual lots within the PD-TRC district that are developed
26 in accordance with a proffered Concept Development Plan, the
27 buffer yard and screening requirements of Section 5-~~1400-1404~~
28 and the parking area landscaping and screening requirements of
29 Section 5-1407 shall not be applicable between uses on adjacent
30 lots developed within the center or between uses within the PD-
31 TRC district and differently zoned properties. Only the road
32 corridor buffer requirements of Section 5-1403 for specifically
33 listed roads, other arterial roads, and other major collector roads
34 shall apply.

1 **4-1119** **Street Trees.** Trees shall be planted on both sides of the street at a density
2 of no less than one tree per twenty-five (25) linear feet along all areas
3 dedicated for use for vehicular access. Such trees shall have a minimum
4 caliper of 1 (one) inch and a height at maturity of 15 (fifteen) feet or more.
5 If in the opinion of the Planning Commission at time of review of the
6 Final Development Plan, upon the advice of the County Urban
7 Forester/Arborist, that street trees will not survive in a given location,
8 substitute plantings or substitute locations may be provided.
9

10 **4-1120** **Development Setback and Access from Major Roads.** The lot access
11 requirements of Section 1-205(A) and the building and parking setback
12 requirements of Section ~~5-900~~5-1403(B) shall be observed.
13

14 **Section 4-1200** **PD-RV Planned Development - Rural Village.**

15 **4-1212** **Use Limitations.**

16 (A) No off-street parking shall be permitted in front yards within the
17 Village Center.

18 (B) Automobile service stations shall be limited to one (1) per block and
19 one (1) per street intersection.

20 (C) No workplace use shall be permitted which, because of its nature,
21 location, or manner of operation, is dangerous or noxious because
22 of odor, fumes, gas, smoke, emission of particulate matter or
23 effluent, or for other reasons.

24 (D) Outdoor Storage.

25 (1) No storage of any kind shall be permitted within any front
26 yard.

27 (2) Underground bulk storage of gasoline or petroleum products
28 shall not be permitted, except for automobile service stations
29 or as incidental to manufacturing and research and
30 development operations or the servicing of company owned
31 or leased vehicles within enclosed areas defined in (3)
32 below.

33 (3) Outdoor storage of materials, equipment, and vehicles shall
34 be ~~permitted within enclosed areas which are composed of~~
35 ~~mixed wood, masonry walls, plantings, or other suitable~~
36 ~~barriers approved by the Zoning Administrator, as required~~
37 ~~by Section 5-1400 of this Ordinance screened in accordance~~
38 with Section 5-1406.

- (4) Waste materials must be stored in a closed container. The burning of waste materials is prohibited.

4-1213 Lot and Building Requirements.

(A) Village Conservancy and Satellite Conservancy Subdistricts.

- (1) **Average Lot Size.** Fifty (50) acres minimum.
- (2) **Minimum Lot Size.** Ten (10) acres, exclusive of major floodplain and steep slopes.
- (3) **Minimum Lot Width.** 300 feet.
- (4) **Length/Width Ratio.** 9:1 maximum.
- (5) **Perimeter Yard.** Sixteen (16) feet minimum.
- (6) **Maximum Lot Coverage.** 8% for Single Family Residential and 25% for all other uses.
- (7) **Building Height.** Three (3) stories or forty (40) feet maximum whichever is less.

(B) Village Center - Residential Area.

(1) Single-Family Detached Lots.

- (a) **Lot Size.** 5,000 sq. ft. minimum, exclusive of major floodplain and steep slopes.
- (b) **Lot Width.** 60 feet minimum.
- (c) **Length/width ratio.** 5:1 maximum.
- (d) **Front yard.** Six (6) feet minimum and thirty (30) feet maximum for lots 10,000 square feet in size or less. Twenty-five (25) feet minimum and sixty (60) feet maximum for lots greater than 10,000 square feet in size. (See Figure 6B)
- (e) **Side yard.** Eight (8) feet minimum.
- (f) **Rear yard.** Sixteen (16) feet minimum.
- (g) Detached garages located at the rear of a lot and attached to a similar garage on a contiguous lot may

1 be located within the side yard setback and within six
2 (6) feet of the rear property line. No minimum rear
3 yard shall be required for garages which are accessed
4 from the front of a lot.

5 (h) **Front Sidewalk Width.** Six (6) feet minimum,
6 which may include a minimum four (4) foot wide
7 sidewalk and planting strip of two (2) feet at the curb.
8 Sidewalks shall be provided on both sides of the
9 street.

10 (i) **Lot Coverage.** 40% maximum.

11 (j) **Building Height.** Three (3) stories or 40 feet
12 maximum whichever is less.

13 (2) **Single-family attached Lots.**

14 (a) **Lot Size.** 1,600 square feet minimum, exclusive of
15 major floodplain and steep slopes.

16 (b) **Lot Width.** Sixteen (16) ft. minimum; 48 ft.
17 maximum.

18 (c) **Length/Width Ratio.** 9:1 maximum for lots less
19 than 32 feet in width; 5:1 maximum for lots of 32 feet
20 in width or greater.

21 (d) **Front Yard.** Four (4) feet minimum; sixteen (16)
22 feet maximum. (See Figure 6A)

23 (e) **Lot Coverage.** 70% maximum.

24 (f) **Front Sidewalk Width.** Six (6) feet minimum,
25 which may include a minimum four (4) foot wide
26 sidewalk and planting strip of two (2) feet at the curb.
27 Sidewalks shall be provided on both sides of the
28 street.

29 (g) **Building Height.** Three (3) stories or forty (40) feet
30 maximum, whichever is less.

31 (h) **Access.** Off-street parking for single family attached
32 dwellings of less than 32 feet frontage shall be
33 provided at the rear of the lot and shall be accessed
34 either from an alley or from a side street. This
35 requirement may be modified if a block of parking is

provided within 200 feet of the townhouse units served.

(3) **Greens, Parks and Squares.**

(a) **Lot Size.** 20,000 sq. ft. minimum for the main village green minimum; 10,000 sq. ft. minimum for other greens, parks and squares. (See Figure 4)

(b) **Lot Width.** 96 ft. minimum for the main village green minimum; 64 ft. minimum for other greens, parks and squares.

(c) **Length/Width Ratio.** 5:1 maximum.

(4) **Commercial/Workplace Lots.**

(a) **Lot Size.** 1,600 square feet minimum, exclusive of major floodplain and steep slopes.

(b) **Lot Width.** Sixteen (16) feet minimum; forty-eight (48) feet maximum for attached buildings and one hundred twenty (120) feet maximum for detached buildings.

(c) **Length/Width Ratio.** 9:1 maximum.

(d) **Front Yard & Entrance.** A maximum front yard setback of sixteen feet for all commercial uses except day care facilities. The maximum front yard setback for daycare facilities is 50 feet. A minimum of 60% of buildings located on a single block shall share a common set back. The principal entrance of a commercial building shall be from the front.

(e) **Side Yard.** Storefront buildings fronting on the same street and located on the same block shall be attached except where pedestrian ways are located between buildings.

(f) **Lot Surface Coverage.** 70% maximum.

(g) **Building Height.** Three (3) stories or 40 feet maximum, whichever is less.

(h) **Front Sidewalk.** Eight (8) feet minimum width, which may include a minimum six (6) foot wide sidewalk and planting strip of two (2) feet wide at the

curb. (See Figure 7A) Open colonnades constructed over a sidewalk which adjoins storefront buildings may be permitted subject to an appropriate easement.

(i) **Alleys.** Off-street parking for storefront buildings may be provided at the rear of the lot and may be accessed either from an alley or from a side street perpendicular to that on which the townhouses enfront.

(j) **Pedestrian Access.**

(i) Temporary paths shall be constructed, extending across undeveloped land designated for commercial development and linking other portions of the Village Center, by the developer at the same time as adjoining areas are developed. Such paths shall be a minimum of three (3) feet in width, constructed of gravel, sand, woodchips, or other similar type materials.

(ii) Paths linking land designated for commercial development with residential areas shall be constructed concurrent with development of the individual commercial lots.

(k) **Parking.** Off-street parking for commercial and workplace lots shall not be provided in the front of the lot.

(l) **Buffering.**

(i) Between Village Workplace Areas and residential areas, shall have a continuous buffer, a minimum of fifty (50) feet minimum in width that meets the plant unit requirements for a Buffer Yard Type B under , planted with a Type 2 Buffer pursuant to Section 5-1414(B5-1404(D)) shall be provided, adjacent to residential areas.

(ii) Between Village Workplace Areas and public streets and open space areas, shall have a continuous buffer a minimum of, thirty (30) feet minimum in width that meets the plant unit requirement for a , planted with a Type 2 Buffer Yard Type B under pursuant

1 ~~to Section 5-1414(B), 5-1404(D) shall be~~
2 ~~provided adjacent to public streets and open~~
3 ~~space areas.~~

- 4 (iii) Workplace lots used for open storage shall
5 have either an additional fifty (50) foot wide
6 planted buffer (for a total width of 100 feet if
7 located on a workplace subdistrict boundary)
8 or a masonry wall no less than six (6) feet
9 minimum in height.

10
11 **Section 4-1300 PD-AAAR Planned Development - Active Adult/Age Restricted**

12 **4-1311 Development Setback and Access from Major Roads.** In designing
13 residential development, the lot access requirements of Section 1-205(A)
14 and the building and parking setback requirements of Section 5-9005-
15 1403(B) shall be observed.

16
17 **Section 4-1350 PD-MUB Planned Development-Mixed Use Business**

18 **4-1355 Lot and Building Requirements.**

- 19 (A) **Size.** No minimum lot size is required, except the lot size for Single-
20 Family Detached Dwellings shall be 2,500 square feet minimum,
21 and the lot size for Single-Family Attached Dwellings shall be 1,600
22 square feet minimum exclusive of major floodplain. No lot for a
23 Single-Family Detached Dwelling shall exceed 5,000 square feet
24 exclusive of major floodplain.

25 (B) **Yards.**

- 26 (1) **Front.** See Section 5-9005-1403(B) for arterial and collector
27 roads; and 0 feet minimum and 30 feet maximum from other
28 roads. The maximum front yard can be expanded to 50 feet
29 where a courtyard, plaza, terrace, or other common gathering
30 space, that is a minimum of 300 square feet, is provided
31 adjacent to the front property line.

- 32 (2) **Side.** 0 feet minimum, except 15 feet minimum for a side
33 yard abutting a lot allowing Single-Family Attached
34 Dwellings or Single-Family Detached Dwellings.

- (3) **Rear.** 0 feet minimum, except 15 feet minimum for a rear yard abutting a lot allowing Single-Family Attached Dwellings or Single-Family Detached Dwellings.

4-1358 Use Limitations.

- (A) **Utility Requirements.** All new utility lines shall be placed underground.

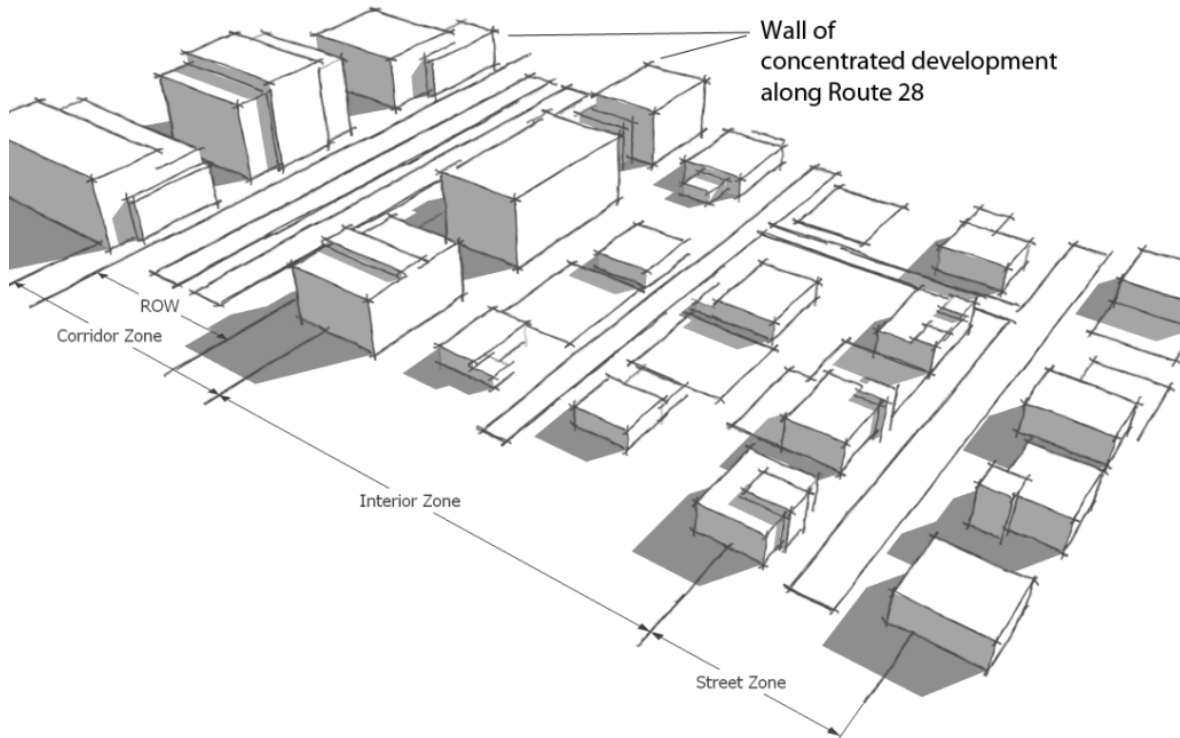
(B) **Buffering and Screening.**

- (1) No loading areas or refuse collection areas shall be located closer than 100 feet from an agricultural zoning district or closer than 50 feet from a residential district. No parking areas shall be located closer than 50 feet to an agricultural zoning district or closer than 30 feet to a residential district.

- (2) Loading areas and refuse collection areas shall be screened from view as seen from adjoining streets and residential areas. Refuse collection areas separated from building walls and placed in parking areas shall also be landscaped and buffered from the view of adjoining streets and residential areas.

- (3) The ~~buffering and screening buffer yard~~ requirements of Section 5-1400-1404 and the parking area landscaping and screening requirements of Section 5-1407 shall not be applicable between uses on adjacent lots developed within the PD-MUB district or a different district subject to the same proffered Concept Development Plan. Only the road corridor buffer requirements of Section 5-1403 for specifically listed roads, other arterial roads, and other major collector roads shall apply.

Section 4-2300 Route 28 CO (Corridor Office).



2
3 • Figure 1 Office Cluster illustration

4 **Description:**

5
6 An office development that is configured around a street grid, with high quality office development
7 concentrated along Route 28. An Office Cluster is divided into 3 subareas:

- 8
9 1. The **Corridor Zone**, located within 100 feet of the existing or planned right-of-way of Route
10 28.
11 2. The **Street Zone**, including all areas outside of the Corridor Zone located within 50 feet of any
12 other public street other than Route 28.
13 3. The **Interior Zone**, including all areas outside of the Corridor Zone or Street Zone.

14 **Mix of Uses:**

15 The site plan shall designate uses that comply with the following land use mix
16 ratios

	<i>Minimum Building Square Feet Required</i>	<i>Maximum Building Square Feet Permitted</i>
Office/Research & Development	60%	100%
Retail & Services*	0%	10%
Flex	0%	10%

* Retail and services do not include showrooms that are accessory to flex buildings and
located entirely within the flex building.

Lot & Building Placement Standards:

1. Frontage Buildout (minimum).

Building walls shall occupy at least **60%** of the lot width at the maximum **Corridor** Setback lines. **Front** building walls shall occupy at least **50%** of the lot width at the maximum **Street** Setback lines.

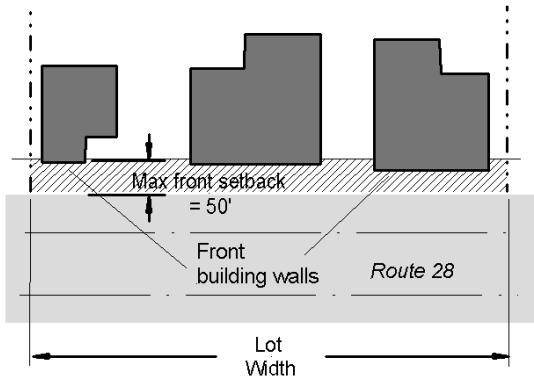


Figure 2 Corridor Setback

2. Corridor Setback.

50 feet (maximum) from the planned right-of-way. This setback shall supersede the building and parking setback requirements of Section 5-900, 5-1403(B). Road corridor buffers in accordance with Section 5-1403(B) shall be required. but is subject to Section 5-1400, Buffer and Screening. No Pedestrian Through Zone or Planting/Furniture Zone is required.

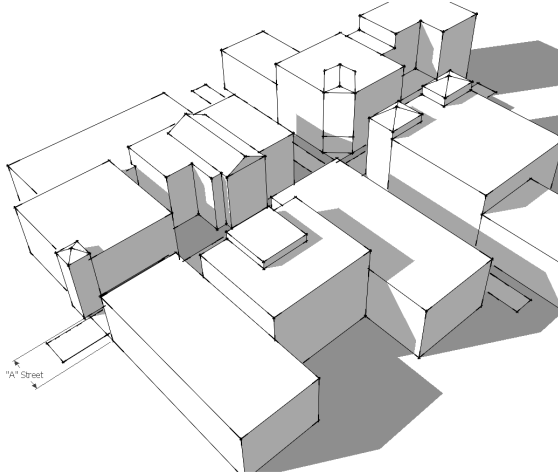
Section 4-2400 Route 28 PD-CM (Planned Development - Corridor Mixed-Use).

4-2406 Office Center Alternative Method.

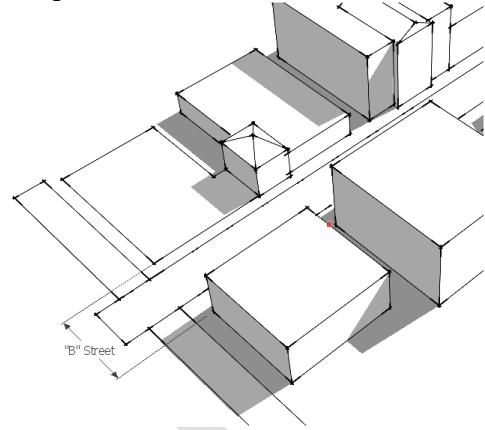
Description:

A mixed-use, primarily office or employment-based development, that is configured around a street grid. This type of development has a mix of non-residential and residential uses. The Center's design is urban and pedestrian-oriented. An Office Center shall include at least 50 and no more than 90 Buildable Acres. To implement the County's design objectives while providing market flexibility, a CDP for an Office Center shall designate "A" Streets and "B" Streets, as follows:

1. An "A" Street is a street with frontage that is restricted to building types and uses that promote pedestrian activity, and which benefit from pedestrian and/or transit access. A street shall be deemed to be classified an "A" Street unless otherwise designated on the CDP.
2. A "B" Street is a street that permits front-loaded surface parking, retail and service uses, and single-story buildings. A "B" designation may be considered an interim designation as part of a phased development plan. The aggregate length of the "B" Streets on an application shall not exceed 50



linear feet per Buildable Acre subject to the application, and shall not exceed thirty-five percent (35%) of the total length of all streets within the proposed development.



Mix of Uses: <i>The concept development plan shall designate uses that comply with the following land use mix ratios -</i>		Minimum Square Feet Required	Maximum Square Feet Permitted
Office/Research & Development		55%	70%
Retail & Services		10%	20%
High Density Residential <i>(this requirement is exempt from Section 1-207)</i>		15%	25%
Public and Civic <i>(see Sections 4-2407 and 4-2706 for public and civic space standards)</i>		5%	No maximum

Full-Service Hotels are not counted toward this limit

Building Standards:

1. Orientation. Buildings and their principal entrances shall face streets or adjacent Plazas, Squares, or Greenways (see classification system in Section 4-2706).

2. Street Setback / Streetside Standards.

a. Minimum and maximum setbacks for “A” and “B” Streets are as set out in the table below.

b. Within a Corridor Zone, the maximum setback is 50 feet from the existing or planned right-of-way. This setback ~~shall supersede the building and parking setback requirements of Section 5-9005-1403(B); Road corridor buffers in accordance with Section 5-1403(B) shall be required. but is subject to Section 5-1400, Buffer and Screening.~~ No Pedestrian Through Zone or Planting/Furniture Zone is required.

Section 4-2700 Development Standards for Route 28 Corridor Districts.

4-2701 Applicability.

(A) These development standards apply to any property that elects to proceed under a Route 28 Corridor Planned Development or Optional Overlay district. *(See Sections 4-2201(D) and 4-2201(E) for applicability and Section 4-2900 for “election to waive” procedures.)*

(B) If an application is filed under this Division D: Route 28 Corridor:

(1) Unless otherwise provided in this Division D, the use, building setback, height, parking, landscaping, and other standards of this Ordinance apply to any Standard or Alternative Method of development (including, without limitation, Section ~~5-9005-1403(B)~~), and

(2) After an election is filed (see Section 4-2902), the property owner is subject to all requirements of the Revised 1993 Zoning Ordinance that are not otherwise regulated by this Division D.

4-2702 General Standards.

(A) Applicability. This sub-section applies to:

(1) Any rezoning to a PD-CM District, and

(2) Any Standard or Alternative Method of development.

(3) Any other development within a Route 28 Corridor district that requires subdivision plat, site plan, or special exception approval.

(B) Outdoor Storage / Refuse Collection / Loading Area.

(1) Areas used for outdoor storage, refuse collection, and loading area shall be:

(a) Screened by a building wall, or

(b) Screened by a wall consisting of brick, masonry, or primary materials that are compatible with those used by the principal buildings on the site.

(C) Transportation and Pedestrian Amenities

(1) All development proposals shall conform to a generally rectilinear grid system of streets.

(2) Development proposals shall include access points to the adjacent properties that allow for a continuation of the existing street network.

(D) Utility Lines. All new utility distribution lines shall be placed underground.

(E) Landscaping (Alternative Method Only).

~~For purposes of this subsection, "landscaping" refers to the buffer and screening requirements of Section 5-1400. For Under any Alternative Method of development, for individual lots that are developed in accordance with a Site Plan or Concept Development Plan the buffer yard requirements of Section 5-1404 and the parking area landscaping and screening requirements of Section 5-1407 shall not apply between non-residential uses located within the Route 28 Corridor Plan area. Only the road corridor buffer requirements of Section 5-1403 for specifically listed roads, other arterial roads, and other major collector roads shall apply. —~~

~~are not subject to landscaping (except for the requirements of Sections 5-1403(A)-(D), 5-1404, 5-1406(E)(2), 5-1410 through 5-1413) —~~

~~(a) — between uses on adjacent lots developed within the Corridor, Street or Interior zones uses, or~~

~~(b) — within the zoning district and differently zoned properties that are located within the Route 28 Corridor Plan area.~~

~~(2) — are subject to landscaping if they are adjacent to a residentially zoned, residentially developed, or residentially planned portion of a planned development zoning district.~~

4-2708 Site Standards.

(A) Applicability. This section applies to the Alternative Method of development in the CO, PD-CM and CB districts.

(B) Blocks.

(1) This subsection (B) applies to:

(a) Business Campus and Custom Campus Alternative Method development sites that are larger than 30 acres. This subsection does not apply to a Secure Office Campus.

(b) Office Cluster and Office Center development sites.

(2) The development site shall be divided into blocks.

(3) Block length within the development area shall not exceed –

(a) 600 feet for an Office Cluster,

(b) 800 feet for a Business or Custom Campus, and

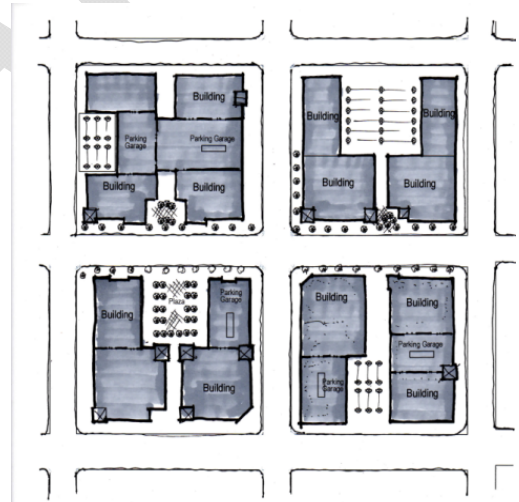
(c) 400 feet for an Office Center.

(C) Streets.

(1) Streets interior to an Alternative Method development may be public or private, consistent with the Facilities Standards Manual.

(2) Streets shall be arranged in a generally rectilinear grid.

(3) Streets shall align with existing or planned streets on adjacent sites.



Grid Street Pattern

(D) Parking Arrangement. Parking spaces and parking structures shall be located internal to a block, or in the areas outside of the Frontage Buildout and separated from a road by landscaping and screening as provided in Section 5-14135-1407.

4-2710 Campus Alternative Method.

Description:

A Campus is an office-oriented development that includes a mix of uses in a park-like setting. This section establishes three types of Alternative Method Campus Developments: **Business Campus**, **Custom Campus**, and **Secure Office Campus**.

Campus type –

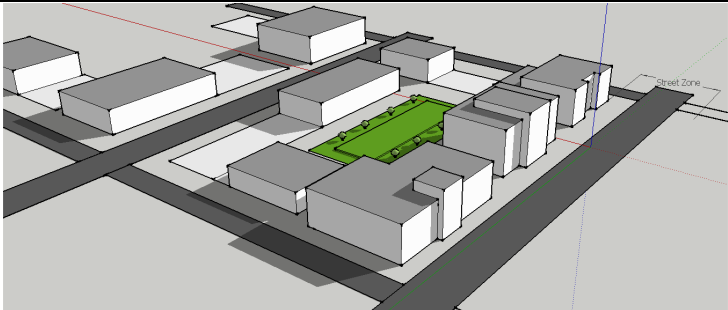
(the predominant use in each campus type is office and/or research-and-development)

Mix of Uses:

Minimum Square Feet Required

Maximum Square Feet Permitted

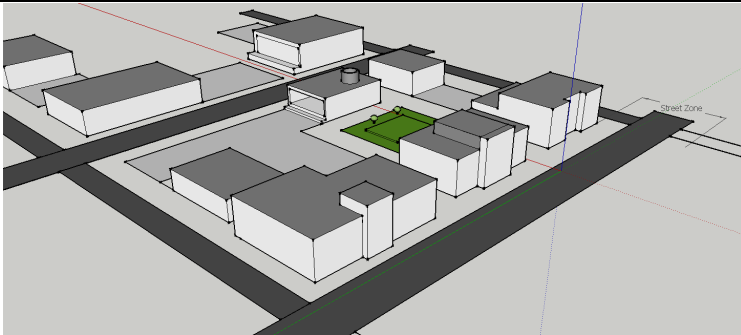
Business Campus -



An office-oriented planned development that combines office / research-and-development / flex buildings and supportive retail and service uses. This campus type does **not include manufacturing and production** uses.

Office / Research & Development	75%	100%
Flex / Data Centers	0%	10%
Retail & Services*	0%	10%

Custom Campus -



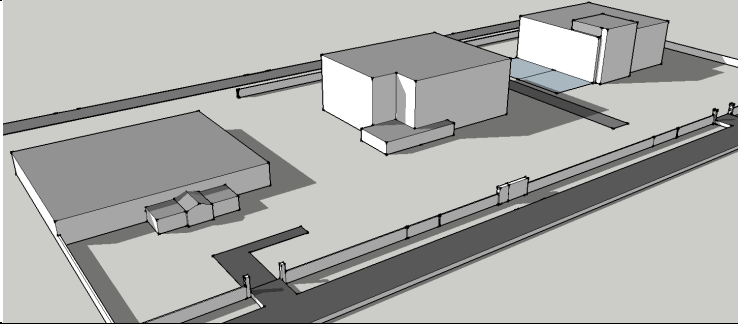
An office-oriented planned development -that combines office, research-and-development, and **manufacturing and production** uses.

Office / Research & Development	60%	100%
Manufacturing and Production	0%	10%
Retail & Services*	0%	10%

Definition and Mix of Uses:

Minimum Square Feet Required	Maximum Square Feet Permitted
------------------------------	-------------------------------

Secure Office Campus -



An office-oriented planned development that includes design standards that accommodate security elements, such as greater building setbacks, secured perimeters, and controlled site access. To use this option, the applicant must demonstrate that a secured perimeter and standoff distances are required for the applicant's prospective tenants by state or federal law or regulations.

Office / Research & Development

60%

100%

Retail & Services*

0%

10%

Generally (applicable to all campus types)

Flex / Data Centers

- Up to **10%** of all floor area in CO
- Up to **100%** of the **Office/Research & Development** allocation in CB
- Flex uses are not permitted within a Major Street Zone. This restriction does not apply to Data Centers.

Public & Civic Uses / Parks & Open Spaces

- Refer to the applicable Optional Overlay district standards (Sections 4-2308 or 4-2506)

* Retail and services do not include showrooms that are accessory to flex buildings and located entirely within the flex building.

A Campus is divided into 2 or 3 subareas:

1. The **Street Zone** includes all areas located within 50 feet of the right-of-way of a public street other than Route 28. A Street Zone adjacent to the following roadways is considered a "**Major Street Zone**": George Washington Boulevard, Russell Branch Parkway, Waxpool/Church Road (Route 625), Loudoun County Parkway, Moran Road, Sterling Boulevard, Route 7, and Route 606 east of Route 28. The Street Zone does **not apply to a Secure Office Campus**.
2. The **Interior Zone**, includes all areas outside of the Street Zone other than the Corridor Zone, if applicable.
3. If the Campus is adjacent to the Route 28 right of way, a **Corridor Zone** applies, and is located within 100 feet of the planned right-of-way of Route 28.

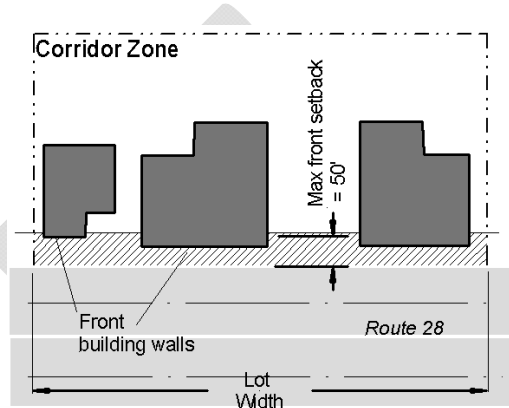
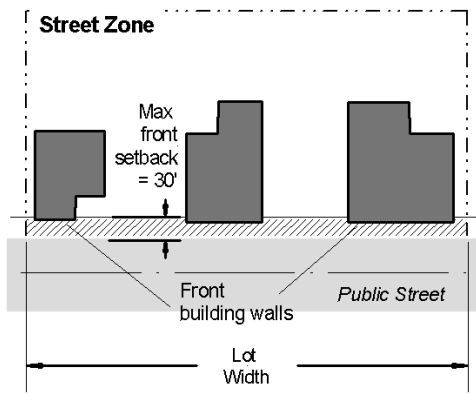
[Lot & Building Placement Standards begin on next page]

Lot & Building Placement Standards:

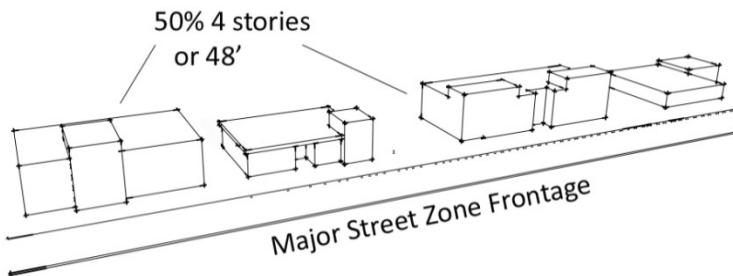
1. Street Setback. In the **Street Zone** - 0 feet (minimum) and 30 feet (maximum). No front setback applies to the **Interior Zone**. In the **Corridor Zone**, the setback is 50 feet (maximum) from the planned right-of-way of Route 28. ~~These setback shall supersede the building and parking setback requirements of Section 5-9005-1403(B). Road corridor buffers in accordance with Section 5-1403(B) shall be required, but are subject to any landscaping required by any buffer required by section 5-1400.~~

2.1. Frontage Buildout (minimum). In the **Street Zone**, **Front** building walls shall occupy at least **50%** of the lot width at the maximum **Street** Setback lines. In the **Corridor Zone**, building walls shall occupy at least **60%** of the lot width at the maximum Corridor Setback lines.

3.2. Rear and Side Setbacks are not required.



Building Standards:



1. **Height.** At least 50% of a **Major Street Zone** frontage setback shall be occupied by buildings that are at least 4 stories or 48 feet in height. If a Corridor Zone is present, the frontage buildout, corridor setback and height standards for the Corridor Zone in Section 4-2305 apply.
2. **Orientation.** In the **Street Zone**, front building walls shall face streets or adjacent Civic Uses (see classification system in Section 4-2706).
3. **Frontage Types.** Buildings within the Frontage Buildout of the **Street Zone** shall use the Frontage Types listed in Section 4-2704. Frontage Types are not required in the **Corridor Zone**.
4. **Massing / Façade.** In the **Street Zone**, building planes above the fifth story or 60 feet above average finished grade shall be separated by at least 60 feet.
5. **Open Space Network.** Buildings, parking areas and exterior spaces shall be connected by a continuous open space network. The open space network shall include interior paths that link buildings with pedestrian walkways, bikeways, plazas, and trails. The open space network is counted toward the required parks and open space area (section 4-2308(B)).
6. **Materials.** Building walls that face a Road or Street shall comply with Section 4-2705.

Section 5-600

Additional Regulations for Specific Uses. The following additional regulations apply to specific uses as set forth below. These regulations are intended to serve as the minimum standards for these uses, and are not intended to be in substitution for other provisions of this ordinance that may apply, or for additional conditions that may be imposed in connection with special exception or rezoning approvals. Unless otherwise specified, the following additional regulations may be modified by Minor Special Exception in accordance with the provisions of Section 6-1300. Modifications may be approved by the Board of Supervisors upon a finding that such modification to the regulations will achieve an innovative design, improve upon the existing regulations, preserve the County's historic or archeological heritage, or otherwise exceed the public purpose of the existing regulation. No modification shall be granted to any of the underlying zoning district regulations.

5-601

Bed and Breakfast Homestay, Bed and Breakfast Inn, Country Inn and Rural Retreats and Rural Resorts Establishments. No such use shall be established either as the initial use of the subject property or by change of use of the property or by conversion of one such use to another until a sketch plan or site plan, as applicable, for such proposed new use has been approved and the appropriate building permit and applicable Fire Prevention Code permits have been obtained. These establishments may be located in accord with the lists of permitted and special exception uses for the individual zoning districts subject to the following criteria:

(A) Bed and Breakfast Homestay.

(1) Intensity/Character.

- (a) Management.** The owner of the premises shall reside on the premise and manage the Bed and Breakfast Homestay.
- (b) Guest Rooms.** 1-4 guest rooms.
- (c) Lot Size.** No minimum lot area.
- (d) Food Service.** The Bed and Breakfast Homestay shall not contain restaurant facilities, but may provide food service for overnight guests or private party attendees, only.
- (e) Private Parties.**
 - (i)** Private parties for up to 20 attendees, including overnight guests, may be held daily at the Bed and Breakfast Homestay.
 - (ii)** Private parties for more than 20 attendees may be held up to 10 times per calendar year and shall require approval of a Building Permit to allow the structure to be used for such private parties and a Zoning Permit for each private party. A Zoning Permit shall be applied for at least thirty (30) days in advance of each private party. The Zoning

Permit application shall be accompanied by a copy of the approved Building Permit and proof of any necessary approvals from County agencies, such as the Health Department and Fire Official.

- (f) **Hours of Operation.** Hours of operation for private parties shall be limited to 7:00 AM to 12:00 midnight.

(2) **Landscaping/Buffering/Screening.**

- (a) ~~Outdoor private party areas shall meet the requirements of Section 5-653(A)5-1404(A)(6) to screen outdoor private party areas, regardless of the size of the adjacent property. This requirement The landscaping and screening requirements of Section 5-653(A) may be waived or modified in whole or in part by the Zoning Administrator in accordance with the circumstances listed in Section 5-1409 or under the additional circumstance where the adjacent property owner(s) provides written consent to waive all or a portion of the required landscaping/buffering/screening requirements.~~

(3) **Parking.**

- (a) **General.** Parking and loading for a Bed and Breakfast Homestay shall be provided as required by Section 5-1102.

- (4) **Exterior Lighting.** Exterior lighting for a Bed and Breakfast Homestay shall be subject to Section 5-652(A)(2)-(3) (Exterior Lighting Standards). In addition to the requirements of Section 5-652, the maximum height of pole-mounted exterior lighting shall be 12 feet.

- (5) **Noise.** No outdoor music shall be permitted between 11 PM and 10 AM on Friday, Saturday, and any evening preceding a holiday recognized by Loudoun County, and between 10 PM and 10 AM on any other day.

- (6) **Roads/Access.** For any Bed and Breakfast Homestay that is located on a lot which does not have frontage on a publicly maintained road, documentation shall be provided to the Zoning Administrator demonstrating that the private access easement serving such lot may be used to provide access to the establishment.

(B) **Bed and Breakfast Inn.**

- (1) **Intensity/Character.**

(a) **Management.** The owner or manager of the premises shall provide full-time management at all times when the Bed and Breakfast Inn is occupied by overnight guests or private party attendees. An owner or manager may live on the premises.

(b) **Guest Rooms.** The number of guest rooms shall not exceed 10.

(c) **Lot Area.** The minimum lot area shall be 5 acres.

(d) **Size of Use.** The floor area ratio shall not exceed 0.04.

(e) **Food Service.** The Bed and Breakfast Inn shall not contain restaurant facilities, but may provide food service for overnight guests or private party attendees, only.

(f) **Private Parties.**

(i) Private parties for up to 50 attendees, including overnight guests, may be held daily at the Bed and Breakfast Inn.

(ii) Private parties for more than 50 attendees, including overnight guests, may be held up to 20 times per calendar year and shall require approval of a Building Permit to allow the structure to be used for such private parties and a Zoning Permit for the private parties. A Zoning Permit shall be applied for at least thirty (30) days in advance of each private party, or at least 30 days in advance of the first private party of the calendar year if the dates of all such private parties are listed. The Zoning Permit application shall be accompanied by a copy of the approved Building Permit and proof of any necessary approvals from County agencies, such as the Health Department and Fire Official.

(g) **Hours of Operation.** Hours of operation for private parties shall be limited to 7:00 AM to 12:00 midnight.

(h) **Yard Standards.**

(i) Parking shall be setback 40 feet from all lot lines.

(2) **Landscaping/Buffering/Screening.**

(a) Outdoor private party areas shall meet the requirements of The use shall comply with the landscaping and screening standards of Section 5-653(A)-5-1404(A)(6) to screen outdoor private party areas, regardless the size of adjacent

property. The landscaping and screening requirements ~~of Section 5-653(A)~~ may be waived or modified in whole or in part by the Zoning Administrator in ~~the circumstances listed in accordance with~~ Section 5-1409 or under the additional circumstance where the adjacent property owner(s) provides written consent to waive all or a portion of the required landscaping/buffering/screening requirements.

(b) Parking areas shall comply with ~~the landscaping and screening standards of Section 5-653(B); Section 5-1407.~~

(c) New driveways providing access to a Bed and Breakfast Inn use shall not be located within a required buffer yard area except as minimally necessary to access the site.

(3) **Parking.**

(a) **General.** Parking and loading for a Bed and Breakfast Inn shall be provided as required by Section 5-1102.

(4) **Exterior Lighting.** Exterior lighting for a Bed and Breakfast Inn shall be subject to Section 5-652(A)(1)-(3) (Exterior Lighting Standards). In addition to the requirements of Section 5-652, the maximum height of pole-mounted exterior lighting, outside of parking areas, shall be 12 feet.

(5) **Noise.** No outdoor music shall be permitted between 11 PM and 10 AM on Friday, Saturday, and any evening preceding a holiday recognized by Loudoun County, and between 10 PM and 10 AM on any other day.

(6) **Roads/Access.**

(a) The Bed and Breakfast Inn shall comply with the Road Access Standards in Section 5-654.

(b) For any Bed and Breakfast Inn that is located on a lot which does not have frontage on a publicly maintained road, documentation shall be provided to the Zoning Administrator demonstrating that the private access easement serving such lot may be used to provide access to the establishment.

(c) There shall be no more than two points of access for the Bed and Breakfast Inn.

(7) A structure existing prior to January 7, 2003, located within an Historic Site District or Historic and Cultural Conservation District may be used as a Bed and Breakfast Inn and shall be exempt from the minimum lot area, yard and floor area ratio requirements

specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003, unless a greater expansion is approved by Minor Special Exception, pursuant to Section 6-1300.

(C) **Country Inn.**

(1) **Intensity/Character.**

(a) **Management.** The owner or manager of the premises shall provide full-time management at all times when the Country Inn is occupied by overnight guests or private party attendees. An owner or manager may live on the premises.

(b) **Guest Rooms.** 1-40 guest rooms.

(c) **Minimum Lot Area.** The minimum lot area shall be 20 acres.

(d) **Size of Use.**

(i) The floor area ratio shall not exceed 0.04.

(ii) Any restaurant and indoor Banquet/Event Facility(ies) located on the property shall not exceed 49 percent of the total floor area of the Country Inn.

(e) **Food Service.**

(i) Food service may be provided for overnight guests and private party attendees.

(ii) Full-service restaurant facilities may be provided to the general public in accordance with the individual Zoning District regulations.

(f) **Private Parties.**

(i) Private parties for up to 100 attendees, including overnight guests, may be held daily at the Country Inn.

(ii) Private parties for more than 100 attendees, including overnight guests, may be held up to 20 times per calendar year and shall require approval of a Building Permit to allow the structure to be used for such private parties and a Zoning Permit

for the private parties. A Zoning Permit shall be applied for at least thirty (30) days in advance of each private party, or at least 30 days in advance of the first private party of the calendar year if the dates of all such private parties are listed. The Zoning Permit application shall be accompanied by a copy of the approved Building Permit and proof of any necessary approvals from County agencies, such as the Health Department and Fire Official.

(g) **Hours of Operation.** Hours of operation for private parties shall be limited to 7:00 AM to 12:00 midnight.

(h) **Yard Standards.**

(i) The Country Inn use shall be setback 100 feet from all lot lines.

(ii) Parking shall be setback 100 feet from all lot lines.

(iii) Outdoor private party areas shall be setback 200 feet from all lot lines or 100 feet from a lot line of a property having a commercial use.

(i) **Accessory Use.** A maximum of 10% of the gross floor area of the Country Inn may be composed of accessory day treatment, spa facilities.

(2) **Landscaping/Buffering/Screening.**

(a) Outdoor private party areas shall meet the requirements of The use shall comply with the landscaping and screening standards of Section 5-653(A)5-1404(A)(6) to screen outdoor private party areas from adjacent properties, regardless the size of adjacent property.

(b) Parking areas shall comply with theSection 5-1407. landscaping and screening standards of Section 5-653(B).

(c) New driveways providing access to the Country Inn shall not be located within a required buffer yard area except as minimally necessary to access the site.

(3) **Parking.**

(a) **General.** Parking and loading for a Country Inn shall be provided as required by Section 5-1102.

(4) **Exterior Lighting.** All exterior lighting shall comply with the standards of Section 5-652(A)(1)-(3) (Exterior Lighting Standards). In addition to the requirements of Section 5-652, the

maximum height of pole-mounted exterior lighting, outside of parking areas, shall be 12 feet.

- (5) **Noise.** No outdoor music shall be permitted between 12 AM (midnight) and 7 AM.

(6) **Roads/Access.**

- (a) The Country Inn shall comply with the Road Access Standards in Section 5-654.

- (b) For any Country Inn that is located on a lot which does not have frontage on a publicly maintained road, documentation shall be provided to the Zoning Administrator demonstrating that the private access easement serving such lot may be used to provide access to the establishment.

- (c) There shall be no more than two points of access for guests of the Country Inn.

- (7) A structure existing prior to January 7, 2003, located within an Historic Site District or Historic and Cultural Conservation District may be used as a Country Inn and shall be exempt from the minimum lot area, yard and floor area ratio requirements specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003, unless a greater expansion is approved by Minor Special Exception, pursuant to Section 6-1300.

(D) **Rural Retreats and Resorts.** Rural retreats and rural resorts shall comply with the following standards.

- (1) **Parcel Size.** The minimum lot area of rural resorts and retreats shall comply with Section 5-601(D)(8)(a), except when located within the buffer area of a Planned Development-Rural Village (PD-RV) district.

- (2) **Separation Requirement.** When not located within a Planned Development-Rural Village (PD-RV) district, rural retreats shall be appropriately sited so as not to infringe on the character of any existing village. At a minimum, rural retreats shall be located at least one (1) mile from the boundaries of an existing Village Conservation Overlay District or an existing PD-CV or PD-RV zoned parcel.

- (3) **Setbacks.** All new buildings, active recreational areas, parking, and lighted areas shall be set back a minimum of 200 feet from adjacent properties.
- (4) **Access.** All rural retreats and resorts shall comply with the road access standards in Section 5-654.
- (5) **Water and Sewer.** The establishment shall be served by public water and sewer if located in a PD-RV district. Otherwise, the establishment shall be served by a communal water system and a communal wastewater collection and treatment system. Communal water and sewer systems may be located within the open space.
- (6) **Open Space.** A minimum of 75% of the site shall remain as open space. Recreational uses customarily incidental and subordinate to the rural resort or retreat permitted in the open space area may include: swimming pools and related facilities, boating facilities, tennis and other sports courts, equestrian facilities, picnic areas, golf courses and related facilities, ballfields, children's play equipment and passive recreation facilities. Driveways and parking areas supporting these recreational facilities may also be located in the open space area.
- (7) **May be Open to Public.** These establishments may be open to the general public for patronage. A Rural Retreat or Rural Resort shall be entitled to treatment as an Event Facility pursuant to Section 5-642 by Minor Special Exception.
- (8) **Additional Standards for AR and TR Districts.** In the AR and TR districts, rural retreats and resorts shall comply with the following additional requirements in addition to the general standards identified above. Where there is a conflict between these standards and the general standards controlling the development of rural resorts and retreats, these standards shall control.
- (a) **Intensity/Character.** The minimum lot area shall be as follows.

Use	Size of Lot (Minimum)	Nos. of Guest Rooms
Level I – Rural Retreat small scale	40 acres	Up to 20 rooms
Level II – Rural Retreat medium scale	60 acres	21-40 rooms
Level III – Rural Retreat large scale	80 acres	41-60 rooms
Level I – Rural Resort small scale	100 acres	61-80 rooms
Level II – Rural Resort medium scale	120 acres	81-100 rooms

Use	Size of Lot (Minimum)	Nos. of Guest Rooms
Level III –Rural resort large scale	150 acres	101-120 rooms
More than 120 rooms requires special exception approval pursuant to Section 6-1300		

(b) **Size of Use.**

- (i) The restaurant and Banquet/Event Facilities, and conference and training facilities shall be less than fifty (50) percent of the total floor area of the rural retreat or resort.
- (ii) Outdoor storage related to the rural retreat or resort facilities shall be permitted.
- (iii) The floor area ratio shall not exceed 0.04.

(c) **Yard Standards.** The minimum required yards shall be as follows:

- (i) Level I-Rural Retreat: 125 feet minimum from all lot lines.
- (ii) Level II-Rural Retreat: 200 feet minimum from all lot lines.
- (iii) Level III-Rural Retreat: 250 feet minimum from all lot lines.
- (iv) Level I-Rural Resort: 300 feet minimum from all lot lines.
- (v) Level II-Rural Resort: 350 feet minimum from all lot lines.
- (vi) Level III-Rural Resort: 375 feet minimum from all lot lines.

(d) **Landscaping/Buffering/Screening.**

- (i) The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A)-5-1404(A)(6).~~
- (ii) Parking areas shall ~~comply with Section 5-1407, be screened to comply with the standards of Section 5-653(B).~~

(iii) Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(e) **Roads/Access.**

(i) The rural retreat or resort shall comply with the road access standards in Section 5-654.

(ii) There shall be no more than two points of access to a rural retreat or resort. This requirement shall not preclude an additional access for emergency vehicles only.

(f) **Parking.**

(i) **General.** Parking and loading shall be provided as required by Section 5-1102.

(ii) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

(g) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(h) **Noise.** Outdoor music shall not be allowed after 11:00 PM.

5-602 Tenant Dwellings. Tenant dwellings may be located in the A-3, A-10, TR, CR and JLMA districts, in accord with the list of permitted and special exception uses for the individual zoning districts, subject to the following additional criteria:

(A) **Tenant Dwellings.**

(1) **All Parcels Except Open Space Parcels.**

(a) One (1) tenant dwelling shall be permitted on a parcel with an area of ten (10) acres or more.

(b) One additional tenant dwelling shall be permitted for each twenty-five (25) acres of a parcel in excess of the minimum area of ten (10) acres.

(c) **Tenant Dwellings for Seasonal Labor/Special Exception.** In addition to those structures permitted under Section 5-602(A)(1)(a) and (b) above, additional tenant dwellings for seasonal labor may be permitted by special exception.

(2) **Open Space Parcels.** Tenant dwelling on open space parcels shall be permitted only in the A-3, A-10, and TR districts, subject to the following criteria:

(a) One (1) tenant dwelling shall be permitted on a parcel with an area of twenty-five (25) acres or more.

(B) **General Standards.** Tenant dwellings shall meet the following additional criteria:

(1) **Screening.** Portable dwellings shall be screened from view from public roads and neighboring properties.

(2) **On Internal Roads/No Direct Access to Public Roads.** Structures for multi-family dwelling units shall be accessed by internal roads, shall not have direct access to public roads, and shall be screened from public roads and neighboring properties in accord with the landscaping and buffering requirements for multi-family dwellings.

(3) **Separate Dwelling.** For the purposes of 5-602(A)(1)(a) and (b) above, each unit of a multiple dwelling structure shall constitute a separate tenant dwelling.

(4) **Home Occupations.** Occupants of tenant dwellings may conduct home occupations subject to Section 5-400.

(5) **Size of Tenant Dwelling.** No tenant dwelling unit shall exceed 2,500 square feet in floor area.

(6) **Sanitary and Bathing Facilities.** All tenant dwelling units shall have indoor sanitary, cooking, and bathing facilities, consistent with the requirements of the Uniform Statewide Building Code.

(C) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(D) **Parking.**

(1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

(E) **Landscaping/Buffering/Screening.**

(1) The use shall comply with ~~the landscaping and screening standards of Section 5-653(A), 1404(A)(6).~~

(2) Parking areas shall comply with Section 5-1407. ~~be screened to comply with the standards of Section 5-653(B).~~

(F) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as a Tenant Dwelling and shall be exempt from the parcel area for the first tenant dwelling and floor area requirements specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

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Farm Markets. Farm Markets may be located in accord with the lists of permitted and special exception uses for the individual zoning districts, subject to the following additional provisions:

(A) Except as provided in subsection F below, a minimum of 25% of the products offered for sale must be derived directly from agricultural, horticultural, aquacultural, or animal husbandry products produced on site or on other property in Loudoun County owned or leased by the operator of the Farm Market. An annual report verifying this percentage shall be submitted to the Zoning Administrator upon request. A Farm Market shall be located on the site of ongoing agricultural, horticultural or aquacultural activity unless otherwise provided elsewhere in the Zoning Ordinance.

(B) Farm Markets shall be located on a hard surfaced Class I or Class II road having a minimum paved width of eighteen (18) feet. The entrance shall have safe sight distance and may be required to have right and left turn lanes as determined by the Virginia Department of Transportation.

(C) Sales area for accessory products shall be limited to ten (10) percent of the total area devoted to sales. The calculation of total sales area shall include areas devoted to the display of items for sale.

(D) Permitted accessory products include pottery, baskets, garden accessories, baked goods, floral supplies and other items directly related to the culture, care, use of, or processing of a principal use. Products not related to the principal permitted use such as lawn mowers and tractors shall not be allowed.

(E) Retail sales areas within structures shall not exceed, in the aggregate, 10,000 square feet of floor area or a Floor Area Ratio of .02, whichever is greater.

(F) Farm Markets (off-site production), in addition to Standards (B) through (E) above, must meet the following additional standards:

- (1) A minimum of twenty five percent (25%) of the products offered for sale at the Farm Market (off-site production) must be produced in Loudoun County. An annual report verifying this percentage shall be submitted to the Zoning Administrator on request.
- (2) Parking spaces for Farm Markets (off-site production) shall be provided at a rate of 4/1,000 square feet of floor area of indoor and outdoor sales area, with a required minimum of 10 spaces per establishment.
- (3) Landscaping/Buffering/Screening.
 - (a) ~~Buffer.~~—The use shall comply with ~~the landscaping and screening standards of~~ Section 5-~~653(A)-1404(A)(6).~~
 - (b) ~~Parking Areas.~~—Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~
 - (c) ~~Storage Areas.~~—All storage areas shall comply with ~~be screened and landscaped consistent with the standards of~~ Section 5-~~653(C)-1406.~~

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Wayside Stands. Wayside stands are subject to the following provisions:

- (A) Wayside stands are for retail sales provided the principal sales items sold are farm and garden products produced principally on-site. The term “on-site” shall be defined as all locations (separate parcels) used by the owner or tenant for farming (agriculture, horticulture or animal husbandry).
- (B) Permanent retail sales areas within structures shall not exceed, in the aggregate, ten thousand (10,000) square feet in floor area or a Floor Area Ratio of 0.02, whichever is greater.
- (C) Wayside stands may be located in farm structures existing prior to January 7, 2003. The sales area in an existing farm structure shall have no limitation and may be used as a sales area subsequent to compliance with the Uniform Statewide Building Code.
- (D) Sales areas for accessory products shall be limited to 25% of the gross sales area.
- (E) Accessory products include those products related to the care and culture of products produced on the farm, such as pottery, baskets, and garden accessories.
- (F) Entrances and exits to the wayside stand from public roadways shall provide safe ingress and egress from roads, and shall be channeled to prevent unrestricted vehicular access to and from the premises.
- (G) The sale of seasonal produce harvested on the farm may occur throughout the area of actual production.

(H) Signs for wayside stands shall be erected in compliance with Section 5-1200.

5-605 Commercial Nurseries. The following minimum requirements shall apply to all retail sales associated with production nurseries and commercial nurseries:

- (A) In calculating the percentage of plants grown on-site, plants must be cultivated at the subject nursery facility for at least one (1) full season of new growth for that plant.
- (B) Plant production may be certified by the County Extension Agent, if requested by the Zoning Administrator.
- (C) Plants brought to the subject nursery for immediate resale are included in calculations for non-site produced plants and accessory products.
- (D) Accessory products include those related to the culture and care of plant sold such as pottery, baskets, garden accessories, baked goods, and floral supplies. The sale of bulk products shall be permitted subject to the screening-buffer yard requirements ~~for outdoor storage in of~~ Section 5-1414(A.1404). Propane, firewood lawn and garden tractors, or machine or other equipment sales are not accessory products.
- (E) The sales area for accessory products shall be limited to twenty-five percent (25%) of the gross sales area.
- (F) Twenty-five percent (25%) of the gross sales receipts of the commercial nursery must be derived from plants produced on site; or twenty-five (25%) of the area designated as a commercial nursery shall be dedicated to the cultivation of plants to be sold on site.

5-606 Kennels/Indoor Kennels. For the purposes of this Ordinance, the following words and phrases shall have the meanings respectively ascribed to them by this Section:

(A) **Kennels.**

- (1) **General.** Kennel shall mean any place in or at which, for a fee, five (5) or more dogs, cats, or other household pets over the age of six months are trained, boarded, including day care services, or handled.
- (2) **Not Applicable to Animal Hospital/Grooming Use.** This Section shall not apply to any establishment whose principal use is grooming or any animal hospital.

(B) **Indoor Kennel.**

- (1) **General.** Indoor kennel shall mean any place that is within a completely enclosed commercial facility with no outdoor activity in which dogs, cats or other household pets are confined or penned

in close proximity to each other, except for the primary purpose of grooming, or wherein any owner engages in boarding, breeding, letting for hire, training for a fee, or selling dogs, cats, or other household pets.

(2) **No Opening to Outside.** Indoor Kennels shall not be housed in a structure with any opening to the outside except required ingress/egress and ventilation equipment, shall have an animal waste handling plan, and shall conform to any other requirements that the Planning Commission and/or Board of Supervisors may impose pursuant to special exception review (Section 6-1300).

(3) **Accessory Uses.** Indoor Kennels may include accessory uses to an indoor kennel: up to 10% of gross floor area for retail sales, up to 10% of gross floor area for veterinary service, up to 10% of gross floor area for animal hospital, and up to 10% of gross floor area for grooming; provided, however, that accessory uses may not exceed 25% of the total gross floor area.

(C) **Kennels in AR, TR, and JLMA Districts.** Kennels in the AR, TR, and JLMA districts shall comply with the following standards.

(1) **Location on Site/Dimensional Standards.** An outdoor kennel shall be set back 100 feet from a lot line.

(2) **Roads/Access.**

(a) All kennels shall comply with the road access standards of Section 5-654.

(b) There shall be no more than one point of access from a kennel to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

(3) **Landscaping/Buffering/Screening.**

(a) The use shall comply with ~~the landscaping and screening standards of~~ Section 5-~~653(A).~~1404(A)(6).

(b) Parking areas shall ~~be screened to comply with the~~Section 5-1407. ~~requirements of Section 5-653(B).~~

(4) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(5) **Noise.** The maximum allowable dB(A) level of impulsive sound emitted from the use, as measured at the property line, shall not exceed 55 dB(A).

(6) **Parking.**

- (a) **General.** Parking and loading shall be provided as required by Section 5-1102.
- (b) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standard Manual.

5-607 Recycling Drop-Off Centers and Material Recovery Facilities.

(A) **General Standards for Recycling Drop-Off Centers.** All recycling drop-off centers, public or private, shall meet the following minimum standards:

- (1) Centers may be established on a site which has either a public or private school, shopping center, community center, church, park, fire station, or library, or may be established on land owned by a local government or an owners' association.
- (2) A center may utilize movable containers and trailers to collect and store recyclable materials.
- (3) All recycling drop-off centers shall accept only glass, metals, plastics, papers, corrugated cardboard, and other identified reusable recyclable items; hazardous or toxic materials shall not be accepted.
- (4) Recycling drop-off centers shall be no larger than 3,000 square feet in area. The 3,000 square feet area shall be for the recycling containers only.
- (5) All recyclable materials stored at recycling drop-off centers shall be stored in containers which are constructed and maintained of a durable waterproof and rustproof material, are secured from unauthorized entry or removal of material, and are of a capacity sufficient to accommodate material collected.
- (6) Recycling containers shall be clearly marked to identify the type of material which may be deposited. Recycling drop-off centers shall be marked clearly to identify the name and telephone number of the facility sponsor and the hours of operation, and display a notice stating that no material shall be left outside the recycling enclosure or containers.
- (7) All public and private recycling drop-off centers shall be maintained free of litter by a responsible sponsoring organization or by Loudoun County.
- (8) All recycling drop-off centers shall be screened from ~~residential uses~~ other uses on the same parcel and adjacent residential uses in accordance with Section 5-1406. by an opaque fence at least 6 feet in height. When a recycling drop-off center is located on a lot with

~~another principal use on the lot, then, in addition to the landscape/buffer requirements of the other principal use, the recycling drop-off center must be screened from adjoining residential, public or private school, shopping center, community center, church, park, fire station, or library uses. When a recycling drop-off center is a sole principal use on the lot, landscaping shall be in conformance with the requirements of Section 5-1400 of this Ordinance for commercial and light industrial uses abutting a residential use.~~

- (9) Recycling containers shall be at least 150 feet from any residential dwelling.
- (10) The recycling drop-off center shall be situated so that vehicular ingress and egress do not pose traffic hazards. A minimum of one (1) stacking or parking space per 500 square feet of the recycling drop-off center, or the anticipated peak customer load as determined by the Zoning Administrator, whichever is higher, shall be required on-site. Stacking and parking spaces shall not be located within the road right-of-way or setbacks.
- (11) Occupation of any parking spaces by the recycling drop-off center may not reduce required parking spaces for the principal use below the required minimum number, unless the following conditions exist:
- (a) A parking study shows that existing parking capacity is not fully utilized during the hours of operation of the principal use and the recycling drop-off center, or
 - (b) Hours of normal operation of the principal use do not overlap those of the recycling drop-off center.
- (12) Signs may be provided as follows:
- (a) Sizes of signs must be in conformity with Section 5-1200 of this Ordinance.
 - (b) Signs must be consistent with the character of the location.
 - (c) Directional signs, bearing no advertising message, may be installed with the approval of the Zoning Administrator if necessary to facilitate traffic movements on site, or if the facility is not visible from the public right-of-way.
- (13) No portion of any recycling drop-off center shall be located in any major floodplain or setbacks cited herein.
- (14) No noxious odors shall be emitted beyond any boundary lines of the recycling drop-off center.

- 1 (15) Operation of recycling drop-off centers shall occur during daylight
2 hours, unless located within commercial or industrial areas which
3 are equipped with lighting capable of illuminating the center
4 during periods of darkness.

5 (B) **Specific Standards for Public Recycling Drop-Off Centers.**

- 6 (1) Public recycling drop-off centers shall be set back at least fifty (50)
7 feet from the right-of-way of any street or as otherwise specified
8 ~~in~~under Section ~~5-9005-1403(B)~~; and at least fifty (50) feet from
9 any lot or land bay zoned, used, or planned for residential uses, and
10 shall not obstruct pedestrian or vehicular circulation.

11 (C) **Specific Standards for Private Recycling Drop-Off Centers.**

- 12 (1) The center shall meet the setback requirements for PD-GI uses
13 adjacent to a lot or land bay zoned, used, or planned for residential
14 use.
- 15 (2) In commercially and industrially zoned districts, a center may
16 utilize electric power-driven processing equipment to sort, clean,
17 or compact recyclable materials between the hours of 7AM and
18 7PM. Use of such equipment is not permitted in residentially
19 zoned districts.

20 (D) **Specific Standards for Material Recovery Facilities (MRF).** All
21 MRF's shall meet the following minimum standards:

- 22 (1) Neither an MRF nor the lot on which the MRF is located shall abut
23 a property in residential land use. All processors shall operate in
24 an entirely enclosed building except for incidental storage, except
25 when:
- 26 (a) The operation is within an area enclosed on all sides by an
27 opaque fence or wall not less than eight (8) feet in height
28 and landscaped on all property lines; and
- 29 (b) The operation is located at least 300 feet from any property
30 zoned, used, or planned for residential uses.
- 31 (2) Processing in MRF's is limited to baling, briquetting, crushing,
32 compacting, grinding, shredding, and sorting of source-separated
33 recyclable materials, construction debris, and repairing of reusable
34 materials.
- 35 (3) Power-driven processing equipment shall be permitted, provided
36 that the noise level requirements of Section 5-1507 and any special
37 exception conditions are met.
- 38 (4) All exterior storage of material shall be in sturdy containers or
39 enclosures which are covered, secured, and maintained in good

condition at all times, or shall be baled or palletized. No such storage shall be visible from any adjacent road or other property.

- (5) MRF sites shall be maintained free of litter, shall be cleaned of loose debris on a daily basis and shall be secured from unauthorized
- (6) entry and removal of materials when unattended.
- (7) MRF sites located within 500 feet of an occupied residential dwelling shall not be in operation between the hours of 7:00 p.m. and 8:00 a.m. The MRF will be administered by on-site personnel during all hours of operation.
- (8) Any containers provided for after-hours donation of recyclable materials shall be at least 500 feet from any occupied dwelling unit.
- (9) If the MRF is open to the public, a minimum of ten (10) vehicle stacking spaces or the number of spaces necessary to accommodate the peak anticipated load as determined by the Zoning Administrator, whichever is higher, shall be required on-site.
- (10) A minimum of one (1) parking space shall be provided for each commercial vehicle owned and operated by the MRF, unless a greater number of spaces is required by the zoning district in which the facility is located.
- (11) No dust, fumes or smoke, above ambient levels may be detectable on adjacent properties.
- (12) Noise or vibration emitted or derived from the MRF shall not exceed the levels permitted by Sections 5-1505 and 5-1507 respectively.
- (13) All material recovery facilities shall accept only glass, metals, plastics, papers, corrugated cardboard, construction debris, and other identified reusable recyclable items; hazardous or toxic materials shall not be accepted.
- (14) No noxious odors shall be emitted beyond any boundary lines of the facility.

5-608

Flex-Industrial Uses. The following limitations regarding flex-industrial buildings and uses shall apply at a minimum:

- (A) No building shall exceed two (2) stories in height, except this requirement shall not apply to the Planned Development-Mixed Use Business (PD-MUB) zoning district.
- (B) All buildings shall have a minimum of two (2) loading bays.

- (C) All loading bays shall be located so that vehicles using such bays shall not be visible from public streets. All loading bays shall be screened from view by the building, landscaping, walls or decorative fencing. Except during the process of loading or unloading, trucks and trailers shall not be parked outside the building, unless parked in screened areas not visible from adjacent roads or properties.
- (D) No more than 49 percent of the gross floor space of each building shall be used for non-accessory office uses.
- (E) Office uses recognized as appropriate in flex-industrial/office buildings shall be associated with permitted and special exception uses and shall not include professional office uses with high-turnover or high intensity traffic, such as but not limited to corporate headquarters (unless associated with a permitted use), law offices, architectural offices, insurance offices, medical offices and health maintenance organizations.
- (F) No outdoor storage is permitted.
- (G) All sources of emission of noise and/or vibration shall meet the performance standards of Sections 5-1505.

5-609

Child Care Facilities. Child care homes and centers are permitted provided they comply with the following standards:

(A) Child Care Homes:

- (1) Notwithstanding Section 5-600 of this Ordinance, this Section 5-609(A)(1) and Sections 5-609(A)(2), (4), (5) and (6) below shall not be modified by Minor Special Exception.
- (2) The total number of children cared for in a child care home shall not exceed a maximum of twelve (12) children under the age of thirteen (13).
- (3) When calculating the total number of children cared for in a child care home, the provider's own children, children residing on the premises, and non-resident children shall be included.
- (4) The child care home shall be the principal residence of the child care home provider.
- (5) The child care home shall comply with any and all requirements of the County and State Codes, including without limitation, obtaining a Zoning Permit in accordance with Section 6-1000 of this Ordinance, obtaining a County Business License, and obtaining a State Family Day Home License in accordance with the Code of Virginia, as applicable, prior to establishing the use.
- (6) Prior to the issuance of a Zoning Permit for a child care home, written notice of the Zoning Permit application shall be sent to the

last known address of the owner of each adjacent property as shown on the County's current real estate tax assessment records. For the purposes of this Section 5-609(A)(6) "adjacent" shall mean properties abutting the subject property and all property immediately and diagonally across the street or road from the subject property, but not including properties separated from the subject property by a roadway having more than two through lanes of travel, or, properties across such roadway that are more than 100 feet from the boundary of the subject property. Such written notice shall be sent by certified or registered mail. When such notice is not sent by the County, mail receipts or an affidavit shall be submitted to the Zoning Administrator showing that the required notice was sent. Such written notice shall include the following information:

- (a) A statement that a Zoning Permit application for a child care home has been submitted to the County;
 - (b) The address of the property subject to the Zoning Permit application for the child care home;
 - (c) A statement informing the adjacent property owner that if they have any objection to the proposed child care home that they can send their objection in writing to the Zoning Administrator, which must be received within thirty (30) days from the date the notification letter was sent, and that such written objection shall include the specific issues that are the basis for their objection. The address of the Zoning Administrator shall also be included in the notice letter.
- (7) The Zoning Permit application for the child care home shall include a Sketch Plan, in accordance with Section 6-703 of this Ordinance, The Sketch Plan shall show the size and location of the required outdoor play area and fence required by (8) below, and the required parking spaces.
- (8) If the Zoning Permit application for the child care home is denied, the child care home may be permitted by approval of a Minor Special Exception by the Board of Supervisors, in accordance with the provisions of Section 6-1300 of this Ordinance.
- (9) Unless exempted by (9)(d) below, an outdoor play area shall be provided on the lot where the child care home is located. The outdoor play area shall meet the following standards:
- (a) The minimum size of the outdoor play area shall be seventy-five (75) square feet for each child permitted in the outdoor play area at any given time.

(b) A fence at least three and one half (3 ½) feet in height shall completely enclose the outdoor play area so that children are safely contained inside, and that all persons entering the outdoor play area are within direct line of sight from the child care home.

(c) The outdoor play area shall be located in the rear or side yard.

(d) No outdoor play area shall be required on-site when it is demonstrated that the child care home is located within 1,000 feet of an existing park or outdoor play area of at least two (2) times the size required for the child care home, providing that such park or outdoor play area may be accessed without crossing an arterial or collector road. Such park or outdoor play area shall either be a public park (neighborhood, community or regional park) or other public play area or park which is shown on the approved concept development plan, site plan, or subdivision plat for the development within which the child care home is located, and which is for the use of owners and residents of the portion of the said development where the child care home is located.

(10) Two non-resident assistants/employees shall be permitted.

(11) The hours of operation for the child care home shall be limited to five days a week between the hours of 6:00 AM and 7:00 PM.

(12) Signage for the child care home shall be as permitted in Section 5-1200 of this Ordinance.

(13) Parking spaces required by Section 5-1102 of this Ordinance shall be designed for the drop off/pick up of children and shall be designed and constructed to enhance the safety of children as they arrive and leave the child care home.

(14) For child care homes permitted to care for more than nine (9) children, including the provider's own children, children residing on the premises, and non-resident children:

The child care home shall be permitted only in a single family detached dwelling that is located on a lot that is a minimum of 5,000 square feet in size.

(B) Child Care Centers:

(1) The child care center shall comply with any and all requirements of the County and State Codes, including without limitation, obtaining a Zoning Permit in accordance with Section 6-1000 of this Ordinance, obtaining a County Business License, and obtaining a

State Child Day Center License in accordance with the Code of Virginia, as applicable, prior to establishing the use. Notwithstanding Section 5-600 of this Ordinance, this Section 5-609(B)(1) shall not be modified by Minor Special Exception.

(2) Except as provided under (2)(e) below, an outdoor play area shall be provided on the lot where the child care center is located. The outdoor play area shall meet the following standards:

(a) The minimum size of the outdoor play area shall be seventy-five (75) square feet for each child permitted in the outdoor play area at any given time.

(b) A fence at least three and one half (3 ½) feet in height shall completely enclose the outdoor play area so that children are safely contained inside, and that all persons entering the outdoor play area are within direct line of sight from the child care center classroom areas.

(c) The outdoor play area shall not be located within the minimum required front yard, but may extend into the minimum required side and rear yards. No play equipment shall be located within any required yard or setback of any district.

(d) The outdoor play area shall be safely segregated from parking, loading, or service areas (such as dumpster pads or delivery sites).

(e) No outdoor play area shall be required on-site when it is demonstrated that the child care center is located within 1,000 feet of an existing park or outdoor play area of at least two (2) times the size required for the child care center, providing that such park or outdoor play area may be accessed without crossing an arterial or collector road. Such park or outdoor play area shall either be a public park (neighborhood, community or regional park) or other public play area or park which is shown on the approved concept development plan, site plan, or subdivision plat for the development within which the child care center is located, and which is for the use of owners and residents of the portion of the said development where the child care center is located.

(3) Parking areas and vehicular circulation patterns shall meet the following standards:

(a) Parking areas shall be designed to enhance the safety of children as they arrive at and leave the facility.

- (b) A designated area for the drop off/pick up of children, providing at a minimum one (1) parking space per twenty (20) children, shall be located in proximity to the child care structure in such a way that provides safe and clearly designated access to enter or exit the center. Such parking spaces may be used to meet the minimum off-street parking requirements of Section 5-1102.

5-610 Hospitals. The following standards shall apply to the development of hospitals:

(A) Locational Criteria.

- (1) All hospital sites shall have frontage on a public, hard surfaced road capable of accommodating the traffic generated by the site.
- (2) Hospital structures shall be set back a minimum of 250 feet from County-designated Agricultural-Forestal districts.

(B) Site Development Criteria.

- (1) Hospitals serving over one hundred (100) inpatients shall be served by public water and sewer systems.
- (2) Principal structures shall be set back a minimum of 100 feet from property lines or shall meet the minimum yard setback requirements of the district within which it is located or the adjacent district setback requirements, whichever are greater.
- (3) Accessory structures and parking shall be set back a minimum of 25 feet from any rights-of-way, private access easements, and property lines which adjoin agricultural or residential districts, or shall meet the minimum yard setback requirements of those adjoining districts, whichever are greater.

5-611 Hotel/Motel. The following standards shall apply to the development of hotel/motel:

(A) Locational Criteria.

- (1) Hotel/Motel shall be located on, or with ready access to, collector or arterial roads.
- (2) Hotel/Motel buildings and uses shall not be located in environmentally critical or sensitive areas as defined by the Comprehensive Plan.

(B) Site Development Criteria.

- (1) Hotel/Motel uses shall be served by a public water and sewerage disposal system.

(2) Hotel/Motel uses shall be separated from agricultural uses by a minimum Buffer Yard Type A with a minimum width of 100 feet. Hotel/Motel uses shall be separated from residential and institutional uses by a minimum Buffer Yard Type B with a minimum width of 100 feet. ~~residential, or institutional uses by a landscape buffer with a minimum width of 100 feet, or the minimum width required by Section 5-1400 of this Ordinance, whichever is greater.~~

(C) **Hotels/Motels in the PD-OP and PD-IP Districts.** Hotels/Motels in the PD-OP and PD-IP districts shall be permitted if the use complies with the following standards.

(1) The hotel/motel use shall include a minimum total of 30 square feet per number of hotel rooms of dividable meeting/conference space.

(2) A restaurant and/or carry-out food service shall be provided on-site.

(3) The following amenities shall be provided: Swimming pool, exercise room or fitness facility, a guest store or area offering personal necessities or other items, in addition to the required meeting/conference space.

5-612 Guest Houses. Guest houses are subject to the following additional standards:

(A) Only guests or occupants of the principal residence shall use the guest house.

(B) Guest houses may not be rented, operated for gain, or otherwise used as a separate dwelling.

(C) The floor area of any guest house shall not exceed the lesser of (i) 70% of the gross floor area of the principal structure and a footprint not more than 70% of the principal structure or (ii) 2,500 square feet of gross floor area.

(D) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as a Guest House and shall be exempt from the floor area requirements specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-613 Accessory Apartments and Dwelling Units. Accessory units are subject to the following additional standards:

- (A) No such accessory apartment or dwelling unit shall exceed the lesser of (i) 70% of the gross floor area of the principal structure and a footprint not more than 70% of the principal structure or (ii) 2,500 square feet in gross floor area.
- (B) Accessory apartments and dwelling units shall be permitted only on lots exceeding 20,000 square feet in area. Such lot size restrictions shall not apply in Rural Villages, Rural Hamlets and Countryside Villages. Further, in R-4 and R-8 zoning districts, accessory apartments and dwelling units shall be permitted on cluster or traditional design option lots, on lots less than 10,000 square feet in area.
- (C) In districts other than A-10, AR-1, AR-2, A-3, PD-RV and PD-CV, accessory apartments and dwelling units shall be located only on lots served by public sewer.
- (D) Only one (1) accessory dwelling unit or apartment shall be permitted on a lot. One additional accessory apartment or dwelling unit is permitted on a parcel with an area of 20 acres or more.
- (E) Accessory units may be located within an accessory building, agricultural structure, or in the principal structure.
- (F) All of the use limitations of Section 5-102 shall be met.
- (G) In the AR-1 and AR-2 Districts, one additional accessory dwelling shall be permitted for each 25 acres in excess of 20 acres. Additional dwellings may be permitted by special exception for seasonal labor.
- (H) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as an Accessory Apartment or Accessory Dwelling Unit and shall be exempt from the floor area and minimum lot area requirements specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-614 Small Businesses.

(A) **Purpose and Intent.**

- (1) **General.** The purpose of this section is to allow residents in the AR-1, AR-2, A-3, A-10, TR, CR, JLMA, PD-RV and PD-CV districts to locate and operate small-scale service and contracting businesses or lease such businesses, which preserve the rural and

historic character of the districts and agriculture as an industry. It is the general intent of this Ordinance that commercial uses locate in and around existing urban areas that have adequate roads, public facilities and utilities. However, some small businesses may locate within these districts in order to provide economical and convenient services to the rural area, to supplement farming as a source of income and to operate a home-based business where feasible. Some small businesses can operate in the rural areas with special designs and conditions that mitigate impacts on neighboring rural residential properties.

(2) **Allow Local, Small-Scale Businesses to Locate and Operate.**

The intent of this Section is to allow local, small-scale businesses to locate and operate. It is not intended to permit franchises, branch facilities or other partial elements of larger enterprises that have other business facilities in other locations. Such larger scale enterprises, including expanding businesses which initially located in rural areas under the provisions of this Section, must locate in the County's industrial and commercial zoning districts where they will not adversely impact residential neighborhoods or agricultural activities.

(3) **Uses Temporary for Starting New Business.** The uses approved under the provisions of this section shall be considered temporary for the purpose of starting new businesses. Once a small business needs to expand its area, number of employees, or commercial and customer traffic beyond the capacity and character of the rural area, the business shall relocate to a location appropriately zoned for commercial, business or employment uses. The Board of Supervisors may impose appropriate conditions limiting the duration or transfer of special exceptions granted under the provisions of this Ordinance.

(4) **Adaptive Re-use of Farm Structures.** In addition to home occupations and small businesses, the adaptive re-use of farm structures for the intended use of home occupations and small businesses is allowed with respect to the use of small businesses.

(B) **Definitions.** For the purposes of Section 5-614, Small Businesses in the AR, A-3, A-10, TR, CR, JLMA and PD-CV districts, terms used are defined under "Small Business" in Article 8 of this ordinance.

(C) **Permitted Small Business Uses.**

(1) Small business uses, as listed in subsection D, which meet all of the conditions in Section 5-614(E) shall be allowed on lots of ten (10) acres or greater, subject to approval of a zoning permit/sketch plan, as defined in Section 5-614(H).

(D) **Small Business Uses Permissible by Special Exception.** Small businesses not meeting the criteria of Section 5-614(C) may be allowed by special exception, granted by the Board of Supervisors upon recommendation of the Planning Commission. Special exception applications made pursuant to this Section are subject to the procedures and standards established in Section 6-1300 as well as to the uses, standards and restrictions that follow. The following uses may be approved as “small businesses” in the AR-1, AR-2, A-3, A-10, TR, CR, JLMA and PD-CV zoning districts:

- (1) Business service occupations.
- (2) Personal service occupations.
- (3) Repair service occupations.
- (4) Contractors and contracting.
- (5) Professional office-based services.
- (6) Studios for fine arts and crafts.
- (7) Antique sales and the sale of any goods or items produced on the premises.
- (8) Except as provided above, no retail or wholesale commercial businesses are permitted.

(E) **Small Business Site Development Criteria.**

(1) **Standards and Restrictions for Small Business Uses.**

	Acreage	No. of Employees	Heavy Equip. (On-Site)	Business Vehicles (On-Site)
(a)	0-3	1 maximum	none	2 maximum
(b)	3 but <10	3 maximum	none	2 maximum
(c)	10 but <50	4 maximum	2 maximum	4 maximum
(d)	50 or greater	10 maximum	5 maximum	6 maximum

(e) Business vehicle may not have more than two axles.

(2) **Regulations for Structures.**

	Acreage	Size of Structures
(a)	3-5	2,000 sq. ft. maximum
(b)	5 but <10	2,500 sq. ft. maximum

(c) 10 or greater 5,000 sq. ft. maximum for the initial 10 acres, plus an additional 1,000 sq. ft. for each additional 10 acres, not to exceed 15,000 sq. ft. maximum

(d) Building Height: 35 feet maximum.

(3) Notwithstanding the limitations placed on home occupations in Section 5-400, 100% of an existing farm structure may be used. An approved zoning/building permit shall be received for the change in use.

(4) **Regulations for Storage Yards.**

	Acreage	Size of Storage Yards
(a)	3-5	2,000 sq. ft. maximum
(b)	5 but <10	2,500 sq. ft. maximum
(c)	10 or greater	5,000 sq. ft. maximum for the initial 10 acres, plus an additional 1,000 sq. ft. for each additional 10 acres, not to exceed 15,000 sq. ft. maximum

(d) Storage yards shall be screened consistent with the requirements of Section 5-653(C) (Screening of Outdoor Storage and Storage Yards). Outdoor storage space must be enclosed on all sides by a fence.

(5) **Setback requirements.**

(a) All structures or storage yards of less than 2,000 sq. ft. for uses allowed under this Section shall be set back a minimum of 100 feet from all lot lines.

(b) All structures or storage yards in excess of 2,000 sq. ft. shall be set back at least 300 feet from all lot lines.

(c) All structures or storage yards used for the storage of heavy equipment shall be set back at least 300 feet from all lot lines and 500 feet from existing residential dwellings.

(6) All businesses which use, or store on site, heavy equipment shall access a paved or all-weather state-maintained road.

(F) **Sketch and Site Plans.**

(1) **Sketch Plan.** A sketch plan is required as part of a zoning permit application for permitted small businesses. Sketch plans shall include a drawing of all aspects of the business operations including the size and dimensions of the residence; the size and dimensions of areas within the residence to be used for the

business; size, dimensions, and location of any structures, outdoor storage yards, and screening and buffering; size and dimensions of parking areas and signs if any; and the approximate location of any on-site major floodplain as determined from the County flood plain map. In addition, the sketch plan shall include the required off-site information needed to illustrate conformance with the small business regulations, (Section 5-614), such as distances between storage yards, structures and adjacent residential structures and other buildings, the location and width of adjacent right-of-way, adjoining properties, and easements. The sketch plan need not be drawn to scale, nor does it have to be prepared by a licensed professional. However, distances from structure to adjacent lot lines must be accurately depicted.

- (2) **Special Exceptions.** Special exceptions may contain a condition for a site plan, in lieu of a sketch plan as defined herein, when the Board of Supervisors finds such a condition is necessary to mitigate potential off-site impacts of the proposed use.

- (G) **Signs.** Signs for permitted and special exception small businesses approved under Section 5-614 are subject to the regulations contained in Section 5-1200 of this Ordinance for Businesses.

(H) **Applicability of District Regulations to Small Business Uses.**

- (1) The AR-1, AR-2, A-3, A-10, TR, CR, JLMA and PD-CV district regulations and the general regulations which are consistent with these provisions shall apply to small business uses located in those districts.
- (2) To the extent permitted by other provisions of the Loudoun County Zoning Ordinance, any use accessory and subordinate to a principal agricultural use shall not be affected by Section 5-614. In addition, nothing herein shall affect any legal nonconforming use as provided for in Article I.

(I) **Parking.**

- (1) **General.** Parking shall be provided in accordance with Section 5-1102 when employees and customers are to be on the premises.
- (2) **Landscaping/Buffering/Screening.** Parking areas shall ~~be screened to~~ comply with the Section 5-1407. requirements of Section 5-653(B).
- (3) **Location.** No parking shall be permitted in a required yard or setback.

- (J) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

- (K) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).

5-615 Farm Machinery Sales and Service.

- (A) The establishment shall be located on a paved, state-maintained road not more than 1,000 feet from a primary state road.
- (B) The structures, storage, and parking areas and/or the perimeter of the property shall have a Buffer Yard Type ~~Three (3) B Buffer Yard~~ to screen such areas from adjacent residential buildings.
- (C) Buildings shall be set back a minimum of 75 feet from all property lines.
- (D) Parking, driveways (other than entrance) and storage yards shall be set back a minimum 75 feet from the property line along any road frontage, and a minimum of 50 feet from all other property lines.
- (E) Sites for such establishments shall not be less than three (3) nor more than ten (10) acres.
- (F) Accessory retail sales shall be limited to farm and garden equipment parts and related tools and accessories. In no case shall the floor area devoted to the display and sale of such related tools and accessories be more than 15% of the floor area of the building site. No other non-farm equipment sales shall be permitted, including, but not limited to, lumber, hardware, building materials, or like items.
- (G) No structure shall be located within 500 feet of an existing residential structure.
- (H) The total Floor Area Ratio for all structures shall not exceed 0.1.

5-616 Utility Substations. The following standards shall apply to the development of utility substations.

- (A) Utility substation, transmission.
- (1) In all agricultural and residential districts, utility substations shall be located on lots of one (1) acre or more.
- (2) In all commercial and industrial districts, utility substations shall be located on at least the minimum lot size of the district.
- (B) Utility substation, distribution.
- (1) In all agricultural and residential districts, utility substations shall be located on lots of one (1) acre or more.
- (2) In all commercial and industrial districts, utility substations shall be located on lots of one (1) acre or more.

(C) All utility substations shall be located in areas consistent with the adopted Comprehensive Plan. A Commission Permit shall be required unless the utility substation is specially delineated in the Comprehensive Plan.

(D) All utility transmission and distribution substations and accessory storage yards shall have a minimum Buffer Yard Type ~~Four (4)~~ C Buffer Yard provided, however, in areas where required utility connections preclude installation ~~of the required canopy and understory of large and small deciduous trees of the Type 4 Buffer Yard, the maximum percentage applicable to shrubs under Section 5-1408(B)(2)(d) shall not apply. such trees may be replaced with shrubs, at a rate double to that of the required canopy and understory trees. In lieu of the minimum and maximum percentages applicable to evergreen trees under Section 5-1408(B)(2)(b), a minimum of 40% and a maximum of 70% of the required plant units shall be evergreen trees.~~

(E) Such utilities may be accessed by a private access easement.

5-617 Freestanding Convenience Food Stores. Except to the extent permitted on smaller lots in the Rural Commercial (RC) and Planned Development-Mixed Use Business (PD-MUB) zoning districts.

(A) Convenience food stores shall be located on lots of 50,000 square feet or greater.

(B) Convenience food store shall contain no more than 5,000 square feet of retail area.

(C) If a convenience food store is located at the intersection of two streets, the lot must have at least 200 feet of frontage on each street.

(D) Any convenience food store located within 200 feet of a residentially zoned, used, and/or planned district or land bay must provide an acoustical barrier, such as landscaping, berms, fences and/or walls, to attenuate noise to levels required by Section 5-1507.

5-618 Telecommunications Use And/Or Structures. The following performance standards shall be applied to telecommunication uses and/or structures.

(A) **Antennas.**

(1) **Antennas, Any Portion of Which Exceeds a Height of 60 Feet As Measured from Natural Ground Elevation, When Mounted on Buildings and Structures.** Antennas and related unmanned equipment connected to such antennas, any portion of which that exceeds a height of sixty (60) feet, as measured from natural ground elevation, mounted on buildings or structures may be developed subject to the following performance standards to the extent telecommunications antennas are listed as a permitted use in the underlying zoning district.

- (a) Omnidirectional or whip antennas shall not exceed twenty (20) feet in height or seven (7) inches in diameter and shall be of a material or color which matches the exterior of the building or structure upon which they are mounted.
- (b) Directional or panel antennas shall not exceed ten (10) feet in height or two (2) feet in width and shall be of a material or color which matches the exterior of the building or structure upon which they are mounted.
- (c) Dish antennas shall not exceed six (6) feet in diameter and shall be screened from public view.
- (d) No commercial advertising shall be allowed on any antenna.
- (e) Signals, lights, and/or illumination shall not be permitted on any antenna, unless required by the Federal Communications Commission (FCC), the Federal Aviation Administration (FAA), State or Federal authorities, or the County.
- (f) Cylinder shrouds for the concealment of antennas shall not exceed eleven (11) feet in height or twenty-six (26) inches in diameter and shall be of a material or color which matches the exterior of the building or structure upon which they are mounted. No portion of the antenna shall be exposed outside the shroud.
- (g) The related unmanned equipment structure(s) shall not contain more than five hundred (500) square feet of total gross floor area per user on each site and shall not exceed twelve (12) feet in height. If located within the building or structure upon which the antennas are mounted, they may be located in the areas which are excluded from the determination of net floor area without changing the exclusion of those areas from the calculation of the density of the structure. Such structures shall be of a material or color which matches the exterior of the building or structure upon which they are mounted.
- (h) If the equipment structure is located on the roof of a building, the area of the equipment and structures shall not occupy more than twenty-five percent (25%) of the roof area.
- (i) All antennas and related unmanned equipment shall be removed within ninety (90) days after such antennas or related unmanned equipment are no longer in use.

- (j) The original approved height of a monopole or tower may be increased twenty (20) feet for the collocation of telecommunications antennas, provided that the height of such monopoles and towers, including collocated antennas, shall not exceed one hundred ninety-nine (199) feet, as measured from the natural ground elevation.

- (2) **Antennas, No Portion of Which Exceeds a Height of 60 Feet As Measured From Natural Ground Elevation, when Mounted on Buildings or Structures (Including Antenna Support Structures).** Antennas and related unmanned equipment connected to such antennas, no portion of which exceeds a height of sixty (60) feet, as measured from the natural ground elevation, when mounted on buildings or structures (including antenna support structures), may be developed subject to the following performance standards to the extent telecommunication antennas are listed as a permitted use in the underlying zoning district:

- (a) Omnidirectional or whip antennas shall not exceed eight and one-half (8 ½) feet in height or three (3) inches in diameter and shall be of a material or color which matches the exterior of the building or structure on which they are mounted. Such antennas shall be flush mounted so that neither the antenna nor any portion of the supporting mount shall extend more than two (2) feet from the building or structure.

- (b) Directional or panel antennas shall not exceed five (5) feet in height or one (1) foot in width and shall be of a material or color which matches the exterior of the building or structure on which they are mounted. Such antennas shall be flush mounted so that neither the antenna nor any portion of the supporting mount shall extend more than two (2) feet from the building or structure.

- (c) Dish antennas shall not exceed three (3) feet in diameter and shall be of a material or color which matches the exterior of the building or structure on which they are mounted.

- (d) No commercial advertising shall be allowed on any antenna.

- (e) Signals, lights, and/or illumination shall not be permitted on any antenna, unless required by the Federal Communications Commission (FCC), the Federal Aviation Administration (FAA), State or Federal authorities, or the County.

(f) Cylinder shrouds for the concealment of antennas shall not exceed six (6) feet in height or fourteen (14) inches in diameter and shall be of a material or color which matches the exterior of the building or structure upon which they are mounted. No portion of the antenna shall be exposed outside the shroud.

(g) No more than one (1) related unmanned equipment structure shall be located on an antenna support structure. Such related unmanned equipment structure shall not exceed five (5) feet in height or twenty (20) cubic feet in volume and shall be of a material or color which matches the exterior of the antenna support structure on which it is mounted.

(h) Antennas and related unmanned equipment structures located on the roof of a building shall not exceed the building height of such building by more than fifteen (15) feet and shall not occupy more than twenty-five percent (25%) of the roof area.

(i) All antennas and related unmanned equipment shall be removed within ninety (90) days after such antennas or related unmanned equipment are no longer in use.

(3) **Antenna Hub Sites.** Antenna hub sites may be developed provided such sites comply with the following criteria:

(a) Related unmanned equipment at antenna hub sites shall not contain more than five hundred (500) square feet of total gross floor area and shall not exceed twelve (12) feet in height.

(b) The maximum permitted floor area ratio for the zoning district, if applicable, shall not be exceeded.

(c) Antenna hub sites shall meet the minimum yard requirements of the district in which they are located.

(d) Antenna hub sites shall be compatible with development located in the surrounding visual range regarding the setting, color, lighting, topography and materials. To the maximum extent feasible, related unmanned equipment at an antenna hub site shall be located in the interior of the property on which it is located.

(e) Related unmanned equipment at antenna hub sites shall be screened by a solid fence, wall or berm eight (8) feet in height with an evergreen hedge reaching an ultimate height of at least eight (8) feet and a planted height of at least four (4)

feet. If equipment is added to an existing screened enclosure that contains telecommunication uses and/or structures, the screening requirements may be satisfied with the existing screening.

(f) Antenna hub sites that are fully enclosed within a building shall not be subject to the above criteria.

(g) Antenna hub sites shall be removed within ninety (90) days after such antenna hub sites are no longer in use.

(B) **Monopoles.** Monopoles and related unmanned equipment structure(s) may be developed as a permitted or special exception use, as listed below:

(1) **Monopoles, Permitted By Right.** Monopoles shall be permitted by right subject to the performance criteria listed in Section 5-618(B)(3), in the following situations:

(a) In all zoning districts, if located within an overhead utility transmission line right of way with existing structures greater than eighty (80) feet in height.

(b) In the PD-OP, GB, PD-GI, PD-SA, PD-IP, PD-RDP, or MR-HI zoning districts provided it is located 750 feet or greater from an adjoining residential district.

(c) In the PD-GI and MR-HI zoning districts further subject to Section 5-618(B)(4) if located less than 750 feet from an adjoining residential district.

(d) In the AR, A-10, TR, JLMA-1, JLMA-2, JLMA-3, A-3, CR-1, CR-2, CR-3, CR-4, PD-TREC and RC zoning districts, when accessory to a fire or rescue station.

(2) **Monopoles, Special Exception Required.** Except as provided above, telecommunications monopoles shall be permissible subject to approval of a special exception and subject to the general performance criteria listed in Section 5-618(B)(3) and additional submission requirements listed in 5-618(B)(4), in the following situations:

(a) In the AR-1, AR-2, A-10, TR, JLMA-1, JLMA-2, JLMA-3, A-3, CR-1, CR-2, CR-3, CR-4, PD-TREC and RC zoning districts, except as provided in Section 5-618(B)(1)(d), and in the CLI, PD-CC(CC), PD-CC(SC), PD-CC(RC), PD-TC, PD-TRC, PD-MUB, PD-RV and PD-CV zoning districts.

(b) In the PD-OP, GB, PD-SA, PD-IP and PD-RDP zoning districts when located less than 750 feet from an adjoining residential district.

(c) In all zoning districts, except PD-AAAR, as an accessory use to a fire and rescue station, except as provided in Section 5-618(B)(1)(d).

(d) In all zoning districts, within the right of way of a private toll road.

(e) In the PD-H and R zoning districts when located on property owned by:

(i) Any department or branch of the Federal Government, Commonwealth of Virginia, Loudoun County Government, or Loudoun County School Board; or

(ii) Public Utilities.

(3) **Monopoles, General Performance Criteria.** All telecommunications monopoles, whether permitted by right or permissible with the approval of a special exception application, shall be subject to the following criteria:

(a) The proposed telecommunications monopole shall be compatible with development in the vicinity with regards to the setting, color, lighting, topography, materials and architecture. In addition, the facility shall be located in the interior of the property and areas of existing vegetation, if applicable, shall be used to screen the facility.

(b) New telecommunications monopoles shall be designed to accommodate at least three (3) providers, unless:

(i) Doing so would create an unnecessary visual impact on the surrounding area; or

(ii) No additional need is anticipated for any other potential user in the vicinity; or

(iii) There is some valid economic, technological, or physical justification as to why co-location is not possible.

The applicant shall identify the conditions under which future co-location by other service providers is permitted.

(c) The height of such monopole, including antennas, shall not exceed 199 feet, as measured from the natural ground elevation.

(d) Satellite and microwave dishes attached to monopoles shall not exceed two (2) feet in diameter.

- (e) Except as provided in Section 5-618(B)(3)(o) and Section 5-618(B)(4)(d), telecommunications monopoles shall not be located any closer than one (1) foot for every five (5) feet in height to any property line. Structures and buildings may be constructed within the setback areas of the monopole, provided other zoning standards are met.
- (f) The related unmanned equipment structure(s) shall not contain more than 500 square feet of total gross floor area per telecommunications provider on each site. Structures shall not exceed 12 feet in height.
- (g) Unless otherwise required by the Federal Communications Commission or the Federal Aviation Administration, monopoles shall blend with the background.
- (h) No signals or lights or illumination shall be permitted on a monopole, unless required by the Federal Communications Commission, the Federal Aviation Administration, State or Federal authorities, or the County.
- (i) No commercial advertising or signs shall be allowed on a monopole.
- (j) A commission permit shall be required, except when located in accordance with Section 5-618(B)(1)(a), provided the monopole shall not exceed the height of existing overhead utility transmission line structures by more than twenty (20) feet as measured from natural ground elevation.
- (k) No monopole shall be located within a County designated historic district.
- (l) All unused equipment and facilities from a commercial public telecommunications site shall be removed within 90 days of cessation of commercial public telecommunication use and the site shall be restored as closely as possible to its original condition.
- (m) Applicants for any commercial public telecommunications facility shall demonstrate that they have complied with applicable regulations of the FCC and the FAA. A finding from the FAA that the proposed facility is not a hazard or obstruction to aviation is necessary prior to the issuance of a zoning permit. If a proposed telecommunications facility is higher than 199 feet or within five (5) miles of the property boundary of either Dulles or Leesburg Airports, the applicant shall provide verification that: 1) the appropriate airport authority (Metropolitan Washington

Airports Authority or the Town of Leesburg) has been notified in writing; and 2) the FAA has determined that the proposed facility is neither a hazard nor an obstruction to aviation.

(n) When locating on a Loudoun County or Loudoun County Sanitation Authority site or fire and/or rescue company site: 1) the telecommunications equipment shall not interfere with the existing telecommunications equipment of the primary use; and 2) the setback provisions of Section 5-618(B)(3)(e) shall not apply. ~~In addition, the landscaping/buffering provisions of the Ordinance may be reduced or waived if the site has been developed in accordance with Section 5-1409(G).~~

(o) Applicants proposing a new telecommunications monopole within one (1) mile of a County designated historic district or a Virginia Byway shall submit a minimum of three (3) visual simulations and written justification as to why the monopole could not be sited elsewhere. This requirement shall also be applied if a telecommunications monopole is proposed on a property listed on the National Register of Historic Places.

(p) Telecommunications monopoles shall not be located along ridge lines, but downslope from the top of ridge lines, to protect views of the Catoctin, Bull Run, Hogback, Short Hill, and Blue Ridge Mountains.

(q) Applicants shall submit documentation, in written and graphic form, regarding the service area to be provided by the proposed telecommunications monopole.

(4) **Monopoles, Additional Submission Requirements.** The following additional information shall be submitted by applicants for monopoles required to be approved by special exception.

(a) The applicant shall provide photoimagery or other visual simulation of the proposed telecommunications monopole shown with the existing conditions of the site. This simulation shall be provided from a minimum of three (3) perspectives. The applicant shall address how the facility can be designed to mitigate the visual impact on area residents, facilities, and roads.

(b) Except for areas where permitted by right, an applicant for a new commercial public telecommunication monopole shall demonstrate that location on an existing telecommunications facility or structure greater than 40 feet in height is not feasible. The applicant shall evaluate

telecommunications facilities and structures greater than 40 feet in height within a one (1) mile radius of the proposed facility within the Eastern Loudoun Urban Growth Area. Elsewhere in the County, the applicant shall evaluate these locations within a two (2) mile radius of the proposed facility. Technological, physical, and economic constraints may be considered in determining infeasibility. Co-location may be determined to be infeasible in the following situations:

(i) Planned equipment would exceed the structural capacity of existing and approved telecommunications facilities, considering existing planned use of those facilities, and such facilities cannot be reinforced to accommodate planned or equivalent equipment at a reasonable cost;

(ii) Planned equipment will cause interference with other existing or planned equipment for that telecommunications facility, and that interference cannot be prevented at a reasonable cost;

(iii) Existing or approved telecommunications facilities do not have space on which planned equipment can be placed so as to provide adequate service; and

(iv) Existing and approved telecommunications facilities will not provide adequate signal coverage.

(c) In addition to those entitled to notice under the provisions of Section 6-600 of this Ordinance, all owner(s), or their agent(s), of all properties abutting or immediately and diagonally across the street or road from those properties whose owners are entitled to notice under Section 6-600, shall be provided with the same written notice. The applicant is also encouraged to meet with community and homeowners association groups in the area.

(d) Telecommunications monopoles permissible by special exception pursuant to Section 5-618(B)(2)(d) shall not be subject to the lot requirements, building requirements, and open space requirements, if applicable, of the zoning district in which they are located.

(C) **Telecommunications Towers.** Telecommunications towers with related unmanned equipment structure(s) may be developed as a permitted or special exception use as listed below, subject to the performance standards of this section.

(1) **Telecommunications Towers, Permitted By Right.**
Transmission towers shall be permitted by right subject to the performance criteria listed in Section 5-618(C)(3):

(a) In the MR-HI and PD-GI zoning districts if the tower is forty (40) feet or less in height and is mounted on an existing structure.

(b) In the MR-HI and PD-GI zoning districts if the tower is greater than forty (40) feet in height and will be further subject to the performance standards of Section 5-618(C)(4).

(2) **Telecommunications Towers, Special Exception Required.**
Telecommunications towers shall be permissible by special exception subject to the performance standards listed in Sections 5-618(C)(3) and 5-618(C)(4) in the following situations:

(a) In the A-10, AR-1, AR-2, TR, JLMA-1, JLMA-2, JLMA-3, A-3, CR-1, CR-2, CR-3, CR-4, RC, CLI, PD-CC(CC), PD-CC(SC), PD-CC(RC), PD-TC, PD-TREC, PD-MUB and PD-TRC zoning districts.

(b) In the PD-OP, GB, PD-SA, PD-IP and PD-RDP zoning districts.

(c) In all zoning districts, except PD-AAAR, PD-RV and PD-CV, as an accessory use to a fire and rescue station.

(d) In the PD-H and R zoning districts when located on property owned by:

(i) Any department or branch of the Federal Government, Commonwealth of Virginia, Loudoun County Government, or Loudoun County School Board; or

(ii) Public Utilities.

(3) **Telecommunications Towers, General Performance Criteria.**
All telecommunications towers, whether permitted by right or permissible with the approval of a special exception application, shall be subject to the following criteria:

(a) The telecommunications tower shall be compatible with development in the vicinity with regards to the setting, color, lighting, topography, materials and architecture. In addition, the facility shall be located in the interior of the property and areas of existing vegetation, if applicable, shall be used to screen the facility.

- (b) New telecommunications towers shall be designed to accommodate at least three (3) providers, unless:
- (i) Doing so would create an unnecessary visual impact on the surrounding area; or
 - (ii) No additional need is anticipated for any other potential user in the vicinity; or
 - (iii) There is some valid economic, technological, or physical justification as to why co-location is not possible.
- The applicant shall identify the conditions under which future co-location by other service providers is permitted.
- (c) Telecommunications towers, including antennas, shall not exceed 199 feet, as measured at the natural ground elevation, unless the applicant can clearly demonstrate that the facilities of 199 feet or less cannot render needed services. At the applicant's expense, the County may have an independent analysis performed on the applicant's proposal.
 - (d) Satellite and microwave dishes attached to the towers shall not exceed six (6) feet in diameter.
 - (e) Except as provided in Section 5-618(C)(3)(o), towers shall be set back one (1) foot for every five (5) feet in height from the property line. Structures and buildings may be constructed within the setback area of the tower, provided other zoning standards are met.
 - (f) The related unmanned equipment structure(s) shall not contain more than 500 square feet of total gross floor area per telecommunications provider on each site. Structures shall not exceed 12 feet in height.
 - (g) Unless otherwise required by the Federal Communications Commission or the Federal Aviation Administration, telecommunications towers shall blend with the background.
 - (h) No signals or lights or illumination shall be permitted on a monopole, unless required by the Federal Communications Commission, the Federal Aviation Administration, State or Federal authorities, or the County.
 - (i) No commercial advertising shall be allowed on the tower.
 - (j) A commission permit shall be required.

- (k) No transmission tower shall be located within a County designated historic district.
- (l) No tower shall be located within a PD-RV zoning district.
- (m) All unused equipment and facilities shall be removed from a commercial public telecommunications site within 90 days of cessation of commercial public telecommunication use and the site shall be restored as closely as possible to its original condition.
- (n) Applicants for any commercial public telecommunications facility shall demonstrate that they have complied with applicable regulations of the FCC and the FAA. A finding from the FAA that the proposed facility is not a hazard or obstruction to aviation is necessary prior to the issuance of a zoning permit. If a proposed telecommunications facility is higher than 199 feet or within five (5) miles of the property boundary of either Dulles or Leesburg Airports, the applicant shall provide verification that: 1) the appropriate airport authority (Metropolitan Washington Airports Authority or the Town of Leesburg) has been notified in writing; and 2) the FAA has determined that the proposed facility is neither a hazard nor an obstruction to aviation.
- (o) When locating on a Loudoun County or a Loudoun County Sanitation Authority site or fire and/or rescue company site: 1) the telecommunications equipment will not interfere with the existing telecommunications use of the primary use; and 2) the setback provision of Section 5-618(C)(3)(e) does not apply. ~~In addition, the landscaping and buffering provisions of the Ordinance may be reduced or waived if the site is developed in accordance with Section 5-1409(G).~~
- (p) Applicants proposing a new telecommunications tower within one (1) mile of a County designated historic district or Virginia Byway shall provide a minimum of three (3) visual simulations and written justification as to why the tower could not be sited elsewhere. This requirement shall also be applied if a telecommunications tower is proposed on a property listed on the National Register of Historic Places.
- (q) Telecommunications towers shall not be located along ridge lines, but downslope from the top of ridge lines, to protect views of the Catoctin, Bull Run, Hogback, Short Hill, and Blue Ridge Mountains.

(r) Applicants shall submit documentation, in written and graphic form, regarding the service area to be provided by the proposed telecommunications tower.

(4) **Telecommunications Towers, Additional Submission Requirements.** The following additional performance standards shall apply to transmission towers when approved by special exception:

(a) The applicant shall provide photoimagery or other visual simulation of the proposed facility shown with the existing conditions of the site. This simulation shall be provided from a minimum of three (3) perspectives. The applicant shall address how the facility can be designed to mitigate the visual impact on area residents, facilities, and roads.

(b) Except for areas where permitted by right, an applicant for a new commercial public telecommunication monopoles shall demonstrate that location on an existing telecommunications facility or structure greater than 40 feet in height is not feasible. The applicant shall evaluate telecommunications facilities and structures greater than 40 feet in height within a one (1) mile radius of the proposed facility within the Eastern Loudoun Urban Growth Area. Elsewhere in the County, the applicant shall evaluate these locations within a two (2) mile radius of the proposed facility. Technological, physical, and economic constraints may be considered in determining infeasibility.

Co-location may be determined to be infeasible in the following situations:

(i) Planned equipment would exceed the structural capacity of existing and approved telecommunications facilities, considering existing planned use of those facilities, and such facilities cannot be reinforced to accommodate planned or equivalent equipment at a reasonable cost;

(ii) Planned equipment will cause interference with other existing or planned equipment for that telecommunications facility, and that interference cannot be prevented at a reasonable cost;

(iii) Existing or approved telecommunications facilities do not have space on which planned equipment can be placed so as to provide adequate service; and

(iv) Existing and approved telecommunications facilities will not provide adequate signal coverage.

- (c) In addition to those entitled to notice under the provisions of Section 6-600 of this Ordinance, all owner(s), or their agent(s), of all properties abutting or immediately and diagonally across the street or road from those properties whose owners are entitled to notice under Section 6-600, shall be provided with the same written notice. The applicant is also encouraged to meet with community and homeowners association groups in the area.
- (d) Applicants for new telecommunications towers shall demonstrate that a telecommunications monopole, of comparable transmission capabilities, cannot be utilized or cannot provide an equivalent level of service.

5-619 Rural Corporate Retreat.

(A) **Purpose and Intent.** The purpose of this section is to provide for rural agricultural corporate retreat facilities that will be compatible with, and supportive of the primary land use of agriculture, forestry, open space and/or historic preservation.

(1) The Rural Corporate Retreat is intended to promote the rural amenities of the AR, A-3, A-10, TR-10, JLMA-3 and JLMA-20 districts as an ideal work place. The Rural Corporate Retreat user is encouraged to incorporate existing structures, which could be restored and maintained into the retreat facilities to preserve the existing rural character.

(2) Rural Corporate Retreats shall be permitted in the AR, A-3, A-10, TR-10, JLMA-3 and JLMA-20 districts on the basis of land size and average daily users. Permitted Rural Corporate Retreats shall meet specific development criteria outlined in subsection 5-619(C) below. Any Rural Corporate Retreat that does not meet the criteria of subsection 5-619(C), may be permitted subject to special exception approval.

(3) The Rural Corporate Retreat use shall not involve the handling or processing of hazardous or toxic materials. The Rural Corporate Retreat use shall comply with the applicable performance standards of Section 5-1500.

(B) **Rural Corporate Retreat Development Criteria.**

(1) **Minimum Acreage.** The minimum acreage shall be 50 acres.

(2) **Open Space.** A minimum of 75% of the total property acreage shall be kept in an agricultural, forestry, open space, and/or historic preservation use.

- (3) **Frontage and Access.** The property on which the Rural Corporate Retreat is located shall have frontage and access on a state-maintained road.
- (4) **Floor Area Ratio.** The maximum floor area ratio shall be 0.04. The total acreage shall be used for determining the permitted floor area.
- (5) **On-Site Food Services.** The retreat facilities may provide on-site food service for employees and retreat visitors, but may not contain restaurant facilities open to the general public.
- (6) **Setbacks.** All retreat facilities buildings shall be set back a minimum of 200 feet from adjacent properties.
- (7) **Storage Areas.** Storage areas related to the retreat facilities shall be permitted.
- (8) **Programs.** The retreat facilities use may include training programs, seminars, and similar activities.
- (9) **Special Events.** Special events shall receive approval pursuant to Section 5-500, unless the facility meets the requirements of Section 5-642.
- (10) **Products Sold On-Site.** No products shall be sold on-site except those that are clearly incidental and integral to the purpose and program of the retreat.
- (11) **One Principal Dwelling.** No more than one principal dwelling unit shall be permitted. Tenant dwellings shall be permitted in accord with Section 5-602.
- (12) **On-Site Recreation.** The retreat facilities may provide on-site recreation facilities to be used solely by employees and visitors, but not by the general public.
- (13) **Average Daily User and Acreage Ratio:** 100 users per 50 acres. Notwithstanding, there shall be no more than 450 users on greater than 200 acres without first securing special exception approval. The term Average Daily Users includes employees and visitors to the site. Service trips, such as food or supply deliveries, package delivery, and similar trips are in addition to the average daily users.
- (14) **Exclusions.** Buildings or structures used exclusively for agricultural use, the principal dwelling unit, and tenant dwellings are excluded from these requirements and from the floor area ratio calculations.

(C) **Sketches, Site Plans, Special Exceptions and Statements of Use.**

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- (1) **Sketch Plan.** A sketch plan is required as a part of a zoning permit application for permitted Rural Corporate Retreats. Sketches shall include an accurate drawing of all aspects of the Rural Corporate Retreat including the size and dimensions of buildings; the size and dimensions of land area devoted to the Rural Corporate Retreat use; the size and dimensions of the land to be maintained in agricultural, forestry, open space, and/or historic preservation use; the size and dimensions of parking areas; building setbacks; the size, dimension, and location of any signs; and the approximate location of any on-site major floodplain as determined from the County flood plain map. In addition, the sketch plan shall include the required information needed to illustrate conformance with the Rural Corporate Retreat regulations of this Section 5-619.
- (2) **Statement of Use.** For all Rural Corporate Retreats, a statement of use shall be filed in conjunction with the sketch or site plan. The statement of use shall define the operations of the Rural Corporate Retreat and shall outline how the use meets the development criteria.

19 **5-620**

20 **Manufactured Housing.** The following standards shall apply to the development of manufactured housing:

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- (A) Homes shall be a minimum of 900 square feet in floor area, and a minimum of 19 feet in width.
- (B) Roofs shall be pitched with a minimum vertical rise of four inches for each twelve inches of horizontal run.
- (C) Exterior materials shall be of a color, material and scale compatible with site-built, single family construction.
- (D) Homes shall have a non-reflective roof material which is or simulates asphalt or wood shingles, tile or slate or other products as used in surrounding areas.
- (E) All homes shall have a pitched roof with a minimum of either a 6" overhang and a 4" gutter or 12" overhang on the front and back and a minimum of 6" on the sides.
- (F) Perimeter non-load bearing foundation enclosures shall be compatible with foundation materials on site-built residential structures, and shall be limited to masonry, stone or concrete.
- (G) Homes shall have wheels, axles, transporting lights, and removable towing apparatus removed from the site, and shall be placed on a permanent foundation.
- (H) Storage areas for RV unit shall be provided on a separate lot. If such lot is exterior to the development it shall be effectively buffered from the

street and adjacent dwellings. If the storage area is located on an interior lot, the buffering shall not be required.

(I) Manufactured homes in the AR-1, AR-2, A-3, A-10, and TR-10 districts shall not be subject to this section.

(J) Nothing in this subsection shall be deemed to supersede valid restrictive covenants of record, except that a manufactured home built in accordance with the HUD code shall not be deemed a mobile home.

5-621 Public Utilities. Lot requirements for Municipal Corporations, VDOT, LCSA, Public Utilities and Public Service Corporations.

(A) In all zoning districts, public utilities shall be located on lots of one half (1/2) acre or more.

(B) ~~Buffer Yard Requirements~~Landscaping/Buffering/Screening.

(1) All utility facilities, except Water well, municipal, shall have a minimum Buffer Yard Type ~~Four (4)~~C-Buffer Yard.

(2) **Water well, municipal** shall have a minimum Buffer Yard Type ~~One (1)~~A-Buffer Yard if the well area includes other accessory structures or buildings. Side and rear buffer yards shall be supplemented with an additional two (2) evergreen trees per 100 lineal-linear feet. ~~The required buffer may surround the Water well, municipal, use, rather than around the perimeter of the lot or parcel as required by Section 5-1407(A).~~

(C) Such utilities may be accessed by private access easement.

(D) Utility Substations are governed by Section 5-616 of this Ordinance.

(E) **Water well, municipal.** Prior to approval of the first site plan for a new Water well, municipal use, an Applicant shall complete the testing and reporting requirements of either Section 5-621(E)(1) or Section 5-621(E)(2), below, with the choice of either the (E)(1) or the (E)(2) testing to be at Applicant's discretion, and shall provide the results to the Director of the Department of Building and Development in conjunction with the said site plan application: Such tests shall be required to be conducted only during the initial testing period prior to the approval of a site plan for a new municipal water well and shall not require continuous monitoring of off-site wells after site plan approval.

(1) Yield and Drawdown Tests as required by the Virginia Department of Health-Office of Drinking Water, and monitoring of existing private wells within 500 feet of the proposed well, as recommended by the Virginia Department of Health-Office of Drinking Water and with the consent of the property owner; or

- (2) A Hydrogeologic Report prepared in accordance with Section 6.240.A (Background Information), Section 6.240.B (Analysis of Background Information), Section 6.240.E (Pumping Test), and Section 6.240.G (Groundwater monitoring program proposal) of the Facilities Standards Manual. Monitoring of private wells is to be conducted only with the consent of the property owner.

5-622 Magazine Contained Explosive Facilities.

- (A) **Purpose and Intent.** The intent of this section is to allow businesses with magazine contained explosives storage facilities to be located within the A-3 zoning district, while preserving the rural character of the district. A commercial business operation requiring a magazine contained explosives facility shall be located in a commercial or industrial zoning district.
- (B) **Effective Control.** In order to qualify for a special exception as a magazine contained explosives facility, the applicant shall demonstrate unified ownership/control of the parcel that is the subject of the special exception application and the commercial business operation cited in (A) above.
- (C) **Site Development Criteria.**
- (1) **Acreage.** The minimum gross acreage of a parcel used for storage of magazine contained explosives shall be 50 acres. A minimum of three acres shall be located outside of major floodplain. In no event shall the acreage be less than that necessary to comply with the regulations contained in the most current adopted edition of the "Virginia Statewide Fire Prevention Code" (VSFPC) and all other applicable state and local codes and ordinances whichever is more restrictive.
- (2) **Setbacks.**
- (a) **Adjacent to Roads.** No magazine facility or loading area shall be permitted closer than 500 feet to the right-of-way of a state maintained road or the minimum setback contained in the VSFPC, whichever is more restrictive.
- (b) **Adjacent to Other Properties.** No magazine facility shall be permitted closer than 350 feet or the minimum setback contained in the VSFPC, whichever is more restrictive.
- (3) **Access.** Magazine Contained Explosives Facilities may be located on lots accessed by private access easement.
- (D) **Construction and Placement.** Construction and Placement of a magazine for the containment of explosives shall conform to all applicable State and Federal requirements.

(E) **Open Space.** Except for those areas established for the approved magazine facility on the special exception plat, the remainder of the parcel shall be maintained for agricultural, horticultural, and forestry uses during the term of the special exception. Uses and structures accessory to the magazine facility and an agricultural, horticultural, and/or forestry use on the property may be permitted, including security buildings, barns and one single family dwelling.

(F) **Conveyance.** Approval of a special exception or zoning permit pursuant to this section shall not convey with the transfer of the property or business which are the subject of these applications

5-623 PD-IP Private School Notification Standards.

(A) **Purpose and Intent.** Operators of a private school located within a PD-IP District must notify all applicants, at the time of application, of the potential permitted and special exception uses within such a district.

(B) **Standard Notification.** The notification document shall include a list of the uses permitted within the industrial zone. The document shall include a section that requires prospective student's parent to sign a statement stating that they have reviewed or have been offered the opportunity to review this document. Said document shall remain on file at the school for the period of the student's enrollment.

5-624 Vehicle Wholesale Auction.

(A) **Locational Criteria.**

(1) Vehicle wholesale auctions shall be located on a public, paved road capable of accommodating the traffic generated by the use.

(2) Vehicle wholesale auctions shall be located on parcels where at least a portion of the parcel is located within the noise contour areas of the Airport Impact Overlay District, as existing at the time of initial site plan approval.

(3) Vehicle wholesale auctions shall be located on a parcel with an area of 50 acres or more.

(B) **Site Development Criteria.**

(1) Any car-carrier loading/unloading area and vehicle storage areas shall be located separately from the customer parking areas, and such areas shall be identified with directional signage.

(2) The use shall be served by public sewer.

(3) Car washing associated with the use shall utilize recycled water.

- (4) The sale and/or storage of vehicles that are not in operating condition shall not be permitted.
- (5) Outdoor vehicle storage, parking spaces, and loading spaces shall be specifically identified on an approved site plan and shall be limited to such areas.
- (6) Outdoor vehicle storage shall be setback at least 100 feet from any road right-of-way.
- (7) The test driving of all vehicles shall be conducted on-site.
- ~~(8) Notwithstanding the requirements of Section 5-1400, no structure shall be required in the rear or side Type 4 Buffer Yards when adjacent to areas of Dulles Airport.~~
- ~~(9)~~(8) Vehicle wholesale auctions shall not be conducted before 8:00 a.m., after 6:00 p.m., or on Saturdays or on Sundays.

5-625

Winery, Commercial. Commercial wineries in the AR, JMLA, and Route 28 CO, PD-CM and CB districts shall comply with the following standards:

(A) Intensity/Character.

- (1) **Site Size.** The minimum lot area for a commercial winery is 10 acres.
- (2) **Wine Tasting Rooms and Accessory Food Sales.** Facilities for wine tasting rooms and accessory food sales (including a kitchen) shall not exceed 49 percent of the total gross floor area of all structures at the commercial winery.
- (3) **Hours of Operation.** Hours of operation shall be limited to 10:00 a.m. to 10:00 p.m.

(B) Size of Use.

- (1) **Floor Area Ratio.** The floor area ratio for a commercial winery shall not exceed 0.04.
- (2) **Storage Yards.** The total area of storage yards shall not exceed 20 percent of the total area of the principal structure.

(C) Location on Site/Dimensional Standards. A commercial winery shall be set back at least 125 feet from all lot lines.

(D) Landscaping/Buffering/Screening.

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section 5-~~653(A)-1404(A)(6).~~

- (2) **Parking and Storage Areas.** Parking areas shall comply with Section 5-1407. ~~Sand~~ storage areas shall ~~be screened to~~ comply with the requirements of Section 5-~~653(B)~~.1406.

(E) **Roads/Access Standards.**

- (1) **General Access Standards.** A commercial winery shall comply with the road access standards of Section 5-654.
- (2) **Driveways.** Driveways to a commercial winery shall not be located within a required buffer yard area except as minimally necessary to access the site.
- (3) **Vehicles/Equipment.** Commercial wineries that use heavy equipment shall have direct access to a paved public road.

(F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(G) **Parking.**

- (1) **General.** Parking and loading shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

5-626 Agriculture, Horticulture and Animal Husbandry.

(A) **Parcel Size.**

- (1) Agriculture, Horticulture and Animal Husbandry uses shall have no minimum lot size.
- (2) Animal Husbandry shall not be permitted on a parcel of less than five (5) acres in size unless such parcel has obtained an approved Conservation Farm Plan with a Best Management section as described in Section 5-626(B) below.

(B) **Conservation Farm Plan.** Prior to the establishment of an Animal Husbandry use on a property of less than five (5) acres the owner of the parcel shall be required to execute a Conservation Farm Plan (also known as a farm management plan) including a waste management plan, through and with the Loudoun Soil and Water Conservation District (SWCD) and the Virginia Cooperative Extension Service (VCES) and provide a copy of such executed Plan to the Zoning Administrator. The Plan shall indicate the types and quantity of proposed animals, location and size of existing and proposed structures, grazing areas, and location and type of wells and septic fields and reserve septic fields. A Best Management section shall be included identifying the best management practices necessary to support the proposed types and quantity of animals. Review of the Plan

shall take into consideration the type and construction of any wells, septic fields and reserve septic fields and environmental features such as steep slopes, rock outcroppings and streams. The Best Management Section shall be reviewed by the Virginia Cooperative Extension Service to confirm that it is consistent with generally accepted Animal Husbandry standards and documentation indicating such confirmation shall be provided to the Zoning Administrator. After approval, no additional animals may be added to the site without an approved amendment to the Plan.

- (C) **Setbacks for Certain Structures.** No structure for housing livestock including barns, run-in sheds, stables, and the like shall be located closer than 60 feet from the property line of an adjoining lot where a residential dwelling existing or under construction at the time of construction of the structure is the principal use. This setback shall not apply if such residential dwelling is located more than 60 feet from the property line adjoining the structure.

5-627 Agriculture Support Uses (Direct Association with Agriculture, Horticulture or Animal Husbandry).

(A) **Intensity/Character.**

- (1) **In Association with On-Going Agriculture, Horticulture, or Animal Husbandry Use.** The agriculture support use (direct association) shall be allowed only in direct association with an on-going agriculture, horticulture, or animal husbandry use or activity.
- (2) **Site Size.** The minimum lot area for any agriculture support use (direct association) shall be 5 acres, except the following uses shall have the following minimum lot area:

Use	Lot Area (Minimum)
Equestrian Event Facility	25 acres
Stable, Livery	25 acres

- (3) **Visitors/Customers/Parking Spaces.** The minimum lot area shall increase based on the number of visitors/customers attracted to the use, as follows:

Use	Scope of Use/Event	Lot Area (Minimum)
Level I— small scale	No more than 200 visitors on any one day; no more than 100 vehicles allowed on site at any one time.	5 acres, up to 25

Use	Scope of Use/Event	Lot Area (Minimum)
Level II— medium scale	> 200 visitors on any one day, no more than 400; no more than 200 vehicles allowed on site at any one time.	>25 acres, up to 50
Level III— large scale	> 400 visitors on any one day, no more than 600; no more than 300 vehicles allowed on site at any one time, except 4 additional visitors and 2 additional vehicles allowed per acre in excess of 100 acres.	>50 acres, up to 100

(4) **Hours of Operation.** Hours of operation for any agriculture support use (direct association) shall be limited to the hours from 6:00 a.m. to 9:00 p.m.

(5) **Owner.** The agriculture support use (direct association) shall be operated or maintained by the owner or occupant of the land upon which the primary associated agriculture, horticulture, or animal husbandry use is being conducted.

(B) **Size of Use.**

(1) **Structure.** The size of structures used in the agricultural support use (direct association) shall not exceed the following gross floor area (total all structures):

Use	Lot Area	Size of Structures (Maximum)
Level I—small scale	5 to 25 acres	12,000 square feet
Level II—medium scale	>25 acres, up to 50 acres	24,000 square feet
Level III—large scale	> 50 acres, up to 100 acres. Additional structure size allowed by right at rate of 2,400 square feet per 10 acres in excess of 100 acres, up to 48,000 square feet in total structure size for agriculture support (direct association uses)	36,000 square feet

(2) **Storage Areas.** The total area of all storage areas used in the agricultural support use (direct association) shall not exceed the following size in square feet:

Use	Lot Area	Size of Structures (Maximum)
Level I—small scale	5 to 25 acres	5,000 square feet
An additional 1,000 square feet of storage area shall be allowed by right for each additional 10 acres, not to exceed a maximum of 20,000 square feet.		

- (C) **Location on Site/Dimensional Standards.** Structures or storage areas of an agricultural support use (direct association) shall be set back from lot lines as follows:

Use		Lot Area (Min.)	Size of Structures (Max.)	Setback from Lot Lines
Level I—small scale		5 to 25 acres	12,000 square feet	60 ft.
Level II—medium scale		>25 acres, up to 50 acres	24,000 square feet	120 ft.
Level III—large scale		> 50, up to 100 acres	36,000 square feet	175 ft.

- (D) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply ~~with the landscaping and screening standards of~~ Section 5-~~653(A).~~ 1404(A)(6)
- (2) **Storage Areas.** All storage areas ~~shall be screened and landscaped consistent with the standards of~~ shall comply with Section 5-~~653(C).~~ 5-1406.

- (E) **Road/Access Standards.**

- (1) **General Access Standards.** An agriculture support use (direct association) shall comply with the road access standards of Section 5-654.
- (2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.
- (3) **Vehicles/Equipment.** Any agricultural support use (direct association) that involves the use of or services heavy equipment shall have direct access to a paved public road maintained by the state. Direct access shall not be provided by a private easement.

- (F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

- (G) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).

- (H) **Hazardous Chemicals, Pesticide Use.** The use and application of herbicides, pesticides, and potentially hazardous chemicals and substances such as paints and solvents shall be prohibited within the required buffer.

- (I) **Parking.**

- (1) **General.** Parking shall be provided as required by Section 5-1102.

- (2) **Surface.** All parking areas serving the agricultural support use (direct association) shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

5-628 Farm Based Tourism. Farm based tourism uses in the AR, TR, JLMA, and Route 28 CO, PD-CM and CB districts shall comply with the following standards:

(A) **Intensity/Character Standards.**

- (1) **Site Size.** The minimum lot area for a farm based tourism use shall be 5 acres.
- (2) **Visitors/Customers/Parking Spaces.** The lot area shall increase based on the number of visitors/customers attracted to the use, as follows:

Use	Scope of Use/Event	Lot Area Requirement
Level I—small scale	No more than 300 visitors on any one day; no more than 150 vehicles allowed on site at any one time.	>5 acres, up to 40
Level II—medium scale	> 300 visitors daily, no more than 600 visitors on any one day; no more than 300 vehicles allowed on site at any one time.	>40 acres, up to 80
Level III—large scale	> 600 visitors daily, no more than 800 visitors on any one day; no more than 400 vehicles allowed on site at any one time.	>80 acres

- (3) **Hours of Operation.** Hours of operation shall be limited to 8:00 a.m. to 6:00 p.m.
- (4) **Owner.** The farm based tourism use shall be operated or maintained by the owner, operator, or occupant of the land upon which the primary associated agriculture, horticulture or animal husbandry use is being conducted.

(B) **Size of Use Standards.**

- (1) **Structure.**
- (a) The size of structures used for the farm based tourism use shall not exceed the following gross floor areas (total all structures):

Use	Lot Area (Minimum)	Size of Structures (Maximum)
Level I—small scale	5 acres, up to 40 acres	Up to 5,000 square feet
Level II—medium scale	>40 acres, up to 80 acres	> 5,000 square feet, up to 7,500 square feet

Use		Lot Area (Minimum)	Size of Structures (Maximum)
Level scale	III—large	>80 acres	> 7,500 square feet, up to 10,500 square feet

- (2) **Storage Areas.** The total area of all storage areas shall not exceed 25 percent of the total floor area of the structures used for the farm based tourism use.

(C) **Location on Site/Dimensional Standards.**

- (1) **Lot Lines.** Structures for farm based tourism uses shall be set back from lot lines as follows:

Use		Size of Structures (Maximum)	Setback from Lot Lines
Level I—small scale	II—medium	Up to 5,000 square feet	100 ft.
Level I—small scale	II—medium	>5,000 square feet up to 7,500 square feet	150 ft.
Level scale	III—large	>7,500 square feet, up to 10,000 square feet	200 ft.

(D) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section 5-653(A).1404(A)(6).
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the~~Section 5-1407. ~~requirements of~~ Section 5-653(B).
- (3) **Storage Areas.** All storage areas shall ~~be screened and landscaped consistent with the standards of~~comply with Section 5-653(C).5-1406.

(E) **Road/Access Standards.**

- (1) **General Access Standards.** Farm based tourism uses shall comply with the road access standards of Section 5-654.
- (2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-654(A) (Exterior Lighting Standards).

(G) **Parking.**

- (1) **General.** Parking shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

- (H) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used for Farm Based Tourism and shall be exempt from the minimum lot area and Level I lot area and setback from lot lines requirements, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-629 Sawmills. Sawmills shall comply with the following standards.

(A) **Intensity/Character Standards.**

- (1) **Site Size.** The minimum lot area for a sawmill shall be 12 acres.
- (2) **Customers/Parking Spaces.** The minimum lot area shall increase based on the number of customers attracted to the use, as follows.

Use		Scope of Use/Event	Lot Area (Minimum)
Level I—small scale	I—small	No more than 25 customers on any one day; no more than 13 vehicles allowed on site at any one time.	12 acres
Level II—medium scale	II—medium	> 25 customers on any one day, no more than 100; no more than 50 vehicles allowed on site at any one time.	20 acres
Level III—large scale	III—large	> 100 customers on any one day, no more than 150; no more than 75 vehicles allowed on site at any one time.	25 acres

- (3) **Hours of Operation.** Hours of operation for a sawmill shall be limited from 6:00 a.m. to 6:00 p.m.

(B) **Size of Use Standards.**

- (1) **Structure.** Excluding the actual timber cutting equipment, the size of all structures used at the sawmill shall not exceed the following gross floor areas (total all structures):

Use	Lot Area (Minimum)	Size of Structures (Maximum)
Level I—small scale	12 acres	3,500 square feet
Level II—medium scale	20 acres	5,500 square feet
Level III—large scale	25 acres	7,000 square feet

- (2) **Storage Yards.** The size of storage yards used for a sawmill shall not exceed the following size in square feet:

Use	Lot Area (Minimum)	Size of Storage Yard (Maximum)
Level I—small scale	12 acres	4,500 square feet
Level II—medium scale	20 acres	9,000 square feet
Level III—large scale	25 acres	15,000 square feet

(C) **Location on Site/Dimensional Standards.**

- (1) **Lot Lines.** Structures and storage yards shall be set back from lot lines as follows:

Use	Size of Structures (Maximum)	Setback from Lot Lines
Level I—small scale	Up to 3,500 square feet	225 ft.
Level II—medium scale	>3,500 square feet, up to 5,500 square feet	275 ft.
Level III—large scale	>5,500 square feet, up to 7,000 square feet	325 ft.

- (2) **Sawdust and or Wood Chip Pile.** Sawdust or wood chip piles at the sawmills shall not exceed 25 feet.

(D) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply ~~with the landscaping and screening standards of~~ Section 5-~~653(A).1404(A)(6).~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~
- (3) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section 5-~~653(C).1406.~~

(E) **Roads/Access Standards.**

- (1) **General Access Standards.** A sawmill shall comply with the road access standards of Section 6-564.
- (2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652 (Exterior Lighting Standards).

(G) **Noise Standards.** The maximum allowable dB(A) level of impulsive sound emitted by the use, as measured at the property line, shall not exceed 55 dB(A).

(H) **Parking.**

- (1) **General.** Parking and loading shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas serving the sawmill shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

5-630 Agriculture Support Use (No Direct Association with Agriculture, Horticulture, Animal Husbandry).

(A) **Intensity/Character.**

- (1) **Site Size.** The minimum lot area for an agriculture support use (no direct association) shall be 5 acres, except the following uses shall have the following minimum lot area:

Use	Lot Area (Minimum)
Agricultural Research Facility	25 acres
Central Farm Distribution Hub for Agricultural Products	25 acres
Equestrian Event Facility	25 acres
Stable, Livery	25 acres

- (2) **Visitors/Customers/Parking Spaces.** The minimum lot area shall increase based on the number of visitors/customers attracted to the use, as follows:

Use	Scope of Use/Event	Lot Area Minimum
Level I - small scale	No more than 200 visitors on any one day; no more than 100 vehicles allowed on site at any one time.	5 to 25 acres
Level II - medium scale	More than 200 visitors on any one day and less than 400; no more than 200 vehicles allowed on site at any one time.	>25 acres, up to 50
Level III - large scale	More than 400 visitors on any one day and less than 600; no more than 300 vehicles allowed on site at any one time, except that 5 additional visitors and 2 additional vehicles are allowed per acre in excess of 100 acres.	>50 to 100 acres

- (3) **Hours of Operation.** Hours of operation for an agricultural support use (no direct association) shall be limited to the hours from 6:00 a.m. to 10:00 p.m.

(B) **Size of Use.**

- (1) **Structure Size.** The size of structures used on the agricultural support use (no direct association) shall not exceed the following floor area ratio or gross floor area, as applicable:

Use	Lot Area (Minimum)	Size of Structures (Maximum)
Agricultural Research Facility	25 acres	Maximum FAR: 0.02
Central Farm Distribution Hub for Agricultural Products	25 acres	Maximum FAR: 0.02
All Other Uses		
Level I—small scale	5 to 25 acres	12,000 square feet
Level II—medium scale	>25 acres, up to 50 acres	24,000 square feet
Level III—large scale	> 50 acres, up to 100 acres. Additional structure size allowed by right at rate of 2,400 square feet per 10 acres in excess of 100 acres, up to 48,000 square feet in total structure size for agriculture support use (no direct association)	36,000 square feet

- (2) **Storage Areas.** The total area of storage areas shall not exceed 10 percent of the total area of the principal structure.

- (C) **Location on Site/Dimensional Standards.** An agricultural support use (no direct association) shall be set back from lot lines as follows:

Use	Lot Area (Min)	Size of Structures (Max.)	Setback from Lot Lines
Agricultural Research Facility	25 acres	Maximum FAR (all structures): 0.02	150 ft.
Central Farm Distribution Hub for Agricultural Products	25 acres	Maximum FAR (all structures): 0.02	150 ft.
All Other Uses			
Level I—small scale	5 to 25 acres	12,000 square feet	60 ft.
Level II—medium scale	>25 acres, up to 50 acres	24,000 square feet	120 ft.
Level III—large scale	> 50, up to 100 acres	36,000 square feet	175 ft.

- (D) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply ~~with the landscaping and screening standards of~~ Section ~~5-653(A); 5-1404(A)(6).~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~

(3) **Storage Areas.** All storage areas shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C).~~ 5-1406.

(E) **Roads/Access Standards.**

(1) **General Access Standards.** An agricultural support use (no direct association) shall comply with the road access standards in Section 5-654.

(2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(3) **Vehicles/Equipment.** Any use that involves the use of or services heavy equipment shall have direct access to a paved public road.

(4) **Number of Access Points.** There shall be no more than two points of access from the use to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

(F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(G) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).

(H) **Parking.**

(1) **General.** Parking shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

5-631 Animal Hospital. Animal hospitals in the PD-GI, AR and JLMA districts shall comply with the following standards.

(A) **Intensity/Character.**

(1) **Site Size.** The minimum lot area for any animal hospital shall be 5 acres.

(B) **Size of Use.**

(1) **Floor Area Ratio.** The maximum floor area ratio shall not exceed 0.04.

(2) **Storage Yards.** The total area of storage yards shall not exceed 10 percent of the total area of the principal structure.

(3) **Location on Site/Dimensional Standards.** An animal hospital shall have the following minimum required yards:

- (a) Structures of less than 5,000 square feet of gross floor area: 100 feet minimum from all lot lines.
- (b) Structures greater than 5,000 square feet and less than 15,000 square feet of gross floor area: 150 feet minimum from all lot lines.
- (c) Structures greater than 15,000 square feet of gross floor area: 200 feet minimum from all lot lines.

(C) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A); 5-1404(A)(6).~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the~~Section 5-1407. ~~requirements of Section 5-653(B).~~
- (3) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~comply with Section ~~5-653(C); 5-1406.~~

(D) **Roads/Access.**

- (1) **General Access Standards.** An animal hospital shall comply with the road access standards of Section 5-654.
- (2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.
- (3) **Number of Access Points.** There shall be no more than two points of access from an animal hospital to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

(E) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(F) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).

(G) **Parking.**

- (1) **General.** Parking and loading shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

5-632 Seasonal Labor Dormitory. Seasonal labor dormitory uses in the AR and JLMA-20 districts shall comply with the following standards.

(A) **Intensity/Character.**

- (1) **Location of Use.** The use shall be located on the site of active agriculture, horticulture or animal husbandry operations.
- (2) **Dwelling Unit Size.** The minimum size of a dormitory shall be based on a rate of 100 square feet per seasonal laborer housed, up to a maximum of 2,500 square feet.
- (3) **Residents.** Residents shall be employed on site at an on-going agriculture, horticulture or animal husbandry operation during their occupancy of the unit.

(B) **Location on Site.**

- (1) **Located on Internal Site Roads.** Dormitories shall be accessed by internal site roads and shall not have direct access to public roads.
- (2) **Setback from Single-Family Dwellings.** Dormitories shall be set back 300 feet from off-site single family detached units.

(C) **Landscaping/Buffering/Screening.** Yards, berms, vegetative screening, fences or walls shall be provided to buffer adjacent properties and public streets from dormitory structures.

(D) **Sanitary and Bathing Facilities.** All dwellings shall have indoor sanitary and bathing facilities consistent with the requirements of the Loudoun County Health Department.

(E) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(F) **Parking.**

- (1) **General.** Parking shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.
- (3) **Landscaping/Buffering/Screening.** Parking areas shall ~~be screened to comply with the Section 5-1407 requirements of Section 5-653(B).~~

5-633

Airport/Landing Strip. The following standards shall apply to airport/landing strips in the AR, JLMA-20 and TR-10 districts.

(A) **Intensity/Character.**

- (1) **Scope of Aviation Operations.**

- (a) The airport/landing strip shall be for private aviation aircraft only, limited exclusively to the use of the landowner and guests; commercial operations, including flight training, ground school, and sales, are prohibited.
- (b) Instrument-guided flight to access the airport/landing strip is prohibited.
- (c) Jet-propelled aircraft shall not use the airport/landing strip.
- (d) Takeoffs or landings are prohibited between the hours of 6:00 p.m. and 6:00 a.m.

(2) **Accessory Aircraft Repairs and Servicing.**

- (a) Typical accessory support services for the airport landing strip are allowed, including but not limited to fueling stations, fuel tanks, and storage.
- (b) Routine minor repairs and necessary maintenance of aircraft are permitted accessory uses, provided all routine repairs and maintenance occur within an enclosed structure, such as a hangar.

(B) **Site Size.** The minimum lot area for an airport/landing strip shall be 80 acres, except that a use consisting only of a landing strip with no accessory structures or facilities other than a fueling station shall be a minimum of 15 acres in size.

(C) **Structure Size.**

- (1) **Structure Size.** The size of structures necessary to service the use, such as aircraft service buildings, shall not exceed the following gross floor area (total all structures): 15,000 square feet.
- (2) **Storage Yards.** The maximum total area of storage yards for all lots smaller than 25 acres shall be 5,000 square feet. For lots greater than 25 acres, an additional 1,000 square feet shall be allowed for each additional 10 acres, not to exceed a maximum of 20,000 square feet.

(D) **Location on Site/Dimensional Standards.**

- (1) **Aviation Structures, Storage Yards and Runway or Landing Strip.** All aviation structures, storage yards, and the runway or landing strip, shall be set back from lot lines as follows:
 - (a) Structures less than 2,500 square feet of gross floor area: 125 feet minimum from all lot lines.

- (b) Structures greater than 2,500 and up to 15,000 square feet of gross floor area: 200 feet minimum from all lot lines.
- (c) Structures over 15,000 square feet of gross floor area: 250 feet minimum from all lot lines.
- (d) Runway or landing strip: 650 feet minimum from all lot lines.

(E) **Landscaping/Buffering/Screening.**

- (1) **Runway Buffer Area.** A buffer area shall be provided extending from the end of all runways or landing strips. The size of the buffer shall encompass a minimum land area equal to a one-quarter mile radius measured from the edge of the end of every runway. No uses shall be allowed within this runway buffer area.
- (2) **Parking.** Parking areas shall ~~be screened to comply with Section the 5-1407. requirements of Section 5-653(B).~~ Section 5-653(B).
- (3) **Outdoor Services/Activities.** All tanks, storage yards, and vehicles and equipment stored outdoors shall be screened and landscaped consistent with the standards of Section 5-653(C).

(F) **Road/Access.** Any airport/landing strip use shall comply with the road access standards of Section 5-654.

(G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(H) **Parking.**

- (1) **General.** Parking shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

5-634 Agricultural Cultural Center. An agricultural cultural center in the AR and Route 28 CO, PD-CM and CB districts shall comply with the following standards:

(A) **Intensity/Character of Use.** The minimum lot area for an agricultural cultural center shall be 10 acres.

(B) **Size of Use.**

- (1) **Floor Area Ratio.** The maximum floor area ratio shall be 0.04.
- (2) **Storage Yards.** The total area of all storage yards shall be limited to 10 percent of the total gross floor area of the principal structure on the site. Outdoor exhibit space open to members of the public shall not be counted as part of the area of storage yards.

(C) **Location on Site.**

(1) **Lot Lines.** An agricultural cultural center shall be set back from lot lines as follows:

(a) Structures of less than 9,000 square feet of gross floor area: 125 feet minimum from all lot lines.

(b) Structures greater than 9,000 square feet, and up to 18,000 square feet of gross floor area: 175 feet minimum from all lot lines.

(c) Structures over 18,000 square feet of gross floor area: 225 feet minimum from all lot lines.

(D) **Landscaping/Buffering/Screening.**

(1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A).~~ 5-1404(A)(6).

(2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~

(3) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C).~~ 5-1406.

(E) **Roads/Access.**

(1) **General Access Standards.** An agricultural cultural center shall comply with the road access standards of Section 5-654.

(2) **Number of Access Points.** There shall be no more than one point of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

(3) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(G) **Parking.**

(1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas serving an agricultural cultural center of up to 5,000 square feet gross area shall use a dust-free surfacing material as provided in the Facilities Standards Manual. Parking

areas in excess of 5,000 square feet of gross floor area shall provide paved parking for visitors and users.

- (H) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as an Agricultural Cultural Center and shall be exempt from the minimum lot area, floor area ratio, and set back from lot line requirements specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-635

Fairground. The following standards shall apply to fairgrounds in the AR and JLMA-20 districts.

- (A) **Intensity/Character of Use.** The minimum lot area for the use shall be 25 acres.

- (B) **Size of Use.**

- (1) **Floor Area Ratio.** The maximum floor area ratio shall be 0.04.
- (2) **Storage Areas.** The total area of storage areas shall not exceed 10 percent of the total area of the principal structures.
- (3) **Building Height.** Building height shall not exceed 35 feet.
- (4) **Location on Site.** The use shall be set back from lot lines as follows:
 - (a) Structures of less than 20,000 square feet of gross floor area: 150 feet minimum from all lot lines.
 - (b) Structures greater than 20,000 square feet, up to 40,000 square feet of gross floor area: 200 feet minimum from all lot lines.
 - (c) Structures greater than 40,000 square feet of gross floor area: 225 feet minimum from all lot lines.

- (C) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A); 5-1404(A)(6).~~

- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~
- (3) **Storage Areas.** All storage areas shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C)-5-~~ 1406.

(D) **Roads/Access.**

- (1) **General Access Standards.** Fairgrounds shall comply with the road access standards of Section 5-654.
- (2) **Number of Access Points.** There shall be no more than two points of access to a fairground. This requirement shall not preclude an additional access for emergency vehicles only.
- (3) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(E) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A)(1)-(3).

(F) **Noise.**

- (1) **Location in Relation to Residential Use.** No loading/unloading activities, or other noise-producing activities shall be allowed within 250 feet of an existing adjacent single family detached use during the hours of 11:00 p.m. and 6:00 a.m.
- (2) **Maximum dB(A).** The maximum allowable dB(A) level of impulsive sound emitted from the use, as measured at the property line, shall not exceed 55 dB(A). In addition, outdoor music shall not be allowed after 11:00 PM.

(G) **Parking.**

- (1) **General.** Parking shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas serving a fairground shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

5-636 Arboretum, Botanical Garden, Nature Study Area. The following standards shall apply to the development of arboretums, botanical gardens, and nature study areas in the AR, JLMA-20 and PD-CV districts.

(A) **Intensity/Character of Use.**

- (1) **Site Size.** The minimum lot area for any arboretum, botanical garden or nature study area shall be 5 acres.

(2) **Hours of Operation.** The hours of operation shall be limited to 6:00 a.m. to 9:00 p.m., except that permitted temporary special events at an arboretum, botanical garden, or nature study area may operate beyond the 9:00 p.m. time according to the terms of the temporary special events permit.

(3) **Accessory Uses.** Accessory uses shall only permitted on lots 20 acres in size or larger. Accessory uses to an arboretum, botanical garden, or nature study area may include retail sales (e.g., gift shops), small restaurants or cafes, or visitor centers subject to the following standards:

(a) Retail sales shall be limited to the sale of items directly related to the nature and character of the principal permitted use.

(b) Accessory uses other than a visitors center shall contain no more than 1,000 square feet of gross floor area. A visitors center shall contain no more than 2,500 square feet of gross floor area.

(B) **Size of Use.**

(1) **Floor Area Ratio.** The maximum floor area ratio shall be 0.02.

(2) **Storage Areas.** The total area of storage areas shall not exceed 10 percent of the total area of the principal structure.

(C) **Roads/Access.** Uses shall comply with the road access standards of Section 5-654.

(D) **Parking.**

(1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

(E) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(F) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as an Arboretum, Botanical or Garden Nature Study Area and shall be exempt from the minimum lot area and floor area ratio requirements specified above, provided that any expansion or enlargement of such

structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-637

Cemetery, Mausoleum, Crematorium. The following standards shall apply to the development of cemeteries, mausoleums, and crematoriums, except this section shall not apply to crematoriums permitted in the Planned Development-Mixed Use Business (PD-MUB) zoning district.

(A) Intensity/Character of Use.

- (1) **Site Size.** The minimum lot area for any cemetery, mausoleum, or crematorium shall be 10 acres.
- (2) **Hours of Operation.** The hours of operation shall be limited to 6:00 a.m. to 9:00 p.m. or dusk, whichever occurs first.

(B) Size of Use.

- (1) **Maximum Floor Area Ratio.** The maximum floor area ratio shall be 0.04.
- (2) **Storage Areas.** The total area of storage areas shall not exceed 10 percent of the total area of the principal structure.

(C) Location on Site/Dimensional Standards.

- (1) **General.** Cemetery, mausoleum, or crematorium uses shall be set back 150 feet from lot lines.
- (2) **Setback from Residences without Property Owner Consent.** Cemetery, mausoleum and crematorium uses shall be set back a minimum of 250 yards from a residence if property owner consent is not received to be located closer to the residence. Cemetery, mausoleum or crematorium uses shall be set back a minimum of 300 yards from a city, town or water company well (Section 57-26 Code of Virginia).

(D) Landscaping/Buffering/Screening.

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A)-5-1404(A)(6).~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~
- (3) **Storage Areas.** All storage areas shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C)-5-1406.~~

(E) **Roads/Access.**

(1) **General Access Standards.** Uses shall comply with the road access standards of Section 5-654.

(2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(F) **Parking.**

(1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

(G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

5-638

Public Safety Uses (Fire and/or Rescue Station, Police Station or Substation).

The following standards shall apply to the development of Fire and/or Rescue Stations and Police Stations or substations in the AR, TR and JLMA districts. Such standards shall not apply to the development of a temporary Fire and/or Rescue Station in the AR, TR and JLMA districts.

(A) **Fire and/or Rescue Station.**

(1) **Size of Use.**

(a) **Site Size.** The minimum lot area for any Fire and/or Rescue Station shall be two (2) acres.

(b) **Floor Area Ratio.** The maximum floor area ratio shall be 0.3.

(c) **Storage Yards.** The total area of storage yards shall not exceed 20 percent of the total area of the principal structure.

(d) **Setback from Lot Lines.** Structures associated with Fire and/or Rescue Stations shall be set back 100 feet from all lot lines. Such setback may be reduced to 60 feet from lot lines if a Buffer Yard Type ~~4-C Buffer Yard~~ is provided along such lot line.

(2) **Landscaping/Buffering/Screening.**

(a) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A), 5-1404(A)(6)~~ unless a Buffer Yard Type ~~4-C Buffer Yard~~ is provided in accordance with Section 5-638(A)(1)(d).

(b) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with the Section 5-1407. ~~requirements of Section 5-653(B).~~

(c) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C).~~5-1406.

(3) **Roads/Access.**

(a) **General Access Standards.** Uses shall comply with the road access standards of Section 5-654.

(b) **Number of Access Points.** There shall be no more than two points of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

(4) **Parking.** Parking and loading shall be provided as required by Section 5-1102(B)(4). These spaces shall be in addition to vehicle storage spaces for vehicles not in use.

(5) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A)(1) and (2) (Exterior Lighting Standards).

(B) **Police Station or Substation.**

(1) **Size of Use.**

(a) **Site Size.** The minimum lot area for a Police Station or Substation shall be two (2) acres.

(b) **Floor Area Ratio.** The maximum floor area ratio shall be 0.3.

(c) **Storage Yards.** The total area of storage yards shall not exceed 20 percent of the total area of the principal structure.

(d) **Setback from Lot Lines.** Police Stations or Substations shall be set back from lot lines as follows:

(i) Structures of less than 4,000 square feet of gross floor area: 60 feet minimum from all lot lines.

(ii) Structures greater than 4,000 square feet, and up to 8,000 square feet of gross floor area: 100 feet minimum from all lot lines.

- (iii) Structures greater than 10,000 square feet of gross floor area: 120 feet minimum from all lot lines.

(2) **Landscaping/Buffering/Screening.**

- (a) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A), 5-1404(A)(6).~~
- (b) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~
- (c) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-1406, 5-653(C).~~

(3) **Roads/Access.**

- (a) **General Access Standards.** Uses shall comply with the road access standards of Section 5-654.
- (b) **Number of Access Points.** There shall be no more than two points of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

- (4) **Parking.** Parking and loading shall be provided as required by Section 5-1102(B)(4). These spaces shall be in addition to vehicle storage spaces for vehicles not in use.

- (5) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A)(1) and (2) (Exterior Lighting Standards).

5-639 Religious Assembly Uses (Church, Synagogue, Temple, Mosque). The following standards shall apply to the development of religious assembly uses in the AR, JLMA and TR-10 districts

(A) **Size of Use.**

- (1) **Site Size.** The minimum lot area for a religious assembly use shall be:

- (a) Religious assembly uses with seating capacity of 300 seats or less: 10 acres.
- (b) Religious assembly uses with seating capacity of 300 seats or more seats, or religious assembly uses that include accessory uses (schools, day care centers, recreation facilities): 20 acres.

(2) **Maximum Floor Area Ratio.** The maximum floor area ratio, as measured utilizing all structures and the total gross acreage of the site shall be 0.20.

(3) **Storage Yards.** The total area of storage yards shall not exceed 10 percent of the total area of the principal structure.

(B) **Location on Site.**

(1) **Setbacks from Lot Lines.** A religious assembly use (including all accessory uses and structures) shall be set back from lot lines a minimum of 75 feet for buildings and other structures and a minimum of 50 feet for parking.

(C) **Child Care Facilities.** Religious assembly uses with child care facilities shall comply with the requirements of Section 5-609.

(D) **Landscaping/Buffering/Screening.**

(1) **Buffer.** The use shall comply with ~~landscaping and screening standards of~~ Section ~~5-653(A); 5-1404(A)(6).~~

(2) **Parking Area.** Parking areas shall ~~be screened to comply with the~~ Section 5-1407. ~~requirements of Section 5-653(B).~~

(3) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C); 5-1406.~~

(E) **Roads/Access.**

(1) **General Access Standards.** Religious assembly uses shall comply with the road access standards of Section 5-654.

(2) **Number of Access Points.** There shall be no more than two points of access to a public road from a religious assembly use. This requirement shall not preclude an additional access for emergency vehicles only.

(F) **Parking.**

(1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

(G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(H) **Modification of Performance Standards.** The Zoning Administrator shall have the authority to grant modifications to any of the standards listed in this Section 5-639 in order to eliminate a substantial burden on religious exercise as guaranteed by the federal *Religious Land Use and Institutionalized Persons Act of 2000* (42 U.S.C. Sec. 2000cc), as amended. In granting such a modification, the Zoning Administrator may require conditions consistent with the federal Act that will secure substantially the objectives of the modified standard and that will substantially mitigate any potential adverse impact on the environment or on adjacent properties.

5-640

Conference and Training Centers. Conference and training centers in the AR, JLMA-20 and TR-10 districts shall comply with the following standards.

(A) **Intensity/Character.** The minimum lot area shall be as follows.

Use	Lot Area (Minimum)	Average Daily Users
Level I-small scale	50 acres	Up to 50 users
Level II-medium scale	100 acres	>50 and up to 100 users
Level III-large scale	150 acres	>100 and up to 150 users
Level IV	Requires special exception approval pursuant to Section 6-1300	>150 users
Average daily users include the employees, trainees and conferees the conference and training center is designed to accommodate. Service trips, which are trips made to the facility for the purpose of delivering food, supplies, and related materials are in addition to the average daily users.		

(B) **Size of Use.**

- (1) **Floor Area Ratio.** The maximum floor area ratio shall be 0.04.
- (2) **Accessory Uses.** Dining and banquet facilities may be provided for employees, trainees and conferees. The banquet and dining facilities shall not exceed 20 percent of the total area of the principle permitted structure. The lodging facilities shall not constitute over 40 percent of the total area of the principal permitted structure.
- (3) **Special Events Only by Section 5-500 or Special Exception.** Special events shall receive approval pursuant to Section 5-500, or be specifically provided for in the approval of a special exception (Section 6-1300), as applicable.
- (4) **No Products Sold On-Site.** No products shall be sold on-site, except those that are clearly incidental and integral to the training programs and seminars. Shirts, glasses, golf equipment, pens and pencils, mugs and similar items with the logo of the company or firm conducting or sponsoring the conference or seminars are considered incidental and integral to the training program.

- (5) **Storage Yards.** The total area of storage yards shall not exceed 10 percent of the total area of the principle structures.
- (6) **On-Site Recreation Facilities.** On-site recreation facilities may be used solely by employees, trainees or conferees.
- (7) **Open Space.** A minimum of 75 percent of the site shall remain as open space.
- (8) **Location on Site/Dimensional Standards.** Conference and training centers shall be set back from lot lines as follows:

Use	Lot Area (Min)	Setback from Lot Lines
Level I—small scale	50 acres	150 ft.
Level II—medium scale	100 acres	200 ft.
Level III—large scale	150 acres	250 ft.

(C) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A); 5-1404(A)(6).~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~
- (3) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C); 5-1406.~~

(D) **Roads/Access.**

- (1) **General.** The conference and training center use shall comply with the road access standards of Section 5-654.
- (2) **Number of Access Points.** There shall be no more than one point of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.
- (3) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(E) **Parking.**

- (1) **General.** Parking and loading shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

- (F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).
- (G) **Noise Standards.** The maximum allowable dB(A) level of impulsive sound from the site, as measured at the property line, shall not exceed 55 dB(A). In addition, outdoor music shall not be allowed after 11:00 PM.
- 5-641 Teahouse; Coffeehouse.** Teahouse or coffeehouse uses in the AR districts shall comply with the following standards.
- (A) **Intensity/Character Standards.** Hours of operation shall be limited to 6:00 a.m. to 9:00 p.m.
- (B) **Size of Use.**
- (1) **Site Size.** The minimum lot area shall be 5 acres.
- (2) **Structure.** The size of structures used shall not exceed 2,500 square feet in gross floor area (total all structures).
- (C) **Location on Site/Dimensional Standards.** The teahouse or coffeehouse use shall be setback 50 feet from lot lines.
- (D) **Landscaping/Buffering/Screening.** Parking areas shall ~~be screened to comply with the Section 5-1407. requirements of Section 5-653(B).~~
- (E) **Parking.** Parking and loading shall be provided as required by Section 5-1102.
- (F) **Roads Access Standards.**
- (1) **General Access Standards.** The use shall comply with the road access standards in Section 5-654.
- (2) **Number of Access Points.** There shall be no more than one point of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.
- (G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A)(1), (2) and (4).
- (H) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as a Teahouse or Coffeehouse and shall be exempt from the minimum lot area and floor area requirements specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be

provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-642 Banquet/Event Facility. Any Banquet/Event Facility use, except within the PD-MUB and CLI district, shall comply with the following standards:

(A) Intensity/Character.

- (1) **Hours of Operation.** Hours of operation shall be limited to 7:00 AM to 12:00 midnight.
- (2) **Size of Use.** The minimum lot area for a Banquet/Event Facility shall be 20 acres.
- (3) **Floor Area.** The floor area ratio shall not exceed 0.04.
- (4) **Location on Site/Dimensional Standards.** The Board of Supervisors may increase the outdoor area setback in establishing conditions associated with a Minor Special Exception for the Banquet/Event Facility use.
 - (a) The Banquet/Event Facility use shall be setback 100 feet from all lot lines.
 - (b) Parking shall be setback 100 feet from all lot lines.
 - (c) Outdoor private party areas shall be setback 200 feet from all lot lines or 100 feet from a lot line of a property having a commercial use.
- (5) **Number of Attendees.** The maximum number of attendees for incremental acreage is based at the rate of 200 plus two (2) persons per acre over 20 acres.

Minimum Acreage	No. of Attendees
20 acres	200 attendees
50 acres	260 attendees
75 acres	310 attendees
100 acres	360 attendees

(B) Landscaping/Buffering/Screening.

- (1) **Buffer.** The ~~Banquet/Event Facility~~ use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A)-5-1404(A)(6)~~
- ~~(2)~~ **Parking Areas.** Parking areas shall comply with ~~the Section 5-1407. landscaping and screening standards of Section 5-653(B).~~

~~(3)(2)~~ **Storage Yards.** All storage yards shall comply with ~~the landscaping and screening standards of~~ Section 5-653(C)-5-1406.

(C) **Roads/Access Standards.**

(1) **General Access Standards.** A Banquet/Event Facility shall comply with the road access standards of Section 5-654.

(2) **Number of Access Points.** There shall be no more than two points of access to a publicly maintained road for the Banquet/Event Facility use. This requirement shall not preclude an additional access for emergency vehicles only.

(3) For any Banquet/Event Facility that is located on a lot which does not have frontage on a publicly maintained road, documentation shall be provided to the Zoning Administrator demonstrating that the private access easement serving such lot may be used to provide access to the establishment.

(D) **Parking.**

(1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(E) **Exterior Lighting.** All exterior lighting shall comply with the standards of Section 5-652(A)(1)-(3) (Exterior Lighting Standards). In addition to the requirements of Section 5-652, the maximum height of pole-mounted exterior lighting, outside of parking areas, shall be 12 feet.

(F) **Noise.** A Banquet/Event Facility shall comply with the noise standards of Section 5-652(B) (Noise Standards).

5-643 Restaurant. Any restaurant use in the AR-1, AR-2, JLMA-2, and JLMA-3 zoning districts shall comply with the following standards.

(A) **Intensity/Character Standards.** Hours of operation shall be limited from 6:00 a.m. to 12:00 midnight.

(B) **Size of Use.**

(1) **Site Size.** The minimum lot area shall be 20 acres except that there shall be no minimum lot size for adaptive reuse of farm structures existing as of January 7, 2003.

(2) **Floor Area Ratio.** The floor area ratio shall not exceed 0.01 except that there shall be no maximum floor area ratio for adaptive reuse of farm structures existing as of January 7, 2003.

(3) **Location on Site/Dimensional Standards.** The use shall be set back from lot lines as follows:

- (a) Structures of up to 1,500 square feet of gross floor area: 100 feet minimum from all lot lines.
- (b) Structures greater than 1,500 and up to 4,000 square feet of gross floor area: 150 feet minimum from all lot lines.
- (c) Structures over 4,000 square feet of gross floor area: 175 feet minimum from all lot lines.

(C) **Parking.** Parking and loading shall be provided as required by Section 5-1102.

(D) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A); 5-1404(A)(6).~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~
- (3) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C); 5-1406.~~

(E) **Roads/Access Standards.**

- (1) **General.** A restaurant shall comply with the road access standards of Section 5-654.
- (2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.
- (3) **Number of Access Points.** There shall be no more than one point of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

(F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

5-644 Educational or Research Facilities Use Related to the Agriculture, Horticulture and Animal Husbandry Uses in the District. Any educational or research facilities use related to the agriculture, horticulture and animal husbandry uses in the AR and TR districts shall comply with the following standards.

(A) **Size of Use Standards.**

- (1) **Site Size.** The minimum lot area shall be 25 acres.
- (2) **Visitors/Customers/Parking Spaces.** The minimum lot area shall increase based on the number of visitors/customers attracted, as follows.

Scope of Use/Event	Lot Area (Minimum)
No more than 200 visitors on any one day; no more than 100 vehicles allowed on site at any one time. Additional visitors allowed by right at rate of 5 per acre in excess of 25 acres.	25 acres

(3) **Structure.** The floor area ratio shall not exceed 0.04.

(4) **Storage Yards.** The maximum total area of storage yards shall not exceed 10 percent of the total area of the principal structure.

(B) **Location on Site/Dimensional Standards.** The use shall be set back from lot lines as follows:

(1) Structures up to 7,000 square feet of gross floor area: 100 feet minimum from all lot lines.

(2) Structures greater than 7,000 square feet of gross floor area and up to 12,000: 150 feet minimum from all lot lines.

(3) Structures greater than 12,000 square feet of gross floor area: 200 feet minimum from all lot lines.

(C) **Parking.** Parking and loading shall be provided as required by Section 5-1102.

(D) **Landscaping/Buffering/Screening.**

(1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A), 5-1404(A)(6).~~

(2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~

(3) **Storage Yards.** Storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C), 5-1406.~~

(E) **Roads/Access.**

(1) **General.** The use shall comply with the road access standards of Section 5-654.

(2) **Number of Access Points.** There shall be no more than two points of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

(3) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

- (F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).
- (G) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).
- (H) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as an Educational or Research Facilities Use Related to the Agriculture, Horticulture and Animal Husbandry and shall be exempt from the minimum lot area, floor area ratio, and set back from lot line requirements specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-645

Camp, Day and Boarding. Day and boarding camps in the AR, TR, JLMA and PD-CV districts shall comply with the following standards.

(A) **Intensity/Character.**

(1) **Site Size.**

- (a) The minimum lot area for a day and boarding camp for less than 15 campers shall be 20 acres.
- (b) The minimum lot area for a day and boarding camp for more than 15 campers shall comply with the following standards.

Use	Scope of Use/Campers	Lot Area (Minimum)
Level I— small scale	Up to 30 campers daily.	15 acres
Level II— medium scale	Up to 100 campers or borders daily.	40 acres
Level III— large scale	Up to 250 campers or borders daily.	100 acres
Level IV	> 250 campers or borders daily.	Special exception pursuant to Section 6-1300

- (2) **Not Permanent Residence.** Day and boarding camps shall not be used as permanent residences, except for the owner or manager and permanent maintenance personnel.

(3) **Service Buildings.** Service buildings with restroom and other facilities shall be provided in accordance with the Loudoun County Health Department requirements.

(B) **Location on Site/Dimensional Standards.** Structures shall be set back from lot lines as follows:

Use	Setback from Lot Lines
Level I—small scale	150 ft.
Level II—medium scale	200 ft.
Level III—large scale	250 ft.
Level IV	300 ft.

(C) **Landscaping/Buffering/Screening.**

(1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A); 5-1404(A)(6).~~

(2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~

(D) **Roads/Access.**

(1) **General Access Standards.** The use shall comply with the road access standards of Section 5-654.

(2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(3) **Number of Access Points.**

(a) **Camp with Less Than 15 Campers/Level I Camp.** There shall be no more than one point of access to a public road from a camp with less than 15 campers or a Level I day and boarding camp. This requirement shall not preclude an additional access for emergency vehicles only.

(b) **Level II or III Day and Boarding Camp.** There shall be no more than two points of access to a road from a Level II or III day and boarding camp. This requirement shall not preclude an additional access for emergency vehicles only.

(E) **Parking.**

(1) **General.** Parking shall be provided as required by Section 5-1102.

(2) **Surface.** All parking and loading areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

- (F) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).
- (G) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).

5-646 Campgrounds. Campgrounds in the AR, TR, and JLMA districts shall comply with the following standards.

(A) **Intensity/Character.**

(1) **Site Size.**

- (a) The minimum lot area for a campground shall be 40 acres.
- (b) The minimum lot area for a campground shall increase based on the following standards.

Use	Scope of Use/Campsites	Lot Area (Minimum)
Level I—small scale	Up to 50 campsites	40 acres
Level II—medium scale	>50 up to 100 campsites	80 acres
Level III—large scale	>100 up to 150 campsites	160 acres
Level IV	> 150 campsites	Special exception pursuant to Section 6-1300

- (2) **Not Permanent Residence.** Campgrounds shall not be used as permanent residences, except for the owner or manager and permanent maintenance personnel.
- (3) **Camping Sites.** Camping sites shall be a minimum of 1,250 square feet and at least 25 feet in width.
- (4) **Recreational Area.** Each campground shall provide a recreational area consisting of 100 square feet per campsite.
- (5) **Public Telephone.** At least one (1) public telephone shall be provided for each 50 campsites.
- (6) **Streets and Walks Lighted.** Streets and walks shall be lighted every 400 feet.
- (7) **Service Buildings.** Service buildings with restroom and other facilities shall be provided in accordance with the Loudoun County Health Department requirements.
- (8) **Groundcover.** All areas within a campground shall have sufficient groundcover to prevent erosion and blowing dust.

(B) **Size of Use.**

- (1) **Structure Size.** The size of structures (excluding tent platforms) used at a campground shall not exceed the following standards:

Use	Scope of Use/Campers	Total Size of Structures (Maximum)
Level I—small scale	Up to 50 campsites	8,000 square feet
Level II—medium scale	>50 up to 100 campsites	16,000 square feet
Level III—large scale	>100 up to 150 campsites	32,000 square feet
Level IV	>150 campsites	Special exception pursuant to Section 6-1300

- (C) **Location on Site/Dimensional Standards.** A campground shall be set back from lot lines as follows:

Use	Lot Area (Min)	Size of Structures (Max)	Setback from Lot Lines
Level I—small scale	40 acres	8,000 square feet	150 ft.
Level II—medium scale	80 acres	16,000 square feet	200 ft.
Level III—large scale	160 acres	32,000 square feet	250 ft.

- (D) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A)-5-1404(A)(6)~~.
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the~~Section 5-1407. ~~requirements of Section 5-653(B)~~.

- (E) **Roads/Access.**

- (1) **General Access Standards.** The use shall comply with the road access standards of Section 5-654.
- (2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.
- (3) **Number of Access Points.**
- (a) There shall be no more than one point of access to a public road from a Level I campground. This requirement shall not preclude an additional access for emergency vehicles only.
- (b) There shall be no more than two points of access to a public road from a Level II, III or IV campground. This requirement shall not preclude an additional access for emergency vehicles only.

- (F) **Parking.**

- (1) **General.** Parking shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.
- (G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).
- (H) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).

5-647

Cross-Country Ski Business and Eco-Tourism. Any cross-country ski business and eco-tourism use in the AR, JLMA-20 and TR-10 districts shall comply with the following standards:

- (A) **Intensity/Character of Use.** The hours of operation shall be limited to 6:00 a.m. to 9:00 p.m.
- (B) **Size of Use.**
 - (1) **Size of Use.** The minimum lot area of an eco-tourism use shall be 5 acres.
 - (2) **Structure Size.** The size of structures used shall not exceed 5,000 square feet in gross floor area.
 - (3) **Storage Areas.** The total area of storage areas shall not exceed 1000 square feet.
- (C) **Roads/Access.**
 - (1) **General Access Standards.** The eco-tourism use shall comply with the road access standards in Section 5-654.
 - (2) **Number of Access Points.** There shall be no more than one point of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.
- (D) **Exterior Lighting.** The only exterior lighting allowed for an eco-tourism use shall be for security purposes only.
- (E) **Parking.**
 - (1) **General.** Parking and loading shall be provided as required by Section 5-1102.
 - (2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.
- (F) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation

(HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as a Cross-Country Ski Business or for Eco Tourism and shall be exempt from the minimum lot area and floor area requirements specified above, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-648

Golf Course. Any golf course in the AR, TR, JLMA and PD-CV districts shall comply with the following standards.

(A) Intensity/Character.

(1) **Site Size.** The minimum lot area for a golf course shall be:

(a) 75 acres for 9 holes.

(b) 150 acres for 18 holes.

(2) **Hours of Operation.** The hours of operation for a golf course shall be limited to 6:00 a.m. to 9:00 p.m.

(3) **Accessory Uses.** Accessory uses to a golf course may include a club house which includes a pro shop and small restaurant or café, subject to the following standards:

(a) The golf pro shop shall be limited to sales of golf-related items.

(b) Accessory uses shall constitute no more than 25 percent of the total size of the golf clubhouse.

(B) Size of Use.

(1) **Structure Size.** The size of structures used at a golf course shall not exceed 25,000 square feet in gross floor area (total all structures).

(2) **Storage Yards.** The total area of storage yards shall not exceed 5,000 square feet.

(C) Location on Site/Dimensional Standards. A golf course shall be set back 200 feet from lot lines.

(D) Parking.

(1) **General.** Parking shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

(E) **Landscaping/~~Buffering~~/Screening.**

(1) **Buffer.** ~~A minimum of the first 50 feet of setback area shall be buffered, screened and landscaped consistent with the standards of~~ The use shall comply with Section ~~5-653(A);5-1404(A)(6).~~

(2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~

(F) **Roads/Access.**

(1) **General Access Standards.** A golf course shall comply with the road access standards in Section 5-654.

(2) **Number of Access Points.** There shall be no more than two points of access to a public road from a golf course. This requirement shall not preclude an additional access for emergency vehicles only.

(G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

5-649

Outdoor Amphitheater. Any outdoor amphitheater in the AR districts shall comply with the following standards.

(A) **Intensity/Character.**

(1) **Site Size.** The minimum lot area for an outdoor amphitheater shall be 50 acres.

(2) **Accessory Uses.** Accessory uses to an outdoor amphitheater may include concession facilities for the sales of drinks and food during events, and offices used solely for the purpose of operating and managing the outdoor amphitheater. The concession facilities shall constitute no more than 5,000 square feet, and be integrated into the general structure and design of the outdoor amphitheater.

(B) **Size of Use.** The seating capacity of the outdoor amphitheater shall not exceed 2,000 persons.

(C) **Location on Site/Dimensional Standards.** An outdoor amphitheater shall be set back from lot lines a minimum of 1000 feet.

(D) **Landscaping/Buffering/Screening.**

(1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A);5-1404(A)(6).~~

(2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~

(E) **Roads/Access.**

(1) **General.** The use shall comply with the road access standards of Section 5-654.

(2) **Number of Access Points.** There shall be no more than two points of access to an outdoor amphitheater. This requirement shall not preclude an additional access for emergency vehicles only.

(3) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(F) **Parking.**

(1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

(G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards), except that fully shielded lighting fixtures are not required around the outdoor amphitheater itself.

(H) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).

5-650 Antique Shop; Art Gallery or Studio; Craft Shop. Any antique shop, art gallery or studio, or craft shop in the AR, TR-10 and PD-CV districts shall comply with the following standards.

(A) **Intensity/Character Standards.** Hours of operation shall be limited to 8:00 a.m. to 9:00 p.m.

(B) **Size of Use.**

(1) **Site Size.** The minimum lot area shall be 1 acre.

(2) **Structures.**

(a) The total size of all structures used for art galleries or studios and craft shops shall not exceed 3,000 square feet in gross floor area.

(b) The total size of all structures used for antique shops shall not exceed 10,000 square feet in gross floor area.

- (C) **Location on Site/Dimensional Standards.** The antique shop, art gallery or studio, or craft shop shall be set back a minimum of 100 feet from all lot lines.
- (D) **Landscaping/Buffering/Screening.**
- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A); 5-1404(A)(6)~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the Section 5-1407. requirements of Section 5-653(B).~~
- (E) **Parking.**
- (1) **General.** Parking and loading shall be provided as required by Section 5-1102.
- (2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.
- (F) **Roads/Access Standards.**
- (1) **General Access Standards.** The use shall comply with the road access standards in Section 5-654.
- (2) **Number of Access Points.** The use shall have no more than one point of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.
- (G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).
- (H) **Noise.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).
- (I) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as an Antique Shop; Art Gallery or Studio; or Craft shop shall be exempt from the minimum lot area, set back from lot line, and floor area requirements, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-651

Auction House. Any auction house in the AR districts shall comply with the following standards.

(A) **Intensity/Character Standards.**

- (1) **Hours of Operation.** Hours of operation shall be limited to 8:00 a.m. to 9:00 p.m.
- (2) **Sanitary Facilities.** Bathroom facilities shall be provided on site, consistent with the requirements of the Uniform Statewide Building Code.

(B) **Size of Use.**

- (1) **Site Size.** The minimum lot area shall be 10 acres.
- (2) **Structure.** There shall be only one structure allowed on the lot which shall not exceed 10,000 square feet in size.
- (3) **Outdoor Storage.** The maximum area of outdoor storage shall not exceed 2,000 square feet.

(C) **Location on Site/Dimensional Standards.** The auction house shall be set back a minimum of 100 feet from all lot lines.

(D) **Landscaping/Buffering/Screening.**

- (1) **Buffer.** The use shall comply with ~~the landscaping and screening standards of~~ Section ~~5-653(A)-5-1404(A)(6).~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to~~ comply with ~~the~~Section 5-1407. ~~requirements of Section 5-653(B).~~
- (3) **Outdoor Storage.** All outdoor storage shall ~~be screened and landscaped consistent with the standards of~~comply with Section ~~5-653(C)-5-1406.~~

(E) **Roads/Access Standards.**

- (1) **General Access Standards.** An auction house shall comply with the road access standards in Section 5-654.
- (2) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.
- (3) **Number of Access Points.** There shall be no more than one point of access to a public road. This requirement shall not preclude an additional access for emergency vehicles only.

(F) **Parking.**

- (1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(2) **Surface.** All parking areas serving the use shall use a dust-free surfacing material as provided in the Facilities Standards Manual.

(G) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(H) **Noise Standards.** The use shall comply with the noise standards of Section 5-652(B) (Noise Standards).

(I) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as an Auction House and shall be exempt from the minimum lot area, and set back from lot line requirements, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

5-652 Exterior Lighting and Noise Standards for Specific Uses. The following exterior lighting and noise standards shall apply to specific uses in this section when they are expressly referenced in the standards for the specific use.

(A) **Exterior Lighting Standards.**

(1) **Pole-Mounted Exterior Lighting.** The maximum height of pole-mounted exterior lighting shall be 25 feet.

(2) **Shielded Lighting/Light Element.** Fully shielded lighting fixtures shall be used in all areas. The light element (lamp or globe) of a fixture shall not extend below the cutoff shield.

(3) **Hours of Operation.** All exterior lighting shall be extinguished from 10:00 p.m. to 6:00 a.m., except for exterior lighting that is determined necessary for security purposes.

(4) **No Illuminated Signage.** Signage related to the use shall not be illuminated.

(B) **Noise Standards.**

(1) **Location in Relation to Residential Use.** No loading/unloading activities or other noise-producing activities shall be allowed within 250 feet of an existing single family residential use.

(2) **Maximum dB(A).** The maximum allowable dB(A) level of impulsive sound emitted from the use, as measured at the property line of any adjacent residential lot where the lot is designed for a

single family dwelling unit as a principal use, shall not exceed 55 dB(A). In addition, outdoor music shall not be allowed after 11:00 PM.

5-653

~~**[RESERVED] Landscaping Standards for Specific Uses.** The following landscaping, buffering, and screening standards shall apply to specific uses in this section when they are expressly referenced in the standards for the specific use.~~

~~**(A) Setbacks or Yards Adjacent to Certain Sized Lots.** A minimum of the first 50 feet of setback or yard area adjacent to any existing lot four (4) acres or less in size that contains a house within 300 feet of the adjacent property line shall be landscaped and screened with solid fencing and/or landscaped area that provides year-round screening and is equivalent to a Type Three (3) Buffer Yard (Section 5-1400). The use of natural topography, vegetation, and trees that provide screening at the density, depth and height of the Type Three (3) Buffer Yard shall be credited towards this Type Three (3) Buffer Yard requirement in accordance with Section 5-1409(E).~~

~~**(1)** In the A-3, A-10, AR-1, and AR-2 zoning districts, the Zoning Administrator may permit the required buffer to surround the proposed use, rather than to be located on the property line.~~

~~**(B) Parking Areas.** Parking areas shall be provided with 1 canopy tree per each 10 parking or 2 loading spaces for off-street parking areas and service areas for loading and unloading. The Zoning Administrator may waive, reduce and/or modify these tree planting requirements if in his/her opinion the topography or existing vegetation adequately screens such parking areas from adjacent properties.~~

~~**(C) Screening of Outdoor Storage and Storage Yards.** Outdoor storage and storage yards shall be screened to minimize visibility from adjacent public roads and adjacent single family detached uses by six (6) canopy trees per one hundred (100) lineal feet of perimeter of storage area.~~

5-654

Road Access Standards for Specific Uses. The following road access standards shall apply to specific uses in this section when they are expressly referenced in the standards for specific use. All Facilities Standards Manual provisions regarding waivers apply.

TABLE 5-654: ROAD ACCESS STANDARDS

Maximum Vehicles Per Day (VPD) ⁽¹⁾	Onsite Private Road Construction Standards	Public Road Access	
		Public Paved Road Standards ⁽²⁾	Public Unpaved Road Standards ⁽²⁾
1 - 20 VTD	FSM Chapter 4, Table 3, Type C1 Roadway	Permitted	Permitted
21 - 70 VTD	FSM Chapter 4, Table 3, Type C2 Roadway	Permitted	Permitted

TABLE 5-654: ROAD ACCESS STANDARDS

Maximum Vehicles Per Day (VPD) ⁽¹⁾	Onsite Private Road Construction Standards	Public Road Access	
		Public Paved Road Standards ⁽²⁾	Public Unpaved Road Standards ⁽²⁾
71 - 250 VTD	FSM Chapter 4, Table 3, Type C3 Roadway	Permitted	Permitted
251 - 600 VTD	FSM Chapter 4, Table 1, Type A1 Roadway	Permitted	Special Exception Review required (Section 6-1300)
More than 600 VTD	FSM Chapter 4, Table 1, Type A1 Roadway	Special Exception Review required (Section 6-1300)	Special Exception Review required (Section 6-1300)

⁽¹⁾ VPD is to be calculated based on an estimated two trips (one in, one out) per individual vehicle.
⁽²⁾ Characteristics of the first public road accessed by project's private access road.

5-655 Elementary, Middle, or High School for 15 or fewer pupils.

- (A) **Size of Use.** The minimum lot area for an elementary, middle, or high school for fifteen (15) or fewer pupils is 5 acres, except to the extent permitted on smaller lots in the PD-MUB or PD-TC zoning districts.
- (B) **Road/Access Standards** shall comply with the road access standards of Section 5-654.
- (C) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) Exterior Lighting Standards).
- (D) Outdoor play space shall be provided in accordance with the standards established in Section 5-609 Child Outdoor play space shall be provided in accordance with the standards established in Section 5-609 Child Care.

5-656 Convent or Monastery. In the AR, TR, and JLMA-3 districts, a convent or monastery shall comply with the following additional requirements:

(A) **Intensity/Character.**

- (1) The minimum lot area shall be as follows, unless the convent or monastery is developed as an adaptive re-use pursuant to Section 5-656(A)(2):

Use	Size of Lot (Minimum)	No. of Residents
Level I – small scale	5 acres	4-10 residents
Level II – medium scale	10 acres	11-20 residents
Level III – large scale	20 acres	21-30 residents
Level IV- requires special exception approval pursuant to Section 6-1300	30 acres	31-40 residents

(B) **Building/Lot requirements.**

- (1) **Size of use.** The floor area ratio shall not exceed 0.04.

(2) **Minimum Required Yard Standards.** The minimum required yards shall be as follows:

- (a) Level I – small scale: 50 feet minimum from all lot lines;
- (b) Level II – medium scale: 100 feet minimum from all lot lines
- (c) Level III- large scale: 150 feet minimum from all lot lines

(3) **Landscaping/Buffering/Screening.**

- (a) The use shall comply with ~~the landscaping and screening standards of Section 5-653(A), 5-1404(A)(6).~~
- (b) Parking areas shall ~~be screened to~~ comply with ~~the~~ Section 5-1407. ~~standards of Section 5-653(B).~~
- (c) Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(4) **Roads/Access.** The convent or monastery shall comply with the road access standards in Section 5-654.

(5) **Parking.**

- (a) **General.** Parking and loading shall be provided as required by Section 5-1102.
- (b) **Surface.** All parking areas serving the use shall use a dust-free surfacing material, as provided in the Facilities Standards Manual.

(6) **Exterior Lighting.** All exterior lighting shall comply with the standards of Section 5-652(A) Exterior Lighting Standards.

(C) A structure existing prior to January 7, 2003, that is: 1) located within a County Historic Site (HS) District or Historic and Cultural Conservation (HCC) District under Section 6-1800 et seq.; 2) listed or eligible for listing in the Virginia Landmarks Register (VLR) or the National Register of Historic Places (NRHP); or 3) listed or eligible for listing as a contributing resource to a VLR or NRHP listed or eligible Historic District, may be used as a Convent or Monastery and shall be exempt from the Level I minimum lot area, yard and floor area ratio requirements, provided that any expansion or enlargement of such structure shall not exceed 15% of the total floor area existing prior to January 7, 2003. Documentation shall be provided to the Zoning Administrator demonstrating that the Virginia Department of Historic Resources has confirmed the listing or eligibility of structures.

Stockpiling of Dirt. Any stockpiling of dirt in the AR and TR districts shall comply with the following standards:

(A) Intensity/Character Standards.

(1) Size of Use.

- (a) Minimum Lot Size.** Five (5) Acres
- (b) Pile Area.** A single stockpile of dirt pile shall not exceed an area greater than two (2) acres.
- (c) Height.** A single stockpile of dirt shall not exceed 25 feet above original natural grade. For each additional five (5) acres in lot area, the height may increase one (1) foot and in no case shall the height exceed 50 feet above original natural grade. Additionally, no stockpile shall be visible above the existing tree line as viewed from any property line.
- (d) Slope.** Slope shall not exceed a 3:1 ratio.

(2) Siting.

- (a)** No stockpile of dirt is permitted in the Mountainside Overlay District and/or FOD.
- (b)** To the maximum extent feasible stockpiles of dirt shall not be located in wetlands, hydric soils, or areas identified as containing endangered species or plants.
- (c)** Stockpiles of dirt shall only be permitted on forested sites when there is an approved forest management plan.

(3) Location on Site/Dimensional Standards.

- (a) Setback from Single-Family Dwellings.** No stockpile of dirt, loading/unloading activities, general stockpile of dirt operations, or related activities shall be allowed within 500 feet of an existing residential structure.
- (b) Other setbacks.** No stockpile of dirt shall be located within 100 feet of any lot line and/or street to include ingress-egress easements.

(4) Hours of Operation. The hours of operation shall be limited to 7:00 AM to 6:00 PM.

(B) Access/Vehicular Circulation.

- (1) **Access.** Access to the lot shall be from a paved, State maintained road at least twenty (20) feet in width.
- (2) **Driveways/Internal Access Roads (driveways).** Driveways shall not be located within a required buffered setback area except as minimally necessary to access the site. Such driveways shall be all-weather roads negotiable by loaded transport vehicles.
- (3) **Vehicular Circulation.** Adequate-stacking space shall be provided on site to accommodate anticipated traffic. Such stacking space shall be screened in accordance with the requirements in Section 5-650(B).
- (4) **Debris.** To prevent the tracking of debris, mud, dirt or other material on public rights-of-way, the public rights-of-way shall be hosed off on a daily basis when the stockpile of dirt facility is in operation. During winter months the road shall be chemically treated to prevent icing conditions after hosing off the road.
- (C) **Materials.** Stockpiles of dirt may be comprised only of uncontaminated dirt and naturally occurring rock. Incorporated organic material, including roots, twigs, limbs, logs, leaves, and grass may not exceed three (3) percent by volume at any location in the stockpile of dirt. Processing within the stockpile of dirt is limited to grading, sorting, and compacting of dirt and waste rock. Screening of dirt shall not be permitted.
- (D) **Exterior Lighting.** Exterior Lighting shall be permitted for security purposes only and in accordance with Section 5-649. Signage for the stockpile of dirt use shall not be illuminated.
- (E) **Landscaping—~~and/Buffering/~~—Screening.** ~~—Landscaping—and Screening~~The use shall ~~be provided in accordance~~comply with Section ~~5-1404(A)(6).~~5-650.
- (F) **Noise.** Noise created by the activity at the stockpile of dirt shall comply with Section 5-649(B).

Compliance with other Ordinances. Nothing herein shall relieve the stockpile of dirt activity from complying with other Federal, State or County Codes. Where there is a conflict in the applicable ordinances, the more restrictive shall apply. A Zoning Permit is required prior to the commencement of the Stockpiling of Dirt. In addition, prior to commencing any stockpile of dirt activity, a preliminary soil report shall be provided to the County Soil Scientist in accordance with Chapter 6 of the Facilities Standards Manual.

5-658

Funeral Homes. Funeral homes, when located within the PD-IP zoning district, are subject to the following additional provisions:

- (A) The funeral home must be located within a freestanding building and be the sole principal use on the lot.

- (B) The minimum lot size for a funeral home use shall be 1.5 acres.
- (C) The funeral home use shall be established on a parcel of land fronting on, and with direct access to, an existing collector or arterial road.
- (D) Sufficient car stacking space shall be provided on the lot such that a collector or arterial road need not be used for the forming of funeral processions. The area of the lot used for the forming of funeral processions shall have direct, but limited, access to the collector or arterial road.

5-659

Drive-through Facilities Associated With Banks, Financial Institutions and Pharmacies. Drive-through facilities with up to 3 service lanes and an escape lane shall be permitted in association with banks, financial institutions and pharmacies that also provide a standard range of customer services in a building, subject to the following additional provisions:

- (A) ~~Notwithstanding the requirements of Section 5-1400(A) and (B), where~~ Where the bank or financial institution or pharmacy property abuts a any property zoned, used, or planned for residentially-residential uses zoned or used property a Buffer Yard Type Four (4)C Rear Yard Buffer including structure shall be provided adjacent to such property, the residential property (Section 5-1400), except this that this requirement shall not apply to vertically mixed-use buildings containing residential uses in the PD-MUB or PD-TC zoning districts. In lieu of the maximum percentages applicable to large deciduous trees under Section 5-1408(B)(2)(a), small deciduous trees under Section 5-1408(B)(2)(c), and evergreen trees under Section 5-1408(B)(2)(b), a maximum of 30% of the required plant units may be large deciduous trees and/or small deciduous trees. All other plant units shall consist of evergreen trees and/or evergreen shrubs. Further, 70% of canopy trees and 100% of all other plants required in the buffer shall be evergreens.
- (B) Stacking space shall be sufficient to avoid vehicle stacking into drive lanes, parking spaces and public streets.

5-660

Country Club. Country clubs in the AR-1 and AR-2 shall comply with the following standards. Throughout this section, "Lot Area" shall include the total acreage of abutting parcels under common ownership and control, or under a common development plan, and "Property Line" shall be the outer line of the properties under common ownership and control, or under a common development plan."

- (A) **Intensity/Character.** The minimum lot area shall be as follows:

Use	Lot Area (Minimum)
Level I-small scale	50 acres
Level II-medium scale	75 acres
Level III-large scale	150 acres

(B) **Size of Use.**

- (1) **Floor Area Ratio.** The maximum floor area ratio shall be 0.04.
- (2) **Maximum Structure Size.** The maximum size of structures shall be as follows:

Use	Maximum Total Size of Permitted Principal Structures (GFA)
Level I—small scale	25,000 sq. ft.
Level II—medium scale	50,000 sq. ft.
Level III—large scale	75,000 sq. ft.

- (3) **Accessory Structures.** The total area of all accessory structures shall not exceed 15 percent of the total gross floor area of the principal structures used for the Country Club use.

- (4) **Distribution of Uses.**

Use	Total Maximum Gross Floor Area of the Principal Permitted Structures
Dining and Restaurant Facilities	30 percent
Banquet and Conference Facilities	25 percent
Spa and Health Facilities	15 percent

(C) **Use Limitations.**

- (1) Enclosed principal structures for dining and banquet facilities, conference facilities, spa, fitness facilities, and recreational activities (such as pool and tennis) shall be sited and designed to take advantage of the topography and existing vegetation to blend into the rural landscape to the maximum extent feasible. Such principal structures shall be clustered to maximize usage of site infrastructure (i.e. parking, travelway, utilities). Principal structures that have reason to be separated from the main Country Club complex (e.g. maintenance facilities, structures housing livestock) are not required to be clustered.
- (2) Structures shall be sited to minimize visual impacts on adjacent properties and promote the rural character of the landscape. Siting on primary ridgelines or hilltops, if visible from the adjacent public roadways is prohibited; however, if, because of engineering constraints (e.g. utility easements, drainage, access easements, soil conditions, etc.) it becomes necessary to site a facility on a primary

ridgeline or hilltop, then the applicant shall provide additional landscaping and buffering to mitigate the visual impact from adjacent public roadways.

(D) Minimum Required Yards.

- (1) Principal and accessory structures shall have a minimum yard of 50 feet from all property lines (the “property line” is determined to be the outer line of the properties under common ownership and control).
- (2) In order to encourage preservation of environmental resources, the yard requirements may be reduced up to 25% by the Zoning Administrator.
- (3) Accessory structures, not requiring a building permit, may be located a minimum of 25 feet from all property lines.

(E) Landscaping/Buffering/Screening.

- (1) **Buffer.** Principal or accessory structures associated with the Country Club use shall ~~comply with the~~ provide a Buffer Yard Type 3-B in accordance with landscaping and screening standards of Section 5-1414(B)(3) 5-1404(D) where adjacent to parcels of 3 acres or less that are not part of a common development plan. ~~In order to take advantage of natural topography, vegetation, and trees, the required yard or setback buffer area may be located anywhere between the use and the property line.~~
- (2) **Parking Areas.** Parking areas shall ~~be screened to comply with the Section 5-1407. requirements of Section 5-653(B).~~
- (3) **Storage Yards.** All storage yards shall ~~be screened and landscaped consistent with the standards of~~ comply with Section ~~5-653(C).~~ 5-1406.

(F) Roads/Access.

- (1) **General.** The country club use shall comply with the road access standards of Section 5-654.
- (2) **Number of Access Points.** There shall be no more than two direct points of access from a Country Club use to a public road. This requirement shall not preclude an additional access for emergency vehicles.
- (3) **Driveways.** Driveways shall not be located within a required buffer yard area except as minimally necessary to access the site.

(G) **Water and Sewer.** A Country Club shall be served by a communal water system and a communal wastewater collection and pre-treatment or treatment system.

(H) **Parking.**

(1) **General.** Parking and loading shall be provided as required by Section 5-1102.

(2) **Surface.** Where practicable, a pervious surface shall be provided. Where not practicable, a dust-free surfacing material shall be provided in accordance with the requirements of the Facilities Standards Manual.

(I) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A) (Exterior Lighting Standards).

(J) **Noise Standards.** The maximum allowable dB(A) level of impulsive sound from the site, as measured at the property line, shall not exceed 55 dB(A).

5-661 Business Service Establishment.

(A) Retail sales to the general public shall not exceed twenty percent (20%) of the gross floor area devoted to the business service establishment.

5-662 Contractor Service Establishment.

(A) Retail sales to the general public shall not exceed ten percent (10%) of the gross floor area devoted to the contractor service establishment.

(B) Outdoor storage of equipment, supplies, and construction trailers are permitted, provided such are fully screened from public roads and adjacent lots where contractor service establishments are permitted.

5-663 Wholesale Trade Establishment.

(A) Retail sales to the general public shall not exceed twenty percent (20%) of the gross floor area devoted to the wholesale trade establishment.

5-664 Data Center. The following standards shall apply to data centers in the CLI, PD-OP, PD-RDP, and PD-IP zoning districts.

(A) **Principal Building Facades.** Principal building facades shall include all building facades that face adjacent public roads. Principal building facades associated with new construction shall meet the following standards:

(1) Principal building facades shall avoid the use of undifferentiated surfaces by including at least two (2) of the following design elements: change in building height, building step-backs or

recesses, fenestration, change in building material, pattern, texture, color, or use of accent materials.

- (2) When a building has more than one principal facade, such principal building facades shall be consistent in terms of design, materials, details, and treatment.

(B) **Screening of Mechanical Equipment.** In order to minimize visibility from adjacent roads and adjacent properties, ground level and roof top mechanical equipment shall be screened. This screening may be provided by a principal building. Mechanical equipment not screened by a principal building shall be screened by a visually solid fence, screen wall or panel, parapet wall, or other visually solid screen that shall be constructed of materials compatible with those used in the exterior construction of the principal building. Notwithstanding the requirements of this section, mechanical equipment located in a manner found to have no adverse impact on adjacent roads and adjacent properties, as determined by the Zoning Administrator, shall not be required to be screened.

(C) **Exterior Lighting.** All exterior lighting shall be designed and constructed with cutoff and fully shielded fixtures that direct light downward and into the interior of the property and away from adjacent roads and adjacent properties.

(D) **Pedestrian and Bicycle Facilities.**

- (1) **Provision of Sidewalks and/or Trails.** Sidewalks and/or trails for pedestrian and/or bicycle access shall be provided, at a minimum, along any side of a public road that abuts the property upon which the data center is located.

- (2) **Sidewalk and/or Trail Connections.** To provide for future sidewalk and/or trail connections, the sidewalks and/or trails for pedestrian and/or bicycle access provided pursuant to Section 5-664(D)(1) above shall be equivalent to any other sidewalk and/or trail for pedestrian and/or bicycle access that is located on the same side of the public road, and within 500 feet, of the property upon which the data center is located.

(E) ~~Buffer Yard Requirement~~ Buffering/Landscaping/Screening.

- (1) ~~Buffer Yards.~~ In lieu of the buffer yard required under Table 5-1404(B), any side/rear yard abutting property located within the CR, JLMA, TR, R, PD-H, PD-CV, PD-RV, or PD-AAAR zoning districts that is not developed with commercial or industrial uses shall include a Buffer Yard Type C with required plantings located on an earthen berm that has a minimum height of six (6) feet and shall not have a grade steeper than 2:1.

1 (2) **Road Corridor Buffer.** In lieu of the road corridor buffer required
2 under Section 5-1403(B), any front yard abutting a collector or
3 arterial road shall include a Road Corridor Buffer Type 3 with
4 required plantings located on an earthen berm that has a minimum
5 height of six (6) feet and shall not have a grade steeper than 2:1,
6 unless a Gateway Corridor Buffer is required in which case the
7 Gateway Corridor Buffer shall be provided. In lieu of the buffer
8 yard requirement in Table 5-1414(A) of Section 5-1414, any
9 side/rear yard abutting property that is not developed for
10 commercial or industrial uses located in any one of the following
11 zoning districts: CR, JLMA, TR, R, PD-H, PD-CV, PD-RV, and
12 PD-AAAR shall include Type 4 buffer yard required plantings
13 installed on an earthen berm that has a minimum height of six (6)
14 feet and a slope not steeper than 2:1. The Type 4 buffer yard width
15 and required plantings shall be as set forth in Table 5-1414(B) of
16 Section 5-1414 and installed in accordance with the requirements
17 of Section 5-1400, Buffering and Screening.

18 (3) In lieu of the requirements of Section 5-1408(B)(2), the following
19 requirements shall apply to the plant types used to meet Section 5-
20 664(E)(1) and Section 5-664(E)(2). Maximum percentages shall
21 apply solely in determining the quantity of a given plant type that
22 can be counted towards meeting a Plant Unit requirement, and
23 shall not preclude the installation of additional plant material from
24 that plant type, if desired.

25 (a) A maximum of 30% of the required plant units may be
26 large deciduous trees.

27 (b) A minimum of 40% and a maximum of 70% of the required
28 plant units shall be evergreen trees that are a minimum of
29 eight (8) feet in height at the time of planting.

30 (c) A maximum of 30% of the required plant units may be
31 small deciduous trees.

32 (d) A maximum of 20% of the required plant units may be a
33 combination of shrubs, ornamental grasses, and perennials.

34 (e) Use of natural topography and preservation of existing
35 vegetation, supplemented by new vegetation, if needed,
36 may be substituted for the above requirements if
37 determined by the County Urban Forester to provide
38 screening at the density, depth, and height equivalent to the
39 Buffer Yard Type C with earthen berm required under
40 Section 5-664(E)(1) or Road Corridor Type 3 with earthen
41 berm required under Section 5-664(E)(2).

42 (f) The maximum percentages of plant types provided under
43 (a) through (d) above shall be applied along each property

line where the buffer yard or road corridor buffer is required.

~~(3) — all Notwithstanding the requirements of this section, use of natural topography and preservation of existing vegetation, supplemented by new vegetation, if needed, may be substituted for the above requirements when found by the County Urban Forester to provide screening at the density, depth, and height equivalent to the Type 4 buffer yard with earthen berm.~~

5-665 Storage, Mini-Warehouse. A storage mini-warehouse use shall comply with the following regulations in the GB, PD-IP and PD-GI zoning districts.

(A) **~~Buffer~~Buffering/Screening/Landscaping.** ~~—The use shall comply with Section 5-1400. When the use abuts a major collector road, in lieu of the road corridor buffer for other major collector roads required under Section 5-1403(B), a Road Corridor Buffer Type 3 shall be provided. be screened with landscaping that provides year-round screening and is equivalent to a Type Three (3) Buffer Yard (Section 5-1400) when located adjacent to or adjoining major roadways or residential uses.~~

(B) **Security.** If a security device is provided for the building or a security fence is installed around the use, in consultation with Fire, Rescue and Emergency Services, the owner shall demonstrate on the site plan the selection of a device to allow adequate and timely access of emergency vehicles to the storage, mini-warehouse use and such device shall be installed prior to occupancy permit.

(C) **Exterior Lighting Standards.** All exterior lighting shall comply with the standards of Section 5-652(A)(Exterior Lighting Standards).

(D) The storage, mini-warehouse use shall comply with the road access standards of Section 5-654.

5-666 Schools, Public (Elementary, Middle or High).

(A) **Utilities.** All public schools shall be served by either central or municipal sewer and water utilities.

(B) **Lighting:**

(1) **Light Fixtures.** Exterior building lighting, including security lighting, and parking lot lighting shall be full cutoff and fully shielded and shall direct light downwards and into the interior of the property and away from surrounding public or private roads and properties.

(2) **Exterior Building Lighting.** Exterior building lighting, including security lighting, shall not exceed a maximum average illumination of five (5) foot-candles at grade level unless otherwise required by law, ordinance, or regulation.

(3) **Parking Lot Lighting.** Parking lot lighting shall not exceed a maximum average illumination of two (2) foot-candles at grade level. Parking lot lighting shall be turned off within one hour following the end of evening activities, or by 11 p.m., whichever occurs first.

(4) **Recreational and Athletic Fields and Facilities Lighting.** Lighting for recreational and athletic fields and facilities shall be turned off by 11 p.m., shall be directed inward and downward toward the field being illuminated, shall incorporate a reflector technology system that directs light onto the field being illuminated and shall be cut-off and shielded in directions away from the recreational or athletic field to minimize glare and spillage onto adjacent properties. Lighting for recreational and athletic fields and facilities must not cause illumination in excess of ten foot-candles above background light levels measured at the boundary of any residential district, or, in residential or agricultural districts, at the lot line of any adjacent lot. Light poles for recreational and athletic fields and facilities shall not exceed 80 feet in height.

(5) **Height of Light Fixtures.** The mounting height of any exterior light fixture shall not exceed 20 feet, except for light poles for athletic fields. Height shall be measured from the ground to the light fixture.

(C) **Landscaping/Buffering/~~and~~ Screening.** In addition to meeting the Buffering and Screening requirements of Section 5-~~1400~~1404(B), Public Schools shall provide an additional five (5) evergreen trees per one hundred (100) linear feet along all side yard and rear yard buffers adjoining existing residential uses, except where existing vegetation is to be preserved and provides an equivalent buffer in accordance with the provisions of Section 5-1400.

(D) **Trails.** Any on-site pedestrian circulation network shall be designed so as to connect to any existing or proposed public use trails on adjacent properties which are designed to abut or connect to the public school site.

(E) **Bike Racks.** At least one bike rack shall be installed at the Public School building with space to accommodate at least 10 bicycles.

(F) **Noise.** Installation of outdoor public address systems shall be limited to the recreational and athletic fields. Noise emanating from the public address system shall not exceed 60 dBA at the property boundaries and use of the system shall be prohibited after 11 p.m. and before 8:00 a.m.

(G) **Setbacks:**

(1) **From Agriculture or Residential.** Principal Public School buildings shall have a minimum setback of fifty (50) feet from

adjacent agriculturally or residentially zoned properties or, if located within a mixed use zoning district, from any land bay designated for agricultural or residential use. Such building setback shall not apply to accessory public school buildings, but such accessory buildings must conform to applicable zoning district yard requirements.

- (2) **From Industrial/Commercial/Office.** Principal Public School buildings shall have a minimum setback of one hundred (100) feet from adjacent industrial, commercial or office zoned properties or, if located within a mixed use zoning district, from any land bay designated for industrial, commercial or office uses. Such building setback shall not apply to accessory public school buildings, but such accessory buildings must conform to applicable zoning district yard requirements.

(H) **Building and Site Design.**

- (1) **Stormwater Management.** Unless stormwater management is to be provided by an existing approved off-site storm water management facility, stormwater management and Best Management Practices shall be used on-site, in accordance with the Virginia Stormwater Management Handbook and the Loudoun County Facilities Standards Manual.

- (2) **Bus Parking Area.** Stormwater runoff from the bus parking area shall be routed to an oil and water separator or a system providing equivalent treatment for water quality purposes.

- (3) **Design.** Public school building design shall avoid the use of continuous plane building surfaces and wherever practicable shall break up large building segments into smaller segments through the use of fenestration and setbacks. Public School buildings shall include accent materials around the building exterior to provide further architectural interest.

- (4) The following erosion and sediment control practices shall be required during construction where an outfall drains to a sensitive environmental feature (streams, wetlands, and very steep slopes). In such instances these requirements shall be applied adjacent to the sensitive environmental feature if on-site, or if off-site, along the property line(s) proximate to the sensitive environmental feature:

- (a) Super silt fence shall be substituted for silt fence;
- (b) Sediment traps and basins shall provide double the minimum required volume (268 cubic yards per acre) except that this volume may be reduced to avoid impacts to sensitive environmental features;

- (c) Stabilization matting shall be required in all vegetated, constructed channels and on slopes greater than 3:1.

(5) **Floodplain:**

- (a) A maximum of 20% of on-site areas in major and minor floodplain may be used for utilities, trails or other uses permitted within the floodplain, exclusive of road crossings. Areas so used shall be excluded from the calculation for meeting the forest cover requirement of (c) below;
- (b) Road Crossings shall not be subject to the use limitation of (a) above, and areas used for road crossings shall be excluded from the calculation for meeting the forest cover requirement of (c) below;
- (c) Unless excluded by (a) or (b) above, 80% of major and minor floodplain located on-site shall be forested, either through the retention of existing forest cover or through the planting of unforested floodplain with at least five different native deciduous species at a density of 300 3-gallon plants (180 canopy trees and 120 understory trees) per acre on a 12 x 12 grid.

(I) **Transportation.**

- (1) Public Schools shall be located with direct access to at least one paved, public road, or to at least one paved private road subject to a public access easement. Public Schools shall have a secondary means of access, which may be provided by either a paved or unpaved roadway. Access to a public school site shall be capable of accommodating traffic generated by the site.
- (2) Entrances/Exits shall be provided with sight distances adequate to meet minimum Virginia Department of Transportation standards.
- (3) Right and left turn lanes, into and out of a site, shall be provided, as needed, to accommodate traffic generated by the site.
- (4) At signalized intersections (stop signs or traffic signals) adjacent to a school site, crosswalks shall be provided to access the site, as needed, to accommodate pedestrian traffic generated by the site.
- (5) A traffic impact analysis, in conformance with the County's Facilities Standards Manual, shall be provided to the County in conjunction with each site plan application for a Public School building, and such traffic impact analysis shall specifically include, but not be limited to, an analysis of the need for right and left turn lanes into and out of the public school site and the crosswalks to provide pedestrian access to the public school site.

(J) No Public School shall be located within the portions of the County subject to the Airport Impact Overlay District Ldn 65 or higher aircraft noise contour.

(K) A Phase I Archaeological survey shall be provided to the County in conjunction with each site plan application for a Public School building.

5-667

Brewery, Limited. A limited brewery shall be licensed as a Limited Brewery in accordance with Section 4.1-208 of the Code of Virginia, as amended, and shall be located in the AR-1, AR-2, A-10, or A-3 districts. No Limited Brewery shall be established either as the initial use of the subject property or by change of use of the property until a sketch plan has been approved. The owner of a limited brewery is requested to contact the Loudoun County Department of Fire, Rescue and Emergency Management and Department of Building and Development for an informational inspection of the building(s) or structure(s) to be used for the limited brewery prior to establishing use.

(A) **Sketch Plan.** A sketch plan is required as part of a zoning permit application for a Limited Brewery. Such sketch plans shall include the following:

- (1) Property boundaries;
- (2) Location, function (manufacturing, storage, tasting, residence, etc.), size and dimensions of structure(s) and outdoor area(s). If structure(s) are located more than 300 feet from the property line approximate distances may be provided;
- (3) Location of residences not located on the property that are within 300' of a structure;
- (4) Location and dimensions of all ingress/egress points (including emergency access), access drives and easements;
- (5) Location of parking areas;
- (6) Location of floodplain, well, septic fields, and restroom facilities;
- (7) Location of landscaping and screening for outdoor tasting room and event areas within 300' of a residence not located on the property;
- (8) Location, height, and type of proposed lighting; and
- (9) Location of vegetation, fences, streams, directional signs, or other similar feature that may limit access onto or direct access away from an adjacent residential property line within 300' of tasting room and event areas.

(B) The Sketch Plan need not be drawn to scale, nor does it have to be prepared by a licensed professional. However, distances from structures to adjacent lot lines must be accurately depicted.

(C) Limited Breweries that share a private access easement with another property owner/s, must show the easement allows a use of this type or written permission must be obtained by the sharing parties.

5-668 Craft Beverage Manufacturing. Craft Beverages Manufacturing shall comply with the following standards:

(A) **Intensity/Character.**

(1) **Tasting Rooms and Accessory Food Sales.**

(a) Facilities for tasting rooms and accessory food service shall not exceed the lesser of (i) 49 percent of the total gross floor area or (ii) 5,000 square feet.

(b) Outdoor tasting rooms or similar outdoor activities shall be set back at least 50 feet from all lot lines of adjacent agriculturally or residentially zoned properties.

(c) Facilities for accessory food sales related to craft beverage consumption for the convenience of tasting room patrons only shall be permitted.

(2) **Restaurant.** A restaurant may be provided in accordance with the underlying zoning district.

(3) **Storage Areas.** Outdoor equipment and storage of materials used for craft beverage manufacturing shall not be permitted.

(B) **Exterior Lighting Standards.** All exterior lighting for outdoor tasting rooms or similar outdoor activities shall comply with the standards of Section 5-652(A)(1) and (2) (Exterior Lighting Standards).

(C) **Water and Sewer.** The use shall be served by central water and central sewer.

Section 5-900

~~**[RESERVED] Access and Setbacks From Specific Roads and the W&OD Trail.** Certain roads within Loudoun County because of their function, location and capacity require that uses be set back a certain minimum distance from them. All other provisions of this Ordinance notwithstanding, all buildings and parking, except for agricultural structures and structures located within Village Conservation Overlay Districts and the Joint Land Management Area Districts, shall be set back as provided below, or the setback provided in an approved corridor study whichever setback is greater, from the existing or planned rights-of-way, whichever is greater. Residences, accessory structures, and accessory uses built before June 16, 1993 are exempt from this provision pursuant to Section 1-403(D). The following roads are subject to this provision:~~

~~**(A) Building and Parking Setbacks From Roads.**~~

~~**(1) Route 7.**~~

~~**(a) Fairfax County line, west to Broad Run.**~~

~~**(i) Building: 50 feet**~~

~~**(ii) Parking: 50 feet.**~~

~~**(b) Broad Run west to east corporate limit of Leesburg.**~~

~~**(i) Building: 200 feet.**~~

~~**(ii) Parking: 125 feet.**~~

~~**(c) Route 7 Bypass from the west corporate limit of Leesburg west to Clarke County.**~~

~~**(i) Building: 200 feet.**~~

~~**(ii) Parking: 100 feet.**~~

~~**(2) Route 267.**~~

~~**(a) Building: 150 feet.**~~

~~**(b) Parking: 100 feet.**~~

~~**(3) Route 50. Rt. 659 Relocated west to Fauquier County line.**~~

~~**(a) Building: 100 feet.**~~

~~**(b) Parking: 75 feet.**~~

~~**(4) Route 15.**~~

(a) ~~Building: 100 feet.~~

(b) ~~Parking: 75 feet.~~

~~(5) **Route 28.**~~

(a) ~~Building: 100 feet.~~

(b) ~~Parking: 75 feet.~~

~~(6) **Route 9.**~~

(a) ~~Building: 100 feet.~~

(b) ~~Parking: 75 feet.~~

~~(7) **Route 287.**~~

(a) ~~Building: 100 feet.~~

(b) ~~Parking: 75 feet.~~

~~(8) **Route 606.**~~

(a) ~~Building: 100 feet.~~

(b) ~~Parking: 75 feet.~~

~~(9) **Other Arterial Roads.**~~

(a) ~~Building: 100 feet.~~

(b) ~~Parking: 75 feet.~~

~~(10) **Other Major Collector Roads.**~~

(a) ~~Building: 75 feet.~~

(b) ~~Parking: 35 feet.~~

~~(11) **All other roads in Nonresidential Districts.**~~

(a) ~~Building: As specified in applicable district regulations.~~

(b) ~~Parking: 25 feet unless otherwise specified in applicable district regulations.~~

~~(12) **All other roads in Residential Districts.**~~

(a) ~~Building: As specified in applicable district regulations.~~

(b) ~~Parking: As specified in applicable district regulations.~~

~~(13) Ramps at grade separated interchanges associated with the roads listed above.~~

~~(a) Building: 75 feet.~~

~~(b) Parking: 35 feet.~~

~~(14) Modified Building Setback for Shallow Lots. The building setback from a road in this Subsection 5-900(A) is reduced on shallow lots to allow a building area of up to 85 feet in depth, measured forward from any rear buffer or setback, whichever is more restrictive. In no case shall the modified building setback from the road be less than the yard or setback required by the underlying zoning district. In these cases, parking setbacks shall be coterminous with building setbacks. This provision applies to lots as they existed on June 16, 1993, and no lot may be altered or reconfigured to increase the degree of its shallowness. All lots created since June 16, 1993 must comply with the unmodified Building Setbacks from Roads.~~

~~(15) Modifications to Maintain Streetscape Consistency. Modifications may be allowed to these setbacks to maintain consistency with adjacent properties by Minor Special Exception.~~

~~(B) Building Setback From W&OD Trail. 25 Feet.~~

~~(C) Access from major roads. New access points (private or public) to arterial or major collector roads shall be limited to locations at existing median breaks, planned median breaks or other locations approved by Loudoun County or VDOT.~~

5-1002

Scenic Creek Valley Buffer Established. The following setbacks are established along all waterways draining greater than 640 acres in areas where the major 100 year floodplain is less than the setbacks provided below.

(A) 250 feet measured along the slope of the ground from the channel scar line on the Potomac River.

(B) 200 feet on each side of the creek measured along the slope of the ground from the channel scar line of the Scenic River designated portions of Goose Creek and Catoclin Creek.

(C) 150 feet on each side of the creek measured along the slope of the ground from the channel scar line of each creek or stream where the watershed is greater than 640 acres.

(D) The above setbacks may be reduced as follows:

(1) A reduction of 100 feet shall be allowed for the retention of an existing forested area or the creation of a forested area, as approved by the ~~Area Forester~~ County Urban Forester as part of a management plan between the ultimate setback line and the channel scar line; or

5-1204 Sign Requirements.

GENERAL NOTES

1. Whenever a bonus multiplier is used for ground mounted signs, a landscaped base with a minimum depth of 3 feet on all sides must be maintained (see Figure 1).
2. All signs must be set back the minimum distance from the road right-of-way, as specified, unless a greater setback is required by the Code of Virginia.
3. The maximum height column does not apply when ground mounted bonuses are obtained. Use the maximum height column for Ground Mounted Background Structure. For the purpose of locating building mounted signs, no part of the sign shall extend above or beyond the perimeter of the wall to which it is attached.
4. (Deleted per ZOAM-2016-0005).
5. The following conditions shall apply for permitted Non-PD District Project Directional Signs - Off-Site.
 - a. The location of signs must be approved by the County at the time of the sign permit application.
 - b. Signs shall be located only at controlled intersections where there is a change in direction.
 - c. Signs shall be placed on private property only.
 - d. Signs shall not be permitted on any arterial road, nor on any road listed in Section ~~5-9995-1403(B)~~ of this Ordinance.
 - e. The signs may be installed after sundown Friday night and must be removed by sundown on Sunday. If Monday is a legal holiday, the signs may remain until sundown Monday.
 - f. The signs must be made of a permanent material, signs made of paper or cardboard are hereby specifically prohibited.
 - g. Builders may not use "Non-PD District Project Directional Signs - Off-Site" in combination with "Real Estate-Temporary Open House - Off-Site" signs.
6. In selecting the most appropriate sign category, the more specific listing shall take precedence.

5-1303 Canopy Requirements.

(B) **For development requiring a plan of subdivision, but not a site plan, property not zoned A-3, A-10, AR-1, AR-2, i.e. single family and duplex dwellings.** When a plan of subdivision is required under the Land Subdivision and Development Ordinance and the property is not zoned A-3, A-10, AR-1, AR-2, a landscape plan shall be included at Record Plat or construction drawings,

1 whichever shall occur first, that provides for the planting or
2 replacement of trees on the site to the extent that, at maturity of
3 twenty (20) years, minimum tree canopies will be provided as
4 follows:

5 (1) If the site has a tree canopy coverage of 20% or more, the
6 plan shall provide for the preservation, or planting and
7 replacement of trees on site so as to result in a tree canopy
8 of at least 20%, calculated at 20 years maturity.

9 (2) If the site has a tree canopy coverage of less than twenty
10 (20%) prior to recordation of the subdivision, the plan shall
11 provide for the preservation or planting and replacement of
12 an equivalent percentage of tree canopy coverage as existed
13 prior to development, calculated at 20 years maturity.

14 (3) Every platted lot shall have a minimum tree canopy coverage
15 of 2.5%, or 3,000 square feet, whichever is less, calculated
16 at 20 years maturity, exempting lots for which no permits for
17 new structures will be sought and the designated parent tract.
18 Such trees shall be counted toward the minimum tree canopy
19 requirements in (1) and (2) above.

20 (4) Trees shall be planted at a density of one tree per 50 linear
21 feet along both sides of all areas dedicated for use for
22 vehicular access. Such trees shall have a minimum caliper
23 of 1" and a height at maturity of 15 feet or more. Such trees
24 shall be counted toward the minimum tree canopy
25 requirements in (1), (2) and (3) above.

ARTICLE 8 - DEFINITIONS

Ornamental Grass: Grasses that are grown for their aesthetic value and are generally low maintenance plants resilient to harsh conditions, but does not include turf grasses.

Perennial: Ornamental herbaceous plants that persist for many growing seasons.

Shrub: ~~An~~ A deciduous or evergreen multi-trunked, woody plant that usually attains a mature height of no more than ten (10) feet. Preferred species are provided in the Facility Standards Manual.

Street Tree: Any large deciduous tree which grows in the street right-of-way or on private property abutting the street right-of-way.

Tree: A single perennial woody stem attaining a height of fifteen (15) feet or more at maturity. The particular categories of trees listed below, when used in this Ordinance shall have the following meanings:

~~**Tree, Canopy:** A deciduous tree, usually single trunked, with a definitely formed crown of foliage and which attains a mature height of at least 30 feet.~~

Tree, Deciduous: Trees and shrubs that shed their leaves annually, usually in Autumn.

Tree, Evergreen: A non-deciduous tree, often used for the purposes of screening, weather barrier, or accent planting. Preferred species are provided in the Facilities Standards Manual.

Tree, Flowering: Trees that flower.

Tree, Large Deciduous: A deciduous tree, usually single trunked, with a definitely formed crown of foliage and which attains a mature height of at least 30 feet. Preferred species are provided in the Facility Standards Manual.

Tree, Small Deciduous: A deciduous tree which attains a mature height of no greater than 30 feet. Preferred species are provided in the Facilities Standards Manual.

Tree Canopy or Tree Cover: Shall include all areas of coverage by plant material exceeding five (5) feet in height.

~~**Tree, Understory:** A deciduous or evergreen tree which attains a mature height of no greater than 30 feet. Understory trees often prefer shade and grow naturally under the canopy of larger trees.~~

FSM Chapter 7 Amendments – 11/21/19 Board of Supervisors Draft

7.300 TREE CONSERVATION

- A. The County recommends that the following be considered priorities for tree conservation:
1. Trees, shrubs, and plants located within the Floodplain Overlay District;
 2. Intermittent and perennial stream buffers, non-tidal wetlands, and steep slope areas;
 3. Contiguous forest that connects the largest undeveloped or most vegetated tracts of land within and adjacent to the site;
 4. Trees, shrubs, or plants determined to be rare, threatened, or endangered under the federal Endangered Species Act and those species identified by the Virginia Department of Game and Inland Fisheries;
 5. Trees that are identified as part of a registered historic site;
 6. Hedgerows/Fencerows; and
 7. Invigorated, healthy, structurally sound trees having a diameter measured at four and a half (4.5) feet above the ground of thirty (30) inches or more.
- B. Conservation of Existing Trees and Vegetation to Meet Canopy and Buffer Requirements:
1. Existing tree canopy and vegetation, including those areas of tree canopy and vegetation that an Applicant has agreed to preserve or conserve as part of a proffer or condition of approval, may be used to meet canopy and/or buffering and screening requirements of the Zoning Ordinance, if the following requirements are met:
 - a. The following shall not be used to meet canopy or buffering and screening requirements:
 - i. Concentrated stands of Virginia Pine.
 - ii. Concentrated stands of invasive plant species as identified on the Virginia Department of Conservation and Recreation, Virginia Invasive Plant Species List.
 - iii. Existing tree canopy and vegetation located within the PRZ, as defined in Section 7.303.

~~iii~~.iv. Existing tree canopy and vegetation, located on residential lots of twenty thousand (20,000) square feet or less.

- b. Existing tree canopy shall meet the standards of desirability and life-year expectancy established by the Zoning Administrator. Existing vegetation shall be suitable to provide buffering and screening in accordance with the requirements of the Zoning Ordinance. To demonstrate that these requirements are met, a field inspection of the existing tree canopy and vegetation proposed to be used to meet the canopy and/or buffering and screening requirements of the Zoning Ordinance shall be conducted, and a narrative prepared, by a Certified Arborist, Urban Forester, or Landscape Architect. The date of the inspection and the name of the individual who conducted the inspection shall be identified in the narrative.

The narrative may be accompanied by photographs. The narrative shall describe the overall size, species and general conditions of the area where such existing trees and vegetation are located. General conditions include factors such as dominant species, growth rate, stocking/basal area, structure, form and quality characteristics, regeneration, age range, soils, aspect, stand history, invasive species, and hazard trees. The narrative shall also inventory by field location, common name, scientific name and International Society of Arboriculture (ISA) condition rating of all trees within the area of trees and vegetation to be preserved or conserved located within fifty (50) feet of the limits of clearing and grading that have a diameter breast height (d.b.h.) of thirty (30) inches or more.

C. Conservation of Existing Trees and Vegetation for Use as Best Management Practices (BMP):

1. A field inspection shall be conducted, and a narrative prepared, by a Certified Arborist, Urban Forester, or Landscape Architect. The date of the inspection and the name of the individual who conducted the inspection shall be identified in the narrative.
2. The narrative may be accompanied by photographs and shall describe the overall size, species and general condition of the conserved area where the existing trees and vegetation are located to demonstrate compliance with the BMP requirements of Chapter 5 of this Manual. General conditions include factors such as dominant species, growth rate, stocking/basal area, structure, form and quality characteristics, regeneration, age range, soils, aspect, stand history, invasive species, and hazard trees.
3. Existing tree canopy and vegetation used as BMPs in accordance with Chapter 5 of this Manual shall be located within an easement dedicated to the County of Loudoun.

7.301 LANDSCAPE PLANTINGS

The County recommends that tree and shrub plantings be native and have multiple values such as biomass, nuts, fruits, browse, nesting, and aesthetics. Table 3 (Trees and Shrubs) provides a list of the species that may be used to meet the requirements of Sections 7.302 and 7.305. The Director or Director's Designee may approve the use of additional species not listed in Table 3 if such species demonstrate the values listed above. The Director or Director's Designee shall establish the minimum planting area (square feet) and canopy coverage provided (square feet), if applicable, for any approved additional species.

7.302 TREE CONSERVATION AND LANDSCAPE PLANS

When new plantings or existing tree canopy and vegetation are used to satisfy the requirements of the Zoning Ordinance, this Manual, a proffer, or a condition of approval of a special exception or variance, an applicant shall submit a Tree Conservation and Landscape Plan.

- A. The Tree Conservation and Landscape Plan shall be overlain upon the site plan or construction plans and profiles, whichever is applicable, to illustrate the following:
1. Accurate location and species of each planting.
 2. No plantings are proposed that would be detrimental to the purpose of sight distance easements or other easements.
 3. Required landscape buffers.
 4. Areas of existing tree canopy and vegetation to be preserved or conserved.
 5. All tree protection measures required by Section 7.303 of this Chapter.
 6. Tree canopy calculations.
 7. Landscape planting schedule.
 8. Any narrative required by Section 7.300 of this Chapter.
 9. References to the appropriate guidelines for planting and maintenance of new plant material provided by the Virginia Erosion and Sediment Control Handbook, Landscape Contractors Association's: Landscape Specifications Guidelines for Baltimore - Washington Metropolitan Area.
 - a. Above-ground landscape containers and planters for trees shall be designed in accordance with Virginia Cooperation Extension publication 430-023, Trees for Landscape Containers and Planters.

B. For new plantings used to meet canopy, landscaping and/or buffering and screening requirements, a Landscape Table shall be provided as follows below. For tree plantings, canopy coverage provided shall be in accordance with Table 3, or as established by the Director or Director's designee for additional species. To achieve diversity:

- ### “SAMPLE” LANDSCAPE TABLE

KEY	SCIENTIFIC NAME	COMMON NAME	SIZE (CALIPER or HEIGHT)	TYPE OF ROOT STOCK TO BE PLANTED *1	QUANTITY	____-YEAR CANOPY COVERAGE PROVIDED PER TREE	TOTAL CANOPY COVERAGE PROVIDED
	Large Deciduous Canopy Trees						
Ar	Acer rubrum	Red Maple	2" caliper	B&B	15	270	4,050
Ls	Liquidambar styraciflua	Sweetgum	2" caliper	B&B	18 15	270	4,860 4,050
Qp	Quercus palustris	Pin Oak	2" caliper	B&B	14 15	270	3,780 4,050
Zs	Zelkova serrata	Japanese Zelkova	2" caliper	B&B	20 15	270	5,400 4,050
Total					67 60		18,090 16,200
	Small Deciduous Understory Trees						

KEY		SCIENTIFIC NAME	COMMON NAME	SIZE (CALIPER or HEIGHT)	TYPE OF ROOT STOCK TO BE PLANTED *1	QUANTITY	____-YEAR CANOPY COVERAGE PROVIDED PER TREE	TOTAL CANOPY COVERAGE PROVIDED
Cf		Cornus florida	Flowering Dogwood	1” caliper	B&B	22 18	115	2,530 2,070
Cc		Cercis canadensis	Redbud	1” caliper	B&B	18	115	2,070
Aa		Amelanchier arborea	Downy Serviceberry	1” caliper	B&B	45 18	115	1,725 2,070
Li		Lagerstroemia idica	Common Crapemyrtle	1” caliper	B&B	20 18	115	2,300 2,070
Total						75 72		8,625 8,280
Evergreen Trees								
Pa		Picea abies	Norway Spruce	6’	CON	20	190	3,800
Ps		Pinus strobus	Eastern White Pine	6’	CON	20	190	3,800
Io		Ilex opaca	American Holly	6’	CON	20	115	2,300
Mg		Magnolia grandiflora	Southern Magnolia	6’	CON	20	190	3,800
Total						60 80		9,900 13,700
Total Canopy						202 212		36,615 38,180
Shrubs								
Ra		Rhododendron atlantica	Dwarf Azalea	3 gallon	CON	20	0	0
As		Alnus serrulata	Common Alder	3 gallon	CON	10	0	
Co		Cephalanthus occidentalus	Buttonbush	3 gallon	CON	18	0	0
Ca		Cornus amomum	Silky Dogwood	3 gallon	CON	15	0	0
Total						63		
Note: Substitute plantings may be permitted in accordance with Chapter 7 of the FSM.								

Footnotes:

*1 Type of Root Stock to be planted shall be specified as follows:

- balled and burlapped = B&B
- bare root = BR
- container = CON

C. The use of deciduous trees, evergreen trees, shrubs, ornamental grasses and perennials, or a combination of these plant types only, shall be used to achieve the required buffer planting units. Buffer tables shall be provided as follows below.

“SAMPLE” ROAD CORRIDOR BUFFER TABLE

<u>Adjacent Road Name and Type</u>		<u>“Road Name” (Major Collector)</u>		
<u>Road Corridor Buffer Type Required</u>		<u>Type 2</u>		
<u>Plant Units Per 100 Linear Feet</u>		<u>60</u>		
<u>Total Linear Feet</u>		<u>300</u>		
<u>Total Required Plant Units</u>		<u>180</u>		
<u>Plant Types</u>	<u>Quantity</u>	<u>Plant Unit Equivalents</u>	<u>Plant Units</u>	<u>Percentage</u>
<u>Large Deciduous</u>	<u>6</u>	<u>10 Plant Units = 1 Plant</u>	<u>60</u>	<u>33%</u>
<u>Evergreen</u>	<u>0</u>	<u>6 Plant Units = 1 Plant</u>	<u>0</u>	<u>0%</u>
<u>Small Deciduous</u>	<u>12</u>	<u>5 Plant Units = 1 Plant</u>	<u>60</u>	<u>33%</u>
<u>Shrubs</u>	<u>25</u>	<u>2 Plant Units = 1 Plant</u>	<u>50</u>	<u>28%</u>
<u>Ornamental Grasses</u>	<u>0</u>	<u>1 Plant Unit = 1 Plant</u>	<u>0</u>	<u>0%</u>
<u>Perennials</u>	<u>40</u>	<u>0.25 Plant Unit = 1 Plant</u>	<u>10</u>	<u>6%</u>
<u>Total</u>	<u>N/A</u>	<u>N/A</u>	<u>180</u>	<u>N/A</u>

“SAMPLE” BUFFER YARD TABLE

<u>Proposed Land Use</u>		<u>Group 10</u>		
<u>Adjacent Land Use</u>		<u>Group 2</u>		
<u>Use Buffer Type Required</u>		<u>Type B</u>		
<u>Plant Units Per 100 Linear Feet</u>		<u>80</u>		
<u>Total Linear Feet</u>		<u>350</u>		
<u>Total Required Plant Units</u>		<u>280</u>		
<u>Plant Types</u>	<u>Quantity</u>	<u>Plant Unit Equivalents</u>	<u>Plant Units</u>	<u>Percentage</u>
<u>Large Deciduous</u>	<u>8</u>	<u>10 Plant Units = 1 Plant</u>	<u>80</u>	<u>29%</u>
<u>Evergreen</u>	<u>5</u>	<u>6 Plant Units = 1 Plant</u>	<u>30</u>	<u>11%</u>
<u>Small Deciduous</u>	<u>10</u>	<u>5 Plant Units = 1 Plant</u>	<u>50</u>	<u>18%</u>
<u>Shrubs</u>	<u>40</u>	<u>2 Plant Units = 1 Plant</u>	<u>80</u>	<u>29%</u>
<u>Ornamental Grasses</u>	<u>20</u>	<u>1 Plant Unit = 1 Plant</u>	<u>20</u>	<u>7%</u>
<u>Perennials</u>	<u>80</u>	<u>0.25 Plant Unit = 1 Plant</u>	<u>20</u>	<u>7%</u>
<u>Total</u>	<u>N/A</u>	<u>N/A</u>	<u>280</u>	<u>N/A</u>

C.D. For existing trees, canopy coverage provided shall be determined as follows:

1. For groups of trees, the area of canopy coverage provided shall only include canopy that meet the requirements of Section 7.300.
2. For individual trees, canopy coverage provided shall be equal to the area of the CRZ, as defined in Section 7.303.

D.E. Total canopy coverage calculations shall be provided in tabular form as follows:

“SAMPLE” CANOPY COVERAGE CALCULATIONS

	Acreage	sq. ft.
Gross Site Area	200	8,712,000
Less Exclusion Areas per <u>Zoning Ordinance</u>	5	217,800
Net Site Area	195	8,494,200
Canopy Coverage Required (10%)	19.5	849,420
Canopy Coverage Provided	21	914,760
Existing Canopy	12	522,720
Proposed Canopy on Lots - (excluding Street Trees)	1	43,560
Proposed Canopy – Open Space	5	217,800
Proposed Canopy – Street Trees	2	87,120
Proposed Canopy – Buffers	1	43,560
Reforestation	0	0
Total Canopy Coverage Provided	21	914,760
Requirement is met . . . <u>914,760</u> sq. ft. is greater than 849,420 sq. ft.		

E.F. At the time of planting, the applicant may submit a written request to the Director or Director’s designee to approve the substitution of a species shown on the approved Landscape Plan with a species from the same planting category in Table 3.

7.303 TREE PROTECTION

Tree protection measures during land disturbing activities shall be in accordance with the [Virginia Erosion and Sediment Control Handbook](#). Additionally, the following shall apply:

- A. Areas of existing tree canopy and vegetation that an applicant has agreed to conserve or preserve as part of a proffer or condition of approval or to meet canopy and/or buffering and screening requirements shall be protected during construction.

B. Critical Root Zone/Protected Root Zone

When areas of existing tree canopy and vegetation that an Applicant has agreed to preserve or conserve as part of a proffer or condition of approval or to meet canopy and landscape buffer requirements are identified on a site plan or construction plans and profiles, the corresponding critical root zone (CRZ) or protected root zone (PRZ), as applicable, shall be delineated on the site plan and construction plans and profiles, as well as any grading plan prepared in association with and/or any grading permit application accompanying said site plan or construction plans and profiles.

1. For individual trees, the CRZ shall be represented by a concentric circle centered on the tree trunk with a radius equal in feet to one (1) times the number of inches of the trunk diameter (i.e., The CRZ for a twenty (20) inch diameter tree is twenty (20) feet), as shown in Figure 1.
2. For groups of trees, the PRZ shall be represented by a line drawn within the area of tree canopy and vegetation to be preserved or conserved that is parallel to and 15 feet from the limits of clearing and grading, as shown in Figure 1.

Figure 1 - Critical Root Zone/Protected Root Zone

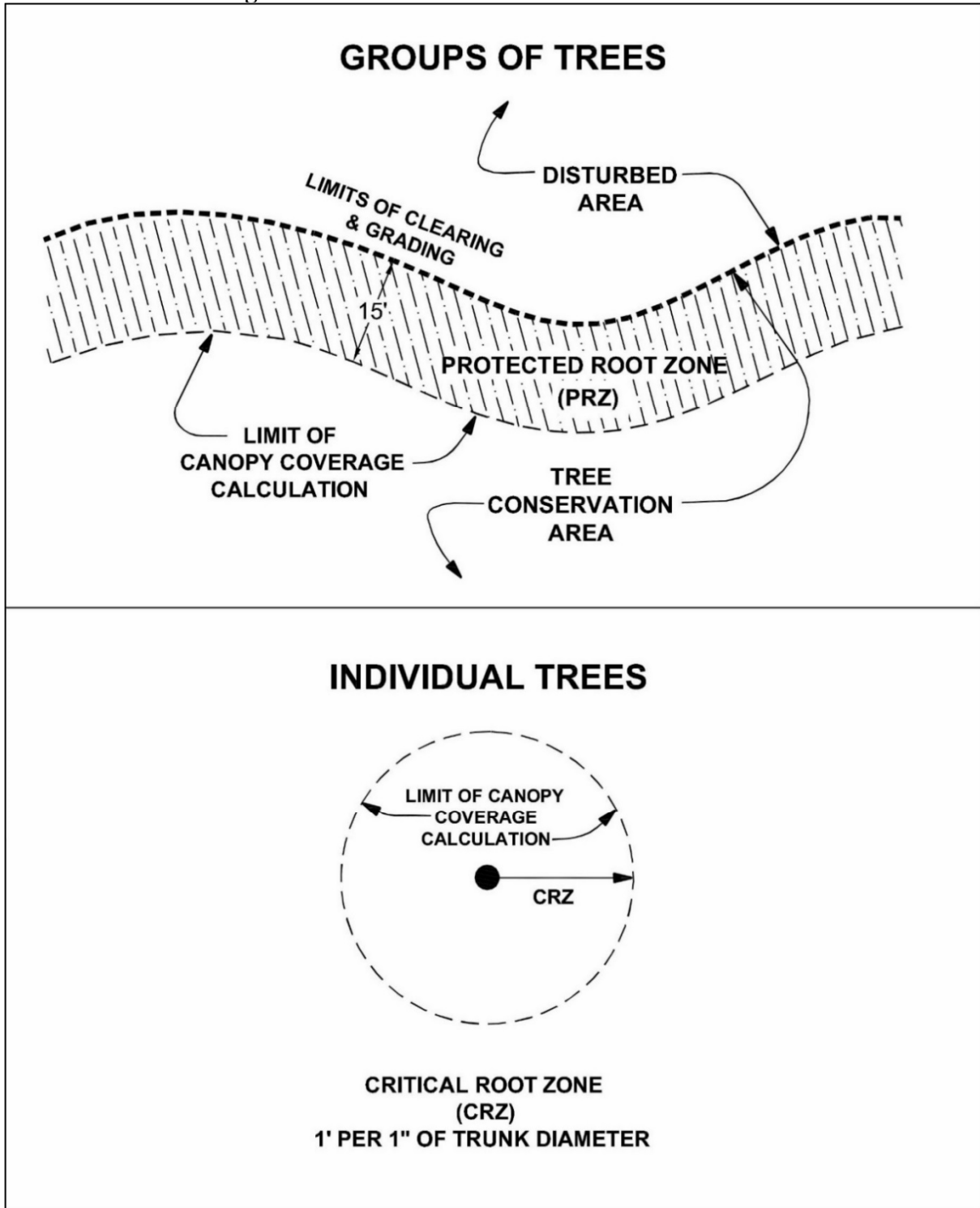


FIGURE 1
Section 7.303
(NOT TO SCALE)

C. General Requirements

1. Prior to any land disturbance, protective barriers, such as Super Silt Fence as shown in Figure 3, or welded wire fence as shown in Figure 6, shall be ~~installed~~ along the CRZ of any tree, or along the limits of clearing and grading of any group of trees, as applicable, to be preserved. Protective barriers shall remain so ~~installed~~ throughout all phases of construction. No grade changes or storage of equipment, materials, debris, or fill shall be allowed within the area protected by the barrier. No construction traffic, parking of vehicles, or disposal of liquids is permitted within the CRZ and PRZ. All protective barriers are recommended to display tree protection signage, as shown in Figure 2, installed at a minimum of one sign every fifty (50) feet.
2. Tree roots which must be severed shall be cut by a trencher or similar equipment aligned radially to the tree. This method reduces the lateral movement of the roots during excavation, which if done by other methods could damage the intertwined roots of adjacent trees. This effort shall take place and be complete prior to any land disturbance activities.
3. Within four hours of any severance of roots, all tree roots that have been exposed and/or damaged shall be trimmed cleanly and covered temporarily with moist peat moss, moist burlap, or other moist biodegradable material to keep them from drying out until permanent cover can be installed.
4. Prior to completion of Phase 1 erosion and sediment control construction activity, hazard trees shall be identified by an Urban Forester, Certified Arborist, or Landscape Architect, marked with paint, saw cut, and removed. Trees that become hazard trees following Phase 1 erosion and sediment control construction activity shall also be marked with paint, saw cut, and removed prior to bond release. Tree stumps located within areas of existing canopy and vegetation to be preserved or conserved on open space parcels shall be left intact.
5. Slopes abutting a CRZ or PRZ shall not have a grade greater steeper than 2:1 for a distance of five (5) feet outside the CRZ or PRZ, or a retaining wall shall be required. Any wall constructed within five (5) feet of the CRZ or PRZ shall be reviewed and approved by the County Urban Forester or Director's designee. Grade changes and excavations shall not encroach within the CRZ or PRZ, unless approved by the County Urban Forester or Director's designee.
6. No toxic materials, including petroleum products, shall be stored within 100 feet of the CRZ or PRZ.
7. Sediment, retention, and detention basins shall not be located within the CRZ or PRZ. Such basins shall not discharge directly into the CRZ or PRZ.

unless the discharge is transitioned back to sheet flow prior to entering the CRZ or PRZ or is discharged into an adequate natural channel, in accordance with Chapter 5 of this manual.

D. Pruning Methods

All final cuts shall be made sufficiently close to the trunk or parent limb but without cutting into the branch collar or leaving a protruding stub, according to the [American National Standards Institute \(A300—Part 1\)](#) [American National Standards Institute \(A300 \(Part 1\) — Pruning\)](#). All necessary pruning cuts must be made to prevent bark from being torn from the tree and to facilitate rapid healing. Flush cuts are unacceptable.

Figure 6 - Tree Protective Barrier Detail

Tree Protective Barrier Detail

Welded Wire Fence

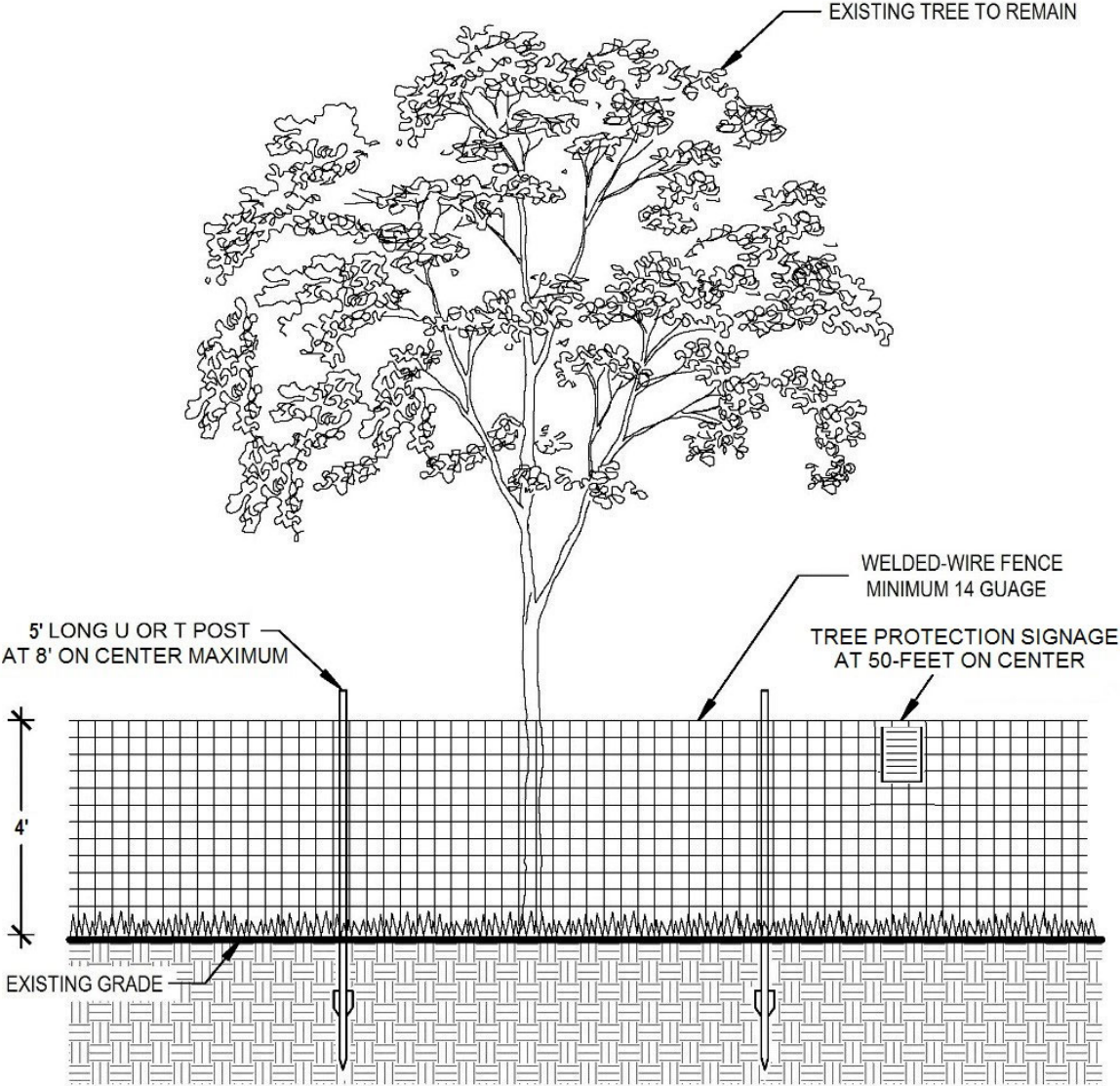


FIGURE 6

Section 7.303

Figure 2 - Typical Tree Protection Signage

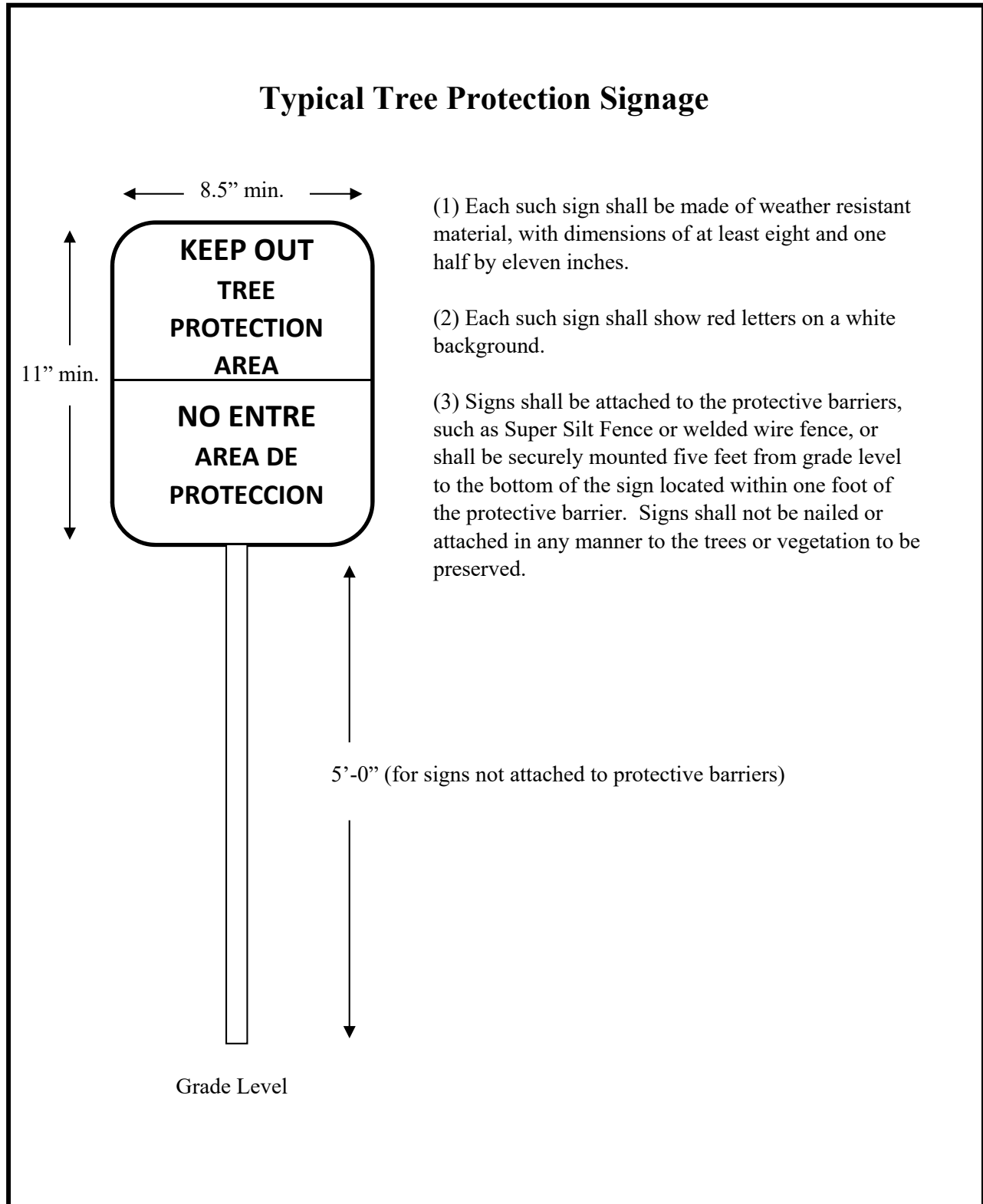


FIGURE 2
Section 7.303

7.304 FOREST MANAGEMENT PLAN

Prior to timber harvesting or silvicultural activities, a Forest Management Plan (FMP), when required by the Zoning Ordinance for the Floodplain Overlay District, Mountainside Development Overlay District, Limestone Overlay District, and Steep Slope Standards, shall be required and submitted to the Director or Director's designee for approval. The approved FMP is required to be on file with the Director or Director's designee and a copy kept on site throughout the duration of the timber harvest or silvicultural activity, including site stabilization, where applicable.

- A. A meeting with the Director or Director's designee is recommended to discuss the scope of the proposed timber harvest or silvicultural activities prior to the preparation and submission of the FMP.
- B. The purpose of the FMP is to establish the tract location and to describe the Best Management Practices (BMP's) required for structural stabilization and re-vegetation of all exposed mineral soil sites. The FMP shall be prepared by the Virginia Department of Forestry, or a professional forester with, at a minimum, a Bachelor of Science degree from and accredited School of Forestry, and shall contain the following information:
 - 1. Sheet size of 11 inches x 17 inches with a scale large enough to clearly depict County base map at 1" = 200', showing tract boundaries, timber type lines, water bodies, topography and acreage to be harvested. These maps are available through the Loudoun County Office of Mapping and Geographic Information.
 - 2. Identify all streams, their headwaters and a Streamside Management Zone (SMZ) at least fifty (50) feet wide on either side of the stream.
 - 3. Approximate location of all decks, haul roads, primary skid trails, and any other road, trail, or travelway that will be used for the timber harvest or silvicultural activity.
 - 4. If grading, including excavation or filling, is necessary for deck or haul road construction, or construction of any other road, trail, or travelway that will be used for the timber harvest or silvicultural activity, a detailed map showing location, topography and information addressing stabilization.
 - 5. Identify species composition, stocking, regeneration, soils, stand history, unique natural features, percent slope, quality and growth rate, and approximate stems per acre to be harvested.
 - 6. Harvest type (i.e., selective, shelterwood, diameter limit cut, clear-cut, etc.)
 - 7. Means of regeneration (natural or artificial).

8. Means of post-harvest closure and stabilization, as applicable.
9. Recommendations regarding the viability of a fuel wood harvest.
10. Statement that all BMP's shall be in accordance with the Virginia Department of Forestry Best Management Practices for Water Quality and all post-harvest BMP's shall be implemented immediately upon logging completion.
11. Plan shall be signed by the drafting professional forester.

C. The following notification shall be provided:

1. Notification pursuant to Section 10.1-1181.2 (H) of the Code of Virginia ["Notification of Commercial Harvesting of Timber" (800/939-LOGS)].
2. A call to the County Urban Forester or Director's designee at least twenty-four (24) hours prior to commencement of the logging operation.
3. A call to the County Urban Forester or Director's designee immediately upon installation of all BMP's.

7.305 REFORESTATION STANDARDS

Any required reforestation used to satisfy the Zoning Ordinance, a proffer, or a condition of approval of a special exception or variance shall comply with the following standards. These standards may serve as guidance for other voluntary planting efforts.

A planting plan prepared by an Urban Forester, Certified Arborist, or Landscape Architect shall be required and shall be reviewed and approved by the County Urban Forester or Director's Designee. The planting plan shall specifically address plant materials, plant density/stocking requirements, site preparation, site stabilization, release/maintenance, livestock exclusion, wildlife damage, maintenance, and restocking requirements (post-establishment) in accordance with the Natural Resources Conservation Service [Tree and Shrub Establishment Guidelines](#) and the Virginia Department of Forestry [Hardwood Management: Planting Guidelines](#). Tree plantings shall be native and have multiple use benefits that improve or enhance wildlife, recreation, and overall aesthetic values and shall consist primarily of pioneer (early succession) tree species. Any proposed streambank stabilization and control of invasive plant species also should be addressed by the planting plan.

A. Plant Materials

A general description of the existing trees and vegetation on the site shall be provided. ~~Table 3 identifies certain trees and shrubs that are native and have multiple use benefits that improve or enhance wildlife, recreation, and overall aesthetic values, that shall be used for reforestation.~~ To achieve diversity, large

deciduous canopy tree plantings shall consist of a mixture of five (5) or more species from Table 3 and small deciduous and evergreen understory tree plantings shall consist of a mixture of three (3) or more species from Table 3. The County Urban Forester or Director's Designee may approve the use of additional tree species where appropriate.

~~1. Plantings shall be installed as soon as possible after delivery from the nursery. If plantings cannot be installed within 48 hours of delivery from the nursery, such plantings shall be kept cool and moist or heeled in. Plantings shall be high quality stock with good root systems. Quality hardwood seedlings should have a minimum of four to five large lateral roots.~~

~~2.1. Plantings should be installed in early Spring (March-April) or Fall (October-November). A tree planting machine, auger, planting bar, or shovel can be used to plant seedlings. Root collars of seedlings shall be slightly below the soil surface. Planting holes shall be closed, plant material shall not be J-rooted, and the soil around the root or cutting shall be firm.~~

B. Planting Density/Stocking Requirements

~~1. Plantings shall be installed with a staggered and uniform spacing. Understory trees shall be inter-planted among canopy trees. A canopy tree shall be defined as any tree thirty (30) feet tall or greater at maturity, while an understory tree shall be defined as any tree less than thirty (30) feet tall at maturity.~~

~~2.1. Plantings shall be installed in accordance with one of the plant densities options and shall include all plant size categories listed in Table 2. The County Urban Forester or Director's designee may allow the use of existing native vegetation to meet the plants per acre requirement.~~

Table 2 - Required Plant Densities for Reforestation

Plant Size Categories	Plants per Acre	Staggered Plant Spacing (ft)
<u>Option 1: Seedlings</u> /Tublings (Large Deciduous Trees Canopy Species) <u>Small Deciduous Trees and/or</u> <u>Evergreen Trees</u>	350 200 <u>85</u>	<u>10' x 10'</u> 14' x 14' <u>Tree plantings shall be evenly distributed with evergreens and/or small deciduous trees interspersed between the large deciduous trees.</u>
<u>Option 2: Container (3-gallon or larger) or Balled and Burlapped</u> <u>Large Deciduous Trees</u> <u>Small Deciduous Trees and/or</u> <u>Evergreen Trees</u>	<u>240</u> <u>60</u>	<u>12' x 12'</u> <u>Tree plantings shall be evenly distributed with evergreens and/or small deciduous trees interspersed between the large deciduous trees.</u>
Seedling/Tublings (Shrubs)	165	16' x 16'
3-gallon Understory Trees	120	12' x 12'
3-gallon Canopy Trees	180	

4. ~~Up to five thousand (5,000) square feet or twenty-five percent (25%) of the reforestation area, whichever is less, may be planted with a mixture of three (3) or more species of shrubs from Table 3 in lieu of required canopy trees and understory trees listed in Table 2 to provide for sight lines and vistas.~~

5. ~~The County Urban Forester or Director's designee may allow:~~

a. ~~The use of existing vegetation a minimum of four (4) feet in height to achieve the required 3-gallon plant densities specified in Table 2 based on species and quality.~~

- ~~b. The use of existing vegetation under four (4) feet in height may be used to achieve the required seedling/tubling densities specified in Table 2 based on species and quality.~~

~~C. Site Preparation~~

~~Planting plans shall include a section addressing site preparation. Sites shall be properly prepared based on the soil type, existing trees and vegetation, and proposed plantings. Such site preparation may require a combination of site preparation techniques. In most situations a combination of mechanical and herbicidal techniques will be most effective and efficient.~~

- ~~1. If herbicides are to be used for site preparation, the specific herbicides shall be identified in the planting plan and shall be used only when and where needed to control competition. Only herbicides that are rendered inactive upon contact with the soil shall be used within riparian buffers. Herbicides shall be handled and disposed of in accordance with federal, state and local regulations.~~
- ~~2. If the area has been used for row crops, the ground shall be disced in the Spring and seeded with a cover crop, such as annual rye grass or cereal rye, that is not invasive, does not require mowing, and will be shaded out (eventually eliminated) by the woody plants.~~
- ~~3. In pasture type situations, competing perennial vegetation shall be eliminated mechanically or with herbicides in circles three (3) to four (4) feet in diameter or in two (2) to three (3) foot wide linear strips where trees will be planted. Invasive species, such as multiflora rose and honeysuckle, shall be controlled by cutting, pulling, and/or herbicides.~~
- ~~4. When existing vegetation is used, site preparation shall focus on eliminating competition. Techniques for eliminating competition include, without limitation, spraying basal bark herbicides during the dormant season, cutting trees, shrubs and vines and then treating the stumps to prevent re-sprouting, and mowing competing vegetation after leaf out in the Spring.~~

~~D. Site Stabilization~~

~~In addition to the required plantings, sites may be initially stabilized with non-native grasses; however, ultimate site stabilization shall be achieved only with native vegetation following site preparation. Seeding mixtures shall be specified in the planting plan.~~

~~Riparian buffers may be initially stabilized using non-native grasses; however, ultimate site stabilization shall be achieved using only native herbaceous plants and only native shrub and tree seed mixtures. The seed mixtures shall not include any~~

~~invasive/exotic plant species and shall be designed to create a diverse plant population for wildlife and formulated to meet specific site conditions.~~

~~E. Livestock Exclusion~~

~~Cattle, horses or other livestock shall be fenced from any riparian planting.~~

~~F. Wildlife Damage~~

~~Measures to prevent or reduce damage to the reforestation from deer browse, buck rub, or beaver activity shall be identified and may include, without limitation, the following:~~

- ~~1. Plant selection. Use plants that are considered less palatable to beaver or deer.~~
- ~~2. Planting Tubes. Protect young seedlings with planting tubes. However, tubes shall not be used in areas subject to frequent flooding. Protect all seedlings with four (4)-foot high protective, biodegradable tree shelters.~~
- ~~3. Buck Rub Protection. Protect each 3-gallon or larger planting container or balled and burlapped tree with a wire cage one (1) foot in diameter and a minimum of forty-eight (48) inches tall secured with a two-inch by two-inch (2" x 2") oak stake.~~
- ~~4. Deer Repellents. Apply taste and odor repellents to deter deer browse.~~

~~G.C. Release/Maintenance~~

~~Newly installed plant material shall be periodically maintained to ensure release for up to three (3) two (2) years after planting. In most situations a combination of the below listed mechanical and herbicidal techniques will be most effective and efficient:~~

- ~~1. Two (2) to four (4) inches of organic mulch or mats.~~
- ~~2. Herbicide applications.~~
- ~~3. Shallow cultivation.~~
- ~~4. Controlled grazing in non-riparian areas.~~
- ~~5. Mowing and other types of mechanical techniques.~~

~~H.D. Restocking Requirements (Post-Establishment)~~

| If a targeted stocking of seventy-five percent (75%) survival with uniform distribution is not achieved within ~~one (1) year~~ two (2) years of planting as determined by the County Urban Forester or Director's designee, the Applicant shall provide a one-time supplemental planting to achieve the full, initial stocking.

Table 3 - Trees and Shrubs

Planting Category — CanopyLarge Deciduous											
The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.											
Botanical Name	Common Name	Minimum Planting Area in sq. ft.		N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
						1.0"	2.0"	3.0"	1.0"	2.0"	3.0"
<i>Acer rubrum</i> 'Columnare'	Columnar Red Maple	55			PL	45	55	75	70	75	90
<i>Carpinus betulus</i> 'Fastigiata'	Fastigate European Hornbeam	55				45	55	75	70	75	90
<i>Fagus sylvatica</i> 'Fastigiata'	Fastigate European Beech	55			GC	45	55	75	70	75	90
<i>Ginkgo biloba</i> 'Princeton Sentry'	Princeton Sentry Ginkgo	55				45	55	75	70	75	90
<i>Quercus robur</i> 'Fastigiata'	Fastigate English Oak	55			PL	45	55	75	70	75	90
<i>Aesculus flava</i>	Yellow Buckeye	90		N	GC	130	150	175	195	205	210
<i>Aesculua glabra</i>	Ohio Buckeye	90				130	150	175	195	205	210
<i>Aesculus hippocastanum</i>	Common Horsechestnut	90			GC	130	150	175	195	205	210
<i>Betula alleghaniensis</i>	Yellow Birch	90		N		130	150	175	195	205	210
<i>Betula lenta</i>	Black Birch	90		N	RF GC	130	150	175	195	205	210
<i>Betula nigra</i>	River Birch	90		N	RF GC	130	150	175	195	205	210
<i>Castanea mollissima</i>	Chinese Chestnut	90				130	150	175	195	205	210
<i>Celtis occidentalis</i>	Common Hackberry	90		N	RF GC	130	150	175	195	205	210
<i>Cercidiphyllum japonicum</i>	Katsuratree	90			PL	130	150	175	195	205	210
<i>Cladrastis lutea</i>	Yellowwood	90		N	PL	130	150	175	195	205	210
<i>Diospyros virginiana</i>	Common Persimmon	90		N	RF GC	130	150	175	195	205	210

Planting Category — CanopyLarge Deciduous

The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
					1.0"	2.0"	3.0"	1.0"	2.0"	3.0"
<i>Eucommia ulmoides</i>	Hardy Rubber Tree	90		PL	130	150	175	195	205	210
<i>Fagus sylvatica</i>	European Beech	90			130	150	175	195	205	210
<i>Gleditsia triacanthos</i> var. <i>inermis</i> (Identify Specific 'Cultivar')	Thornless Common Honeylocust	90	N	PL, GC	130	150	175	195	205	210
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	90		PL	130	150	175	195	205	210
<i>Juglans cinerea</i>	Butternut	90	N		130	150	175	195	205	210
<i>Maclura pomifera</i>	Osage-Orange	90	N		130	150	175	195	205	210
<i>Magnolia acuminata</i>	Cucumbertree Magnolia	90	N		130	150	175	195	205	210
<i>Magnolia macrophylla</i>	Bigleaf Magnolia	90	N		130	150	175	195	205	210
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	90			130	150	175	195	205	210
<i>Nyssa aquatica</i>	Water Tupelo	90	N		130	150	175	195	205	210
<i>Nyssa sylvatica</i>	Black Gum	90	N	PL, RF, GC	130	150	175	195	205	210
<i>Ostrya virginiana</i>	Eastern Hophornbeam	90	N	RF, GC	130	150	175	195	205	210
<i>Pistacia chinensis</i>	Chinese Pistache	90		PL	130	150	175	195	205	210
<i>Prunus pensylvanica</i>	Pin Cherry	90	N		130	150	175	195	205	210
<i>Prunus sargentii</i>	Sargent Cherry	90			130	150	175	195	205	210
<i>Prunus serotina</i>	Wild Black Cherry	90	N	RF, GC	130	150	175	195	205	210
<i>Prunus serrulata</i> 'Kwanzan'	'Kwanzan' Japanese Flowering Cherry	90			130	150	175	195	205	210
<i>Prunus subhirtella</i> var. <i>pendula</i>	Weeping Higan Cherry	90			130	150	175	195	205	210

Planting Category — CanopyLarge Deciduous

The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.		N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
						1.0"	2.0"	3.0"	1.0"	2.0"	3.0"
<i>Prunus x yedoensis</i>	Yoshino Cherry	90				130	150	175	195	205	210
<i>Quercus hemisphaerica</i>	Laurel Oak	90		N		130	150	175	195	205	210
<i>Quercus ilicifolia</i>	Bear Oak	90		N		130	150	175	195	205	210
<i>Quercus laurifolia</i>	Laurel Oak	90	-	N	-	130	150	175	195	205	210
<i>Quercus lyrata</i>	Overcup Oak	90		N	RF	130	150	175	195	205	210
<i>Quercus marilandica</i>	Blackjack Oak	90		N	RF	130	150	175	195	205	210
<i>Quercus muehlenbergii</i>	Chinkapin Oak	90		N		130	150	175	195	205	210
<i>Quercus nigra</i>	Water Oak	90		N		130	150	175	195	205	210
<i>Quercus stellata</i>	Post Oak	90		N		130	150	175	195	205	210
<i>Robinia pseudoacacia</i>	Black Locust	90		N		130	150	175	195	205	210
<i>Salix babylonica</i>	Babylon Weeping Willow	90				130	150	175	195	205	210
<i>Salix nigra</i>	Black Willow	90		N	RFGC	130	150	175	195	205	210
<i>Sassafras albidum</i>	Sassafras	90		N	RFGC	130	150	175	195	205	210
<i>Taxodium ascendens</i>	Pondcypress	90		N	PL	130	150	175	195	205	210
<i>Taxodium distichum</i>	Common Baldcypress	90		N	RFGC	130	150	175	195	205	210
<i>Tilia cordata</i> (Identify Specific 'Cultivar')	Littleleaf Linden	90			PL	130	150	175	195	205	210
<i>Tilia tomentosa</i>	Silver Linden	90			PL	130	150	175	195	205	210
<i>Acer negundo</i>	Boxelder (Reforestation Only)	x		N	RF	x	x	x	x	x	x
<i>Acer rubrum</i>	Red Maple	130		N	PL, RFGC	150	200	250	225	270	300

Planting Category — CanopyLarge Deciduous

The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
				Uses	1.0"	2.0"	3.0"	1.0"	2.0"	3.0"
<i>Acer saccharinum</i>	Silver Maple (Reforestation Only)	x	N	RF	x	x	x	x	x	x
<i>Acer saccharum</i>	Sugar Maple	130	N	<u>GC</u>	150	200	250	225	270	300
<i>Carya cordiformis</i>	Bitternut Hickory	130	N	<u>GC</u>	150	200	250	225	270	300
<i>Carya glabra</i>	Pignut Hickory	130	N	RF <u>GC</u>	150	200	250	225	270	300
<i>Carya illinoensis</i>	Pecan	130		<u>GC</u>	150	200	250	225	270	300
<i>Carya laciniata</i>	Shellbark Hickory	130	N	<u>GC</u>	150	200	250	225	270	300
<i>Carya ovata</i>	Shagbark Hickory	130	N	<u>GC</u>	150	200	250	225	270	300
<i>Carya tomentosa</i>	Mockernut Hickory	130	N	RF <u>GC</u>	150	200	250	225	270	300
<i>Celtis laevigata</i>	Sugar Hackberry	130	N		150	200	250	225	270	300
<i>Fagus grandifolia</i>	American Beech	130	N	<u>GC</u>	150	200	250	225	270	300
<i>Ginkgo biloba</i> (male)	Ginkgo	130		PL	150	200	250	225	270	300
<i>Juglans nigra</i>	Black Walnut	130	N	RF	150	200	250	225	270	300
<i>Liquidambar styraciflua</i>	American Sweetgum	130	N	RF <u>GC</u>	150	200	250	225	270	300
<i>Liriodendron tulipifera</i>	Tuliptree	130	N	RF	150	200	250	225	270	300
<i>Platanus occidentalis</i>	Sycamore	130	N	RF <u>GC</u>	150	200	250	225	270	300
<i>Platanus x acerifolia</i>	London Planetree	130		PL, <u>GC</u>	150	200	250	225	270	300
<i>Populus deltoides</i>	Cottonwood	130	N	<u>GC</u>	150	200	250	225	270	300
<i>Quercus alba</i>	White Oak	130	N	<u>GC</u>	150	200	250	225	270	300
<i>Quercus bicolor</i>	Swamp White Oak	130	N	PL, RF <u>GC</u>	150	200	250	225	270	300

Planting Category — CanopyLarge Deciduous

The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
					1.0"	2.0"	3.0"	1.0"	2.0"	3.0"
<i>Quercus coccinea</i>	Scarlet Oak	130	N	PL, GC	150	200	250	225	270	300
<i>Quercus falcata</i>	Southern Red Oak	130	N	PL, GC	150	200	250	225	270	300
<i>Quercus imbricaria</i>	Shingle Oak	130	N		150	200	250	225	270	300
<i>Quercus michauxii</i>	Swamp Chestnut Oak	130	N	PL, RF	150	200	250	225	270	300
<i>Quercus montana</i>	Chestnut Oak	130	N	PL, GC	150	200	250	225	270	300
<i>Quercus palustris</i>	Pin Oak	130	N	PL, RF, GC	150	200	250	225	270	300
<i>Quercus phellos</i>	Willow Oak	130	N	PL, RF, GC	150	200	250	225	270	300
<i>Quercus rubra</i>	Northern Red Oak	130	N	PL, RF, GC	150	200	250	225	270	300
<i>Quercus shumardii</i>	Shumard Oak	130		PL, GC	150	200	250	225	270	300
<i>Quercus velutina</i>	Black Oak	130	N	RF	150	200	250	225	270	300
<i>Salix matsudana</i> 'Tortuosa'	Corkscrew Willow	130			150	200	250	225	270	300
<i>Sophora japonica</i>	Japanese Pagodatree	130		GC	150	200	250	225	270	300
<i>Tilia americana</i> (Identify Specific 'Cultivar')	American Linden (Basswood)	130	N	PL, RF	150	200	250	225	270	300
<i>Ulmus americana</i>	American Elm	130	N	PL, GC	150	200	250	225	270	300
<i>Ulmus carpinifolia</i>	Smoothleaf Elm	130			150	200	250	225	270	300
<i>Ulmus parvifolia</i>	Chinese Elm	130		PL, GC	150	200	250	225	270	300
<i>Zelkova serrata</i>	Japanese Zelkova	130		PL, U	150	200	250	225	270	300

N: Native

All species listed may be used to meet the requirements of 7.302 and 7.305. Additionally, certain species may be better suited for the following situations:

Planting Category = CanopyLarge Deciduous

The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
				Uses	1.0"	2.0"	3.0"	1.0"	2.0"	3.0"

PL: Parking Lot—RF: Reforestation—U: Utility Lines

Planting Category — Small Deciduous Understory

The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
				Uses	1.0"	2.0"	3.0"	1.0"	2.0"	3.0"
<i>Acer buergerianum</i>	Trident Maple	55		<u>GC</u>	75	100	125	115	135	150
<i>Acer campestre</i>	Hedge Maple	55		U	75	100	125	115	135	150
<i>Acer ginnala</i>	Amur Maple	55		U	75	100	125	115	135	150
<i>Acer griseum</i>	Paperbark Maple	55			75	100	125	115	135	150
<i>Acer palmatum</i>	Japanese Maple	55		U	75	100	125	115	135	150
<i>Aesculus pavia</i>	Red Buckeye	55		PL	75	100	125	115	135	150
<i>Amelanchier arborea</i>	Downy Serviceberry	55	N	<u>RF, U</u>	75	100	125	115	135	150
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	55	N	<u>U, GC</u>	75	100	125	115	135	150
<i>Amelanchier laevis</i>	Allegheny Serviceberry	55	N	<u>RF, U, GC</u>	75	100	125	115	135	150
<i>Asimina triloba</i>	Common Pawpaw	55	N	<u>RF, GC</u>	75	100	125	115	135	150
<i>Betula populifolia</i>	Gray Birch	55		<u>RF</u>	75	100	125	115	135	150
<i>Carpinus caroliniana</i>	American Hornbeam	55	N	<u>RF, GC</u>	75	100	125	115	135	150
<i>Castanea pumila</i>	Allegheny Chinkapin	55	N	<u>GC</u>	75	100	125	115	135	150
<i>Cercis canadensis</i>	Redbud	55	N	<u>RF, U, GC</u>	75	100	125	115	135	150
<i>Chionanthus virginicus</i>	White Fringetree	55	N	U	75	100	125	115	135	150
<i>Cornus alternifolia</i>	Pagoda Dogwood	55	N		75	100	125	115	135	150
<i>Cornus florida</i>	Flowering Dogwood	55	N	<u>RF, U</u>	75	100	125	115	135	150
<i>Cornus kousa</i>	Kousa Dogwood	55		<u>U, GC</u>	75	100	125	115	135	150
<i>Crataegus coccinea</i>	Scarlet Hawthorn	55		<u>RF</u>	75	100	125	115	135	150

Planting Category — Small Deciduous Understory

The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
				Uses	1.0"	2.0"	3.0"	1.0"	2.0"	3.0"
<i>Crataegus crusgalli</i>	Cockspur Hawthorn	55	N	RF	75	100	125	115	135	150
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	55	N	U	75	100	125	115	135	150
<i>Crataegus viridis</i>	Winter King Hawthorn	55		GC	75	100	125	115	135	150
<i>Franklinia alataamaha</i>	Franklinia	55	N		75	100	125	115	135	150
<i>Halesia diptera</i>	Two-Winged Silverbell	55	N	GC	75	100	125	115	135	150
<i>Halesia tetraptera</i>	Carolina Silverbell	55	N	GC	75	100	125	115	135	150
<i>Hamamelis virginiana</i>	Witchhazel	55	N	RF, U, GC	75	100	125	115	135	150
<i>Koelreuteria paniculata</i>	Panicle Goldenrain tree	55		GC	75	100	125	115	135	150
<i>Laburnum x. wateri</i>	<u>Golden Chain</u>	<u>55</u>			<u>75</u>	<u>100</u>	<u>125</u>	<u>115</u>	<u>135</u>	<u>150</u>
<i>Lagerstroemia spp.</i> (Identify Species & 'Cultivar')	Crape Myrtle	55		U	75	100	125	115	135	150
<i>Magnolia x soulangeana</i>	Saucer Magnolia	55			75	100	125	115	135	150
<i>Magnolia stellata</i>	Star Magnolia	55		U	75	100	125	115	135	150
<i>Magnolia virginiana</i>	Sweetbay Magnolia	55	N	RF, U, GC	75	100	125	115	135	150
<i>Malus spp.</i>	Crabapple	55		U	75	100	125	115	135	150
<i>Morus rubra</i>	Red Mulberry	55	N	RF	75	100	125	115	135	150
<i>Oxydendrum arboreum</i>	Sourwood	55	N	RF GC	75	100	125	115	135	150
<i>Persea borbonia</i>	Redbay Sweetbay	55	N		75	100	125	115	135	150

Planting Category — Small Deciduous Understory

The Uses column identifies certain species that may be better suited for planting in Parking Lots and underneath overhead Utility Lines. Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Caliper 10 Year			Canopy Coverage (sq. ft.) Per Caliper 20 Year		
				Uses	1.0"	2.0"	3.0"	1.0"	2.0"	3.0"
<i>Prunus americana</i>	American Wild Plum	55	N		75	100	125	115	135	150
<i>Prunus cerasifera</i>	Flowering Plum	55		U	75	100	125	115	135	150
<i>Prunus virginiana</i>	Choke Cherry	55	N		75	100	125	115	135	150
<i>Prunus x incamp 'Okame'</i>	'Okame' Cherry	55		U	75	100	125	115	135	150
<i>Rhamnus caroliniana</i>	Carolina Buckthorn	55	N		75	100	125	115	135	150
<i>Stewartia koreana</i>	Korean Stewartia	55		U	75	100	125	115	135	150
<i>Stewartia ovata</i>	Mountain Stewartia	55		U	75	100	125	115	135	150
<i>Stewartia pseudocamellia</i>	Japanese Stewartia	55		U, GC	75	100	125	115	135	150
<i>Styrax japonicus</i>	Japanese Snowbell	55		U, GC	75	100	125	115	135	150
<i>Syringa reticulata</i>	Japanese Tree Lilac	55		U	75	100	125	115	135	150

—N: Native

All species listed may be used to meet the requirements of 7.302 and 7.305. Additionally, certain species may be better suited for the following situations:

—PL: Parking Lot — RF: Reforestation — U: Utility Lines

Planting Category — Evergreen

The Uses column identifies certain species that may be better suited for planting underneath overhead Utility Lines.
Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Height 10 Year			Canopy Coverage (sq. ft.) Per Height 20 Year		
					6.0'	8.0'	10.0'	6.0'	8.0'	10.0'
<i>Ilex x attenuata</i> 'Fosteri'	Foster's Holly	35		U, <u>GC</u>	45	55	75	70	75	90
<i>Ilex x</i> 'Nellie R. Stevens'	Nellie Stevens Holly	35		U, <u>GC</u>	45	55	75	70	75	90
<i>Juniperus chinensis</i> (Identify Specific 'Cultivar')	Chinese Juniper	35		U	45	55	75	70	75	90
<i>Juniperus virginiana</i> 'Manhattan Blue' 'Princeton Sentry'	Manhattan Blue Princeton Sentry	35			45	55	75	70	75	90
<i>Taxus baccata</i>	English Yew	35			45	55	75	70	75	90
<i>Taxus baccata</i> 'Fastigiata'	Upright Irish Yew	35			45	55	75	70	75	90
<i>Thuja occidentalis</i> (Identify Specific 'Cultivar')	Eastern Arborvitae	35	N	<u>RF</u>	45	55	75	70	75	90
<i>Thuja orientalis</i> (Identify Specific 'Cultivar')	Oriental Arborvitae	35			45	55	75	70	75	90
<i>Abies concolor</i>	White Fir	55			75	100	125	115	135	150
<i>Chamaecyparis lawsoniana</i>	Lawson Falsecypress	55			75	100	125	115	135	150
<i>Chamaecyparis obtusa</i>	Hinoki Falsecypress	55			75	100	125	115	135	150
<i>Chamaecyparis thyoides</i>	Atlantic White Cedar	55	N		75	100	125	115	135	150
<i>Cryptomeria japonica</i>	Japanese Cryptomeria	55		<u>GC</u>	75	100	125	115	135	150
<i>X Cupressocyparis leylandii</i>	Leyland Cypress	55			75	100	125	115	135	150
<i>Ilex aquifolium</i>	English Holly	55		U	75	100	125	115	135	150
<i>Ilex opaca</i>	American Holly	55	N	<u>RF</u> , U, <u>GC</u>	75	100	125	115	135	150

Planting Category — Evergreen

The Uses column identifies certain species that may be better suited for planting underneath overhead Utility Lines.
Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.	N: Native	PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor	Canopy Coverage (sq. ft.) Per Height 10 Year			Canopy Coverage (sq. ft.) Per Height 20 Year		
					6.0'	8.0'	10.0'	6.0'	8.0'	10.0'
<i>Juniperus virginiana</i>	Eastern Red Cedar (Do not plant within 900 ft. of commercial orchards)	55	N	RF GC	75	100	125	115	135	150
<i>Picea glauca</i>	White Spruce	55		RF	75	100	125	115	135	150
<i>Picea omorika</i>	Serbian Spruce	55			75	100	125	115	135	150
Picea orientalis	Oriental Spruce	55			75	100	125	115	135	150
<i>Picea pungens</i>	Colorado Spruce	55			75	100	125	115	135	150
<i>Pinus bungeana</i>	Lacebark Pine	55			75	100	125	115	135	150
<i>Pinus parviflora</i>	Japanese White Pine	55			75	100	125	115	135	150
<i>Pinus serotina</i>	Pond Pine	55	N		75	100	125	115	135	150
<i>Pseudotsuga menziesii</i>	Douglasfir	55			75	100	125	115	135	150
<i>Taxus cuspidata</i> (Identify Specific 'Cultivar')	Japanese Yew	55			75	100	125	115	135	150
<i>Thuja plicata</i>	Western Arborvitae	55			75	100	125	115	135	150
<i>Tsuga canadensis</i>	Canadian Hemlock	55	N		75	100	125	115	135	150
<i>Tsuga caroliniana</i>	Carolina Hemlock	55	N		75	100	125	115	135	150
<i>Cedrus atlantica</i>	Atlas Cedar	90			125	150	175	190	205	210
<i>Picea abies</i>	Norway Spruce	90		GC	125	150	175	190	205	210
<i>Pinus echinata</i>	Shortleaf Pine	90	N	RF	125	150	175	190	205	210
<i>Pinus sylvestris</i>	Scotch Pine	90			125	150	175	190	205	210
<i>Cedrus deodara</i>	Deodar Cedar	110		GC	125	150	175	190	205	210
<i>Magnolia grandiflora</i>	Southern Magnolia	110		GC	125	150	175	190	205	210

Planting Category — Evergreen

The Uses column identifies certain species that may be better suited for planting underneath overhead Utility Lines.

Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	Minimum Planting Area in sq. ft.		N: Native PL: Parking Lot RF: Reforestation U: Utility Lines GC: Gateway Corridor		Canopy Coverage (sq. ft.) Per Height 10 Year				Canopy Coverage (sq. ft.) Per Height 20 Year		
						6.0'	8.0'	10.0'		6.0'	8.0'	10.0'
<i>Pinus rigida</i>	Pitch Pine	110		N		125	150	175		190	205	210
<i>Pinus strobus</i>	Eastern White Pine	110		N	RF	125	150	175		190	205	210
<i>Pinus taeda</i>	Loblolly Pine	110		N	RFGC	125	150	175		190	205	210

~~N: Native~~

~~All species listed may be used to meet the requirements of 7.302 and 7.305. Additionally, certain species may be better suited for the following situations:~~

~~RF: Reforestation~~ ~~U: Utility lines~~

Planting Category: Shrubs — Deciduous (Minimum Height 30")

Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	N: Native	RF: Reforestation GC: Gateway Corridor		Botanical Name	Common Name	N: Native	RF: Reforestation GC: Gateway Corridor
			Uses					Uses
<i>Aesculus parviflora</i>	Bottlebrush Buckeye				<i>Ilex spp.</i> (Identify Species & 'Cultivar')	Holly	N	
<i>Alnus spp.</i> (Identify Species & 'Cultivar')	Alder	N	RF		<i>Itea virginica</i>	Virginia Willow (Sweetspire)	N	RF GC
<i>Aronia spp.</i> (Identify Species & 'Cultivar')	Chokeberry	N	GC		<i>Iva frutescens</i>	Marsh Elder	N	
<i>Aucuba japonica</i>	Japanese Aucuba				<i>Kerria japonica</i>	Japanese Kerria		
<i>Baccharis halimifolia</i>	High Tide Bush	N			<i>Leucothoe spp.</i> (Identify Species & 'Cultivar')	Leucothoe	N	
<i>Buddelia davidii</i>	<u>Butterfly Bush</u>		GC					
<i>Callicarpa americana</i>	American Beautyberry	N	GC		<i>Lindera benzoin</i>	Spicebush	N	RF
<i>Caryopteris x clandonensis</i>	Blue-Mist Shrub		GC		<i>Lyonia lucida</i>	Shining Fetterbush	N	
<i>Ceanothus americanus</i>	New Jersey Tea	N			<i>Myrica pensylvanica</i>	Northern Wax Myrtle	N	
<i>Cephalanthus occidentalis</i>	Buttonbush	N			<i>Photinia spp.</i> (Identify Species & 'Cultivar')	Choke Cherry		RF
<i>Chimonanthus praecox</i>	<u>Fragrant Wintersweet</u>		GC					
<i>Clethra alnifolia</i>	Sweet Pepper-Bush	N	GC		<i>Physocarpus opulifolius</i>	Common Ninebark		RF
<i>Cornus spp.</i> (Identify Species & 'Cultivar')	Dogwood	N	RF GC		<i>Rhododendron viscosum</i>	Swamp Azalea	N	
<i>Corylus americana</i>	American Hazelnut		RF		<i>Rhus spp.</i> (Identify Species & 'Cultivar')	Sumac	N	
<i>Corylopsis pauciflora</i>	<u>Buttercup Winterhazel</u>		GC					
<i>Corylopsis spicata</i>	<u>Spike Winterhazel</u>		GC					
<i>Cotinus coggygria</i>	Smoketree		GC		<i>Rosa spp. carolina</i>	<u>Pasture</u> Rose	N	GC

Planting Category: Shrubs — Deciduous (Minimum Height 30")

Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	N: Native	RF: Reforestation GC: Gateway Corridor		Botanical Name	Common Name	N: Native	RF: Reforestation GC: Gateway Corridor
			Uses					Uses
<i>Cotinus obovatus</i>	American Smoketree	N	RF GC		<i>Rubus spp.</i> (Identify Species & 'Cultivar')	Blackberry	N	
<u><i>Cottoneaster spp.</i></u>	<u>Cottoneaster</u>							
<i>Crataegus flabellata</i>	Fanleaf Hawthorn		RF		<i>Salix spp.</i> (Identify Species & 'Cultivar')	Willow	N	
<i>Cyrilla racemiflora</i>	Swamp Cyrilla	N			<i>Sambucus canadensis</i>	Common Elderberry	N	RF
<i>Deutzia gracilis</i>	Deutzia				<i>Spirea spp.</i> (Identify Species & 'Cultivar')	Spirea	N	GC
<i>Euonymus spp.</i> (Identify Species & 'Cultivar')	Euonymus	N			<i>Stewartia malacodendron</i>	Silky Camelia	N	
<u><i>Fothergilla gardenia</i></u>	<u>Dwarf Fothergilla</u>		GC					
<i>Fothergilla major</i>	Fothergilla		GC		<i>Styrax americanus</i>	American Snowbell		
<i>Gaylussacia spp.</i> (Identify Species & 'Cultivar')	Huckleberries	N			<i>Symphoricarpos orbiculatus</i>	Coral Berry		RF
<i>Hydrangea spp.</i> (Identify Species & 'Cultivar')	Hydrangea	N	GC		<i>Vaccinium spp.</i> (Identify Species & 'Cultivar')	Vaccinium	N	RF
<i>Hypericum spp.</i> (Identify Species & 'Cultivar')	St. John's Wort				<i>Viburnum spp.</i> (Identify Species & 'Cultivar')	Viburnum	N	RF GC
					<u><i>Vitex agnus</i></u>	<u>Chastetree</u>		GC

N: Native

All species listed may be used to meet the requirements of 7.302 and 7.305. Additionally, certain species may be better suited for the following situations:

~~RF: Reforestation~~

Planting Category: Shrubs — Evergreen (~~Minimum Height 30"~~)

Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.

Botanical Name	Common Name	N: Native	GC: Gateway Corridor	Botanical Name	Common Name	N: Native	GC: Gateway Corridor
			Uses				Uses
<i>Berberis julianae</i>	Wintergreen Bearberry			<i>Pieris floribunda</i>	Evergreen Mountain Fetterbush	N	
<i>Buxus microphylla</i>	Littleleaf Boxwood		GC	<i>Pieris japonica</i>	Japanese Pieris		
<i>Buxus sempervirens</i>	Common Boxwood		GC				
<i>Camellia japonica</i>	Japanese Camellia			<i>Potentilla fruticosa</i>	Cinquefoil		
<i>Euonymus spp.</i> (Identify Species & 'Cultivar')	Euonymus			<i>Prunus laurocerasus</i>	Common Cherry Laurel		GC
<i>Gaultheria procumbens</i>	Wintergreen	N		<i>Rhododendron atlanticum</i>	Dwarf Azalea	N	
<i>Ilex x aquipernyi</i>	Dragon Lady Holly			<i>Rhododendron calendulaceum</i>	Flame Azalea	N	
<i>Ilex cornuta</i>	Chinese Holly			<i>Rhododendron catawbiense</i>	Catawba Rhododendron	N	
<i>Ilex cornuta</i> 'Burfordii'	Burford Holly			<i>Rhododendron cumberlandense</i>	Cumberland Flame Azalea	N	
<i>Ilex crenata</i>	Japanese Holly			<i>Rhododendron maximum</i>	Great Rhododendron Rose Bay	N	
<i>Ilex glabra</i>	Inkberry	N	GC	<i>Rhododendron periclymenoides</i>	Pinxter Flower	N	
<i>Ilex spp.</i> (Identify Species & 'Cultivar')	Holly		GC	<i>Rhododendron prinophyllum</i>	Rose Azalea	N	
<i>Ilex vomitoria</i>	Yaupon Holly	N		<i>Rhododendron spp.</i> (Identify Species & 'Cultivar')	Azalea and Rhododendron		
<i>Juniperus spp.</i> (Identify Species & 'Cultivar')	Juniper		GC	<i>Skimmia japonica</i>	Japanese Skimmia		
<i>Kalmia latifolia</i>	Mountain Laurel	N	GC	<i>Taxus baccata</i>	English Yew		
<i>Mahonia aquifolium</i>	Oregon Grapeholly			<i>Taxus cuspidata</i>	Japanese Yew		

Planting Category: Shrubs — Evergreen (Minimum Height 30")							
Gateway Corridor Buffer Yards shall be planted with species specified for Gateway Corridor.							
Botanical Name	Common Name	N: Native	GC: Gateway Corridor		Botanical Name	Common Name	N: Native
			Uses				
<i>Morella cerifera</i>	Southern Wax Myrtle	N	GC		<i>Taxus x media</i>	Anglojap Yew	
<i>Osmanthus heterophyllus</i>	Falseholly	N					
	N: Native						

7.800 ARCHAEOLOGY AND HISTORIC RESOURCES

7.810 ~~PHASE I~~ ARCHAEOLOGICAL SURVEY

The purpose of ~~the Phase I~~ an archaeological survey is to identify the locations of existing archaeological and historic resources, including cemeteries, burial grounds, and graves on a property subject to the application.

- A. ~~All~~The Phase I archaeological surveys required by this Section shall be conducted by a qualified professional meeting the Qualification Standards as set forth in “the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation” as defined in 36 CFR 61, Appendix A.
- B. ~~The Phase I~~a Archaeological survey and reporting shall meet the standards set forth in the Virginia Department of Historic Resources (VDHR) “Guidelines for Conducting Historic Resources Survey in Virginia.”
- C. ~~The Phase I archaeological survey is recommended to test the entire property. A Phase I archaeological survey is required~~The applicant may limit the Phase I archaeological survey only tofor areas of proposed subsurface disturbance, including, but not limited to, the house/outbuilding footprints, drainfields, roads and paved areas, sidewalks, utility lines, borrow pits, staging areas, and stockpiling areas, but is recommended for the entire property. ; however, if areas of proposed subsurface disturbance are changed to include areas not previously tested, additional Phase I Archaeological testing of the non-tested areas will be required. A reconnaissance level (“walkover”) survey of any area of the property not subject to the Phase I Archaeological Survey shall be conducted to identify potential cemeteries, burial grounds, and/or graves. The results of the reconnaissance level survey shall be provided with the Phase I archaeological report.
- D. If the Phase I Archaeological Survey is limited only to areas of proposed subsurface disturbance or if multiple Phase I Archaeological Surveys are submitted for an application, a separate sheet for informational purposes only and not for recordation shall be submitted at a maximum 1:2400 scale (1 inch = 200 feet) delineating existing parcel boundaries, proposed development layout, and boundaries of the Phase I Archaeological Survey testing areas.
- E. The Director may approve a Phase I Archaeological Management Summary Report, in lieu of the reporting required by VDHR’s “Guidelines for Conducting Historic Resources Survey in Virginia,” if the Phase I archaeological survey does not result in the identification of archaeological sites, or results in the identification of archaeological resources that are determined by the consultant to warrant no further archaeological investigation. The Phase I Archaeological Management Summary Report must include the following:

1. A brief description of the property with a vicinity map.
2. The testing methodology and rationale, including a summary of previously identified sites in the vicinity and results of historic map research.
3. A topographic map of project area showing areas tested, with the shovel test locations delineated.
4. The results of fieldwork including artifact inventory and brief description of any identified sites.
5. The rationale for site recommendations if applicable.

6. Results of the reconnaissance level survey.

- F. The Director may waive or modify the requirement for Phase I archaeological survey and reporting after determining that a site has little or no potential for cultural resources based on a finding such as (a) the site has been subject to prior significant grading or ground disturbance beyond normal agricultural use, or (b) the site contains environmental characteristics (such as slopes, wetlands, hydric soils) that would have rendered previous human occupation reasonably unlikely. Variations (WAIV) of the requirement for the reconnaissance level survey shall not be permitted.

7.820 PRESERVATION OF HISTORIC CEMETERIES, BURIAL GROUNDS, AND GRAVES

- A. In order to preserve existing cemeteries, burial grounds, and graves for human remains, all preliminary plats of subdivision, and all site plans and construction plans and profiles if not previously provided with a preliminary plat of subdivision, shall include a professionally prepared archaeological delineation of the perimeter boundary of all burials if any cemeteries, burial grounds, or graves are identified during the archaeological survey. The delineation shall be conducted in accordance with standard archaeological practices, such as, but not limited to, shallow mechanical trenching extending outward from location of the visible areas of the identified cemetery, burial ground, or grave to remove topsoil so that soil discolorations indicative of burials may be viewed, or systematic probing with rods to detect differences in soil compaction indicative of burials. The perimeter boundary of the cemetery, burial ground, or grave shall be delineated five (5) feet from the edge of the identified burials, and any future burial locations if applicable.
- B. The cemetery, burial ground, or grave and associated buffer area as required by the Zoning Ordinance shall be located within an easement granted to Loudoun County in a form approved by the County. The perimeter boundary of a cemetery, burial ground, or grave as determined by the archaeological delineation and the associated easement shall be indicated on the site plan, construction plans or profiles, preliminary plat of subdivision, and associated plat applications as required by

Chapter 8. A digital file of the boundary of the cemetery, burial ground, or grave prepared in accordance with the Office of Mapping and Geographic Information Digital Data Submission Guidelines for Cemeteries shall be submitted prior to approval of the site plan, construction plans or profiles, or preliminary plat of subdivision.

- C. Unimproved pedestrian access to the cemetery, burial ground, or grave shall be provided on the site plan, construction plans or profiles, preliminary plat of subdivision, and associated plat applications as required by Chapter 8, either by a minimum of 15 feet of frontage on a street or by an access easement that shall be a minimum of 15 feet wide from a street or other point of public ingress.
- D. Prior to any land disturbance, protective barriers, such as Super Silt Fence as shown in Figure 3, or welded wire fence as shown in Figure 6, shall be installed along the limits of clearing and grading proximate to the cemetery, burial ground, or grave.
- E. Subsections A. through D., above, shall not preclude exhumation and re-interment of burials in accordance with the Code of Virginia. The plan approved by the Virginia Department of Historic Resources for such exhumation and re-interment shall be provided to the County Archaeologist prior to exhumation.

7.830 CEMETERY, BURIAL GROUND, AND GRAVE TREATMENT PLAN

A Treatment Plan shall include the following:

- A. A map depicting the perimeter boundary of the cemetery, burial ground, or grave; all associated burial site elements (such as fences, walls, gates, landscape features, plantings associated with burials, fieldstones, and tombstones); the required and proposed Cemetery, Burial Ground, and Grave Buffers; existing vegetation to be preserved or conserved and proposed landscaping, opaque barriers, or hardscaping; proposed grading; proposed pedestrian access easement; and existing and proposed surrounding uses.
- B. An inventory of existing burial site elements depicted on the map and their condition.
- C. A description of the existing vegetation to be preserved or conserved, or removed, treatment of invasive species excluding any species planted in association with burials, and any proposed landscaping within the buffer.
- D. A description of the physical demarcation of the perimeter boundary.
- E. A description of any proposed opaque barriers, fencing, or hardscaping.
- F. A description of any proposed interpretive signage documenting the cultural and historical significance of the cemetery, burial grounds, or graves.

G. A description of how the modified buffer will achieve the purpose and intent of the required Cemetery, Burial Ground, and Grave Buffers, and address how the cemetery, burial ground, or grave and its historic context is being preserved through alternative mitigation techniques.

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8.101 GENERAL STANDARDS

The information in this section gives an explanation of standard plat and plan requirements. See the specific requirements of each plat or plan for the requirements of each document.

A. Standards:

1. Scale: The scale of the plat or plan shall be shown in feet.
2. Proposed Name of Subdivision or Development: No proposed names of subdivisions or developments shall duplicate or closely resemble the name of any existing or currently proposed subdivision or development in Loudoun County. Name should include Phase or Section Number, as applicable.
3. Revision Block: A revision block shall be shown on the Cover Sheet (or first sheet) of the plat set and all sheets of the plan set. The Cover Sheet revision block shall contain a summary of all revisions made to any sheet of the plat, or plan, in substantially the following form:

Rev. No.	Sheet Number and Revision Description	Date

All other sheets of the plan set shall include a revision block itemizing the revisions applicable to each sheet, in substantially the following form:

Rev. No.	Revision Description	Date

4. Source of Title: The source of title of the owner (the deed book and page number or instrument number of the last instrument in the chain of title for all included property).

5. Zoning Requirements:

- a. Preliminary Plats, Site Plans, Construction Plans and Profiles: In tabular form show the specific zoning requirements, in accordance with the Zoning Ordinance including proffered or special exception conditions, for the subject property and the existing zoning districts, to include but not limited to: applicable version of the Zoning Ordinance (i.e. 1972, 1993, Revised 1993); Zoning district; overlay zoning districts; minimum lot area; minimum lot width; maximum length/width ratio; minimum front, side and rear yards; maximum floor area ratio; maximum lot coverage; maximum building heights; parking spaces required and provided (including standard and handicap accessible); open space requirements; proposed uses and proposed number of lots. For construction plans and profiles and site plans show floor area ratio or lot coverage calculations as required by the Zoning Ordinance. A note may be added to the plat stating that the zoning requirements are for depiction of current ordinance requirements only and may be subject to change.
 - b. Plats: In tabular form show the specific zoning requirements, in accordance with the Zoning Ordinance including proffered or special exception conditions, for the subject property and the existing zoning districts, to include but not limited to: applicable version of the Zoning Ordinance (i.e. 1972, 1993, Revised 1993); Zoning district; overlay zoning districts; minimum lot area; minimum lot width; maximum length/width ratio; minimum front, side and rear yards; maximum lot coverage; maximum building heights; open space requirements; proposed number of lots. A note may be added to the plat stating that the zoning requirements are for depiction of current ordinance requirements only and may be subject to change.
6. Associated Land Development Application Information: Reference to land development application numbers and corresponding approval dates for land development applications preceding the subject application submission that involve the subject property. Land development applications involving only adjacent sections, or expired or superseded land development applications, do not need to be listed.
7. Vicinity Map: The plat or plan shall show the location of the proposed subdivision by an insert vicinity map, drawn to a scale 1 inch equals not more than 2000 feet or other appropriate scale as permitted by the Director.
- c. The existing perimeter boundary line of the proposed subdivision and/or site plan and of any larger tract of which the subdivision and/or site plan forms a part.

- d. Adjoining roads or principal access points with their names and route numbers.
 - e. Town boundary lines within one mile of the proposed subdivision.
 - f. North arrow.
8. Coordinate Grid Tics: Coordinate grid tics and values reflecting the North American Datum of 1983 (NAD 83 HARN) State Plane Virginia North (in US Survey Foot) coordinate grid system with at least three tics or intersection points shall be shown on each plan sheet, for informational purposes, in intervals of no less than 250 foot increments and no more than 1,000 foot increments. For record plats, grid system coordinates of at least two adjacent corners shall be included, if any point in the subdivision is within 1/2 mile of an NGS or equivalent triangulation or traverse station established within the standards for a second order geodetic monument. (Projects that were started prior to November 9, 2009, may use the previously required NAD 27 datum.)
9. Adjoining Property Information: MCPI (PIN), adjacent zoning district, and departing property lines shall be shown. For preliminary plats, construction plans and profiles, and site plans the existing adjacent land use shall be indicated for the purpose of determining buffer requirements per the Zoning Ordinance.
10. Zoning District and Jurisdictional Boundaries: The zoning district boundaries shall be shown when a property is located in more than one zoning district. Zoning overlay district boundaries shall be shown when a property is located within any zoning overlay district. Jurisdictional boundaries shall be shown for property located in Loudoun County and a town or another county, or which falls under the subdivision control of a town.
11. Yard and Setback Lines: Front, side and rear yard and setback lines required by the Zoning Ordinance and/or proffers shall be shown as dashed lines or in tabular form. The dimension from each lot line and the length of the front yard line shall be clearly illustrated and identified. A note may be added to the plat stating that the yard and setback lines are for depiction of current ordinance requirements only and may be subject to change.
12. Stakeout Note:
- A note shall be provided stating that if requested by the Director, the approximate location of proposed entrances from State-maintained roads will be staked, and the name, address and telephone number of the party who will respond to the Director's request for field assistance, when

required, to identify specific areas of proposed development as related to existing site conditions.

13. Approval Block: An approval block shall be provided per the following with appropriate application number provided within:

<p>APPROVAL BLOCK</p> <p>LAND DEVELOPMENT APPLICATION NUMBER _____</p>	
_____ Director of Building & Development	_____ Date

14. Fee Check: A fee check, payable to the County of Loudoun, shall be attached to the plat or plan submission. Fee schedules are available from the Director.
15. Land Development Application Form: A complete and executed Land Development Application Form with original signatures, as provided by the Director.
16. MCPI (PIN) Reference: The MCPI number is required for all properties that are a part of the application. Such references may be made in tabular form or shown on the plat or plan.
17. Topography: Topographic information, indicating when and by what means it was made, having contour intervals of 2 feet or less, showing all the area covered by the site, including a 50 foot overlap, and related to the North American Vertical Datum of 1988 (NAVD 88). Areas of forest or other vegetated cover shall also be shown. Champion trees as identified in adopted Federal and State documents shall also be identified. (Projects that were started prior to November 9, 2009, may use the previously required NGVD 29 datum.)
18. Seal and Signature: The seal, signature, and date of the Licensed Professional Engineer (P.E.) or Surveyor who prepared this plat or plan shall be shown on each sheet.
19. Surveyor's Certificate: A certificate, endorsed by the Licensed Professional Engineer (P.E.) or Surveyor, setting forth the source of title of the owner of the property (deed book and page number or instrument number where owner acquired the property) and the place of record of the last instrument in the chain of title (deed book and page number or instrument number of

the last instrument that vacated, relocated, or otherwise altered any boundary lines of the property, or subdivided the property), in accordance with Section 15.2-2262 of the Code of Virginia, as amended.

20. Source of Floodplain Note: A note shall be provided that describes the source of the existing floodplain information as follows:

"There is no floodplain on the property that is the subject of this application. The current Flood Insurance Rate Map (FIRM) of Loudoun County Community Panel Number for the property that is the subject of this application is *{insert number}*, effective *{insert date}*."

OR

"There is floodplain on the property that is the subject of this application. The current Flood Insurance Rate Map (FIRM) of Loudoun County Community Panel Number for the property that is the subject of this application is *{insert number}*, effective *{insert date}*." The depicted boundary of the existing floodplain is based on *{select one}* [if applicable, a site-specific floodplain study or floodplain alteration *{provide application number and approval date}*] [the FIRM] [*{other source with description}*]."

21. Archaeology Notes: A note shall be provided to describe each archaeology survey conducted for the property as follows. No note needs to be provided if a particular survey was not performed.

"A Phase I Archaeological Survey was completed for the property, *{insert report title}*, by *{insert company name}* in *{insert month and year}*."

"A Phase II Evaluation, *{insert report title}*, was completed for Site *{insert number(s)}* by *{insert company name}* in *{insert month and year}*."

"A Phase III Data Recovery, *{insert report title}*, was completed for Site *{insert number(s)}* by *{insert company name}* in *{insert month and year}*."

"A Cemetery Delineation, *{insert report title}*, was completed to identify the boundary of the cemetery associated with Site *{insert number(s)}* by *{insert company name}* in *{insert month and year}*."

8.102 PRELIMINARY PLAT OF SUBDIVISION (SBPL)

The purpose of the preliminary plat of subdivision is to conceptually show the probable lot layout and location of streets and other necessary infrastructure to demonstrate geometric locations of all lots and improvements of such proposed subdivision.

A. Plat Requirements

The preliminary plat of subdivision shall be prepared by a Licensed Professional Engineer (P.E.) or Surveyor. These plats shall contain the data listed below, legibly drawn, on sheets of 24 inches by 36 inches in size, with appropriate matchlines, (if necessary). The following shall be included for each plat as appropriate. The failure to depict the following items on the preliminary plat of subdivision, shall not relieve the developer of any requirement to depict such items on subsequent application.

1. The title "Preliminary Plat of Subdivision".
2. Scale. (See 8.101)
 - g. Lots less than or equal to 3 acres: 1 inch equals no more than 100 feet.
 - h. Lots greater than 3 acres 1 inch equals no more than 200 feet.
3. North arrow.
4. Date. A date shall be shown on the cover sheet
5. The Proposed Name of Subdivision or Development. (See 8.101)
6.
 - a. The name and address of the owner of record.
 - b. The name of the applicant.
 - c. The Licensed Professional Engineer (P.E.) or Surveyor who prepared the plat.
7. The number of sheets included in the plat.
8. Revision Block. (See 8.101)
9. Source of Title. (See 8.101)
10. Zoning Requirements. (See 8.101)

In addition to the applicable zoning requirements, as stated in Section 8.101.A.5.a, the following note shall be provided on preliminary plats of subdivision which are preceded by a rezoning or special exception application:

"All development within this subdivision shall be in substantial conformance with (A) the requirements of the applicable concept development plan, proffers and special exception conditions in accordance with (insert specific reference to County application numbers), pursuant to which such concept development plan, proffers and special exception conditions were approved, and (B) any conditions set forth as conditions of approval of this preliminary plat."

11. Associated Land Development Application Information. (See 8.101)
12. Election District and Loudoun County, Virginia in Title Block.
13. Vicinity Map. (See 8.101)
14. Boundary lines and total acreage of the proposed subdivision and the acreage remaining in the original tract, if any.
15. Proposed lot lines, (showing approximate dimensions), proposed block and lot numbers, and the approximate area of each lot.
16. Coordinate Grid Tics. (See 8.101)
17. Adjoining Property Information. (See 8.101)
18. The Zoning District and Jurisdictional Boundaries. (See 8.101)
19. MCPI (PIN) Reference. (See 8.101)
20. The approximate location of existing buildings within the subdivision.
21. The proposed location, width, centerline and projected Average Daily Traffic (ADT's) of each road or other public or private way within the subdivision. Pedestrian circulation paths shall be shown, including proposed trails and sidewalks, if such improvement is required.
22. The approximate location, width, ADT's and centerline of adjoining roads, and access easements with their names and/or route numbers.
23. Proposed roads shall include approved and/or reserved road names per the [Codified Ordinances](#) of Loudoun County.

24. Proposed Yard and Setback Lines. (See 8.101)
25. The approximate location and approximate area of any land to be dedicated or reserved for public use, road right-of-way use, or common use of future property owners in the subdivision. The location of any existing and proposed conservation easements.
26. Approximate watercourse locations and names, if any, and the boundaries of the FOD, or the proposed boundaries of the floodplain as shown on a floodplain study or floodplain alteration which has been submitted and accepted by the County for review in accordance with Chapter 5 of this manual.
27. Source of Floodplain Note. (See 8.101)
28. General location of existing drainage ways, ponds, springs, onsite sewage disposal, onsite water supply systems and existing and proposed public water and sewer lines.

29. Archaeology Notes. (See 8.101)

29.30. The locations of archaeological sites, historic structures, human cemeteries, burial grounds, graves, historic districts, and historic landmarks on the site, if identified by the ~~Phase I~~ Archaeological Surveys performed for the property in accordance with Chapter 7 of this manual and the Phase II Evaluation and Phase III Data Recovery, if applicable.

30.31. Current topographic information, indicating when and by what means it was made, having contour intervals of 5 feet or less, showing all the area covered by the subdivision not including residue parcel(s) and related to the North American Vertical Datum of 1988 (NAVD 88). Loudoun County Geographic Information System (LOGIS), which depicts 4-foot contour intervals, may be used. Areas of forest or other vegetated cover shall also be shown. In cases where a Tree Survey has been performed for the property, identified cover type areas and specimen trees shall be depicted. Champion trees as identified in adopted Federal and State documents shall also be identified. (Projects that were started prior to November 9, 2009, may use the previously required NGVD 29 datum.)

31.32. Stakeout Note. (See 8.101)

32.33. Graphically shown on the plat, Ldn 65 and Ldn 60 aircraft noise contours and any area within one mile of the Ldn 60 aircraft noise contour, as defined by the Zoning Ordinance.

33.34. Approval Block. (See 8.101)

~~34.35.~~ Proffered preservation areas shall be clearly delineated (e.g., trees, structures, etc.).

~~35.36.~~ For lots less than 20,000 square feet in size a typical lot detail shall be provided at a scale of not less than 1 inch = 50 feet.

~~36.37.~~ A tabulation of lot yield for those properties being developed pursuant to the Cluster Subdivision Option or Principal/Subordinate Option in the AR-1 or AR-2 Zoning Districts.

~~37.38.~~ Wetlands data as follows:

- i. Potential jurisdictional waters and wetlands as identified by the Loudoun County Predictive Wetlands Model or a consultant wetland delineation performed in accordance with Army Corps of Engineers (Corps) standards shall be depicted on the plat.
- j. A note referencing the source of the wetland information depicted on the plat (including the Corps Jurisdictional Determination number and date, if it exists) and indicating that all applicable state and federal permits shall be obtained prior to disturbances within jurisdictional waters and wetlands shall be provided on the plat.

~~38.39.~~ Very Steep Slope Areas and Moderately Steep Slope Areas, as defined and regulated in the Zoning Ordinance and as identified in Loudoun County Geographic Information System (LOGIS), or based on a topographic analysis where a contour interval of 5 feet or less is used.

~~39.40.~~ The boundaries of Scenic Creek Valley Buffer and other applicable County environmental buffers.

~~40.41.~~ A soils map certification in accordance with Chapter 6 of this manual.

~~41.42.~~ Overlay Districts as established in the Zoning Ordinance.

B. Items to Accompany Preliminary Plats of Subdivision

The following items shall accompany the submission of a preliminary plat of subdivision:

1. For any subdivision to be served in accordance with the requirements of the LSDO section relating to onsite sewage disposal systems, written approval of the proposed locations of sewage disposal systems shall be obtained from the Health Director or his designee and submitted with the preliminary plat. For any subdivision proposed to be served by on site wells, the developer shall submit with the preliminary plat written verification from the Health

Director, or his designee, that the Hydrogeologic Report has been reviewed and approved in accordance with Chapter 6 of this manual.

2. Fee Check. (See 8.101)
3. Land Development Application Form. (See 8.101)
4. If not previously provided, Aa Phase I archaeological survey report prepared in accordance with Chapter 7 of this manual. If human cemeteries, burial grounds, or graves are identified, an archaeological delineation prepared in accordance with Chapter 7.
5. If within the Limestone Overlay District or Mountainside Development Overlay District, documentation of the submission of an application for, or the submission of a private, Preliminary Soils Review in accordance with Chapter 6 of this manual.
6. A letter from the Virginia Department of Conservation and Recreation, Division of Natural Heritage identifying occurrences of natural heritage resources on the property such as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations. If an endangered and threatened species survey has been completed for the property, a copy of the report shall also be submitted.
7. If applicable, plan and analysis of VDOT connectivity requirements and locations of stub out streets.

C. The following items shall be required prior to approval of Preliminary Plats of Subdivision:

1. If not previously provided, a digital file of the boundary of any cemetery, burial ground, or grave prepared in accordance with the Office of Mapping Digital Data Submission Guidelines for Cemeteries.

C.D. Preliminary Plat Review

Following the first review by the County, the Preliminary Plat may be conditionally approved. After the first review, the Director shall prepare and provide an Official Comment Letter setting forth the corrections and revisions that are required or recommended, including, by attachments, the referral comments from the referral agencies. When the Official Comment Letter is received by the applicant, applicant may submit a written response to the Director that it will comply with all County and referral comments as part of its Construction Plans and Profiles and record plat submissions. The Director will consider this response, and if the Director finds that the revision of the

Preliminary Plat in accordance with the Official Comment Letter will not substantially alter the conceptual layout of the Preliminary Plat, such Preliminary Plat shall be conditionally approved.

8.103 PLATS FOR SUBDIVISION AND OTHER MISCELLANEOUS PLATS

A. Plat Requirements

The plats shall be prepared by a Licensed Professional Engineer (P.E.) or Surveyor. These plats shall contain the data listed below, legibly drawn, on sheets of 18 inches by 24 inches in size, with appropriate matchlines (if necessary). The following shall be included for each plat as appropriate.

1. Scale. (See 8.101)
 - k. Lots less than 1/4 acre; 1 inch equals no more than 50 feet.
 - l. Lots 1/4 to 3 acres; 1 inch equals no more than 100 feet.
 - m. Lots greater than 3 acres; 1 inch equals no more than 200 feet.
2. North arrow.
3. Date.
4. The name of the subdivision. (See 8.101)
5.
 - a. The name of the owner(s) of record.
 - b. The name and address of the Licensed Professional Engineer (P.E.) or Surveyor who prepared the plat.
6. Number of sheets included in the plat.
7. Revision Block. (See 8.101)
8. MCPI (PIN) Reference. (See 8.101)
9. Seal and Signature. (See 8.101)
10. Surveyor's Certificate. (See 8.101)
11. The boundary survey with an error of closure within the limits established by the Commonwealth of Virginia.
12. Coordinate Grid Tics. (See 8.101)

13. The plat(s), as submitted for signature and recordation, shall be drawn legibly and accurately per [Virginia State Library and Archives Standards](#) for plats.
14. Zoning Requirements. (See 8.101)
15. Zoning District and Jurisdictional Boundaries. (See 8.101)
16. Associated Land Development Application Information. (See 8.101)
17. Election District and Loudoun County, Virginia in the Title Block.
18. Vicinity Map. (See 8.101)
19. The plat shall show parcel and lot lines, showing dimensions, block and lot numbers, and the area of each parcel or lot including area outside of major floodplain. Dimensions shall be shown in feet and decimals of a foot to the closest one-hundredth of a foot, and bearings in degrees, minutes, and seconds. The data for curves shall be shown in detail at the curve or in a curve data table containing the following: radius, delta, arc, tangent, chord, and chord bearing. Acreage shall be shown to the ten thousandth decimal place and square footage to the nearest whole foot and all of the remaining area in the original tract/residue parcels to the nearest one hundredth of an acre.
20. Roadways shall include approved and/or reserved names per the [Codified Ordinances](#) of Loudoun County. Existing public roadways shall include route numbers and road names.
21. The location, dimensions of easements, dimensions and area of roadways, public sites (schools, fire and rescue facilities, etc.), parks and other public areas shall be included.
22. Adjoining Property Information. (See 8.101)
23. Graphically shown on the plat, Ldn 65 and Ldn 60 aircraft noise contours and any area within one mile of the Ldn 60 aircraft noise contour, as defined by the [Zoning Ordinance](#).
24. Yard and Setback Lines. (See 8.101)
25. If land is being dedicated or reserved for public use for roads, parking areas for public use, or for common use of the future property owners of the subdivision, the record plat shall so state and illustrate such.
26. As applicable, the location, width, and centerline of existing/proposed roads, easements, and public or private rights-of-way within or immediately

abutting the property. Instrument numbers or deed book and page numbers shall be provided, as applicable.

27. If not otherwise contained within the deed accompanying the plat, the plat shall contain a statement to the effect that the subdivision is with the free consent and in accordance with the desire of the undersigned owners and trustees of the property and shall be duly acknowledged in accordance with Section 15.2-2264 of the Code of Virginia of 1950, as amended.
28. The plat shall indicate Health Director approved sewerage disposal systems and water supply systems, as specified in the Loudoun County [Codified Ordinances](#).
29. The plat shall contain a statement setting forth the persons or entities responsible for maintenance of stormwater detention, drainage facilities, easements, sidewalks, trails, lighting and other facilities, as applicable.
30. In the AR-1, AR-2, A-10 and A-3 Zoning Districts, record plats shall contain the following statement:

"In all areas within the AR-1, AR-2, A-10 or A-3 Zoning Districts, agricultural and rural economy activities are the preferred land uses. Owners of land within AR-1, AR-2, A-10 or A-3 Zoning Districts are hereby notified that agricultural and rural economy activities shall be given preference by the County when conflicts arise concerning the compatibility of such farm or rural economy uses with adjacent or nearby non-farm or non-rural economy uses. The County shall not restrict or interfere with farming and rural economy activities in AR-1, AR-2, A-10 or A-3 Zoning Districts. The farming and rural economy activities, including such effects as noise, odors, and machinery traffic, shall not be recognized or accepted by the County as valid or proper cause for complaints from adjacent or nearby residential neighbors."
31. Watercourses and names, if any.
32. Source of Floodplain Note. (See 8.101)
- ~~33.~~ 33. A floodplain easement in accordance with Chapter 5 of this manual.
- ~~34.~~ 34. Archaeology Notes. (See 8.101)
- ~~35.~~ 35. The boundaries of any archaeological delineation of human cemeteries, burial grounds, or graves, and the associated easement and pedestrian access easement.
- ~~33.~~36. Restrictive covenants. Instrument or deed book and page numbers shall be provided, as applicable.

~~34.37.~~ An Approval Block. (See 8.101)

~~35.38.~~ If private roads or access easements are proposed, the following notes shall be provided:

- a. “Construction of the private road(s) and/or access easement(s) shown hereon shall conform to the standards set forth in the Loudoun County Land Subdivision and Development Ordinance and Chapter 4 of the Facilities Standards Manual.”

AND

- b. One of the following notes, as applicable:
 - i. “The streets in this subdivision do not meet the standards necessary for inclusion in the system of state highways and will not be maintained by the Virginia Department of Transportation or the County and are not eligible for rural addition funds or any other funds appropriated by the General Assembly and allocated by the Commonwealth Transportation Board.”

OR

Where streets are required to meet VDOT standards for design and construction, but which are not intended for acceptance as part of the secondary system of state highways.

- ii. “Although the streets in this subdivision are required to meet VDOT standards for design and construction, such streets are not intended for inclusion in the system of state highways and will not be maintained by the Department of Transportation or the County and are not eligible for rural addition funds or any other funds appropriated by the General Assembly and allocated by the Commonwealth Transportation Board.”

AND

- c. “The access serving these lots is private and its maintenance, including snow removal, is NOT a public responsibility.”

~~36.39.~~ The location of structures (e.g., buildings, barns, sheds) to be retained, including stone walls within areas to be dedicated for public right-of-way.

~~37.40.~~ Designation of ADU lots in accordance with Zoning Ordinance.

~~38.41.~~ If the property is being developed pursuant to the Principal/Subordinate Subdivision Option, the following as appropriate:

- a. Tabulations showing the lot yield originally calculated for the Originating Tract, all prior subdivisions from the Originating Tract, and all resulting Principal Lots and number of Subordinate Lots created pursuant to each such subdivision.
- b. Labels clearly identifying the Principal and Subordinate lot (s).
- c. A note stating that “Subordinate lots are ineligible for further subdivision.”

~~39.42.~~ If the property is being developed pursuant to the Cluster Subdivision Option in the AR-1 or AR-2 Zoning District, the following as appropriate:

- a. A tabulation of density for such cluster subdivision.
- b. Inclusion of note on the record plat and documentation within the deed stating that all lots are ineligible for further subdivision.

~~40.43.~~ All subdivisions which include AR or TR zoned property shall include a note on the record plat and within the deed indicating that agricultural operations enjoy the protection of the Right to Farm Act.

B. Items to Accompany Plats

The following items shall accompany the submission of the plat.

1. Verification of Water Supply and Sewage Disposal.
 - a. If not already provided as part of a Preliminary Subdivision:
 - i. A letter signed by the Health Director evidencing conformance with applicable requirements of the County Health Department.
 - ii. If public water or public sewerage is to be provided by an entity other than Loudoun Water, a letter signed by an authorized official of that entity shall be submitted indicating that service can and will be provided.
2. Fee Check. (See 8.101)
3. Land Development Application Form. (See 8.101)

4. If not previously provided with a Preliminary Plat of Subdivision or Construction Plans and Profiles, Steep Slopes data as follows:
 - a. For any proposed parcel of land or road that includes within its boundaries Very Steep Slope Areas and/or Moderately Steep Slope Areas, as defined and regulated in the Zoning Ordinance, the following shall be depicted on a separate sheet for informational purposes only and not for recordation: topographic information at contour intervals of 5 feet or less and the location and extent of Very Steep Slope Areas and Moderately Steep Slope Areas; land disturbing activities including, but not limited to, any proposed building and structure sites, driveways and paved areas, drainfields and associated septic lines, wells and associated water lines, minor utilities, and public sanitary sewer and water lines; and mitigation measures. Such information shall satisfy Locational Clearance submission requirements for Steep Slope Areas.

C. Final Documents

Prior to plat approval, the following items must be submitted for review and approval to the Director:

1. If improvements for which a performance bond is required under Section 8.300 of this chapter are not completed, a performance bond in the form of a cash escrow, letter of credit, or corporate surety bond, along with the appropriate performance agreement, shall be submitted. Such performance bond must be accepted by the Board of Supervisors or designee prior to plat approval.
2. An unexecuted copy of the deed. Such deed shall:
 - a. Contain a correct description of the land subdivided or adjusted and state that such subdivision or adjustment is with the free consent and in accordance with the desire of the undersigned owners and trustees of the property and shall be duly acknowledged in accordance with Section 15.2-2264 of the Code of Virginia, as amended.
 - b. Contain language such that, when the deed is recorded, it shall operate to transfer, in fee simple, to the Board of Supervisors such portion of the premises platted as is on the plat set apart for roadways or other public use, and transfer to the Board of Supervisors, or to such association or public authority as the Board of Supervisors may provide, any easement indicated on the plat as the Board of Supervisors may require.
 - c. Contain protective or restrictive covenants, if applicable.

- d. Contain, when applicable, provisions for maintenance and indemnification by the property owner with respect to any structure, including permanent fences and stone walls, within the proposed and future public right-of-way.
3. When the developer is required to establish an owners' association prior to approval of the plat to satisfy proffer or other zoning or regulatory requirements, or in cases where land or facilities are to be conveyed to and owned in perpetuity by an owner's association, copies of the owner's association's documents shall be submitted.

For properties located within the Goose Creek Reservoir Protection area as defined in Chapter 5 of this manual, such owner's association documents shall include covenants requiring the association to maintain the storm drainage inlet structure markings described in Chapter 5 and covenants restricting the use of pesticides, herbicides and fertilizers to those materials which are labeled safe for aquatic use.

4. A letter from the obligor acknowledging that a maintenance and indemnification agreement satisfactory to the Board of Supervisors to provide for public facilities maintenance must be executed and delivered to the Director prior to final release of the financial guarantee.
5. Certificate by subdivider that structures subject to Zoning Ordinance minimum yard requirements, which are not shown on the plat, will be removed, unless satisfactory alternate arrangements have been approved by the Director.
6. Paper copies as requested by the County.
7. If not included in the deed:
 - a. A Deed of Release if there are deed of trust trustees who are not parties and signatories to the deed; or
 - ~~b.~~ A letter or other documentation from the owner which certifies that there is no deed of trust lien on the property.
8. Water or sewerage facility documentation:
 - a. For development(s) served by public water or sewerage facilities, documentation from the Loudoun County Sanitation Authority (Loudoun Water), or appropriate town, indicating that a performance bond adequate to assure the installation of water or sewerage facilities in a manner which will satisfy its requirements has been approved.

- b. For development(s) served by private well or septic facilities, documentation from the Loudoun County Health Department indicating that such facilities have been approved.
9. A copy of the document establishing the funding mechanism providing maintenance of the common facilities in accordance with the Zoning Ordinance (AR Districts only).
10. A copy of a minimum two year maintenance contract if a communal water and/or sewage disposal system is to be maintained by an entity other than the Loudoun County Sanitation Authority (Loudoun Water) (AR Districts only).

D. Standard Process

The following process is required for plat applications (“Plats”) that are based on construction plans and profiles or site plans (“Plans”). It does not apply to any easement, dedication, boundary line adjustment, family subdivision, subdivision waiver, preliminary/record plat application that does not involve construction plans, or other plats as approved by the Director. Any application that fails to provide all the information required in this section will be returned without review and, upon resubmission, placed after all other applications that have been submitted prior to such resubmission.

1. The first submission of the Plat shall not be submitted prior to the second submission of the Plans. The first submission of the Plat shall address, as appropriate, all of the County’s first review comments on the Plans. The first submission of the Plat shall be submitted without Legal Documents, except that the Deed of Subdivision, Dedication and Easements may be submitted.
2. The second submission of the Plat shall address all of the first submission Plat referral comments. The second submission of the Plat shall be accompanied by the submission of the Legal Documents which shall have been prepared based upon the second submission Plat and in conformance with any applicable proffers or conditions. For the purpose of this process, Legal Documents shall include, as applicable, Deed of Subdivision, Dedication and Easements, Deed of Open Space Easement, ADU Covenants, and Declaration of Covenants or Supplementary Declaration of Covenants. Legal Documents shall be forwarded by the project planner to the Office of the County Attorney for review. Review comments regarding the Legal Documents shall be provided to the project planner by the Office of the County Attorney. The review comments associated with the second submission Plat and first submission Legal Documents will be forwarded to the applicant upon completion.

3. The third submission of the Plat and second submission of the Legal Documents shall address all of the second submission Plat and first submission Legal Documents referral comments. The second and all subsequent submissions of the Legal Documents shall each be highlighted by the document preparer to reflect all revisions to the immediately prior submission. It is also encouraged that, where appropriate, Plats be highlighted to reflect all revisions to the plat. The third submission Plat and second submission Legal Documents shall not be submitted until the Plans upon which the Plat is based have been approved and the bond amount approved. A copy of the County staff bond estimate approval letter shall be submitted with the third submission of the plat (second submission of Legal Documents).
4. Staff will complete review of the third submission Plat and second submission Legal Documents within 3 weeks and forward comments on both Plat and documents within 5 working days after receipt of comments from the Office of the County Attorney.
5. Required associated documents such as Performance Agreements and Bonds and Cash Contribution Agreements, shall be submitted separately. These documents should be submitted at least four weeks prior to the anticipated Plat approval. The review of these documents will follow the current procedures and timelines. In any event, bonding documents, when required, must be posted and accepted prior to formal Plat Approval.
6. After review of the third submission Plat and second submission Legal Documents, both plat and documents should be able to be approved or near approval. However, if the applicant fails to properly address previous comments such that a subsequent submission of either the plat or the documents is necessary, subsequent submissions will be reviewed after all other applications that have been submitted prior to such subsequent submission.
7. The primary review agencies may include [Loudoun Water](#) and the Loudoun County Health Department (LCHD). The County does not exercise direct control over Loudoun Water, which is a separate Authority, or LCHD, which is a State Agency, and cannot therefore commit Loudoun Water or LCHD to any time line or comment period. Regardless of whether or not the County has received Loudoun Water or LCHD comments, County comments will be forwarded as soon as they are completed. Loudoun Water and LCHD referral comments will not be required prior to resubmission of an Application (but will ultimately need to be addressed in order to obtain final approval).

8.106 CONSTRUCTION PLANS AND PROFILES (CPAP)

A. The construction plans and profiles shall be prepared by a Licensed Professional Engineer (P.E.) or Surveyor. The plans shall contain the following data, legibly drawn, on sheets of 24 inches by 36 inches in size, with appropriate match lines (if necessary).

1. The following shall be included on the Cover Sheet of the plan set:

- a. Title "Construction Plans and Profiles".
- b. Name and address of the owner of record.
- c. Name and address of the Applicants.
- d. Name of the Licensed Professional Engineer (P.E.) or Surveyor who prepared the plan.
- e. Sheet Index, including the number of sheets in the plan.
- f. MCPI (PIN) Reference. (See 8.101)
- g. Vicinity Map. (See 8.101)
- h. Approval Block. (See 8.101)
- i. Revision Block. (See 8.101)
- j. Original Plan Date.
- k. Source of Title. (See 8.101)
- l. Source of Floodplain Note. (See 8.101)
- m. Archaeology Notes. (See 8.101)

2. The following shall be included on each sheet of the plan set:

- a. Scale. (See 8.101)
- b. North arrow, if applicable.
- c. Original Plan Date.
- d. Proposed Name of Subdivision or Development. (See 8.101)
- e. Revision Block. (See 8.101).

- f. Election District and Loudoun County, Virginia, within the Title Block.
 - g. Seal and Signature (See 8.101), if applicable.
- 3. Zoning District and Jurisdictional Boundaries. (See 8.101)
- 4. Zoning Requirements. (See 8.101)
- 5. Associated Land Development Application Information. (See 8.101). Proffers, conditions of approval, or modifications associated with rezoning, special exception, and variance applications shall be included either as part of the plans or as a separate document.
- 6. Key map, if more than three plan and profile sheets are required.
- 7. Note(s) on plans where land or facilities are to be dedicated to and held in perpetuity by a lot-owner's association, condominium association, or similar entity.
- 8. Proposed and existing property lines and Adjoining Property Information (See 8.101) and use.
- 9. Roads shall include approved and/or reserved road names and sign locations per the [Codified Ordinances](#) of Loudoun County.
- 10. Numbered archaeological sites and structures; human cemeteries, burial grounds, and graves; and historic landmarks on the site to be preserved, as identified by archaeological surveys performed for the property.
- 11. Pollution sources (including without limitation dump sites, drainfields, buried fuel tanks, hazardous material storage facilities, solid and liquid disposal sites, etc.), wells, and springs that are known or as identified in LOGIS.
- 12. Existing open space and conservation easements with deed book and page number or instrument number. Other known existing easements with deed book and page number or instrument number.
- 13. Environmental Impact (Overlay) Districts, as established in the Zoning Ordinance, on the grading plan and the erosion and sediment control plan.
- 14. The boundaries of the Scenic Creek Valley Buffer and other required environmental buffers.
- 15. Topography. (See 8.101)

16. Very Steep Slope Areas and Moderately Steep Slope Areas, as defined and regulated in the Zoning Ordinance, on the grading plan and the erosion and sediment control plan.
17. Location, type, and dimensions of vehicular ingress and egress to the site, and clear zones as applicable.
18. Design speed for all proposed roadways.
19. Roadway and transportation facilities shall be designed in accordance with Chapter 4 of this manual. Roadway and utility improvement plans are to consist of plan and profile, drawn to a minimum scale of 1 inch to not more than 50 feet horizontally and 1 inch to not more than 5 feet vertically. The plan portion of the roadway plan shall show the location of roads, lots, and storm drainage, sanitary sewer, and water distribution systems. The profile portion of the roadway plan shall show the existing and proposed roadway improvements, and sanitary sewer, water distribution, and storm drainage systems. Details of standard road sections, curb and gutter type, and miscellaneous construction items shall appear within the plan, as well as any construction notes pertaining to the proposed improvements. Roadway plans shall include the following:
 - a. Average Daily Trip (ADT) projections for all existing and proposed roadways.
 - b. Stations indicated every 100 feet on centerline; at points of curvature, points of intersection and points of tangency; at centerline of entrances and intersections, at subdivision or section limits, and at turnaround radius points.
 - c. When a proposed roadway or entrance intersects with an existing roadway, the centerline profile of the existing roadway shall be shown for adequate sight distance, to the right and the left of the proposed connection, per VDOT standards. Dimensions for sight lines and sight distances shall be shown at entrances onto the road system and for intersections on both plan and profiles. Where the line of sight departs the established right-of-way or private access easement, a separate sight distance easement shall be provided. The profile along the line of sight shall be shown reflecting existing and proposed grades as well as any obstacles that may obstruct the driver's vision (e.g., plantings, utility structures, entrance features, fences, etc.).
 - d. The centerline profile shall extend 300 feet beyond the property line or boundary on roadways that may provide access to adjoining property.

- e. A grade line of road construction to include:
 - i. Percent of grade.
 - ii. Elevations at the beginning and the end of all vertical curves.
 - iii. The length of vertical curves with sight distances and stations of vertical points of intersection.
 - iv. Elevations computed every 50 feet on all tangent sections and every 25 feet on vertical curves.
 - v. Elevations at:
 - a) centerline intersections of roads.
 - b) road centerline intersections with the boundaries of a subdivision.
 - c) curb returns.
 - d) culvert and storm sewer crossings.
 - e) curb inlets.
 - f) beginning and ending of superelevation transition sections.
 - vi. The point of finished grade on typical section (i.e., centerline, top of curb, etc.).
- f. The locations of curb-cut ramps for the handicapped.
- g. The proposed location of multiple mailbox groupings and other uses requiring a vehicle staging area.
- h. Proposed roadside ditches indicated in the profile where the ditch varies from running parallel to the road centerline.
- i. The horizontal and vertical location of proposed and existing culverts, storm sewer crossings, sanitary sewer crossings, and utility crossings shown on roadway profiles.
- j. Utility easements and proposed relocations.
- k. When a proposed roadway parallels or is located near an existing stream or a natural or manmade open channel, profiles of the top of

the bank of the stream, computed water elevations and invert (or flowline) of the stream or natural or manmade open channel shall be provided. The relationship of the proposed roadway grade to existing profiles of the stream or natural or manmade open channel shall be shown. Road construction shall not encroach on the approved floodplain limit of the stream, except as permitted by applicable floodplain requirements of Chapter 5 of this manual and the Zoning Ordinance.

- l. Grade profiles of curb and gutter construction in cul-de-sacs are to be computed along the top elevation of the face of the curb starting at the beginning of the curb return, following the face of curb around the cul-de-sac and thence to the end of return or curve on the opposite side of the cul-de-sac:
 - i. Grade ties of the road, before entering the cul-de-sac grade, shall be shown on each end of the cul-de-sac grade profile.
 - ii. Other acceptable methods may be used subject to the approval of the Director and the Virginia Department of Transportation.
- m. If a difference exists in elevations on proposed curb grades, curb elevations showing top of curb right and top of curb left shall be shown on the plans.
- n. Landings shown on plans and profiles.
- o. Driveway locations (both individual and common).
- p. Traffic control signage and structures (e.g., road delineators, barricades, and stop signs), and road signs, shall be shown on the plans. Signage shall conform to VDOT requirements.
- q. Right-of-way and easements shall be identified.
- r. Typical roadway cross sections shall be provided on the plans.
- s. Sidewalks, trails, and proffered pedestrian improvements shall be shown and maintenance responsibilities shall be indicated.
- t. For informational purposes only, for road sections consisting of more than two lanes, illustrative pavement striping indicating the travelways, tapers, turn lanes, directional markings (e.g., turn and through arrows, solid and dashed line delineators, etc.), and pedestrian crosswalks shall be provided. VDOT may require a separate application for permitting purposes.

20. Utility Plan and Profile Standards: The profile of the utilities is required for storm drainage, sanitary sewer, and water distribution systems. Utility profiles are to be drawn to a scale of 1 inch to not more than 50 feet horizontally and 1 inch to not more than 5 feet vertically. The profiles shall show the following:
- a. Public water and sewer profiles shall conform with the Loudoun Water Design Manual or applicable water and sewer standards if outside the Loudoun Water service area.
 - b. Storm Sewer and Culvert profiles in accordance with Chapter 5 of this manual.
21. The following standard notes shall appear on all construction plans:
- a. "Sub-base depth is based on a CBR value of 4, which may be revised once soil tests of subgrade are performed."
- OR
- "Sub-base depth is based on a CBR value of _____ based on an actual determination per soils tests."
- b. "A smoothing grade shall be maintained from the centerline of the existing road to the curb and gutter, to preclude the forming of false gutters and/or the ponding of any water on the roadway."
 - c. "Standard guardrail and handrail shall be installed at those locations as designated during final field inspections by Loudoun County or VDOT."
 - d. "The approval of these plans shall in no way relieve the owner of complying with other applicable local, State and Federal requirements."
22. Grading and drainage plans, drawn to a scale of 1 inch to not more than 50 feet. The grading plan shall include the following:
- a. Proposed grading shown by proposed contour lines, supplemented with spot elevations.
 - b. Storm sewers and culverts and their sizes and top and invert elevations.
 - c. Limits of clearing and grading, areas of tree canopy and vegetation preserved or conserved as part of a proffer or condition of approval

or to meet BMP requirements, floodplains, wetlands, conservation easements, or other easements, if known, that restrict grading.

- d. Natural and manmade open channels and swales.
- e. Proposed easements.
- f. Proposed roadway layout.
- g. Proposed lot layout and information, as follows:
 - i. For residential lots less than one acre in size, all Grading Criteria in Chapter 5 of this manual, including spot elevations for the proposed basement floor, first floor, garage slab, and finished grade at the building corners.
 - ii. For residential lots one acre or greater in size:
 - a) The house, driveway, drainfield, and well location, the limits of clearing and grading, and the proposed grading for each lot.
 - OR
 - b) The potential limits of clearing and grading and a typical detail for on-lot erosion and sediment control applicable to all lots.
- h. Retaining walls with the elevations proposed for the top and bottom of the wall.

- 23. A stormwater management plan in accordance with Chapter 1096 of the [Codified Ordinances](#) and Chapter 5 of this manual.
- 24. Storm drainage calculations, in accordance with Chapter 5 of this manual, and drainage area map showing individual and cumulative drainage area contributing to each point of concentration.
- 25. Watercourses and names, if any, and floodplain easement(s) in accordance with Chapter 5 of this Manual. Wetlands data as follows:

- a. Potential jurisdictional waters and wetlands as identified by a consultant wetland delineation performed in accordance with Army Corps of Engineers (Corps) standards shall be depicted on the plan.
 - b. A note referencing the source of the wetland information depicted on the plan (including the Corps Jurisdictional Determination number and date, if it exists) and indicating that all applicable state and federal permits shall be obtained prior to disturbances within jurisdictional waters and wetlands shall be provided on the plan.
- 26. A soils map and certification in accordance with Chapter 6 of this manual.
- 27. An erosion and sediment control plan in accordance with the [Virginia Erosion and Sediment Control Handbook](#) and Chapter 7 of this manual.
- 28. A Tree Conservation and Landscape Plan, in accordance with the Zoning Ordinance and Chapter 7 of this manual.
- 29. Lighting plans, in accordance with Chapter 7 of this manual.
- 30. Regulatory signage and street name signs.
- 31. For single family attached developments, the following shall be shown:
 - a. Location, type, size, and height of fencing, screening, and retaining walls.
 - b. Parking, loading spaces, walkways, and bike paths, indicating type of surfacing, size, angle of stalls, width of aisles, and number of parking and loading spaces provided.
 - c. The number of floors, floor area, height, exterior dimensions, location, and proposed use of each building.
- 32. Designation of ADU units in accordance with the Zoning Ordinance.
- 33. Dimensions required to demonstrate compliance with regulations, proffers, and conditions.

B. Items to Accompany Construction Plans and Profiles

- 1. The following items shall accompany the initial submission of construction plans and profiles:
 - a. Fee Check. (See 8.101)
 - b. Land Development Application Form. (See 8.101)

- c. Bond estimate as required by Section 8.304 of this Chapter.
- d. If the construction plans and profiles are being submitted pursuant to Section 1243.10(1) of the Land Subdivision and Development Ordinance, a copy of the first submission comments for the corresponding Preliminary Plat of Subdivision.
- e. If a stormwater management plan is required pursuant to Chapter 1096 of the Codified Ordinances, an unexecuted copy of the deed, and if available a plat, establishing long-term maintenance responsibility and necessary easements for storm drainage and stormwater management purposes.
- f. A completed Proffer/Condition Status Update form, as applicable.
- g. If not previously provided, an archaeological survey report prepared in accordance with Chapter 7 of this manual. If human cemeteries, burial grounds, or graves are identified, an archaeological delineation prepared in accordance with Chapter 7.

2. The following items shall be required prior to construction plans and profiles approval:

- a. A geotechnical study in accordance with the requirements Chapter 6 of this manual.
- b. If not provided with a previous Preliminary Plat of Subdivision: a letter from the Virginia Department of Conservation and Recreation, Division of Natural Heritage identifying occurrences of natural heritage resources on the property such as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations; and if an endangered and threatened species survey has been completed for the property, a copy of the report shall also be submitted.
- c. If not previously provided, a digital file of the boundary of any cemetery, burial ground, or grave prepared in accordance with the Office of Mapping Digital Data Submission Guidelines for Cemeteries.

8.107 SITE PLANS (STPL) AND RURAL ECONOMY SITE PLANS (REST)

Rural Economy Site Plans shall meet all the requirements of Section 8.107 except as modified as a result of a pre-submission meeting pursuant to Section 8.000 of this manual.

A. The site plan shall be sealed by a Licensed Professional Engineer (P.E.) or Surveyor. The site plan shall contain the following applicable data, legibly drawn, on sheets of 24 inches by 36 inches in size, with appropriate matchlines, (as necessary).

1. The following shall be included on the Cover Sheet of the plan set:
 - a. The Title "Site Plan".
 - b. Name and address of the owner of record.
 - c. Name and address of the Applicant.
 - d. Name of the Licensed Professional Engineer (P.E.) or Surveyor who prepared the plan.
 - e. Sheet Index, including the number of sheets in the plan.
 - f. MCPI (PIN) Reference. (See 8.101)
 - g. Vicinity Map. (See 8.101)
 - h. Approval Block. (See 8.101)
 - i. Revision Block. (See 8.101)
 - j. Original Plan Date.
 - k. Source of Title. (See 8.101)
 - l. Source of Floodplain Note. (See 8.101)
 - m. Archaeology Notes. (See 8.101)
2. The following shall be included on each sheet of the plan set:
 - a. Scale. (See 8.101)
 - b. North Arrow, if applicable.
 - c. Proposed Name of Subdivision or Development. (See 8.101)

- d. Revision Block. (See 8.101)
 - e. Original Plan Date.
 - f. Election District and Loudoun County, Virginia, within the Title Block.
 - g. Seal and Signature (See 8.101), if applicable.
- 3. Zoning District and Jurisdictional Boundaries. (See 8.101)
 - 4. Zoning Requirements. (See 8.101)
 - 5. Associated Land Development Application Information. (See 8.101). Proffers, conditions of approval, and modifications associated with rezoning, special exception, and variance applications shall be included either as part of the plans or as a separate document.
 - 6. The number of floors, floor area, height, exterior dimensions, location, and proposed use of each building.
 - 7. Dimensions required to demonstrate compliance with regulations, proffers, and conditions.
 - 8. Note(s) on plans where land or facilities are to be dedicated to, and held in perpetuity by, a lot-owner's association, condominium association, or similar entity.
 - 9. Property lines, Adjoining Property Information (See 8.101), and use.
 - 10. Roads shall include approved and/or reserved street names and sign locations per the [Codified Ordinances](#) of Loudoun County.
 - 11. Numbered archaeological sites and structures; human cemeteries, burial grounds, and graves; and historic landmarks on the site to be preserved, as identified by archaeological surveys performed for the property.
 - 12. Pollution sources (including without limitation dump sites, drainfields, buried fuel tanks, hazardous material storage facilities, solid and liquid disposal sites, etc.), wells, and springs that are known or as identified in LOGIS.
 - 13. Existing open space and conservation easements with deed book and page number or instrument number. Other known existing easements with deed book and page number or instrument number.

14. Environmental Impact (Overlay) Districts, as established in the Zoning Ordinance, on the grading plan and the erosion and sediment control plan.
15. The boundaries of the Scenic Creek Valley Buffer and other required environmental buffers.
16. Topography. (See 8.101)
17. Very Steep Slope Areas and Moderately Steep Slope Areas, as defined and regulated in the Zoning Ordinance, on the grading plan and the erosion and sediment control plan.
18. Location, type, and dimensions of vehicular ingress and egress to the site, and clear zones as applicable.
19. Design speed for all proposed roadways.
20. Roadway and transportation facilities shall be designed in accordance with Chapter 4 of this manual. If applicable, roadway plans are to consist of plan and profile, drawn to a minimum scale of 1 inch to not more than 50 feet horizontally and 1 inch to not more than 5 feet vertically. The plan portion of the roadway plan shall show the location of roads, lots, and storm drainage, sanitary sewer, and water distribution systems. The profile portion of the roadway plan shall show the existing and proposed roadway improvements, and sanitary sewer, water distribution, and storm drainage systems. Details of standard road sections, curb and gutter type, and miscellaneous construction items shall appear within the plan, as well as any construction notes pertaining to the proposed improvements. Roadway plans shall include the following:
 - a. Average Daily Trip (ADT) projections for all existing and proposed roadways.
 - b. Stations indicated every 100 feet on centerline; at points of curvature, points of intersection and points of tangency; at centerline of entrances and intersections, at subdivision of section limits, and at turnaround radius points.
 - c. When a proposed roadway or entrance intersects with an existing roadway, the centerline profile of the existing roadway shall be shown for adequate sight distance, to the right and the left of the proposed connection, per VDOT standards. Dimensions for sight lines and sight distances shall be shown at entrances onto the road system and for intersections on both plan and profiles. Where the line of sight departs the established right-of-way or private roadway easement, a separate sight distance easement shall be provided. The profile along the line of sight shall be shown reflecting existing and

proposed grades as well as any obstacles that may obstruct the driver's vision (e.g., plantings, utility structures, entrance features, fences, etc.)

- d. The centerline profile shall extend 300 feet beyond the property line or boundary on roadways that may provide access to adjoining property.
- e. A grade line of road construction to include:
 - i. Percent of grade.
 - ii. Elevations at the beginning and the end of all vertical curves.
 - iii. The length of vertical curves with sight distances and stations of vertical points of intersection.
 - iv. Elevations computed every 50 feet on all tangent sections and every 25 feet on vertical curves.
 - v. Elevations at:
 - a) centerline intersections of roads
 - b) road centerline intersections with the boundaries of a subdivision
 - c) curb returns
 - d) culvert and storm sewer crossings
 - e) curb inlets
 - f) beginning and ending of super elevation transition sections
 - vi. The point of finished grade on typical section (i.e., centerline, top of curb, etc.)
- f. The locations of curb-cut ramps for the handicapped.
- g. The proposed location on of multiple mailbox groupings and other uses requiring a vehicle staging area.
- h. Proposed roadside ditches indicated in the profile where the ditch varies from running parallel to the road centerline.

- i. The horizontal and vertical location of proposed and existing culverts, storm sewer crossings, sanitary sewer crossings, and utility crossings shown on roadway profiles.
- j. Utility easements and proposed relocations.
- k. When a proposed roadway parallels or is located near an existing stream or a natural or manmade open channel, profiles of the top of the bank of the stream, computed water elevations and invert (or flowline) of the stream or natural or manmade open channel shall be provided. The relationship of the proposed roadway grade to existing profiles of the stream or natural or manmade open channel shall be shown. Road construction shall not encroach on the approved floodplain limit of the stream, except as permitted by applicable floodplain requirements of Chapter 5 of this manual and the Zoning Ordinance.
- l. Grade profiles of curb and gutter construction in cul-de-sacs are to be computed along the top elevation of the face of the curb starting at the beginning of the curb return, following the face of curb around the cul-de-sac and thence to the end of return or curve on the opposite side of the cul-de-sac:
 - i. Grade ties of the road, before entering the cul-de-sac grade, shall be shown on each end of the cul-de-sac grade profile.
 - ii. Other acceptable methods may be used subject to the approval of the Director and the Virginia Department of Transportation.
- m. If a difference exists in elevations on proposed curb grades, curb elevations showing top of curb right and top of curb left shall be shown on the plans.
- n. Landings shown on plans and profiles.
- o. Driveway locations (both individual and common).
- p. Traffic control signage and structures (e.g., road delineators, barricades, and stop signs), and road signs, shall be shown on the plans. Signage shall conform to VDOT requirements.
- q. Right-of-way and easements shall be identified.
- r. Typical roadway cross sections shall be provided on the plans.

- s. Sidewalks, trails, and proffered pedestrian improvements shall be shown and maintenance responsibilities shall be indicated.
 - t. For informational purposes only, for road sections consisting of more than two lanes, illustrative pavement striping indicating the travelways, tapers, turn lanes and directional markings (e.g., turn and through arrows, solid and dashed line delineators, etc.), and pedestrian crosswalks shall be provided. VDOT may require a separate application for permitting purposes.
21. Utility Plan and Profile Standards: The profile of the utilities is required for storm drainage, sanitary sewer, and water distribution systems. Utility profiles are to be drawn to a scale of 1 inch to not more than 50 feet horizontally and 1 inch to not more than 5 feet vertically. The profiles shall show the following:
- a. Public water and sewer profiles shall conform with the Loudoun Water Design Manual or applicable water and sewer standards if outside the Loudoun Water service area.
 - b. Storm Sewer and Culvert profiles in accordance with Chapter 5 of this manual.
22. The following standard notes shall appear on all site plans:
- a. "Sub-base depth is based on a CBR value of 4, which may be revised once soil tests of subgrade are performed."
- OR
- "Sub-base depth is based on a CBR value of _____ based on an actual determination per soils tests."
- b. "A smoothing grade shall be maintained from the centerline of the existing road to the curb and gutter, to preclude the forming of false gutters and/or the ponding of any water on the roadway."
 - c. "Standard guardrail and handrail shall be installed at those locations as designated during final field inspections by Loudoun County or VDOT."
 - d. "The approval of these plans shall in no way relieve the owner of complying with other applicable local, State and Federal requirements."

23. Grading and drainage plans, drawn to a scale of 1 inch to not more than 50 feet and showing the proposed roadways, structures, buildings, and site improvements. The grading plan shall include the following:
 - a. Proposed grading shown by proposed contour lines, supplemented with spot elevations.
 - b. Storm sewers and culverts and their sizes and top and invert elevations.
 - c. Limits of clearing and grading, areas of tree canopy and vegetation preserved or conserved as part of a proffer or condition of approval or to meet BMP requirements, floodplains, wetlands, conservation easements, or other easements, if known, that restrict grading.
 - d. Open channels and swales.
 - e. Proposed easements.
 - f. Elevations for the proposed basement floor, first floor, and garage slab for all buildings. In addition, spot elevations of the finished grade at the building corners shall be shown.
 - g. Retaining walls with the elevations proposed for the top and bottom of the wall.
24. A stormwater management plan in accordance with Chapter 1096 of the [Codified Ordinances](#) and Chapter 5 of this manual.
25. Storm drainage calculations, in accordance with Chapter 5 of this manual, and drainage area map showing individual and cumulative drainage area contributing to each point of concentration.
26. Watercourses and names, if any, and floodplain easement(s) in accordance with Chapter 5 of this manual. Wetlands data as follows:
 - a. Potential jurisdictional waters wetlands as identified by a consultant wetland delineation performed in accordance with Army Corps of Engineers (Corps) standards shall be depicted on the plan.
 - b. A note referencing the source of the wetland information depicted on the plan (including the Corps Jurisdictional Determination number and date, if it exists) and indicating that all applicable state and federal permits shall be obtained prior to disturbances within jurisdictional waters and wetlands shall be provided on the plan.
27. A soils map and certification in accordance with Chapter 6 of this manual.

28. An erosion and sediment control plan in accordance with the [Virginia Erosion and Sediment Control Handbook](#) and Chapter 7 of this manual.
29. A Tree Conservation and Landscape Plan, in accordance with the [Zoning Ordinance](#) and Chapter 7 of this manual.
30. Lighting plans in accordance with Chapter 7 of this manual.
31. Regulatory signage and street name signs.
32. Location, type, size, and height of fencing, screening, and retaining walls.
33. Parking, loading spaces, walkways, and bike paths, indicating type of surfacing, size, angle of stalls, width of aisles, and number of parking and loading spaces provided.
34. Designation of ADU units in accordance with [Zoning Ordinance](#).

B. Documents to Accompany Site Plans

1. The following items shall accompany the initial submission of a site plan:
 - a. Fee Check. (See 8.101)
 - b. Land Development Application Form. (See 8.101)
 - c. Bond estimate as required by Section 8.304 of this Chapter.
 - d. If a stormwater management plan is required pursuant to Chapter 1096 of the [Codified Ordinances](#), an unexecuted copy of the deed, and if available a plat, establishing long-term maintenance responsibility and necessary easements for storm drainage and stormwater management purposes.
 - e. A completed [Proffer/Condition Status Update form](#), if applicable.
 - f. If not previously provided, an archaeological survey report prepared in accordance with Chapter 7 of this manual. If human cemeteries, burial grounds, or graves are identified, an archaeological delineation prepared in accordance with Chapter 7.
2. The following items shall be required prior to site plan approval:
 - a. A letter signed by the Health Director evidencing conformance with applicable requirements of the County Health Department.

- b. Performance Agreements and Bonds, as required by Section 8.300 of this Chapter shall be submitted for review. Such Performance Agreements and Bonds shall be approved by the Board of Supervisors or designee prior to site plan approval.
- c. A geotechnical study in accordance with the requirements of Chapter 6 of this Manual.
- d. An approved and recorded:
 - i. Easement Plat (and deed) prepared in accordance with this Chapter if easements are shown on the site plan. Easement plats shall not include dedication of property to the County for public street purposes.
 - ii. Dedication/Vacation Plat (and deed) prepared in accordance with this Chapter if dedication of property to the County for public street purposes, or vacation of property previously dedicated to the County for public street purposes, is shown on the site plan. This plat may include easements.
 - iii. Declaration of protective or restrictive covenants, if applicable.
- e. If not included in the deed:
 - i. A Deed of Release if there are deed of trust trustees who are not parties and signatories to the deed; or
 - ii. A letter or other documentation from the owner which certifies that there is no deed of trust lien on the property.
- f. If not provided with a previous Preliminary Plat of Subdivision or Construction Plan and Profile: a letter from the Virginia Department of Conservation and Recreation, Division of Natural Heritage identifying occurrences of natural heritage resources on the property such as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations; and if an endangered and threatened species survey has been completed for the property, a copy of the report shall also be submitted.
- g. If not previously provided, a digital file of the boundary of any cemetery, burial ground, or grave prepared in accordance with the Office of Mapping Digital Data Submission Guidelines for Cemeteries.

8.108 RECORD DRAWINGS

A. Filing Requirements:

Upon satisfactory completion of the installation of the required improvements shown on the approved site plan or construction plans and profiles, whichever is applicable, the developer shall submit to the Director two (2) copies of the completed record drawings, prepared and signed by a Licensed Professional Engineer (P.E.) or Surveyor, of such plans. Such record drawings shall be submitted at least two (2) weeks prior to the anticipated date of occupancy of any building for site plan applications. In the case of construction plans and profiles, the record drawings shall accompany the request for bond release in accordance with Section 8.300 of this manual or be submitted prior to record plat approval per Section 8.305 H of this manual, whichever is applicable. Such record drawings shall be reviewed for conformance with the approved plans and the ordinances and regulations of County and State agencies.

B. Record Drawings

The term "record drawings" shall be deemed to include what is sometimes referred to as "as built" drawings and shall be prepared in accordance with this Subparagraph. The following items shall be surveyed to determine actual field conditions, and the approved site plans or construction plans and profiles as annotated to reflect such actual field conditions shall constitute the record drawings.

1. Storm Sewer Systems

- a. The general location of drainage structure(s) within their easements shall be observed and noted if the structure is outside the easement. Included in this location requirement are inlet or outlet end sections. Manholes wherever located shall have at least two measurements to permanent physical features provided.
- b. The structure top and pipe invert elevations, including end sections, shall be provided.
- c. Pipe size and the percent grade between inverts from structure to structure shall be noted.
- d. Spot elevations of the invert of manmade open channels shall be provided on 100-foot centers.

2. Pavement

- a. The width of pavement shall be verified once for each width and at transitions.

3. Stormwater Management

- a. The elevations and lengths of dams and spillways shall be noted.
- b. The width of dams and spillways shall be noted.
- c. Stand pipe structure sizes and heights shall be noted.
- d. The volume of the impoundment area shall be calculated.

4. Buildings Shown on Site Plan

- a. Exterior dimensions of buildings shall be noted.
- b. Setback dimensions to buildings shall be noted.

C. Checklist

The developer submitting the record drawings shall also submit a letter with the record drawings certifying that the following items have been inspected and found to be in general conformance with the approved construction plans and profiles or site plans, as applicable.

- 1. Curb and Gutter. Confirm that the curbs are the proper type.
- 2. Sidewalk/Trail. Confirm that the sidewalk/trail is correctly situated with relation to the rights-of-ways or easement. Confirm that the sidewalk/trail maintenance responsibilities have been adequately provided for and specify the entity or entities that will bear such responsibilities. Verify that the construction material used is as approved.
- 3. Drainage. Confirm that the drainage patterns have been established in conformance with the grading plans. Confirm that slopes and swales are properly located and graded. Confirm that positive drainage exists.
- 4. Pavement. Provide a copy of the approved pavement design. Confirm that all pavement was placed in accordance with the approved pavement design. Confirm that all material was compacted to required standards. Provide a copy of the approved striping and signage plan.
- 5. Visibility triangle, as required by the Zoning Ordinance, and clear zones. Confirm that there are no encroachments.
- 6. Utility placement within roads. Provide a statement that all utilities located within roads are within recorded easements, or if in public right-of-way, located as approved and per the [VDOT permit manual](#).

7. Landscaping and Buffering

- a. Developer certifies that the tree conservation and landscaping are in general conformance as to location with the approved Tree Conservation and Landscape Plan. Confirm plantings conform to approved quantities for each~~correct~~ category (~~large deciduouseanopy~~, ~~small deciduousunderstory~~, shrub, or evergreen) ~~in required quantities~~. If plantings do not conform to approved quantities for each category, a redline Tree Conservation and Landscape Plan identifying all changes also shall be included in the Record Drawings~~submitted for review and approval~~.

ZOAM-2017-0005 and DOAM-2018-0001 Transition Rules
Board of Supervisors Business Meeting – November 21, 2019

Transition Rules:

- (1) Defined Terms: For the purpose of these Transition Rules the following definitions shall apply unless otherwise stated:
 - (a) “Plan of Development” shall mean any variance (VARI), preliminary/record subdivision plat (SBPR), record plat (SBRD), construction plans and profiles (CPAP/CPAR/CRCP), final development plan (FIDP), site plan (STPL/REST/STMP), and site plan amendment (SPAM).
 - (b) The “Zoning Ordinance” shall mean the provisions of the Revised 1993 Loudoun County Zoning Ordinance.
 - (c) The “FSM” shall mean the provisions of the Loudoun County Facilities Standards Manual.
 - (d) “Zoning Administrator” shall mean the Zoning Administrator of Loudoun County.
 - (e) “Effective Date” shall mean January 1, 2020.
- (2) For the purposes of these Transition Rules, “Pending Plan” shall mean any Plan of Development which, prior to the Effective Date, (i) has been officially accepted by the County and has not become an Inactive Application (as defined in the Zoning Ordinance), and (ii) has not been withdrawn, and (iii) has not received a final decision, and (iv) has not expired or otherwise become void or invalid pursuant to applicable law, and (v) since the date of its official acceptance has been and continues to be diligently pursued.
- (3) For the purposes of determining whether a Pending Plan is being “diligently pursued” as required herein, the following shall apply, without limitation:
 - (a) If corrections to a plat, plan, or application are or have been deemed necessary by the reviewing authority, a plat, plan, or application containing the requested revisions shall be or shall have been resubmitted within six (6) Months of notification of such needed corrections.

Subsequent resubmission of such filed plans may be approved so long as revisions to such plans do not create any new or additional non-compliance with the Zoning Ordinance or FSM.
 - (b) If applicable, all required executed performance agreements and sureties, deposits, easements and fees shall be submitted within six (6) months of the date of the approval letter for construction plans and profiles and site plans or within twelve (12) months of the Effective Date, whichever is later.

ZOAM-2017-0005 and DOAM-2018-0001 Transition Rules
Board of Supervisors Business Meeting – November 21, 2019

- (c) If any of the foregoing timeframes for a resubmission commenced prior to the Effective Date, the applicable timeframe shall be deemed to have commenced on the Effective Date.
 - (d) The above time limitations may be extended only by the Board of Supervisors and only when the applicant can demonstrate that the said timeframes cannot be met due to the acts or omissions of Loudoun County or the Commonwealth of Virginia beyond applicant's control. Such extensions may be considered only when the applicant, at least thirty (30) days prior to the expiration of the time limitation, notifies the Zoning Administrator in writing of the acts or omissions causing applicant's inability to meet such time limitations.
- (4) As determined by the Zoning Administrator, all Plans of Development that qualify as Pending Plans may continue to be processed in accordance with those provisions of the Zoning Ordinance and FSM that are the subject of ZOAM-2017-0005 and DOAM-2018-0001 that were in effect immediately prior to the adoption of ZOAM-2017-0005 and DOAM-2018-0001.

BOARD OF SUPERVISORS OF LOUDOUN COUNTY

RESOLUTION OF INTENT TO AMEND THE REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE AND THE LOUDOUN COUNTY FACILITIES STANDARDS MANUAL IN REGARD TO SETBACKS, BUFFERS, SCREENING, AND RELATED LANDSCAPING

WHEREAS, at the March 22, 2018 Board of Supervisors Business Meeting, the Board of Supervisors adopted a Resolution of Intent to Amend (“ROIA”) the Zoning Ordinance and FSM in regard to buffer yard, screening, landscaping, and setback requirements; and

WHEREAS, at the December 4, 2018 Board of Supervisors Business Meeting, the Board of Supervisors approved the 2019 ZOAM Work Program, which included amendments to the Zoning Ordinance to address buffers, setbacks, and related landscaping; and

WHEREAS, the Board of Supervisors wishes to revise the previously adopted ROIA to add amendments to additional sections of the Zoning Ordinance that staff believes are necessary to achieve full intent of the ROIA.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors states its intention to amend the Revised 1993 Loudoun County Zoning Ordinance as follows:

- Amend Article 1 to establish new, and clarify, revise, and/or delete existing, regulations in regard to the administration and interpretation of setbacks and buffer yards in all zoning districts.
- Amend Articles 2, 3, and 4 to establish new, and clarify, revise, and/or delete existing, zoning district requirements to facilitate the relocation and consolidation of setback, buffering, screening, and landscaping requirements into Section 5-1400.
- Amend Section 5-600 et seq., Additional Regulations for Specific Uses, to establish new, and clarify, revise, and/or delete existing, setback, landscaping, screening, and buffering regulations for specific uses, and to add references to the requirements of Section 5-1400.
- Amend Section 5-900 et seq., Access and Setbacks From Specific Roads and the W&OD Trail, to relocate existing building and parking setback requirements from specific roads, and other setback and access requirements, into Section 5-1400.
- Amend Section 5-1300, Tree Planting and Replacement, to relocate certain existing requirements into the FSM because such requirements are more applicable to technical site or engineering design, and to establish new, and clarify, revise, and/or delete other existing requirements as necessary to implement and maintain consistency with the foregoing amendments.
- Amend Section 5-1400 et seq., Buffering and Screening, to incorporate and consolidate existing requirements that are being relocated from other Sections of the Zoning Ordinance, establish new, and clarify, revise, and/or delete existing and relocated, requirements in order to provide greater flexibility, facilitate innovative site design, and better address common design challenges and constraints; and to establish new buffer requirements for certain heritage and cultural resources in order to ensure the protection and preservation of existing and historic cemeteries and burial grounds during the land development process.

- Amend Article 8 to establish new, and clarify, revise, and/or delete existing, definitions for terms used in the administration of setback, buffering, screening, and landscaping regulations.
- Amend such other Articles, Sections, Subsections, and provisions of the Zoning Ordinance as necessary to implement and maintain consistency with the foregoing amendments or as otherwise necessary to correct typographical errors, section and subsection numbering, and formatting within, update cross-references to, and further clarify the requirements of, the above-mentioned Articles, Sections, Subsections, and provisions of the Zoning Ordinance.

BE IT FURTHER RESOLVED, that the Board of Supervisors states its intention to amend the Loudoun County Facilities Standards Manual as follows:

- Amend Chapter 7, Environmental Design Standards, and/or create a new Chapter, as necessary to establish new standards and requirements for archaeological surveys and buffers around identified heritage and cultural resources in order to ensure the identification, protection and preservation of existing and historic cemeteries and burial grounds during the land development process, and to otherwise fully implement the foregoing amendments to the buffering, screening, and landscaping requirements of the Zoning Ordinance.
- Amend such other Chapters, Sections, Subsections, and provisions of the FSM as may be necessary to fully implement and maintain consistency with the foregoing amendments or as otherwise necessary to correct typographical errors, section and subsection numbering, and formatting within, update cross-references to, and further clarify the requirements of, the above-mentioned Chapters, Sections, Subsections, and provisions of the FSM.

BE IT FURTHER RESOLVED, that (1) these amendments are in furtherance of the public necessity, convenience, general welfare, and good zoning practice; (2) these amendments are in furtherance of the orderly subdivision of land and its development; (3) Staff is directed to prepare draft amendments for consideration; and (4) the proposed amendments on these matters are to be brought forward for notice, hearing, Planning Commission recommendation, and Board of Supervisors' action.

Zoning Administrator Advisory Opinion Use Classification

Use Group	Proposed Use Categories/ Uses	Additional Zoning Ordinance Regulations
1	Single Family Detached	Subject To 5-600
1	Cluster development	
1	Manufactured housing	5-620
1	Portable dwelling/ Trailer construction	
1	Dwelling, single family detached	
2	Single Family Attached	
2	Dwelling, single family attached (Duplex, Townhouse, and Stacked Townhomes)	
3	Multi-Family	
3	Dormitory, fraternity/sorority house, rooming/boarding house or other residential hall	
3	Dwelling, multi-family	
3	Rooming house	
4	Group Living	
4	Adult day care facility	5-609(B)
4	Orphanage, or similar institution	
4	Tenant dwelling, seasonal labor	5-602
4	Assisted living facility	
4	Congregate care facility	
4	Continuing care facility	
4	Convent, monastery, or seminary	5-656
4	Dormitory, seasonal labor	5-632
4	Nursing home or like type convalescent facility	
5	Agriculture/ Horticulture/ Animal Husbandry and Passive Uses	
5	Equestrian event facility	5-630
5	Farm based tourism	5-628
5	Nursery, production	5-605
5	Pet farm	5-627
5	Virginia farm winery	5-627
5	Agricultural research facility	5-644
5	Agricultural processing / Agricultural processing facilities, such as an abattoir, cannery, grain mill and the like	5-627
5	Agriculture- General use category	5-626
5	Agriculture, horticulture, forestry and fishery, excluding the keeping of livestock	5-626
5	Agriculture, horticulture, forestry, and fishery	5-626
5	Agri-education	5-627
5	Agritainment	5-627
5	Animal care business	5-627
5	Arboretum	5-636
5	Auction facility, livestock	5-651
5	Botanical garden or nature study area	5-636
5	Central farm distribution hub for agricultural products	5-630
5	Community garden	
5	Cultural amenities, e.g. fountains, ice rinks, reflecting pools	
5	Custom operators	5-627

5	Direct market business for the sale of products produced on-site included but not limited to pick-your-own	5-627
5	Eco-tourism	5-647
5	Farm co-ops	5-627
5	Farm market	5-603
5	Farm market (off-site production)	5-603
5	Feedlot (for on-going, on-site animal husbandry activities)	5-627
5	Guest farms or ranch	
5	Horticulture- General use category	5-626
5	Memorial park	5-637
5	Municipal drinking water supply reservoir	
5	Nature Preserve, such as but not limited to, wildlife sanctuary, conservation area, and game preserve	
5	Nursery, production, with frontage on a state maintained road	5-605
5	Nursery, production, without frontage on a state maintained road	5-605
5	Park, passive recreational uses	
5	Park or plaza	
5	Public or private playground or neighborhood park	
5	Stable, Livery, with frontage on a state maintained road	5-627
5	Stable, Livery, without frontage on a state maintained road	5-627
5	Stable, private	5-627
5	Stormwater management structures and ponds	
5	Wayside stand	5-604
6	Community and Active Recreation Uses	
6	Active recreation space	
6	Agricultural cultural center	5-634
6	Camp, day and boarding	5-645
6	Cemetery w/mausoleum	5-637
6	Community center	
6	Community center, HOA facilities only	
6	Community, neighborhood, or regional park, active recreation uses	
6	Dog Park	
6	Fairground	5-635
6	Golf course (Including Accessory Uses)	5-648
6	Marina	
6	Outdoor amphitheater (2,000 seats or fewer)	
6	Park, active recreational uses	
6	Playing field and courts, lighted	
6	Public or private community or regional park	
6	Rural recreational establishment, outdoor	
7	Institutional/ Civic	
7	Hospital	5-610
7	Medical care facility, including hospital	
7	Medical care facility, outpatient only	
7	Police station or substation	5-638
7	Educational or research facilities related to uses permitted in this district	
7	Educational or research facilities use related to the agriculture, horticulture and animal husbandry uses in the district	5-644
7	Interactive science & technology center	
7	Public transit facilities and stations to include bus shelters and bicycle parking facilities	
7	Church, synagogue and temple, mosque, chapel	5-639

7	Civic, social, and fraternal association meeting place	
7	College or university or other educational institution	
7	Cultural center	
7	Educational institution	
7	Fire and/or rescue station or substation	
7	General government use	
7	Library	
7	Mausoleum (Stand-alone)	5-637
7	Museum	
7	Museum or exhibition facility, no direct access to Rt. 50	
7	Museum, cultural center, arboretum	
7	Museum, historical and cultural center	
7	Outdoor amphitheater (greater than 2,000 seats)	
7	Performing arts center	
7	Post office	
7	Private club or lodge	
7	Recycling drop off collection center	5-607
7	School, private (elementary, middle or high)	
7	School, public (elementary, middle or high)	5-666
7	Sports stadium, complex, arena	
7	Stadiums and arenas	
7	Structure or use for federal, state, county or local government purposes, not otherwise listed	
7	Vocational school, private	
7	Zoo	
8	Office and Conference/ Training Centers	
8	Conference and training center	5-640
8	Convention or exhibition facility	
8	Establishment for general research, scientific research, development and/or training where assembly, integration and testing of products in a completely enclosed building is incidental to the principal use of scientific research	
8	Office	
8	Research & Development	
8	Research, experimental, testing, or development activities	
8	Rural corporate retreat	5-619
8	Rural resort & retreat	5-601(D)
8	Rural retreats and resorts supporting recreational uses for hotels/motels, community recreation facilities including restaurants, swimming pools and changing facilities, maintenance structures, tennis/racquet ball courts and parking lots in the Village Conservancy subdistrict	
8	Training facility	
9	Commercial Retail	
9	Bank or financial institution	5-659
9	Bus terminal	
9	Business service establishment	5-661
9	Animal hospital or day care center for pets	
9	Art gallery	5-650
9	Art studio	5-650
9	Brewery, limited	
9	Construction retail establishment	
9	Cross country ski business	5-647
9	Farm machinery sales, rental, service and repair	5-627
9	Firearm range, archery range, indoor	

9	Firearm range, indoor	
9	Golf driving range	
9	Kennel	5-606
9	Kennel, indoor	5-606
9	Motor vehicle rental	
9	Motor vehicle rental, with outdoor storage only	
9	Nursery, commercial	5-605
9	Off-street parking facility, freestanding	
9	Parking lot/ valet service, long-term	
9	Recreation establishment, indoor	
9	Recreation establishment, outdoor	
9	Recreation vehicle park	
9	Small business	5-614
9	Veterinary service	
9	Amusement or theme park	
9	Antique shop	5-650
9	Auction house	5-651
9	Automobile car sharing or rental agency	
9	Automobile service station	
9	Bakery, commercial	
9	Banquet/Event Facility	5-642
9	Bed and breakfast homestay	5-601(A)
9	Bed and breakfast inn	5-601(B)
9	Bowling alley	
9	Car wash	
9	Child care center	5-609
9	Commercial retail and service uses with drive-throughs	
9	Commuter parking facilities, structured or surface	
9	Convenience food store, with or without gas pumps	5-617
9	Convenience retail establishment with accessory gas pumps and/or car wash	5-617
9	Country club	5-660
9	Country inn	5-601(C)
9	Craft shop	5-650
9	Crematorium	5-637
9	Facility for lessons in dance, gymnastic, judo, and sports training	
9	Feed and farm supply center	5-627
9	Food store	
9	Funeral home or mortuary	
9	Health and fitness center	
9	Home service establishment	
9	Hotel/ Motel	5-611
9	Hotel/Motel	
9	Motor vehicle sales and service	
9	Motor vehicle sales limited to racecars	
9	Motor vehicle service and repair, heavy or light	
9	Motorcycle or ATV sales, rental, repair, and associated service	
9	Personal service establishment	
9	Pharmacy	5-659
9	Pharmacy, with drive-through facilities	
9	Postal service, including overnight courier collection and overnight mail distribution facility.	
9	Printing service	
9	Repair service establishment	
9	Repair service establishment, with accessory outdoor storage	
9	Restaurant	5-643
9	Restaurant, carry-out only	

9	Restaurant, dine-in and carryout only, excluding drive- through facilities	
9	Restaurant, dinner theatre	
9	Restaurant, fast food with drive-through facility	
9	Restaurant, fast-food, excluding drive-through facilities	
9	Restaurant, including carry out	
9	Restaurant, with drive-through facility	
9	Retail - Ambulatory food/beverage vendors and mobile vending carts	
9	Retail sales establishment	
9	Teahouse; coffeehouse	5-641
9	Theater	
9	Theatre, indoor	
9	Winery, commercial	5-625
10	Flex-Industrial Uses and Utilities	
10	Communal sewer system	5-621
10	Communal water supply system	5-621
10	Contractor service establishment with or without outdoor storage	5-662
10	Contractor's service establishment, limited to landscape contractors and lawn maintenance services	
10	Dry cleaning plant	
10	Fruit processing, storage	
10	Mass transit facilities & stations	
10	Motor vehicle storage, outdoor	
10	Outdoor storage, vehicles	
10	Craft beverage manufacturing	5-668
10	Data center	5-664
10	Distribution facility	
10	Establishments for assembly, fabrication, processing, production and/or manufacturing of goods and products	
10	Flex industrial uses	5-608
10	Light manufacture, processing, fabrication, and/or assembly of goods and products that does not generate noise, odor, vibration, or other hazard outside the boundaries of the subject property, pursuant to section 4010E. Such goods and products may include, but are not limited to: scientific and precision instruments; photographic equipment; communication or computation equipment; drugs, medicines, pharmaceutical; household appliances; toys, sporting and athletic goods; die-cut paperboard and cardboard; glass products made of purchased glass; electric lighting and wiring equipment; service industry machines; lithographic and printing processes; industrial controls; radio and TV receiving sets; watches and clocks; bags and containers; sanitary paper products; optical goods; and electrical machinery.	
10	Manufacture, processing, fabrication and/or assembly, distribution of products, such as, but not limited to: scientific and precision instruments, photographic equipment, communication, computation equipment, drugs, medicines, pharmaceutical, household appliances, toys, sporting and athletic goods, die-cut paperboard and cardboard, glass products made of purchased glass, electric lighting and wiring equipment, service industry machines, lithographic and printing processes, industrial controls, radio and TV receiving sets, watches and clocks, bags and containers, sanitary paper products, optical goods, electrical machinery, mobile homes, prefabricated and modular housing and components, dairy products, feed and grain, baked and confectioners' goods, farm machinery, fruit and vegetable processing, canning, and storage	
10	Moving and storage company	
10	Printing plant	
10	Public utility buildings or structures	
10	Public utility service center, with or without outdoor storage	5-621
10	Public water and wastewater facilities including land application fields, identified on the approved Concept Development Plan	
10	Radio and television broadcasting, relay station	
10	Radio and television recording studio	
10	Radio, radar and/or television tower	

10	Research, experimental, testing, and/or development activities where manufacturing, fabrication, production, testing, repair, storage, sale, or resale of materials, goods, and products which are purchased and reassembled are incidental to the principal use.	
10	Sale and storage of building materials and garden supplies	
10	Sewage pumping station	
10	Sewage treatment plant	5-621
10	Stone cutting, welding, blacksmith, tinsmith and woodworking shops with accessory enclosed storage	
10	Storage, mini-warehouse	5-665
10	Storage, outdoor	
10	Telecommunications antenna	5-618(A)
10	Telecommunications monopole	5-618(B)
10	Telecommunications roof top antenna on a multi-family structure which is forty (40) feet or greater in height	5-618
10	Telecommunications transmission tower	5-618
10	Testing station	
10	Utility generating plant or transmission facility	
10	Utility Substation	5-616
10	Utility substation, communal water and wastewater treatment facilities and other utilities to serve the Rural Village district	
10	Utility Substation, dedicated	5-621
10	Utility substation, distribution	5-616 and 5-621
10	Utility substation, transmission	5-616 and 5-621
10	Vehicle wholesale auction	5-624
10	Warehousing facility	
10	Water pumping station	5-621
10	Water storage tank	5-621
10	Water storage tank, elevated	
10	Water treatment plant	5-621
10	Water well, Municipal	5-621
10	Wholesale trade establishment	5-663
11	Heavy Industrial and Aviation	
11	Automobile graveyard or junk yard	
11	Crushing, treating, washing, and/or processing of materials	
11	Material recovery facility	5-607
11	Motor vehicle storage and impoundment	
11	Airport/Landing Strip	5-633
11	Asphalt mixing plant	
11	Concrete mixing plant	
11	Excavation, mining, dredging, stripping	
11	Extraction of sedimentary rock	
11	Heavy equipment and specialty vehicle sales, rental, repair and accessory service	
11	Heliport or helistop	
11	Magazine contained explosives facility	5-622
11	Sawmill	5-629
11	Solid waste incinerator, landfill or transfer station	
11	Stockpiling of dirt	5-657
11	Stone quarrying	
11	Storage for coal, lumber, building material, contractor equipment, and similar material	
11	Storage of empty solid waste vehicles and containers	
11	Storage, building material or contractor's equipment, coal, lumber	
11	Storage, bulk gasoline, petroleum products and natural gas, small and large	
11	Vegetative waste management facility	
11	Yard waste composting facility	



Loudoun County Fire and Rescue

PO Box 7100
801 Sycolin Road SE, Suite 200
Leesburg, VA 20177-7100
Phone 703-777-0333 Fax 703-771-5359



Memorandum

To: Josh Elkins, Project Manager
From: Maria Figueroa Taylor, Fire-Rescue Planner *JK*
Date: February 13, 2018
Subject: Countywide Landscaping and Buffer Standards
ZOAM 2017-0005 & DOAM 2018-0001

Thank you for the opportunity to review the above captioned application. The Fire and Rescue Planning Staff has no comments.

If you have any questions or need additional information, please contact me at 703-777-0333.

c: Project file

Teamwork * Integrity * Professionalism * Service

Attachment 6

DATE: April 4, 2019
TO: Josh Elkins, Project Manager, Department of Planning and Zoning
FROM: Buddy Rizer, Executive Director, DED
Prepared By: Katy Lowitz, Development Process Manager, DED
SUBJECT: Countywide Landscaping and Buffer Standards
ZOAM-2017-0005 and DOAM-2018-0001

The Department of Economic Development's (DED) analysis of the above applications are detailed below in the following sections.

Applicant Proposal

1. Zoning Ordinance Amendment to:
 - a. Ensure the buffering and screening standards of the Revised 1993 Loudoun County Zoning Ordinance are appropriate for the intended form(s) of development throughout the County.
 - b. Provide sufficient flexibility to facilitate innovative site design and enable resolution of common design challenges and constraints.
2. A Development Ordinance Amendment to ensure consistency between the updated Zoning Ordinance requirements and the corresponding technical design standards of the Facilities Standards Manual.

DED Response

DED supports efforts to provide predictable standards and processes with regard to buffering and landscaping in the county.

Attractive streetscapes and commercial property frontage contribute to a sense of place and cohesiveness within the county, which supports business development efforts to attract, retain and expand business investment. Updated and appropriate landscaping and buffer requirements provide an aesthetically pleasing and necessary transition between uses. Additionally, the proposed requirements should reduce the need for applicants to request landscape and buffer zoning modifications, a practice that is common at the present time. The requests for zoning modifications delays the approval process due to increased staff review time required for each project. Finally, the proposed Zoning Ordinance Amendment enhances design flexibility and plant diversity further contributing to a business friendly land development process.



As far as cluster specific changes, DED feels the amendments to specific landscape standards for data centers in Section 5-664 requiring larger trees at the time of planting and unique plant composition/mix are reasonable and address community feedback. Additionally, the proposed text revisions help refine district-specific perimeter buffers and buffers of adjacent uses rather than relying on lot lines or zoning district. This should benefit rural businesses as, in many instances, rural structures/uses are often set far back from lot lines.

Please contact Katy Lowitz, katy.lowitz@loudoun.gov or 703-737-8274, for any follow-up questions or concerns.

COUNTY OF LOUDOUN
DEPARTMENT OF BUILDING AND DEVELOPMENT
MEMORANDUM

DATE: March 6, 2019

TO: Josh Elkins, PLA, CZA; Zoning Planner

FROM: John Zuiker, County Urban Forester

SUBJECT: ZOAM/DOAM referral comments

The following ZOAM/DOAM referral comments are from the Natural Resources Team, Building & Development Department.

	Zoning #	Comment
1.	4-1017	Clarify that the street trees are to be planted on both sides of the street.
2.	4-1119	Clarify that the street trees are to be planted on both sides of the street.
3.	5-616.D	Buffer yards allow a maximum of 50% evergreens however typically you would want to require more to screen this use. At least 70%.
4.	5-1002.D.1	Remove text (Area Forester), add County urban forester.
5.	5-1303.B.4	Clarify that the street trees are to be planted on both sides of the street.
6.	Table 5-1403(F)(1)	Large Deciduous trees should be identified as a minimum of 2 inch caliper. Also remove text (dbh). It is in conflict with caliper measurement.
7.	Table 5-1403(F)(1)	Small deciduous trees must be identified as a minimum of 2 inch caliper to be consistent with FSM Table 3. Remove text (8-foot height).
8.	Table 5-1403(F)(1)	Change shrub height to 24-inch from 30 -inch to provide greater diversity for shrub plantings but still allow for taller plant material along this Gateway Corridor.
9.	5-1403.F.1.b.(iii)	Change shrub minimum height from 30 inches to 24 inches to be consistent with Table 5-1403(F)(1).
10.	5-1404.F (Buffer Yard Location Example)	Change text (Proposed Tree Save Area) to (Proposed Tree Conservation Area) to be consistent with terminology in FSM.
11.	5-1406.A(2)	The text (125 square feet) should be changed to 130 square feet to meet the FSM requirements of a minimum planting area of 130 square feet for large deciduous trees.
12.	5-1406.A(2)	The text (five (5) feet) should be revised to at least 7 feet to avoid vehicle doors opening and also provides the minimum planting area in square feet for large deciduous trees.

13.	5-1406.A(3)	Add text that the landscape open space shall be provided at each end of every row of parking.
14.	5-1406.A(5)	Evergreen trees should not be planted in parking lots for the following reasons: they are a safety concern near parked vehicles, they block the view of vehicles, pedestrians and particularly children, they create isolated ice patches that are a serious safety hazard, and snow loads will bend the trees into travel lanes and parking spaces.
15.	5-1406.A(5)	Text should be added that no trees or shrubs shall be planted closer than 3 feet from any curbs or pavement.
16.	5-1406.A(6)	The text should include large and <u>small</u> deciduous trees since they will block the lights as well.
17.	5-1406 (Inter. Parking Lot)	The minimum 8' width parking island and minimum 125 square feet is not consistent with the revised text.
18.	5-1406.B.2	Reference evergreen shrubs at a minimum of 24 inches in height.
19.	5-1406.C	Text should be added that no trees or shrubs shall be planted closer than 3 feet from any curb and gutter.
20.	5-1407.E	Remove text (American National Standards Institute, ANSI A300 (Part 6) and companion publication Tree Planting, Best Management Practices) and replace with Md., DC, Va. Landscape Contractors Association; Landscape Specification Guidelines, to be consistent with the FSM.
21.	5-1407.E.1.a	Remove text after (1) inch, (diameter at breast height (d.b.h. measured at 4 and ½ feet above ground)).
22.	Article 8 – Definitions	Tree Canopy or Tree Cover: remove text (plant material) and insert trees.
23.	Article 8 – Definitions	Tree, Deciduous: Remove reference to shrub .
		FSM Chapter 7
24.	7.302.A.9	Remove text (American National Standards Institute (A300 (Part 6 – Planting and Transplanting)) to have only one reference and to be consistent with the Zoning Ordinance.
25.	7.305.B.1	Revise text to read with one of the plant density options listed in Table 2.
26.	7.305 Table 2- Densities for Reforestation	Label the table for clarification as option 1 and option 2.
27.	7.305 Table 2- Reforestation	Revise the text for container to the following: Containers, 3 - gallon or larger or Balled and Burlapped
28.	7.305 Table 2- Reforestation	Add: “ 12 X 12 ” under the spacing category for Container and B&B trees

County of Loudoun
Department of Building and Development
MEMORANDUM

DATE: March 6, 2019

TO: Josh Elkins, Planner, Zoning Administration

FROM: Laura Edmonds, Staff Liaison, FSM Public Review Committee

**SUBJECT: ZOAM-2017-0005 and DOAM-2018-0001,
Countywide Landscaping and Buffer Standards**

The Facilities Standards Manual (FSM) Public Review Committee (PRC) discussed the draft buffer amendments during their February 26, 2019 meeting. Their comments are as follows:

- Question the value and import of the Type A buffer surrounding single-family detached proposed uses in the non-suburban districts against vacant land (e.g., AR).
- Clarify Footnote 1 (vacant land) under Table 5-1404(C) Use Buffer Yard Matrix and whether it is needed.
- Recommend that the 25-foot preservation buffer be eliminated or that land disturbance be permitted without requiring a Treatment Plan.

County of Loudoun
Department of Planning and Zoning
MEMORANDUM

DATE: March 14, 2019

TO: Josh Elkins, PLA, CZA, Planner, Planning and Zoning

FROM: Randall Farren, AICP, Senior Planner, Community Planning

SUBJECT: ZOAM-2017-0005 and DOAM-2018-0001, Countywide Landscaping and Buffer Standards

BACKGROUND

Beginning in 2017, Department of Planning and Zoning staff engaged the Zoning Ordinance Action Group (ZOAG) and contractors to evaluate the county's buffer and screening regulations and develop draft ordinance language to address identified issues. This Zoning Ordinance Amendment (ZOAM) was included in the 2018 ZOAM Work Program that the Board adopted (9-0) on February 6, 2018, and also included in the 2019 ZOAM Work Program that the Board adopted (9-0) on December 4, 2018. This ZOAM and Development Ordinance Amendment (DOAM) also address the March 17, 2017, Board Member Initiative (BMI) (7-0-2; Buffington and Higgins absent) directing staff to develop ordinance language to preserve existing cemeteries and burial grounds.

The proposed ZOAM and DOAM are intended to better align the buffering, screening, and related landscaping standards of the Revised 1993 Zoning Ordinance ("Ordinance") with evolving community expectations and development conditions. The revised standards are expected to provide added flexibility in meeting relevant standards, reduce the need for recurring zoning modification requests, improve the land development review process, and facilitate more desirable streetscape, landscape, and buffer designs. These amendments are therefore intended to refine the County's buffer yard and screening requirements as they pertain to parking lot and mechanical equipment screening, district-specific perimeter buffers, road corridor buffers, and buffer yards between adjacent uses. The amendments also establish new regulations aimed at preserving existing burial grounds and cemeteries during land development processes, providing guidance on their identification and protection during land disturbing activities.

ANALYSIS

The Revised General Plan (RGP) is the foundation for amendments to County ordinances to ensure that the County's goals are implemented through the regulatory process. It is intended that these ordinances will be updated consistent with the policies of the RGP in

keeping with State law and supported by State case law (*RGP, Chapter 1, Legal Basis for the Plan, text*). This referral memo provides an analysis of the consistency of the proposed ZOAM with applicable sections of the RGP and the Heritage Preservation Plan (HPP).

Key changes associated with this ZOAM and DOAM are as follows:

- revising Section 5-1400 of the Ordinance pertaining to buffers, screening, and landscaping;
- consolidating Section 5-900 of the current Ordinance into Section 5-1400, which now addresses building and parking setbacks and buffers from major roads;
- relocating landscaping standards for specific uses currently found in Section 5-600 of the Ordinance to Section 5-1400;
- amending specific standards for data centers to require larger trees at the time of planting and unique plant composition/mix; and
- removing the 50-foot perimeter buffer requirement associated with certain residential developments and incorporating more appropriate perimeter buffers for residential development into Section 5-1400 of the Ordinance;
- adding new standards for preservation of historic cemeteries, burial grounds and graves to Section 5-1400 of the Ordinance; and
- relocating specific plant species information to Section 5-1400 of the Facilities Standards Manual (FSM).

The RGP provides generalized guidance on landscaping, screening, and buffering among potentially incompatible uses. Overall, the RGP promotes the use of well-designed landscaping and vegetative buffers for a variety of purposes. These include noise abatement (*RGP, Chapter 5, Green Infrastructure, Complementary Elements, Aural Environment*); visual interest (*Chapter 6, Suburban Policy Area, Land Use Pattern and Design Policies, Policy 3*); and defining site functions, enhancing environmental quality, providing shade, and promoting native vegetation (*RGP, Chapter 6, Suburban Policy Area, Route 28 Corridor Plan, Office Cluster and Mixed-Use Office Center Design Standards, Landscaping Standards*).

Compatibility and Site Design

The RGP denotes a general preference for achieving compatibility and harmony among uses through the use of unified streetscape and buffering treatments that soften transitions among uses, rather than rigidly demarcating them through structural measures. (*RGP, Chapter 5, Green Infrastructure, Complementary Elements, Aural Environment; Chapter 6, Suburban Policy Area, Route 28 Corridor Plan, Office Cluster and Mixed-Use Office Center Design Standards, Landscaping Standards; Chapter 11, Implementation, Suburban Community Design Guidelines, Residential Neighborhoods, Land Use Arrangement*). Community Planning Staff finds the overall proposed approach to screening and buffering to be in conformance with the approaches encouraged in the RGP. The proposed amendments will encourage more consistent treatments along similar road corridors, especially where disparate uses are located across the street from one another. The proposed buffers between adjacent uses, while simplified, are likely to

provide adequate screening without imposing unnecessarily onerous buffers among uses or resulting in undesirable segregation of otherwise compatible uses.

The RGP does not include direct guidance on the proposed amendment to the current 50-foot perimeter buffer yard requirement for certain residential developments. However, the RGP does include policy language stating that interior open space must account for at least 75 percent of required open space for new residential developments in the Suburban Policy Area (*RGP, Chapter 6, Suburban Policy Area, Open Space Policy 3*). Community Planning Staff notes that applicants typically count their perimeter buffer yards toward required open space commitments. The proposed Ordinance amendment would help encourage the commitment of more usable, interior open space, furthering the aforementioned plan policy and, therefore, Community Planning Staff supports this element of the proposed amendments.

Overall, Community Planning Staff finds the proposed Ordinance amendments to be in keeping with the compatibility and site design policies of the RGP. The proposed changes are anticipated to encourage more creativity and flexibility in buffer and landscaping designs. Therefore, Community Planning Staff recommends adoption of these elements of the proposed amendments.

Natural and Heritage Resources

The RGP encourages the use and design of vegetative buffers that enhance environmental functions, promote native species, and encourage native vegetation. (*RGP, Chapter 6, Suburban Policy Area, Route 28 Corridor Plan, Office Cluster and Mixed-Use Office Center Design Standards, Landscaping Standards*). Community Planning Staff notes that the proposed restructuring of buffer yard requirements and the use of the proposed “Plant Unit” system are likely to encourage more creative and diverse designs both in terms of structure and plant diversity. These changes are likely to encourage a greater variety of pollinators and enhance the ecosystem services provided by buffer plantings, especially where used in combination with requirements for the use of native plant species.

The RGP identifies cemeteries and burial sites as important natural and heritage resource elements, specifically in the Rural Policy Area (*RGP, Chapter 7, Rural Policy Area, Green Infrastructure, text*). The Heritage Preservation Plan (HPP) includes more specific policy language that closely aligns with the proposed new standards for cemeteries and burial grounds and encourages the proposed revisions to the County’s regulatory documents. The HPP calls for the integration of preservation efforts into the County’s Development Review Process for “early identification and clear guidelines for review and preservation” of heritage resources such as cemeteries, and further calls for the review and revision of the Ordinance to facilitate resource protection (*HPP, Phase 1 Actions, Actions 2 and 4*). The HPP also states that “the County will review and make changes, as necessary, to the various regulatory documents” including the Ordinance and the FSM in order to encourage heritage preservation (*HPP, Chapter 9, Development Review, Land Development Policy 4*). Finally, the proposed ZOAM would require the establishment of buffers and preservation areas surrounding existing cemeteries and burial grounds. This

is in keeping with the Buffer Guidelines in Chapter 10 of the HPP, which state that heritage resources “should be appropriately buffered from surrounding development” especially when the original historic context of the site or resource cannot be otherwise maintained.

Overall, the proposed amendments are in conformance with the relevant natural and heritage resource policies of the RGP and HPP and further several identified policy goals of each.

Draft Loudoun 2040 Comprehensive Plan

The County is currently in the process of developing a new comprehensive plan to guide future land use and development. The October 23, 2018 version of the Draft Loudoun 2040 Comprehensive Plan does not provide specific guidance on screening and buffering that differs significantly from that of the RGP. However, Community Planning Staff notes that the Place Type approach to land use as described in the draft Loudoun 2040 plan generally promotes compatibility of uses and unified site design approaches through form-based considerations and thoughtful transitions among disparate uses. Overall, the additional flexibility afforded through the proposed amendments would encourage the type of creative approaches to streetscapes and transitions among uses envisioned in the draft Loudoun 2040 plan, especially in areas where a vertical or horizontal mix of uses are anticipated.

Recommendation

The proposed ZOAM and DOAM would facilitate approaches to landscaping, vegetative screening, buffering, and streetscapes that are in keeping with plan policy and further RGP objectives related to compatibility, site design, and natural and heritage resources. Further, the proposed amendments conform to policies related to the identification, preservation, and buffering of cemeteries and burial grounds as outlined in the HPP. As such, the proposed ZOAM and DOAM conform to relevant Plan policies and, therefore, Community Planning Staff supports their approval.

Cc: Alaina Ray, AICP, Director, Planning and Zoning-via email
Chris Mohn, AICP, Deputy Zoning Administrator, Planning and Zoning-via email
Dan Galindo, AICP, Program Manager Community Planning, Planning and Zoning-via email



Loudoun County, Virginia

HERITAGE COMMISSION

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Leesburg, Virginia 20177-7000

Telephone (703) 777-0246 • Fax (703) 777-0441 • E-mail: loudounhc@loudoun.gov

DATE: March 13, 2019

FROM: Loudoun County Heritage Commission

TO: Department of Planning & Zoning, Josh Elkins, Planner, Zoning Administration

SUBJECT: REFERRAL REVIEW FOR ZOAM 2017-0005 AND DOAM 2018-0001, Countywide Landscaping and Buffer Standards.

Dear Mr. Elkins,

The Heritage Commission met on March 5, 2019 and received the presentation from your department regarding the Zoning Ordinance Amendment for buffering and screening standards for cemeteries.

It is the Heritage Commission's priority that this ZOAM protect cemeteries in the following manner and for the stated purposes:

Cemetery Protection Priorities:

1. Cemeteries are historic and cultural resources. As cemeteries serve as a community's sacred memorialization grounds, they also indicate what values, beliefs, and standards a community practiced. Any plantings that were used as commemoration, even those that in another context may be considered "invasive species," is a component of the cemetery equivalent to headstones or markers, and thus should be preserved. Additionally, not all burials are marked by carved headstones; some are marked with fieldstone or not at all. Delineation will determine where unmarked burials exist. Some cemeteries are outlined with stone walls, fences, or plantings and those should be protected as part of the resource.
2. The disinterment and/or removal of historic cemeteries should not be the default simply to accommodate development. As development is planned, cemeteries should be defaulted to stay in situ. Disturbing burials removes the context, damages the resources, and is indecent to the remains.
3. As cemeteries are left in their historic and sacred context, their care and maintenance should be monitored and standards met. Leaving a cemetery in situ, only to be neglected into dereliction or otherwise harmed is not protecting the resource.

In reviewing the draft ZOAM, the Heritage Commission recommends the following specific edits:

1. Attachment 9, 7.820, ARCHAEOLOGICAL SURVEY/ E: Currently states "However, exhumation and reinterment must be coordinated with the County Archeologist."
 - a. Heritage Commission requests change to: "The Treatment Plan will be submitted to the County Archaeologist or Historic Preservation Planner for review and approval."
2. Attachment 9, 7.830, CEMETERY, BURIAL GROUND, AND GRAVE TREATMENT PLAN/ C: Currently states, "A description of the existing vegetation to be preserved or conserved, treatment of invasive species, within the buffer and any proposed landscaping."

a. Heritage Commission requests change to: “A description of the existing vegetation to be preserved or conserved, a plan for careful removal of any potentially damaging and non-planted invasive species, within the buffer and any proposed landscaping for County staff review.” *(see note below)

3. Attachment 9, 7.830, CEMETERY, BURIAL GROUND, AND GRAVE TREATMENT PLAN/ E: Currently states, “A description of any proposed opaque barriers or hardscaping.”

a. Heritage Commission requests change to: “A description of any proposed opaque barriers, hardscaping, or fencing.” **(see note below)

4. Attachment 7, CEMETERY, BURIAL GROUND, AND GRAVE BUFFERS (a), (b) and (c): Currently states, “and clearing of invasive vegetation on the surface.” *(see note below)

a. Heritage Commission requests change to: “and clearing of invasive vegetation on the surface reviewed by County staff to ensure it was non-planted.”

The Heritage Commission supports this ZOAM and recommends Board of Supervisors approval with the requested changes outlined in this memorandum.

Thank you for your consideration.

With best regards,



Robert Pollard
Chair, Loudoun County Heritage Commission

*Note: Background: Heritage Commission is concerned about the use of “invasive species” or “invasive vegetation.” As stated in Priority 1. above, some plantings were intentionally installed for commemoration, this includes but is not limited to periwinkle, daffodils, flowering plants. Additionally, any plant removal, particularly that of honeysuckle can be damaging in that roots may disturb burials, i.e. ground disturbance.

**Note: Background: Heritage Commission is concerned about fence post footings installed inside the 5-foot setback from the edge of delineated area and 24 inches or more below ground, for grave shaft disturbance.

cc: Mark Stultz, Zoning Administrator
Alaina Ray, Director, Department of Planning & Zoning
Dan Galindo, Department of Planning & Zoning
Heritage Commission

County of Loudoun

Department of Transportation and Capital Infrastructure

MEMORANDUM

DATE: April 5, 2019

TO: Josh Elkins, Project Manager
Department of Planning & Zoning (DPZ)

FROM: Deborah S. Miller, Transportation Planner *DM*
DTCI, Transportation Planning & Operations Division

SUBJECT: **ZOAM 2017-0005 & DOAM 2018-0001 –
Countywide Landscaping and Buffer Standards
First Referral**

Background

This Zoning Ordinance Amendment (ZOAM 2017-0005) proposes to amend the Revised 1993 Zoning Ordinance (Zoning Ordinance) regarding buffering and screening standards in order to 1) establish appropriate landscaping buffers and ensure that the public and development community understand what is reasonable and expected regarding these buffering and screening standards, consolidated under Section 5-1400, including parking lot and mechanical equipment screening, district-specific perimeter buffers, road corridor buffers, and buffer yards between adjacent uses and vacant land; 2) provide sufficient flexibility to facilitate innovative site design and enable resolution of common design challenges and constraints; 3) establish new regulations governing the preservation of existing and historic cemeteries, burial grounds and grave sites, to include provisions addressing boundary identification, proximity of land disturbing activity, and perimeter buffering; and 4) provide additional clarification within the regulations of the current Zoning Ordinance. Specifically, this ZOAM proposes to completely delete Section 5-900 (Access and Setbacks From Specific Roads and the W&OD Trail) and consolidate all buffering and screening requirements under Section 5-1400 (Landscaping – Buffer yards, Screening, Parking and Landscape Plans), as well as make changes to Articles 1, 2, 3, 4 and 8 and Section 5-600 (Additional Regulations for Specific Uses).

This Development Ordinance Amendment (DOAM 2018-0001) proposes to amend Chapters 7 and 8 of the Loudoun County Facilities Standards Manual (FSM) in order to 1) implement various revisions to the buffering and screening standards proposed with ZOAM 2017-0005; 2) require an Archeological Survey for new development in order to identify and delineate existing or unknown cemeteries, burial grounds or graves; 3) implement various revisions to tree standards, species diversity criteria, landscaping tables, provisions to allow for substitution of different species at time of planting, forest management plan requirements and canopy tables; and 4) relocate specific plant species information in Section 5-1400 of the Zoning Ordinance to the FSM.

A resolution of intent to amend pertaining to the aforementioned amendments was approved by the Board of Supervisors on March 7, 2017.

Department of Transportation and Capital Infrastructure's (DTCI's) review of these applications is based on materials received from the Department of Planning and Zoning on December 20, 2018, including 1) a referral cover sheet, dated December 20, 2018, containing a summary of the proposed amendments; and 2) draft text revisions to Articles 1, 2, 3, 4, and 8, Sections 5-600, 5-900, and 5-1400 of the Zoning Ordinance and Chapters 7 and 8 of the FSM. A copy of the proposed ZOAM and DOAM draft text is attached to this referral.

Transportation Comments

1. The Countywide Transportation Plan (2010 CTP) is being revised and is currently under review by the Board of Supervisors. DTCI staff notes that the draft Loudoun 2040 Countywide Transportation Plan proposes various changes to the County's planned public roadway network, including changes to roadway functional classifications. Details of these changes as currently proposed can be made available upon request.
2. DTCI notes that the standards for Access and Setbacks from Major Roads and the W&OD Trail in Section 5-900 have been relocated and consolidated into Section 5-1400 (Landscaping – Buffer yards, Screening, Parking and Landscape Plans) of the Zoning Ordinance. The draft text provided in Section 5-1400, as presented with this submission, is consistent with the existing setback requirements under Section 5-900 (which is proposed for deletion in its entirety). However, in Table 5-1403(B), shown on Page 2 of Attachment 7, the second description for Route 50 should be revised to reference "Northstar Boulevard" west to Fauquier County line, instead of "Route 659 Relocated".
3. DTCI notes that draft text was added to Chapter 7 of the FSM regarding standards for the preservation of historic cemeteries, burial grounds, and graves (FSM § 7.820) that includes requirements of a minimum 15-foot wide access easement with frontage on a street or other point of public ingress to provide direct access to a cemetery, burial ground or grave site. However, in FSM § 7.830 - Cemetery, Burial Ground, and Grave Treatment Plan, DTCI notes that access easements are not listed as a required plan element of a Cemetery, Burial Ground, and Grave Treatment plan. DTCI recommends that the draft text include this requirement as well as a statement that no cemetery, burial ground or grave shall have direct access to any existing or planned limited access roadway, such as VA Route 28 (Sully Road) and portions of VA Route 7 (Harry Byrd Highway). DTCI defers additional comment on these matters to the Department of Building and Development.

ATTACHMENTS

1. Draft Text – Zoning Ordinance Article 1, dated December 11, 2018
2. Draft Text – Zoning Ordinance Article 2, dated December 11, 2018
3. Draft Text – Zoning Ordinance Article 3, dated December 11, 2018
4. Draft Text – Zoning Ordinance Article 4, dated December 11, 2018
5. Draft Text – Zoning Ordinance Section 5-600, dated December 11, 2018
6. Draft Text – Zoning Ordinance Section 5-900, dated December 11, 2018
7. Draft Text – Zoning Ordinance Section 5-1400, dated December 11, 2018
8. Draft Text – Zoning Ordinance Article 8, dated December 11, 2018
9. Draft Text – Facilities Standards Manual Chapter 7, dated December 19, 2018
10. Draft Text – Facilities Standards Manual Chapter 8, dated December 19, 2018

cc: Lou Mosurak, Senior Coordinator, DTCI