

AGENDA
FLUVANNA COUNTY PLANNING COMMISSION
Former Board of Supervisors Room
March 14, 2012
7:00 P.M.

PLANNING COMMISSION WORK SESSION

- 1. Open the Work Session** (Mr. James Halstead, Jr., Chairman)
- 2. Public Comment** (Limited to Three Minutes per Speaker)
- 3. Discussion of Proposed Amendments to the Off-Street Parking Section of the Zoning Ordinance**
- 4. Discussion of Proposed Amendments to the Tree Protection Section of the Zoning Ordinance**
- 5. Discussion of Proposed Amendments to the Fluvanna County Code regarding Tree Protection and Erosion and Sediment Control**
- 6. Discussion of Proposed Amendments to the *Vision* chapter of the Comprehensive Plan**

For the Hearing-Impaired – there is a listening device available at the Board of Supervisors Room upon request.. TTY access number is 711 to make arrangements.

For persons with Disabilities – if you have special needs, please call the County Administrator's Office at 591-1910 and relay your request.



COUNTY OF FLUVANNA

"Responsive & Responsible Government"

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Memo

To: Fluvanna County Planning Commission
From: Andrew J. Pompei, Planner
Date: March 8, 2012
Re: Review of the Off-Street Parking Section of the Zoning Ordinance

Over the past year, the Planning Commission and Department of Planning & Community Development have worked together to amend the subdivision and zoning ordinances, so that these policies are consistent with the intent of the current Comprehensive Plan. Since late 2011, the Planning Commission has considered changes to the Off-Street Parking section of the zoning ordinance. The Off-Street Parking regulations address the parking requirements for new development. Possible amendments were discussed at the Planning Commission work session in February.

Based on input from the Planning Commission, as well as local organizations and developers, amendments to the Off-Street Parking section of the zoning ordinance have been prepared. Planning staff would like to receive additional input from the Planning Commission regarding these proposed changes.

The agenda packet for the Planning Commission work session on March 14 includes the following documents related to the Off-Street Parking section of the zoning ordinance:

- Summary of Draft Regulations
- Draft of the Off-Street Parking Section of the Zoning Ordinance
- Explanation of Modifications to the Off-Street Parking Regulations
- Comparison of the Existing/Proposed Off-Street Parking Regulations to Other Virginia Localities

If you have any concerns, please contact the Planning Department at (434) 591-1910 or via email.

Off-Street Parking
Summary of Draft Regulations
March 8, 2012

Intent/Purpose

The proposed off-street parking regulations are intended to provide greater flexibility for developers and business owners, while minimizing the environmental impacts caused by excessive amounts of impervious area. Additional provisions help ensure that new parking facilities can safely accommodate pedestrians, bicyclists, and automobiles.

Highlights

Below is a summary of the proposed changes to the off-street parking regulations:

On-Street Parking

On-street parking may be used to satisfy the minimum parking requirements, provided that it is located within 150 feet of the designated use and, if located on a public roadway, is approved by the Virginia Department of Transportation (VDOT).

Dimensional Standards

While the previous regulations only specified stall sizes for perpendicular (90°) parking spaces, the proposed revisions specify the stall sizes for angled parking and compact car spaces. The minimum stall depth requirements for perpendicular parking spaces may be reduced by up to two feet, if the parking spaces are adjacent to planting strips that can accommodate vehicle overhang.

Compact Cars

Parking areas containing thirty (30) or more spaces may reserve up to twenty percent (20%) of the minimum required parking spaces for compact cars.

Access & Interconnectivity

Minimum spacing requirements for access points are established, ensuring there is adequate spacing between driveways. Where possible, parking lots must be designed to connect with parking facilities on adjacent parcels.

Pedestrian Facilities

Within parking lots, sidewalks built to VDOT standards must be provided to accommodate safe pedestrian movement.

Maximum Parking Requirements

Developers may only exceed the minimum parking requirements if they utilize porous paving materials or install additional landscaping. These measures are intended to offset the higher runoff rates generated by increased impervious surfaces.

Reduction in Minimum Parking Requirements

Developers may be granted a reduction in the number of required parking spaces if they build near a transit stop, provide bicycle parking facilities, install additional landscaping, utilize New Urbanist design principles, or submit a professionally-prepared parking study.

Minimum Parking Requirements

The minimum parking requirements are intended to ensure the construction of adequate parking facilities that can safely accommodate patrons. Some of the minimum parking requirements were reduced, based on the requirements of neighboring localities and recommendations from private organizations. Additional uses were specified within the off-street parking schedule.

Article 26. Off-Street Parking and Loading Spaces

Sec. 22-26-1. Statement of Intent.

The intent of this article is to provide vehicle parking space for a developed site that is adequate to serve the demand generated by the proposed use, while avoiding excessive impervious area. This article will serve to protect valuable natural, historic, and scenic resources within Fluvanna County; to provide safe and convenient internal and external movement of vehicles, *bicycles*, and pedestrians; to provide adequate fire and police protection and stormwater control; and otherwise to protect the health, safety, and welfare of the citizens of Fluvanna County.

Sec. 22-26-2. Off-Street Parking and Loading Spaces Required.

- A. There shall be provided at the time of erection of any building or at the time any main building is enlarged, or at the time of a change in use of a building or site, off-street parking and loading spaces as set forth in this section. No person, firm, or corporation shall build and occupy any structure or initiate the new use of any land without providing the off-street parking and loading spaces as set forth in this section. Parking requirements shall not automatically be considered sufficient for any other use of the property. When there is a change in use of the property, additional parking spaces may be required if necessary to meet the standards established by this section.
- B. Off-street parking and loading spaces shall be maintained in a clean, litter-free, serviceable, and orderly condition, and shall continue as long as the main use of the site is continued. No owner or operator of any structure affected by this section shall discontinue, change, or dispense with the required parking and loading areas without prior approval by the ~~Director of Planning~~ *Zoning Administrator*.
- C. No non-residential off-street parking space or loading space shall be used for the sale, repair, dismantling or servicing of any vehicle, equipment, materials, or supplies, or obstructed in any fashion.
- D. When a use that is non-conforming as to the required off-street parking and loading space is enlarged, additional off-street parking and loading space shall be required only on the basis of the enlargement.
- E. No Certificate of Occupancy for a new or changed use shall be granted unless the requirements of this section are met.

Sec. 22-26-3. Location of Off-Street Parking.

- A. The off-street parking facilities required by this section shall generally be located on the same lot or parcel of land that they are intended to serve.
- B. When consistent with the intent of this article, the ~~Director of Planning~~ *Zoning Administrator* may approve off-street parking on property that is located within six hundred (600) feet of the development site. Before such approval is granted, a written agreement assuring the retention of property for parking use shall be properly drawn and executed by the parties, approved as to form by the County Attorney, recorded with the County Clerk, and filed with the ~~Director of Planning~~ *Zoning Administrator*.
- C. Nothing in this section shall be construed to prevent the joint use of off-street parking between two (2) or more buildings or developments, or uses by two (2) or more owners or

operators. In that case, the total number of parking spaces when combined or used together shall not be less than the sum of the requirements for the several individual uses computed separately, unless it can be demonstrated that by the nature of the several uses, the parking spaces will be in use at substantially different times of day. Before such approval is granted, a written agreement assuring the retention of property for parking use shall be properly drawn and executed by the parties, approved as to form by the County Attorney, recorded with the County Clerk, and filed with the ~~Director of Planning~~ *Zoning Administrator*.

- D. Where a parking lot is owned by Fluvanna County or another public body, and its spaces are open for use by the general public, said spaces may be used to meet the on-site parking requirement, provided that said parking lot is within 600 feet of the development site.
- E. *With the approval of the Zoning Administrator, on-street parking spaces located within one-hundred feet (150') of the designated use may count towards the minimum off-street parking requirements. On-street parking spaces may be located on any private street or, with the approval of the Virginia Department of Transportation (VDOT), any public street. Each off-street parking space shall be on a paved area abutting the travelway.*
- F. To the greatest extent possible, parking areas shall not be located between the adjacent public right-of-way and the principal structure(s) on the site.

Sec. 22-26-4. Parking Space Standards.

A. ~~Parking Space Size~~ *Dimensional Standards*

- ~~1. Option A: Minimum width of 10' per space, with a minimum length of 18' and a minimum aisle width of 20'.~~
- ~~2. Option B: Minimum width of 9' feet per space, with a minimum length of 18' and a minimum aisle width of 24'.~~

1. *Parking spaces shall conform to the dimensions listed in Table ____:*

Table ____: Minimum Parking Space and Aisle Dimensions

Angle	Type	Width	Stall Depth	One-Way Aisle Width	Two-Way Aisle Width
0° (Parallel)	<i>Standard</i>	9 ft.	20.5 ft.	13 ft.	24 ft.
	<i>Compact</i>	7.5 ft.	18.5 ft.	12 ft.	24 ft.
30°	<i>Standard</i>	9 ft.	17 ft.	13 ft.	N/A
	<i>Compact</i>	8 ft.	14 ft.	12 ft.	N/A
45°	<i>Standard</i>	9 ft.	18 ft.	13 ft.	N/A
	<i>Compact</i>	8 ft.	16 ft.	12 ft.	N/A
60°	<i>Standard</i>	9 ft.	18 ft.	16 ft.	N/A
	<i>Compact</i>	8 ft.	16.5 ft.	15 ft.	N/A
90° (Perpendicular)	<i>Standard</i>	9 ft.	18 ft.	N/A	24 ft.
	<i>Standard</i>	10 ft.	18 ft.	N/A	20 ft.
	<i>Compact</i>	8 ft.	17 ft.	N/A	22 ft.

2. *The minimum stall depth requirements for perpendicular parking spaces may be reduced by up to two feet (2'), if the parking spaces are adjacent to planting strips or other landscaping features that allow for an unobstructed overhang equivalent to the reduction.*
3. *Parking areas containing thirty (30) or more spaces may designate up to twenty percent (20%) of the minimum required parking spaces as compact car spaces. Such spaces shall meet the following requirements:*
 - a. *All compact parking spaces shall conform to the dimensions listed in Table ___.*
 - b. *Compact car parking spaces shall be located in one (1) or more continuous areas and shall not be intermixed with spaces designed for full-size vehicles.*
 - c. *Compact car parking spaces shall be clearly designated by pavement markings and/or appropriate signage.*
4. *Vehicular access roads, when not adjacent to parking spaces, shall meet the following requirements:*
 - a. *The minimum travelway width for two-way access roads shall be twenty feet (20').*
 - b. *One-way access roads are permitted, provided that the circulation pattern is contained within the site or sites shown on the site plan and public roadways are not incorporated as part of the circulation pattern. The minimum travelway for one-way access roads shall be twelve feet (12').*

B. Handicapped Parking

1. Handicapped parking spaces shall have a minimum width of eight (8) feet, with an adjacent five- (5) foot access aisle to be provided on one side of the handicapped space.
2. Handicapped parking spaces shall have a minimum length of 18'.
3. In any parking lot of more than five (5) spaces, there shall be at least two designated and properly signed as a handicapped space.
4. In parking lots having more than five (5) spaces, at least one per twenty five spaces in addition to the two handicapped spaces already provided in 22-26-4(b)3.
5. Handicapped parking spaces shall be situated so as to provide direct, unobstructed access to buildings by the shortest practical routing.

C. Screening

1. Parking lots consisting of five (5) or more spaces shall be screened from view of public roads, rights-of-way, and adjacent property, as specified in Article 22-24 Landscaping and Tree Protection of this ordinance.

D. Landscaping

1. Parking lots consisting of five (5) or more spaces are required to be landscaped, as specified in Article 22-24 Landscaping and Tree Protection of this ordinance.

E. Lighting

1. Parking lots consisting of five (5) or more spaces are required to have outdoor lighting meeting County requirements, as specified in Article 22-25 Outdoor Lighting Control of this ordinance.

F. Design Objectives

1. Parking areas and vehicular circulation areas shall be designed to achieve the following objectives:
 - i. to minimize on-site and off-site traffic hazards in order to provide safe and convenient access to the travelling public and to pedestrians,
 - ii. to reduce or prevent congestion on public streets,
 - iii. to facilitate unimpeded flow of on-site traffic in circulation patterns readily recognizable and predictable to motorists, *bicyclists*, and pedestrians, ~~and~~
 - iv. to facilitate the provision of emergency services,
 - v. *to minimize the negative impacts of stormwater runoff on local water quality, and*
 - vi. *to minimize the disturbance of existing vegetation.*

G. Signage

1. Parking lots of five (5) or more vehicles are required to have signage, as specified in Article 22-15 Sign Regulations of this ordinance.

H. ~~Interior Circulation Aisles~~ *Interconnectivity*

- ~~1. Interior circulation aisles for two-way traffic adjacent to parking spaces shall have a minimum travel width of twenty (20) feet with appropriate turning radii.~~
- ~~2. Interior circulation aisles for one-way traffic adjacent to parking spaces shall have a minimum travel width of ten (10) feet with appropriate turning radii.~~
 1. *When possible, parking facilities shall be designed to connect with other parking facilities on adjacent parcels, eliminating the need to use abutting streets for cross-movements.*
 2. *Pedestrian facilities required by this section shall connect with existing sidewalks within or adjacent to the site, if topography and other environmental conditions allow.*

I. Intersections

1. Intersections of vehicular access aisles and public streets shall have an approach angle not exceeding four (4) percent for a distance of not less than forty (40) feet measured from the edge of the travelway of the public road intersected.
2. *Entrances to parking areas from public or private roadways shall be designed and constructed in accordance with Virginia Department of Transportation (VDOT) standards.*

3. *The centerline of any access point shall be set back from the street line of any intersecting street at least fifty feet (50') or one-half the lot frontage, whichever is greater, except that no required setback shall exceed two-hundred feet (200').*
4. *The centerlines of any separate access points shall be spaced at least seventy-five feet (75') apart.*

J. Grades

1. Grades of access aisles not abutting parking spaces shall not exceed ten (10) percent.
2. Grades of parking spaces, loading spaces, and access aisles abutting parking or loading spaces shall not exceed seven (7) percent and cross slope grades shall not exceed four (4) percent.

K. Drainage

1. All off-street parking and loading facilities shall be drained to eliminate standing water and prevent damage to abutting property and/or public streets and alleys.
2. *The use of low-impact development (LID) techniques to control stormwater runoff generated by parking areas is encouraged. Examples of LID techniques include, but are not limited to, the use of permeable paving materials, rain gardens, bioswales, infiltration trenches, and tree box filters designed to capture stormwater and facilitate on-site infiltration.*

L. Pedestrian Facilities

1. *Sidewalks, pedestrian crosswalks, and other pedestrian facilities shall be provided within all parking facilities for five (5) or more vehicles.*
2. *Sidewalks shall be located and aligned to directly and continuously connect points of pedestrian origin and destination, and shall not be located and aligned solely based on the outline of a parking lot configuration that does not provide such direct pedestrian access. Connecting walkways shall link building entrances with existing sidewalks along adjacent streets and with existing or proposed sidewalks on adjacent parcels.*
3. *Sidewalks shall comply with the most recent Virginia Department of Transportation (VDOT) specifications.*
4. *Sidewalks and other pedestrian facilities shall be separated from off-street parking, on-street parking, and loading and service areas by curbing or other protective devices.*
5. *Where sidewalks associated with a parking area cross a public or private roadway, a crosswalk shall be clearly marked in accordance with Virginia Department of Transportation (VDOT) standards. The use of remedial treatments, such as raised pedestrian crossings, forecourts and landings, special paving, signs, lights, and bollards, at pedestrian crossings is encouraged.*
6. *Sidewalks may be paved using hard-surfaced pervious paving materials, such as porous asphalt, porous concrete, or block pavers, as a method of stormwater management, provided that the use of such materials does not compromise the safety of pedestrians.*

M. Stacking Lanes

1. Spaces for stacking of vehicles waiting for access to drive-through windows, automatic teller machines (ATMs), fuel pumps, car washes, and similar uses shall be required.
2. Stacking lanes shall be designed so as not to impede on-site or off-site traffic movements, or movements into and out of parking spaces.
3. Stacking lanes shall be separated from other interior drives or aisles by a raised or painted median, and shall be marked so as to be easily identified from a vehicle.
4. No stacking lane shall be placed between any point of access and parking spaces.
5. All stacking spaces shall be at least ten (10) feet wide and eighteen (18) feet long.
6. Spaces in stacking lanes are required as follows:
 - i. convenience store, filling stations: three (3) spaces per drive-in window and one (1) space per fuel pump.
 - ii. financial institutions with drive-in windows, including ATMs accessible from a vehicle: four (4) spaces per first window or ATM and two (2) spaces per each additional window or ATM
 - iii. drive-in restaurants: eight (8) spaces for the first window and two (2) spaces for each additional window.
 - iv. Carwashes, automatic or drive-through: three (3) spaces per bay
 - v. All other uses with drive-through windows: three (3) spaces per window.

Sec. 22-26-5. Construction Standards.

- A. All access aisles, parking, and loading facilities for five (5) or more vehicles shall be surfaced in accordance with intensity of usage and such improvement shall not be less than six (6) inches of Virginia Department of Transportation #21 or #21A aggregate base together with prime and double seal or equivalent. *The use of hard-surfaced pervious paving materials, such as porous asphalt, porous concrete, or block pavers, is permitted as a method of stormwater management.*
 1. The foregoing notwithstanding, the required improvement may be reduced to three (3) inches of gravel in the following cases: (1) for parking for places of worship and other assembly uses where usage of such parking area is anticipated to be so infrequent as to not require greater improvement; (2) for areas of display or storage of vehicles, mobile homes, machinery or other inventory requiring motor vehicle access for placement; provided, in no case, shall grassed or unimproved areas be devoted to inventory storage; or (3) single or two family dwelling units and uses adjacent or within that unit such as a small home industry, bed and breakfast, home occupation, etc.
 2. *Grass pavers may be used, with the approval of the zoning administrator, where it is demonstrated that the vegetation will survive the amount of expected vehicular traffic.*
 3. All guardrails in parking and loading facilities shall meet VDOT specifications.
 4. All parking and loading facilities shall be marked by painted lines, curbs, wheelstops, bumper blocks, or similar means to indicate individual spaces.

Sec. 22-26-6. Off-street Loading Spaces.

- A. All off-street loading spaces shall be provided on the same lot with the use to which they are appurtenant.
- B. All off-street loading spaces shall have a minimum width of twelve (12) feet, a minimum clearance height of 14 ½ feet, and a depth sufficient to accommodate the largest delivery truck serving the establishment, but in no case less than twenty-five (25) feet.
- C. Off-street loading spaces shall be provided in addition to and exclusive of parking spaces on the basis of:
 - 1. One (1) space for each eight thousand (8,000) square feet of retail space gross feasible area
 - 2. One (1) space for each eight thousand (8,000) square feet of office space.
 - 3. One (1) space for each ten thousand (10,000) square feet of industrial area.

Sec. 22-26-7. Interpretations of Off-street Parking and Loading Requirements.

- A. The off-street parking and loading requirements are in addition to space for the storage of trucks or other vehicles used in connection with any use.
- B. The off-street parking and loading requirements do not limit special requirements that may be imposed in the case of planned unit developments, conditional uses, or special exceptions.
- C. Where fractional spaces result, the parking spaces and loading spaces required shall be construed to be the next highest whole number.
- D. No inoperable vehicle shall be parked or stored on a lot in any zoning district unless the vehicle is within a fully enclosed building or structure, or are otherwise shielded or screened from view from all public roads and adjoining properties.

Sec. 22-26-8. Off-street Parking Requirements.

- A. The off-street parking requirements for various uses are stated on Table 1.
- B. *The off-street parking requirements for a use not specifically listed in Table 1 shall be determined by the Zoning Administrator based on the characteristics of the proposed uses, the number of residents or visitors, the minimum requirements for similar uses, and any other relevant characteristics. In making the determination, the Zoning Administrator may consider the recommendations of relevant parking studies as well as traffic generation figures, including information provided by the Institute of Traffic Engineers, peak parking demands, and other information.*
- C. The number of parking spaces in a parking area may not exceed the number of spaces required by this section by more than forty (40%) percent unless approved by the Planning Commission. *To mitigate the environmental and visual impacts of additional impervious cover on the surrounding community, at least one (1) of the following features shall be incorporated into the design upon approval of the excess parking:*
 - 1. *Additional spaces approved by the Planning Commission will be surfaced using pervious paving material, including, but not limited to, porous asphalt, porous concrete, or block pavers; or*

2. *For every two (2) additional spaces approved by the Planning Commission, one (1) tree and three (3) shrubs will be planted on-site, in addition to the requirements specified in Article 22-24 Landscaping and Tree Protection of this ordinance.*
- D. *A reduction in the number of required parking spaces may, at the written request of the applicant, be granted with the approval of the Zoning Administrator as follows:*
1. *A reduction in the number of required parking spaces may be granted in any one (1) of the following instances:*
 - a. *For projects that include fifty (50) or more parking spaces on-site and are located within a designated growth area, the minimum number of parking spaces may be reduced by up to five percent (5%) if the project is located within three-hundred feet (300') of a transit stop and is connected to the transit stop by a sidewalk.*
 - b. *For projects that include fifty (50) or more parking spaces on-site and are located within a designated growth area, the minimum number of required parking spaces may be reduced by one parking space for every one (1) bicycle space provided on a permanently-constructed bicycle rack, provided that the minimum parking required is not reduced by more than five percent (5%).*
 - c. *The minimum number of required parking spaces may be reduced by up to ten percent (10%), provided that one (1) tree and three (3) shrubs are planted for every two (2) spaces reduced, in addition to the requirements set forth in Article 24 of this Chapter.*
 - d. *The Zoning Administrator may allow the number of required spaces to be reduced up to ten percent (10%) for projects within a designated growth area that meet new urban/neo-traditional planning principles and further the goals set forth in the Comprehensive Plan. Factors that may be considered when allowing a reduction include the density of the surrounding community; the range of land uses located within convenient walking distance; accessibility to mass transit; and the provision of facilities for bicyclists.*
 - e. *The Zoning Administrator may allow the number of required spaces to be reduced up to twenty-five percent (25%), provided that a professionally-prepared parking study or similar documentation indicates that a reduction in the minimum parking requirements for a specific building or use would provide adequate parking facilities on-site.*
 2. *A site may not receive credit for more than one (1) strategy listed above. The possible reductions in the number of required parking spaces are not cumulative.*
 3. *When a reduction in the number of required parking spaces is permitted, the Zoning Administrator may, at his discretion, require the applicant to reserve space on-site that would accommodate the construction of additional parking in the future. The parking reserve area shall be designated on the site plan, and may not be converted to any other use without amendment of the site plan and the approval of the Zoning Administrator. The parking reserve area shall be sited to allow adequate pedestrian, bicycle, and automobile access, and shall be sized to accommodate a number of parking spaces equal to the amount of the parking reduction awarded. The intent of the parking reserve is to allow expansion of the parking area should the use or parking needs change.*
- E. *The provisions of this article for the application of individual parking standards for Planned Unit Developments located within the Zion Crossroads UDA may be modified at the discretion of the Planning Commission, provided that the Applicant submits a parking impact*

study that fully justifies the modification of the standards based on the mix of uses, the phasing of development, and other factors, including relationship of parking location to individual land uses within the project.

TABLE 1. OFF STREET PARKING REQUIREMENTS

USE	PARKING REQUIREMENTS
COMMERCIAL	
Animal Hospital, Veterinary Clinic, Animal Shelter	1 per 300 square feet
<i>Automobile Repair Service Establishments</i>	<i>3 spaces plus 2 spaces for each service bay</i>
<i>Beauty and Barber Shops</i>	<i>2 spaces plus 2 spaces for every barber or beautician chair</i>
<i>Financial Institutions</i>	<i>1 per 250 square feet</i>
Funeral Homes, Churches, other public assembly areas	1 per 4 fixed seats or 75 square feet of assembly area, whichever is greater
<i>Furniture, Carpet, or Appliance Store</i>	<i>1 space per 500 square feet of retail sales area</i>
<i>Gas Stations</i>	<i>1.5 spaces per pump plus 2 spaces for each service bay</i>
Greenhouse; nursery	1 per 200 250 square feet within retail sales area up to 15,000 gross square feet; 1 per 400 square feet thereafter Plus one per 700 1,000 gross square feet located in open storage/growing areas
Laundry	1 per 50 square feet open to the public 2 washing machines
<i>Restaurant</i>	<i>1 per 100 gross square feet, minimum of 10</i>
Retail Stores, Convenience Stores, Gas Stations	1 per 200 250 square feet of up to 15,000 gross square feet; 1 per 400 square feet thereafter plus any required stacking lanes
Sale of Motor Vehicles, Mobile Homes, Travel Trailers	1 per 2000 square feet of display area
Shopping Center Gross Leasable Square Feet	
1 to 15,000	5 4 spaces per 1000 feet
15,000 to 50,000	4.5 3.5 spaces per 1000 feet
Greater than 50,000	4 3 spaces per 1000 feet
EATING ESTABLISHMENT	
	2 per 100 gross square feet, minimum of 15
LODGING	
Country Inns, Boarding & Touring House, Bed & Breakfast	1 per unit
Hotels, Motels	1 per unit plus 150 square feet for restaurant and/or meeting area compliance with the requirements for each particular additional use located on premise.
RECREATION	
Assembly Hall, Dance Hall, Skating Rink	1 per 100 square feet
Indoor Recreation Facilities, Arcades	1 per 200 square feet
Campground	1 per campsite

Golf Course, Driving Range, Miniature Golf	2 per hole
Unspecified Recreational Use	1 per 125 square feet of usable recreation area
Stadiums, Arenas, Theaters	1 per 4 seats
RESIDENTIAL	
Dwellings, single family, two family, mobile homes	2 per unit
Dwellings, multi-family <i>Dwellings, multi-family, efficiency/studio</i>	2.25 per unit <i>1 per unit</i>
<i>Dwellings, multi-family, one bedroom</i>	<i>1.25 per unit</i>
<i>Dwellings, multi-family, two bedroom</i>	<i>1.5 per unit</i>
<i>Dwellings, multi-family, three or more bedrooms</i>	<i>2 per unit</i>
Dwellings, multi-family, elderly <i>Assisted Living Facility, Nursing Home</i>	1.25 per unit plus 1 per employee on the major shift <i>1 space per 3 residents plus 1 space per employee on largest shift</i>
<i>Group Home</i>	<i>0.5 spaces per bed at licensed capacity</i>
OFFICE	
Office (Gross floor area 10,000 square feet or less)	1 space per 200 300 square feet of up to 15,000 square feet, 5 minimum; <i>1 space per 350 sq. ft. thereafter</i>
Office (Gross floor area 10,001 to 50,000 square feet)	1 space per 200 for first 10,000 sq. ft., 1 space per 250 sq. ft. thereafter
Office (Gross floor area 50,000 or greater)	1 space per 200 for first 10,000 sq. ft., 1 space per 300 sq. ft. thereafter
INDUSTRIAL AND COMMERCIAL	
	1 per two employees plus 1 per 200 square feet open to the public
<i>Manufacturing</i>	<i>1 per 2 employees on largest shift plus 1 space per company vehicle</i>
<i>Unspecified Industrial Uses</i>	<i>1 per 2 employees on largest shift plus 1 per 250 square feet open to the public</i>
INSTITUTIONAL	
Day Care, Nursery School, Elementary School	1 per 9 pupils
Middle School	1 per 8 pupils
High School	1 per 3 pupils
Library, Museum, Art Gallery, Community Center	1 per 300 square feet
<i>Professional School</i>	<i>1 space per 2 students at maximum capacity plus 1 space per classroom</i>
Post Office	1 per 250 square feet, minimum of 5
UNSPECIFIED	Sufficient parking for average number of employees and visitors

Explanation of Modifications to the Off-Street Parking Ordinance

Sec. 22-26-3E	Allows on-street parking to count towards off-street parking requirements in certain instances (comparable to Albemarle)
Sec. 22-26-4A(1)	Specifies sizes for all types of parking spaces, including angled spaces. Current size requirements remain the same, others added (comparable to Culpeper)
Sec. 22-26-4A(2)	Allows reduced parking stall size if adjacent to green space (comparable to Albemarle)
Sec. 22-26-4A(3)	Allows compact cars spaces (comparable to Culpeper, Louisa)
Sec. 22-26-4A(4)	Specifies width requirements for travelways not adjacent to parking spaces (comparable to Albemarle)
Sec. 22-26-4F	Added language regarding stormwater, tree protection
Sec. 22-26-4H(1)	Requires interconnectivity of parking lots (comparable to Chapel Hill)
Sec. 22-26-4H(2)	Requires interconnectivity of pedestrian facilities associated with parking lots
Sec. 22-26-4I(2)	Requires entrances to be designed to VDOT standards (codifying existing policies)
Sec. 22-26-4I(3)	Specifies setbacks of entrances from intersections (comparable to New Kent)
Sec. 22-26-4I(4)	Specifies setbacks between entrances (comparable to New Kent)
Sec. 22-26-4K	Encourages the use of LID techniques
Sec. 22-26-4L	Requires the provision of pedestrian facilities within parking lots (comparable to Culpeper)
Sec. 22-26-5A	Specifically allows the use of permeable paving materials
Sec. 22-26-5A(2)	Allows the use of grass pavers with the approval of the Zoning Administrator (comparable to James City)
Sec. 22-26-8B	Explanation for uses not included in Table 1 Comparable to Albemarle, Hanover
Sec. 22-26-8C	Requires applicants requesting additional parking to choose one of two mitigation strategies. Virginia Beach requires excess parking to be paved using permeable materials. The landscaping provisions are comparable to current County policies.
Sec. 22-26-8D(1)	Allows for deviations from the minimum parking standards in certain instances. The provision of bicycle parking spaces may lead to parking reductions (comparable to Lexington-Fayette County, Kentucky). Reduction for New Urbanist/Neo-traditional projects comparable to language used for setback waivers within the current ordinance. Reductions based on a parking study are comparable to Louisa County's provisions.
Sec. 22-26-8D(2)	Specifies that possible reductions are not cumulative, which would allow for significant deviations from the minimum standards.
Sec. 22-26-8D(3)	Developers receiving a reduction may be required to set aside a parking reserve area (based <i>Pennsylvania Standards for Residential Site Development</i>)
Sec. 22-26-8E	Language copied from the PUD regulations

Explanation of Modifications to the Off-Street Parking Ordinance

Explanation of Minimum Parking Requirements per Use

Assisted Living Facility, Nursing Home	Changed “dwelling, multi-family, elderly” to assisted living facility because the former was not defined within the zoning ordinance. Comparable to Albemarle, Fauquier, Goochland, Louisa
Automobile Repair Service Establishments	Definition within current ordinance undefined within schedule Comparable to Orange
Beauty and Barber Shops	Comparable to James City
Churches	No Change Comparable to Albemarle, Culpeper, Fauquier, Gloucester, Goochland, Hanover, Louisa, New Kent, Orange
Community Center	No Change Comparable to James City
Daycare	No Change Comparable to Albemarle
Eating Establishment	Comparable to Gloucester, Hanover, Orange (Louisa, Culpeper, Cumberland require less parking)
Financial Institutions	Comparable to Culpeper, Fauquier, James City, New Kent
Furniture, Carpet, and Appliance Stores	Comparable to Culpeper, Fauquier, New Kent
Gas Stations	Comparable to Gloucester
Greenhouse, Nursery	Change to be consistent with retail adjustments Outdoor area parking requirements comparable to New Kent
Group Home	Comparable to Culpeper
Hotels, Motels	Additional language comparable to Albemarle, Greene, New Kent
Industrial/Commercial	Removed requirements, since new uses were added to the schedule.
Laundry	Comparable to Albemarle
Manufacturing	Comparable to Greene, James City
Multi-Family Dwellings	Number of parking spaces required is based upon the number of bedrooms Comparable to Albemarle, Culpeper
Office	Comparable to Culpeper, Gloucester, Goochland RCS recommended 3 spaces/1,000 square feet Hanover, Louisa require less parking
Professional School	Comparable to Gloucester
Retail Stores, Convenience Stores, Gas Stations	Comparable to Culpeper, Hanover RCS recommended 3 spaces per 1,000 square feet
Shopping Centers	Comparable to Culpeper RCS recommended 3 spaces per 1,000 square feet

Comparison of Minimum Parking Requirements among Virginia Localities for Select Uses

October 2011

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Residential Uses								
Single-Family Unit	2 spaces per unit	2 spaces per unit	2 spaces per unit	2 spaces per unit	1 space per unit	2 spaces per unit	2 spaces per unit	2 spaces per unit
Townhouse Unit	2.25 spaces per unit	Same as Multi-Family (Below)	2 spaces per unit	Same as Multi-Family (Below)	1 space per unit	2 spaces per unit Plus 1 space per 2 units (guests) Plus 1 space per 5 units (Boats, RVs, etc.)	2 spaces per unit 1 space per 3 units for visitor parking 1 bicycle space per 15 units	2 spaces per unit
Multi-Family Units								
Efficiency	2.25 spaces per unit	1 space per unit	1.25 spaces per unit	1 space per unit	1 space per unit	2 spaces per unit 1 space per 3 units (guests) 1 space per 5 units (Boats, RVs, etc.)	1.5 spaces per unit Plus 1 space per 3 units for visitor parking 1 bicycle space per 10 units	2 spaces per unit
One Bedroom	2.25 spaces per unit	1.25 spaces per unit	1.50 spaces per unit	1.25 spaces per unit	1 space per unit			2 spaces per unit
Two+Bedrooms	2.25 spaces per unit	Two Bedrooms: 1.5 spaces per unit Three Bedrooms: 2 spaces per unit	2 spaces per unit	Two Bedrooms: 1.5 spaces per unit Three Bedrooms: 2 spaces per unit	1 space per unit			2 spaces per unit
Group Home	Unspecified	0.5 spaces per bed at licensed capacity	Unspecified	0.5 spaces per bed at licensed capacity	Unspecified	1 space for guest accommodations	1 space per 3 beds Plus 1 space per employee at largest shift	Unspecified

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Residential Uses								
Single-Family Unit	2 spaces per unit	2 spaces per unit	1 space per unit	2 spaces per unit	2 spaces per unit	1 space per unit	2 spaces per unit	2 spaces per unit
Townhouse Unit	2.25 spaces per unit	Same as Multi-Family (Below)	2 spaces per unit	2 space per unit	2.5 spaces per unit	2 spaces per unit	2 spaces per unit	2 spaces per unit 1 space per 8 units (guest)
Multi-Family Units								
Efficiency	2.25 spaces per unit	1 space per unit	2 spaces per unit	2 spaces per unit	1.5 spaces per unit	2 spaces per unit	2 spaces per unit	2 spaces per unit Plus 1 space per 8 units (guest)
One Bedroom	2.25 spaces per unit	1.25 spaces per unit	2 spaces per unit	2 spaces per unit	1.5 spaces per unit	2 spaces per unit	2 spaces per unit	
Two+ Bedrooms	2.25 spaces per unit	Two Bedrooms: 1.5 spaces per unit Three Bedrooms: 2 spaces per unit	2 spaces per unit	2 space per unit	2.2 spaces per unit	2 spaces per unit	2 spaces per unit	
Group Home	Unspecified	0.5 spaces per bed at licensed capacity	1 space per sleeping room Plus 1 space for owner	1 space per bedroom	Total of one more parking space than the total number of rooms rented	1 per sleeping room	1 space per sleeping room Plus 1 space for owner	Unspecified

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Commercial and Industrial Uses								
Assisted Living Facility	1.25 spaces per unit Plus 1 space per employee on major shift	1 space per 3 residents Plus 1 space per employee on largest shift	1 space per 3 beds	0.5 spaces per bed at licensed capacity	Unspecified	1 space per 3 residents Plus 1 space per employee	1 space per 3 residents Plus 1 space per employee on the largest shift	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)
Automobile Repair/Service	Unspecified	3 spaces Plus 2 spaces for each service bay	1 space per employee Plus 2 spaces per each service stall Plus any accessory uses	1 space per 200 gross sq. ft. Minimum 5 spaces	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)	2 spaces per bay Plus 1 space per employee Minimum 5 spaces	1 space per 2 gasoline pumps Plus 2 spaces per service bay	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)
Bank	Unspecified	1 space per 250 sq. ft.	1 space per 150 square feet Requirement may be reduced by 25 sq. ft. per drive-in aisle	1 space per 250 gross sq. ft.	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)	1 space per 250 square feet If drive-in, 8 stacking spaces for first window plus 2 stacking spaces for each additional window.	1 space per 300 square feet Additional requirements if drive-in window 1 bicycle space per 15,000 sq. ft.	1 space per 200 square feet of floor area
Barber/Beauty Shop	Unspecified	2 spaces Plus 2 spaces for every barber or beautician chair	1 space per employee Plus 1 space per 200 sq. ft. gross floor area	Unspecified	Unspecified	1 space per 200 sq. ft. gross floor area	1 space per 300 square feet	1 space per 200 sq. ft. of floor area
Church or Other Place of Worship	1 space per 4 fixed seats or 1 space per 75 sq. ft. of assembly area, whichever is greater	1 space per 4 fixed seats or 1 space per 75 sq. ft. of assembly area, whichever is greater	In Development Area and seats more than 100 people: 1 space per 3 fixed seats or 1 space per 75 sq. ft. of assembly area, whichever is greater In Development Area and seats 100 people or less: 1 space per 4 fixed seats or 1 space per 75 sq. ft. of assembly area, whichever is greater In Rural Areas, the number of required spaces determined by the Zoning Administrator based on a parking study.	1 space per 4 fixed seats and/or one space per 6 occupants based on maximum occupancy rating of the facility for area without fixed seats	1 space per 5 fixed seats	1 space per 4 seats in the principal place of worship	1 space per 4 fixed seats in the main assembly area Plus 1 space per each 60 square feet of assembly area without fixed seats 1 bicycle space per 5,000 sq. ft.	1 space for every 5 fixed seats within the building, if the seats are fixed. If the seats are unfixed, 1 space per 100 square feet of usable floor space.

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Commercial and Industrial Uses								
Assisted Living Facility	1.25 spaces per unit Plus 1 space per employee on major shift	1 space per 3 residents Plus 1 space per employee on largest shift	1 space per 3 patient beds Plus 1 space per employee	2 spaces Plus 0.5 spaces per bedroom	1 space per 4 residents Plus 1 space per employee on the largest shift	1 space per 3 patient beds	1 space per 2 beds	1 space per 2 beds
Automobile Repair/Service	Unspecified	3 spaces Plus 2 spaces for each service bay	1 space per employee Plus 4 spaces per bay Plus 1 space per 200 sq. ft. of sales floor area	4 spaces per 1,000 sq. ft. for retail, display, and office floor area 1 space per 2000 sq. ft. for storage and shop Minimum 10 spaces for auto sales/service	1 space per 250 sq. ft.	1 space per employee Plus 2 spaces per service bay	1 space per 500 sq. ft. of enclosed rental and service floor area Plus 1 space per 25 sales/rental lot area Plus 2 spaces per service bay Plus 1 space per employee Minimum 5 spaces	Three spaces Plus two spaces for each service bay
Bank	Unspecified	1 space per 250 sq. ft.	1 space per 200 square feet of floor area	4 spaces per 1,000 square feet for the first 1,000 square feet of gross floor area 4.5 spaces per 1,000 square feet of gross square feet thereafter	1 space per 250 square feet	1 space per 200 square feet of floor area	1 space per 250 square feet	6 spaces for the first 1,000 square feet Plus 1 space for each additional 300 square feet of gross floor area
Barber/Beauty Shop	Unspecified	2 spaces Plus 2 spaces for every barber or beautician chair	1 space per 200 square feet of floor area	4 spaces per 1,000 square feet for the first 1,000 square feet of gross floor area 4.5 spaces per 1,000 square feet of gross square feet thereafter	3 spaces Plus 2 spaces per barber/beauty chair	1 space per 200 square feet of floor area	1 space per 200 square feet for the first 1,000 square feet of gross floor area 6 spaces for each 1,000 square feet thereafter	Unspecified
Church or Other Place of Worship	1 space per 4 fixed seats or 1 space per 75 sq. ft. of assembly area, whichever is greater	1 space per 4 fixed seats or 1 space per 75 sq. ft. of assembly area, whichever is greater	1 space per 4 seats in the principal place of worship Requirements may be reduced up to 50 percent if the place of worship is within 500 feet of any public parking lot or commercial parking lot where sufficient spaces are available by permission of the owner without charge during the time of service.	1 space per 4 seats in the principal place of worship	1 space per 5 seats based on maximum capacity	1 space per 4 seats in main auditorium	1 space per 4 seats in the principal place of worship Requirements may be reduced up to 50 percent if the place of worship is within 300 feet of any public parking lot or commercial parking lot where sufficient spaces are available by permission of the owner without charge during the time of service.	1 space per 4 seats or 1 space per 50 square feet of gross floor area

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Commercial and Industrial Uses (Continued)								
Daycare	1 space per 9 children	1 space per 9 children	1 space per 10 children enrolled in the major class Plus 1 space per employee	1 space per 300 gross sq. ft. Plus 3 spaces for off-street loading and unloading	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)	2 spaces per 3 employees Plus spaces for all people at facility under normal operating conditions	1 space per employee on the maximum shift Plus 1 space per 20 enrolled individuals 1 bicycle space per 30,000 sq. ft. of floor area	Unspecified
Furniture, Carpet, or Appliance Store	Unspecified	1 space per 500 sq. ft. of retail sales area	1 space per 400 sq. ft. of retail sales area	1 space per 500 sq. ft. Plus 1 space per employee	Unspecified	1 space per 500 sq. ft. net floor area Plus 1 space per employee	1 space per 500 square feet	Unspecified
Gas Station	1 space per 200 square feet for the first 15,000 square feet of gross floor area 1 space per 400 square feet of gross floor area thereafter Plus any required stacking lanes	1.5 spaces per pump Plus 2 spaces for each service bay	Unspecified	1 space per 500 sq. ft. Plus 1 space per employee	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)	1 space per 200 gross sq. ft. for the first 1000 square feet, plus 6 spaces for each additional 1,000 sq. ft.	1 space per 2 gasoline pumps Plus 2 spaces per service bay	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)
Hotel	1 space per each guest room Plus 1 space for 150 square feet for attached restaurant and/or meeting area	1 per unit Plus compliance with the requirements for each particular additional use located on premise	1 space per each guest room Plus compliance with the requirements for each particular additional use located on premise	1.1 space per guest room Plus requirements for accessory uses	1 space per guest room	1 space per rental unit Plus required spaces for affiliated facilities	1 space per room for first 100 units 0.9 spaces per room for units 101-200 0.8 spaces per room for units 201-300 0.7 spaces per room for units above 300 1 bicycle space per 100 units	1 space per each guest room Plus 1 space for every 2 employees Plus compliance with the requirements for each particular additional use located on premise
Manufacturing	1 space per 2 employees Plus 1 space per 200 sq. ft. open to the public	1 space per 2 employees on the largest shift Plus 1 space per company vehicle	1 space per employee on the largest shift Plus 1 space per 500 sq. ft. open to the public (min. 2 customer parking spaces)	1 space per 750 gross sq. ft.	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)	1 space per 1.5 employees on major shift Plus 1 space per company vehicle and piece of mobile equipment	1 space per employee on maximum shift Plus 1 space per company vehicle 1 bicycle space per 15,000 sq. ft. of office space	1 parking space per 2 employees, based on the maximum number of employees on a shift Plus 1 space per company vehicle and piece of mobile equipment
Office	≤10,000 sq. ft.: 1 space per 200 sq. ft. 5 spaces min. 10,001 to 50,000 sq. ft.: 1 space per 200 sq. ft. for first 10,000 sq. ft., 1 space per 250 sq. ft. thereafter >50,000 sq. ft.: 1 space per 200 sq. ft. for first 10,000 sq. ft., 1 space per 350 sq. ft. thereafter	1 space per 300 sq. ft., 5 spaces minimum, 1 space per 350 sq. ft. thereafter	1 space per 200 square feet of net office floor area	Up to 3,000 sq. ft.: 1 space per 200 sq. ft. Plus 1 space per 300 sq. ft. 3,001 – 10,000 sq. ft. Plus 1 space per 325 sq. ft. above 10,000 sq. ft.	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)	4.5 spaces per 1000 square feet of gross floor area Plus 1 space per company vehicle	1 space per 300 square feet Minimum 3 spaces 1 bicycle space per 15,000 sq. ft. of office space	1 space per 200 square feet of floor area

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Commercial and Industrial Uses (Continued)								
Daycare	1 space per 9 children	1 space per 9 children	1space per 20 children Plus 1 space per facility vehicle Plus 5 spaces for unloading and loading children	1 space per 350 square feet of gross floor area	Unspecified	Unspecified	2 spaces per 3 employees	1 space per 6 children of design capacity
Furniture, Carpet, or Appliance	Unspecified	1 space per 500 sq. ft. of retail sales area	Unspecified	1 space per 1,000 sq. ft. gross floor area	1 space per 400 sq. ft. of retail floor area	Unspecified	1 space per 500 sq. ft of gross floor area	1 space per 750 sq. ft. of gross floor area
Gas Stations	1 space per 200 square feet for the first 15,000 square feet of gross floor area 1 space per 400 square feet of gross floor area thereafter Plus any required stacking lanes	1.5 spaces per pump Plus 2 spaces for each service bay	Unspecified (Unspecified uses require 1 parking space for each 200 sq. ft. of business floor area)	Unspecified	Unspecified	Unspecified	1 space for every 150 sq. ft. of gross floor space Such spaces shall be separated by the driveway and general apron areas which give access to the gasoline and air pumps and any service areas; all parking spaces shall be located between the retail facility and the gasoline dispensing pumps.	Unspecified
Hotel	1 space per each guest room Plus 1 space for 150 square feet for attached restaurant and/or meeting area	1 per unit Plus compliance with the requirements for each particular additional use located on premise	1 space per employee Plus 1 space per sleeping room or suite	1 space per guest room Plus 5 additional spaces (for employees)	1 space per guest room Plus 1 space per 50 rooms Plus 1 space per 5 person of the maximum capacity of each meeting room	1 space per employee Plus 1 space per sleeping room or suite	1 spaces per each guest room Plus 1 space per employee Plus compliance with the requirements for each particular additional use located on premise	Unspecified
Manufacturing	1 space per 2 employees Plus 1 space per 200 sq. ft. open to the public	1 space per 2 employees on the largest shift Plus 1 space per company vehicle	2 spaces per each 3 employees on maximum working shift Plus 1 space per company vehicle	1 space per 5,000 sq. ft. gross floor area Plus 1 space per 400 sq. ft. of office area	1 space per 2 employees on the largest shift	1 space per employee on maximum working shift Plus 1 space per company vehicle and piece of mobile equipment	1 parking space for each employee on the maximum work shift Plus 1 space per company vehicle	1 space for each employee working at any time
Office	≤10,000 sq. ft: 1 space per 200 sq. ft. 5 spaces min. 10,001 to 50,000 sq. ft: 1 space per 200 sq. ft. for first 10,000 square feet., 1 space per 250 sq. ft. thereafter >50,000 sq. ft: 1 space per 200 sq. ft. for first 10,000 square feet, 1 space per 350 sq. ft. thereafter	1 space per 300 sq. ft. for the first 15,000 square feet, 5 spaces minimum, 1 space per 350 sq. ft. thereafter	1 space per 300 square feet of floor area Plus space for storage of each truck or other vehicle used in connection with the business or industry 3 spaces minimum	1 space per 400 square feet of gross floor area	1 space per 250 square feet	1 space per 400 square feet of floor area 3 spaces minimum	1 space per 200 square feet of gross floor area	6 spaces for the first 1,000 square feet Plus 1 space for each additional 300 square feet of gross floor area

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Commercial and Industrial Uses (Continued)								
Restaurant (General)	2 spaces per 100 gross square feet, 15 spaces min.	1 space per 100 gross square feet, 10 spaces min.	13 spaces per 1,000 square feet of gross floor area Drive-thru lanes require 5 queue spaces per lane	1 space per 150 gross sq. ft.	1 space per 250 square feet	1 space per 4 seats Plus 1 space per 2 employees for sit-down restaurants, 1 space per 2 employees where seating is at a counter	1 space per 100 square feet 1 bicycle space per 5,000 sq. ft.	1 parking space per table or booth Plus 6 parking spaces for employees
Restaurant (Fast Food)	2 spaces per 100 gross square feet, 15 spaces min.	1 space per 100 gross square feet, 10 spaces min.	13 spaces per 1,000 square feet of gross floor area Drive-thru lanes require 5 queue spaces per lane	1 space per 75 gross sq. ft. Minimum 5 spaces	1 space per 250 square feet	1 space per 4 seats Plus 1 space per 2 employees for sit-down restaurants, 1 space per 2 employees where seating is at a counter	1 space per 100 square feet Plus 10 stacking spaces for the 1 st drive-in window, 3 spaces for each window thereafter 1 bicycle space per 5,000 sq. ft.	1 parking space per table or booth Plus 6 parking spaces for employees
Retail	1 space per 200 square feet for the first 15,000 square feet of gross floor area 1 space per 400 square feet of gross floor area thereafter	1 space per 250 sq. ft. for the first 15,000 square feet, 1 space per 350 sq. ft. thereafter	1 space per 100 square feet of retail sales area for the first 5,000 square feet 1 space per 200 square feet of retail sales area thereafter	Up to 20,000 sq. ft.: 1 space per 250 sq. ft. Plus 1 space per 275 sq. ft. 20,001 – 100,000 sq. ft. Plus 1 space per 300 sq. ft. above 100,000 sq. ft.	1 space per 250 square feet of retail floor space	1 space per 200 gross sq. ft. for the first 1000 square feet, plus 6 spaces for each additional 1,000 sq. ft.	1 space per 200 square feet 1 bicycle space per 5,000 sq. ft.	1 space per 200 square feet of floor area
Shopping Centers	≤10,000 sq. ft.: 5 spaces per 1,000 square feet 15,000 to 50,000 sq. ft.: 4.5 spaces per 1,000 square feet >50,000 sq. ft.: 4 spaces per 1,000 square feet	≤10,000 sq. ft.: 4 spaces per 1,000 square feet 15,000 to 50,000 sq. ft.: 3.5 spaces per 1,000 square feet >50,000 sq. ft.: 3 spaces per 1,000 square feet	10,000 - 24,999 sq. ft.: 5.5 spaces per 1,000 sq. ft. 25,000 - 50,000 sq. ft.: 5 spaces per 1,000 sq. ft. 50,001 - 200,000 sq. ft.: 4.75 sq. ft. 200,001 - 600,000 sq. ft.: 4.5 spaces per 1,000 sq. ft. 600,001 - 750,000 sq. ft.: 4.75 spaces per 1,000 sq. ft. 750,001 sq. ft. or larger: 5 spaces per 1,000 sq. ft.	Up to 20,000 sq. ft.: 1 space per 250 sq. ft. Plus 1 space per 275 sq. ft. for 20,001 – 100,000 sq. ft. Plus 1 space per 300 sq. ft. above 100,000 sq. ft.	1 space per 250 square feet of retail floor space	1 space per 200 gross sq. ft. for the first 1000 square feet, plus 6 spaces for each additional 1,000 sq. ft.	1 space per 200 square feet	1 space per 200 square feet of floor area

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Commercial and Industrial Uses (Continued)								
Restaurant (General)	2 spaces per 100 gross square feet, 15 spaces min.	1 space per 100 gross square feet, 10 spaces min.	1 space per 3 seats Plus 1 space per each employee on the largest shift	1 space per 100 square feet of gross floor area	1 space per 4 seats based on maximum capacity	1 space per 200 square feet of floor area	1 space for every 3 seats or 1 space for every 3 persons of rated building capacity Drive-thru lanes require 6 queue spaces per lane	1 space per 100 square feet
Restaurant (Fast Food)	2 spaces per 100 gross square feet, 15 spaces min.	1 space per 100 gross square feet, 10 spaces min.	1 space per 3 seats Plus 1 space per each employee on the largest shift	1.75 spaces per 100 sq. ft. of gross floor area	1 space per 4 seats based on maximum capacity	1 space per 200 square feet of floor area	1 space for every 3 seats or 1 space for every 3 persons of rated building capacity Drive-thru lanes require 6 queue spaces per lane	1 space per 100 square feet
Retail	1 space per 200 square feet for the first 15,000 square feet of gross floor area 1 space per 400 square feet of gross floor area thereafter	1 space per 250 sq. ft. for the first 15,000 square feet, 1 space per 350 sq. ft. thereafter	1 space per 200 square feet of floor area	4 spaces per 1,000 square feet for the first 1,000 square feet of gross floor area 4.5 spaces per 1,000 square feet of gross square feet thereafter	1 space per 200 square feet	1 space per 200 square feet of floor area	1 space per 200 square feet for the first 1,000 square feet of gross floor area 6 spaces for each 1,000 square feet thereafter	1 space per 200 square feet
Shopping Centers	≤10,000 sq. ft.: 5 spaces per 1,000 square feet 15,000 to 50,000 sq. ft.: 4.5 spaces per 1,000 square feet >50,000 sq. ft.: 4 spaces per 1,000 square feet	≤10,000 sq. ft.: 4 spaces per 1,000 square feet 15,000 to 50,000 sq. ft.: 3.5 spaces per 1,000 square feet >50,000 sq. ft.: 3 spaces per 1,000 square feet	<25,000 sq. ft.: 5 spaces per 1,000 square feet of rental floor area >25,000 sq. ft.: 4 spaces per 1,000 of renal floor area	4 spaces per 1,000 square feet for the first 1,000 square feet of gross floor area 4.5 spaces per 1,000 square feet of gross square feet thereafter	<300,000 sq. ft.: 4 spaces per 1,000 square feet >300,000 sq. ft.: 4.5 spaces per 1,000 square feet	<25,000 sq. ft.: 1 space per 200 square feet of floor area Larger centers not specified	10,000 to 25,000 sq. ft.: 5 spaces per 1,000 sq. ft. 25,000 to 400,000 sq. ft.: 4 spaces per 1,000 sq. ft. 400,000 to 600,000 sq. ft.: 4.5 sq. ft. Over 600,000 sq. ft.: 5 spaces per 1,000 sq. ft.	1 space per 225 square feet

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Civic & Recreational Uses								
Professional School	Unspecified	1 space per 2 students at maximum capacity Plus 1 space per classroom	Determination made by Zoning Administrator based on a parking study	1 space per 300 gross square feet	Unspecified	2 spaces per each 3 employees Plus enough spaces to accommodate all persons at the establishment during normal operations	1 space per 2 students at the maximum capacity Plus 1 space per classroom 1 bicycle space per 30 students at capacity	1 space per teacher, employee, or administrator Plus auditorium parking requirements
Community Center	1 space per 300 square feet	1 space per 300 square feet	1 space per 3 fixed seats or 1 space per 75 sq. ft., whichever is greater	1 space per 4 fixed seats and/or 1 space per 6 occupants based on maximum occupancy	1 space for every 5 fixed seats	Unspecified	As required for uses specifically listed, plus additional spaces to accommodate anticipated demand. 1 bicycle space per 10 patrons, based on maximum demand	1 space per 100 sq. ft. of usable floor space
Golf Course or Club	2 spaces per hole	2 spaces per hole	4 spaces per hole Plus 1 for each employee	3 spaces per hole Plus required parking for accessory uses	Unspecified (Unspecified commercial buildings require 1 space per 100 square feet)	1 space per 4 members based on maximum anticipated membership	50 spaces per 9 holes	25 parking spaces

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Civic & Recreational Uses								
Professional School	Unspecified	1 space per 2 students at maximum capacity Plus 1 space per classroom	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Community Center	1 space per 300 square feet	1 space per 300 square feet	Unspecified	10 spaces Plus 1 space per 300 sq. ft. gross floor area in excess of 1,000 sq. ft.	1 space per 200 square feet	Unspecified	1 space per 100 sq. ft. of gross floor area	1 space per 50 sq. ft. of gross floor area in main assembly area
Golf Course or Club	2 spaces per hole	2 spaces per hole	1 space per 2 employees Plus 3 spaces per hole	5 spaces per hole (including putting green) and 1 space per tee for a driving range	Unspecified	1 space per 5 members or 1 for every 400 sq. ft. of floor area, whichever is greater	8 parking spaces per tee	5 spaces per hole

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Parking Lot Specifications								
Parking Requirements	Parking lots for 5 or more vehicles must be surfaced with at least 6" of VDOT #21 or #21A aggregate base May be reduced to a base of 3" for some low-traffic uses	Parking lots for 5 or more vehicles must be surfaced with at least 6" of VDOT #21 or #21A aggregate base May be reduced to a base of 3" for some low-traffic uses Hard-surface permeable paving permitted; grass pavers permitted with special approval	Parking lots for 4 or more vehicles must be surfaced with a material approved by the County Engineer, based on the intensity of usage and VDOT paving guidelines.	Unspecified	All public parking areas must be surfaced with asphalt or concrete.	Parking lots for 4 or more vehicles must be constructed with a dustless surface. For preliminary site plans, the Planning Director may not require dustless surfaces if the area will be used temporarily or infrequently. The Planning Commission may grant similar exemption for final site plans.	Unspecified	All parking spaces and access driveways must be covered with an all-weather surface. Every public parking area must be surfaced with gravel, stone, asphalt, or concrete.
Stall Size	20' Aisle: 10' x 18' 24' Aisle: 9' x 18'	20' Aisle: 10' x 18' 24' Aisle: 9' x 18' Parallel: 9' x 20.5' Other angles defined	20' Aisle: 10' x 18' 24' Aisle: 9' x 18' Parallel: 9' x 20'	Standard: 9' x 19' Parallel: 9' x 20.5'	Unspecified	Unspecified	Standard: 9' x 18'	20' Aisle: 10' x 18' 24' Aisle: 9' x 18'
Compact Cars	Unspecified	Up to 20% of spaces may be designated for compact cars in lots with ≥30 spaces Perpendicular: 8' x 17' Parallel: 7.5' x 18.5' Other angles defined	Unspecified	Up to 20% of spaces may be designated for compact cars Size: 8' x 17'	Unspecified	Unspecified	Unspecified	Unspecified
On-Street Parking	May not count towards parking requirements	On-street parking spaces in a public or private ROW with 150' of use may count towards the parking requirements. If located in a public ROW, must be approved by VDOT.	On-street parking spaces in a public or private ROW abutting the lot may count towards the parking requirements. If located in a public ROW, must be approved by VDOT.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Siting in Relation to Building	To the greatest extent possible, parking areas shall not be located between the right-of-way and the principal structure.	To the greatest extent possible, parking areas shall not be located between the right-of-way and the principal structure.	Unspecified	Parking lot setbacks: From Arterial Streets: 20' From Other Streets: 10' Along a Lot Line: 5' Along Alleys: 0'	Unspecified	Unspecified	Unspecified	Unspecified
Access Management	Unspecified	Only two access points are permitted per lot per street. The centerlines of any separate access points must be spaced at least 75 feet apart and be set back from the street line of any intersecting street at least 50' or ½ of the lot frontage, whichever is greater, except for in no case may the setback distance exceed 200'.	On multi-lane divided highways, no parking lot entrance, unless it is directly across from a crossover, may be within 500 feet of a crossover, unless there is no other reasonable alternative. Connections with adjoining properties may be required.	No specified standards Ordinance states that parking lot access should not interfere with traffic capacity or flow on adjacent streets	Unspecified	Unspecified	No specific standards Ordinance states that access points should be located so that vehicles entering or leaving the use can be clearly visible from a reasonable distance to any pedestrian or motorist on the adjacent roadway.	Unspecified

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Parking Lot Specifications								
Parking Requirements	Parking lots for 5 or more vehicles must be surfaced with at least 6" of VDOT #21 or #21A aggregate base May be reduced to a base of 3" for some low-traffic uses	Parking lots for 5 or more vehicles must be surfaced with at least 6" of VDOT #21 or #21A aggregate base May be reduced to a base of 3" for some low-traffic uses Hard-surface permeable paving permitted; grass pavers permitted with special approval	All parking lots with more than 10 spaces must be paved with an all-weather surface. Parking lots less than 10 spaces may be covered with gravel; the handicapped spaces must be paved.	Unspecified	All parking areas must be surfaced with gravel, stone, asphalt, or concrete. The use of grass pavers may be permitted in low-traffic areas upon approval of the planning director, where it can be demonstrated that the vegetation will survive the amount of expected traffic.	All parking lots must be paved with an all-weather surface consisting of gravel, stone, asphalt or concrete.	All parking lots with more than 50 spaces must be paved with asphalt, concrete, or tar and gravel. Parking lots with less than 50 spaces must be dust-free.	All parking lots shall be surfaced with gravel, asphalt, or concrete.
Stall Size	20' Aisle: 10' x 18' 24' Aisle: 9' x 18'	20' Aisle: 10' x 18' 24' Aisle: 9' x 18' Parallel: 9' x 20.5' Other angles defined	Standard: 9' x 18'	Standard: 9' x 18'	Standard: 9' x 18' Parallel: 8' x 22'	Standard: 9' x 18' Compact: 8' x 16'	Standard: 9' x 18'	Standard: 9' x 18'
Compact Cars	Unspecified	Up to 20% of spaces may be designated for compact cars in lots with ≥30 spaces Perpendicular: 8' x 17' Parallel: 7.5' x 18.5' Other angles defined	Unspecified	Unspecified	Unspecified	Up to 20% of spaces may be designated for compact cars	Unspecified	Unspecified
On-Street Parking	Unspecified	On-street parking spaces in a public or private ROW with 150' of use may count towards the parking requirements. If located in a public ROW, must be approved by VDOT.	Parking space specifically defined as not being located in a street or alley.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Siting in Relation to Building	To the greatest extent possible, parking areas shall not be located between the right-of-way and the principal structure.	To the greatest extent possible, parking areas shall not be located between the right-of-way and the principal structure.	Parking areas may be located in any required yard.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Access Management	Unspecified	Only two access points are permitted per lot per street. The centerlines of any separate access points must be spaced at least 75 feet apart and be set back from the street line of any intersecting street at least 50' or ½ of the lot frontage, whichever is greater, except for in no case may the setback distance exceed 200'.	Not more than 1 entrance and 1 exit, or 1 combined entrance, should be allowed along primary roads.	Non-commercial or industrial uses may only have 1 entrance and 1 exit, or 1 combined entrance, along any street. Commercial and industrial sites may only have 1 point of access to the public road for every 300' of frontage.	While reviewing the site plan, the Planning Commission may require the location, number, and/or size of proposed entrances to be modified, limited, or increased.	Generally, no more than 1 entrance and 1 exit. 1 combined entrance/exit per street is encouraged.	Only two access points are permitted per lot per street. The centerlines of any separate access points: <ul style="list-style-type: none"> • Must be spaced at least 65 feet apart; • Must be at least 12.5' from any side property line; and • Be set back from the street line of any intersecting street at least 50' or ½ of the lot frontage, whichever is greater, except for in no case may the setback distance exceed 200'. 	

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Parking Lot Specifications (Continued)								
Parking Maximum	May not exceed required spaces by 40% without Planning Commission approval	May not exceed required spaces by 40% without Planning Commission approval and use of permeable paving or additional landscaping	May not exceed required spaces by 20%	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Modifications	Unspecified	<p>In designated growth areas, the minimum parking requirements may be reduced by up to 5% for lots of 50 or more spaces if:</p> <ul style="list-style-type: none"> • Site is located within 300' of a transit stop and connected to it by a sidewalk; or • Bicycle parking is provided (1 bicycle space = 1 parking space reduction) <p>The minimum parking requirements may be reduced up to 10% if:</p> <ul style="list-style-type: none"> • Additional landscaping is provided (1 tree, 3 shrubs for every two spaces reduced); or • New Urbanist principles are used on-site. <p>The minimum parking spaces may be reduced up to 25% with the submission of a parking study and approval of the Zoning Administrator.</p> <p>Possible modifications are not cumulative.</p> <p>The Zoning Administrator may require a reserve parking area to be shown on the site plan, so additional parking can be constructed if needed.</p> <p>May be reduced within the PUD</p>	<p>May be permitted in commercial and industrial districts, or for projects utilizing Transportation Demand Management practices, with the approval of the Zoning Administrator.</p> <p>The applicant must submit a parking study.</p> <p>Zoning Administrator may impose conditions on the modification, including the requirement of a reserve area for parking expansion if needed.</p>	<p>May be permitted in connection with the approval of a site plan where the Planning Commission specifically grants a modification</p>	Unspecified	<p>Neighborhood retail commercial uses oriented towards pedestrian or bicycle traffic may receive a 20% reduction in parking requirements with the approval of the Board of Supervisors.</p> <p>If an applicant can demonstrate through technical studies, shared parking agreements, or other evidence that the parking requirements are excessive, the Planning Director may determine the number of required spaces.</p>	<p>Developments that generate 1,000 or more ADT and are located on major collectors (or higher) must dedicate land for transit operations. If a transit route exists or will exist within a year on the site, a bus shelter must be constructed. When transit provisions are required, the parking requirements are reduced by 5%.</p> <p>Employers that adopt and certify their continued support for a transportation demand management program that encourages alternative modes of transportation may receive a 5% reduction for each of the following:</p> <ul style="list-style-type: none"> • Rideshare program • Flexible work schedules • On-site child care • Telecommuting program • Special bicycle facilities, including employee showers and lockers and covered bicycle parking. <p>When off-street parking credit is given, a land area sufficient to construct 50% of the spaces credited shall be reserved.</p> <p>If a use within the Courthouse Village can not reasonably comply with the parking requirements, the Zoning Administrator may modify or waive the requirements.</p>	Unspecified

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Parking Lot Specifications (Continued)								
Parking Maximum	May not exceed required spaces by 40% without Planning Commission approval	May not exceed required spaces by 40% without Planning Commission approval and use of permeable paving or additional landscaping	Unspecified	Unspecified	Unspecified	Unspecified	May not exceed minimum parking by more than 10% The zoning administrator may permit parking beyond this limit if, after the facility is in operation, it is clearly demonstrated by the owner that additional parking is required.	Unspecified
Modifications	Unspecified	<p>In designated growth areas, the minimum parking requirements may be reduced by up to 5% for lots of 50 or more spaces if:</p> <ul style="list-style-type: none"> • Site is located within 300' of a transit stop and connected to it by a sidewalk; or • Bicycle parking is provided (1 bicycle space = 1 parking space reduction) <p>The minimum parking requirements may be reduced up to 10% if:</p> <ul style="list-style-type: none"> • Additional landscaping is provided (1 tree, 3 shrubs for every two spaces reduced); or • New Urbanist principles are used on-site. <p>The minimum parking spaces may be reduced up to 25% with the submission of a parking study and approval of the Zoning Administrator.</p> <p>Possible modifications are not cumulative.</p> <p>The Zoning Administrator may require a reserve parking area to be shown on the site plan, so additional parking can be constructed if needed.</p> <p>May be reduced within the PUD</p>	Unspecified	<p>If multiple uses are located within the same building or premises, the required parking may be reduced up to 30% with the approval of the Planning Director.</p> <p>Exceptions to the standards may be granted by the Board of Supervisors.</p> <p>The Board of Supervisors may allow for shared parking and/or off-site parking for properties owned by a community development authority.</p>	<p>The minimum number of parking spaces may be reduced with approval of a mass transportation or alternate transportation plan. A reserve area must be set aside that is equal to the size of the number of spaces that were reduced. The Planning Director and Transit Manager must review the plan every two years; if they determine the mass transportation plan has not reduced the demand for parking, more parking may be required to be built in the reserve area.</p> <p>The Planning Commission may grant a waiver reducing the minimum off-street parking requirements if unique circumstances indicate that the minimum amount of parking will not be needed.</p>	<p>The applicant may, with the submission of a parking study, request a reduction in the minimum parking requirements of up to 20%. This reduction must be approved by the Planning Commission and Zoning Administrator.</p> <p>The Zoning Administrator may reduce the minimum parking requirements by up to 10% based on how effectively a site accommodates inter-parcel connectivity and pedestrian movement (walkability).</p>	Unspecified	

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Parking Lot Specifications (Continued)								
Shared Parking	20' Aisle: 10' x 18' 24' Aisle: 9' x 18'	Permitted with the approval of the Planning Director and County Attorney. A shared parking agreement is required. Public parking spaces may count toward parking requirements if within 600' of subject property	Shared parking agreements are permitted between certain uses with the recordation of the written agreement.	Shared parking agreements are permitted with the approval of the Board of Supervisors. The agreement may result in a reduction of up to 20%.	Shared parking is permitted with the approval of the Planning Director, with the submission of a parking analysis and shared parking agreement approved by the County Attorney.	Shared parking agreements are permitted between certain uses.	A reduction in the number of parking spaces can be made by the Zoning Administrator if it can be clearly demonstrated that peak utilization of the parking facility by the users occurs at different times of day.	
Pedestrian Connections	Unspecified	For parking lots with 5 or more spaces, sidewalks must connect points of pedestrian origin and destination. Sidewalks must comply with the most recent VDOT standards.	Sidewalks must be provided between the parking area and the use/structure they serve.	Pedestrian facilities are addressed throughout the ordinance. The ordinance states that "layout and design of parking lots shall specifically address the interrelation of pedestrians, vehicular and bicycle traffic to provide continuous, direct pedestrian access with a minimum of driveway and drive aisle crossings. Remedial treatment such as raised pedestrian crossings, forecourts and landings, special paving, signs, lights and bollards shall be provided at significant points of conflict. Large parking lots shall include internal walkways that are located in places that are logical and convenient for pedestrians" (Sec. 10-6d). Connections must link to existing or planned pedestrian facilities.	Unspecified	Unspecified	Pedestrian accommodations shall be provided in all developments anticipated to have at least 25 employees on any shift or 500 ADT.	Unspecified
Minimum Parking Requirements Schedule	30 uses grouped into categories by type of use	40 uses grouped into categories by type of use	63 uses listed alphabetically If a use is not listed, the Zoning Administrator determines the parking requirements. A parking study may be required to make the decision.	62 uses grouped into categories by type of use (Residential, Commercial, etc.) If a use is not listed, the Zoning Administrator determines the parking requirements.	8 types of uses listed. Similar uses are placed in small groups (1 – 5 uses) seemingly based on traffic generation. About 23 uses defined in all. Commercial uses not listed must have 1 parking space per 100 sq. ft. of building area. No other provisions are listed.	53 uses grouped into categories by type of use (Residential, Commercial, etc.) If a use is not listed, the Planning Director determines the parking requirements.	107 uses grouped into categories by type of use (Agricultural, Recreational, Residential, Commercial, Industrial, and Miscellaneous). Each category shows the included uses in a table.	9 types of uses listed. Similar uses are placed in small groups (1 – 5 uses) seemingly based on traffic generation. About 25 uses defined in all. Commercial uses not listed must have 1 parking space per 100 sq. ft. of building area. No other provisions are listed.

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Parking Lot Specifications (Continued)								
Shared Parking	Permitted with the approval of the Planning Director and County Attorney. A shared parking agreement is required. Public parking spaces may count toward parking requirements if within 600' of subject property	Permitted with the approval of the Planning Director and County Attorney. A shared parking agreement is required. Public parking spaces may count toward parking requirements if within 600' of subject property	Permitted with the approval of the Zoning Administrator. The applicant must submit a parking study. Maximum Reduction: 35%	Permitted with the approval of the Planning Commission in conjunction with site plan approval	Unspecified	Permitted with the approval of the Board of Supervisors	Permitted with the approval of the Zoning Administrator. The applicant must submit a written agreement with the application of a zoning permit.	Unspecified
Pedestrian Connections	Unspecified	For parking lots with 5 or more spaces, sidewalks must connect points of pedestrian origin and destination. Sidewalks must comply with the most recent VDOT standards.	Unspecified	Unspecified	Sidewalk plans providing internal pedestrian access between parking areas, buildings, and public areas are required for multi-family residential and nonresidential development sites.	Unspecified Reductions may be permitted if the use is connected to other uses with pedestrian facilities.	Sidewalk is required adjacent to a business or industrial building and must be at least 4' wide. If vehicles overhang the sidewalk, it must be 6.5' wide.	
Minimum Parking Requirements Schedule	30 uses grouped into categories by type of use	40 uses grouped into categories by type of use	32 uses included in a table	32 uses included in a table If a use is not listed, the Planning Director determines the parking requirements.	53 uses listed Uses grouped in categories according to type of use (Residential, Commercial, Industrial) Commercial uses divided into 3 subcategories: High Demand, Moderate Demand, and Unique Requirements If a use is not listed, the Planning Director determines the parking requirements.	18 uses listed If a use is not listed, the Zoning Administrator determines the parking requirements	34 uses included in a table	16 uses listed

Use	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Bicycles								
Bicycle Parking Requirements	Unspecified	Unspecified	Unspecified	<p>Minimum Number: 5% of automobile spaces provided; no less than 1 and no more than 20 shall be required for any one development.</p> <p>Bicycles must be considered in the parking lot design.</p> <p>The on-site bicycle network must connect to an adjacent bikeway network if it exists.</p>	Unspecified	Unspecified	<p>Bicycle accommodations shall be provided in all developments anticipated to have at least 25 employees on any shift or 500 ADT.</p> <p>Minimum parking requirements schedule includes bicycle parking requirements for select uses.</p> <p>Required bicycle parking may not be more than 250' from the principal use being served.</p>	Unspecified

Use	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Bicycles								
Bicycle Parking Requirements	Unspecified	Unspecified	Unspecified	Unspecified	<p>Bicycle parking facilities are required for all retail and office development 20,000 sq. ft. in floor area and above.</p> <p>20,000 – 50,000 sq. ft.: 1 facility with at least 5 parking spaces 50,001 – 200,000 sq. ft.: 2 facilities with at least 5 parking spaces each 200,001 sq. ft. or more: 3 facilities with at least 5 parking spaces each</p>	Unspecified	Unspecified	Unspecified

Links to Ordinances

Albemarle County Code:

<http://www.albemarle.org/departments.asp?department=ctyatty&relpage=2127>

Buckingham County Zoning Ordinance:

<http://www.buckinghamcountyva.org/zoning/Zoning%20Ordinance%20adopted%2011-9-10%20-%20art9%20included.pdf>

(Note: Buckingham County does not have parking regulations as of October 2011, according to Planning Staff.)

Culpeper County Code:

<http://library.municode.com/index.aspx?clientID=14078&stateID=46&statename=Virginia>

Cumberland County Zoning Ordinance:

http://library1.municode.com/default-test/home.htm?infobase=13342&doc_action=whatsnew

Fauquier County Zoning Ordinance:

<http://www.fauquiercounty.gov/government/departments/commdev/index.cfm?action=zoningordinance1>

Gloucester County Code:

<http://library.municode.com/index.aspx?clientID=10843&stateID=46&statename=Virginia>

Greene County Code:

<http://www.gcva.us/dpts/plan/Zon%20Ord%202011-08-23.pdf>

Goochland County Code:

<http://www.co.goochland.va.us/Departments/DepartmentsAF/BoardofSupervisors/GoochlandCountyCode.aspx>

Hanover County Code:

<http://library.municode.com/index.aspx?clientID=10338&stateID=46&statename=Virginia>

James City County Code:

<http://www.jccegov.com/attorney/county-code.html>

Louisa County Code:

<http://library.municode.com/index.aspx?clientID=12480&stateID=46&stateName=Virginia>

New Kent County Code:

<http://library.municode.com/index.aspx?clientID=13371&stateID=46&statename=Virginia>

(Note: As of October 2011, New Kent was in the process of revising its parking standards.)

Orange County Code:

<http://library.municode.com/index.aspx?clientID=13257&stateID=46&statename=Virginia>



COUNTY OF FLUVANNA

"Responsive & Responsible Government"

P.O. Box 540 Palmyra, VA 22963 (434) 591-1910 FAX (434) 591-1911 www.co.fluvanna.va.us

Memo

To: Fluvanna County Planning Commission
From: Andrew J. Pompei, Planner
Date: March 8, 2012
Re: Review of the Tree Protection Section of the Zoning Ordinance

Over the past year, the Planning Commission and Department of Planning & Community Development have worked together to amend the subdivision and zoning ordinances, so that these policies are consistent with the intent of the current Comprehensive Plan. Since late 2011, the Planning Commission has considered changes to the Tree Protection section of the zoning ordinance. The Tree Protection regulations address the landscaping requirements for new development. Possible amendments were discussed at the Planning Commission work sessions in January and February.

Based on input from the Planning Commission, as well as local landscape architects and developers, amendments to the Tree Protection section of the zoning ordinance have been prepared. A draft of the proposed changes was presented to the Planning Commission at its work session in February. Modifications to the draft made since the last work session have been highlighted in red.

The agenda packet for the Planning Commission work session on March 14 includes the following documents related to the Tree Protection section of the zoning ordinance:

- Summary of Draft Regulations
- Draft of Tree Protection Section of the Zoning Ordinance
- Explanation of Modifications to the Tree Protection Ordinance
- Comparison of the Existing/Proposed Tree Protection Ordinance to Other Virginia Localities

If you have any concerns, please contact the Planning Department at (434) 591-1910 or via email.

Tree Protection
Summary of Draft Regulations
March 8, 2012

Intent/Purpose

The proposed tree protection/landscaping regulations are intended to:

- Ensure that new development is compatible with existing development and the rural character of Fluvanna County;
- Minimize the impacts of new development on local air and water quality;
- Provide shade to the users of the new development; and
- Provide habitat for wildlife.

Highlights

Below is a summary of the proposed changes to the tree protection/landscaping regulations:

Minimum Size of Plant Materials at Installation

The minimum size requirements for new plantings have been reduced. Smaller plants are typically priced lower than larger specimens, and they are better able to acclimate to new growing conditions; this leads to a higher survival rate.

Riparian Protection Areas

All site plans and major subdivisions must reserve a riparian protection area along both sides of intermittent and perennial streams (50' along intermittent streams; 75' along perennial streams; and 100' along the Hardware, Rivanna, and James rivers). Existing vegetation within the riparian protection area must be retained to the greatest extent possible; certain exceptions are clearly specified.

Tree Canopy Requirements

All new commercial, industrial, and multi-family residential projects must have a certain portion of their area under tree canopy. Ten years after planting, the tree canopy must cover at least ten percent (10%) of commercial and industrial sites and at least fifteen to twenty percent (15 – 20%) of multi-family residential sites, depending on the density. Developers may receive bonus credit towards the tree canopy requirements for preserving existing trees.

Street Trees

Street trees are required along existing or proposed streets within or adjacent to any site that is subject to site plan approval, and all major subdivisions with an average lot size of one acre or less. One shade tree is required for every forty feet (40') of road frontage, or one medium shade

tree is required for every twenty-five feet (25') of road frontage. The existing ordinance does not require street trees to be planted within single-family residential subdivisions.

Parking Lot Landscaping

More landscaping is required within, and adjacent to, parking areas. The size of parking islands has increased slightly, and the amount of landscaping required within each island has increased. Developers may choose from one of four screening options, each of which consists of a different palette of plantings.

Screening

Developers may choose from one of five screening options, each of which consists of a different palette of plantings. Dumpsters and other refuse areas within commercial, industrial, and multi-family residential developments must be screened from view by a masonry wall.

Maintenance

Proposed maintenance provisions require the landowner to properly maintain all required landscaping. Landscaped beds must be kept mulched and free from trash, plant material must be pruned, and turf areas must be mowed.

Bonding

Per the proposed amendments, developers must submit a landscaping maintenance bond that will be retained for three years following the initial planting. The maintenance bond must be equal to one-third (1/3) of the value of the required landscaping. This provision would enable the County to better enforce the current requirement that landscaping be maintained in healthy condition for at least three years after installation; the County would be able to use portions of the bond to replace dead vegetation required by the ordinance.

Article 24. Tree Protection

Sec. 22-24-1. Landscape plan -- General provisions for landscaping.

The purpose of this section is to provide guidelines for the landscaping and screening of development sites subject to site plan approval. These requirements are intended to ensure that site development is harmonious with the surrounding properties, to promote the public health, safety and welfare, in accordance with the guidelines in the Comprehensive Plan; to help to conserve energy by providing shade and wind breaks; to encourage recharge of ground water by providing pervious area; to improve and preserve the air quality and minimize noise, dust and glare, and to preserve the rural character of the County.

Sec. 22-24-2. Landscape Plan Specifications.

- I. A certified Landscape Architect, arborist, horticulturist, land surveyor, or other person deemed qualified by the ~~Director of Planning~~ *Zoning Administrator* shall prepare the plan.
- II. The plan shall be prepared at a scale of not less than 1"=40' for areas along streets and roads, and not less than 1"=20' for areas around buildings, parking lots, and landscape areas.
- III. All landscape plans shall be on sheets not exceeding twenty-four inches (24") by thirty-six inches (36").
- IV. If the plan is prepared on more than one sheet, match lines shall clearly indicate where the several sheets join.

Sec. 22-24-3. Landscape Plan Contents.

- A. The Landscape Plan shall include the following elements
 1. Existing and proposed contours at intervals of five (5) feet or less.
 2. Property boundary lines.
 3. Limits of grading and clearing.
 4. Tree protection zone(s) as applicable.
 5. All proposed improvements.
 6. Existing and proposed underground and overhead utilities, including heights and/or depths.
 7. Rights-of-way and easements.
 8. Botanical and common name, size, spacing, and location of all trees, shrubs, and ground cover, and the location and extent of planting beds in which they are to be planted, if any.
 9. Plants shall be labeled on the plan by direct call-out method ~~and not~~ *or* by symbols keyed to a plant list.
 10. A planting symbol to illustrate the natural canopy/cover of trees and the extent of growth of shrubs at maturity.

11. A plant list or matrix showing the botanical name, common name, quantity, size, spacing, handling method, and general instruction, if any, specific to each plant.
12. General details illustrating the method of installation of plants, seeding, and sodding, including but not necessarily limited to size of plant pit, method of placement, backfill material, method of support, preparation of beds, mulch, etc.
13. Special details illustrating special conditions such as supplemental plant pit drainage, pruning for special effects, or other conditions requiring illustrated instructions.
14. General notes specifying the care and maintenance of plants for a period of three years following planting and the replacement of any dead, dying, or diseased vegetation required to be installed by this chapter for the life of the project.
15. Any and all information required for tree protection as indicated in Section B of this article.
16. Provide and identify adequate exterior water source.

Sec. 22-24-4. Minimum Standards.

A. The following shall be the minimum size of plant materials at installation:

1. Large shade trees ————— 2” caliper
2. Medium shade trees ————— 1.5” caliper
3. Ornamental trees ————— 1.5” caliper
4. Large evergreen trees ————— 8’ in height
5. Medium evergreen trees ————— 6’ in height
6. Small evergreen trees ————— 4’ in height
7. Large shrubs ————— 2’ in height
8. Medium shrubs ————— 2’ in height
9. Small shrubs ————— 1’ in height
10. Ground cover ————— 1 year plants

1. *Large shade trees* *1.5” caliper*
2. *Medium shade trees* *1.25” caliper*
3. *Ornamental trees* *1.25” caliper*
4. *Evergreen trees* *5’ in height*
5. *Shrubs* *18” in height*
6. *Ground cover* *1 year plants*

~~B. All trees to be planted shall meet the specifications of the American Landscape Association. The planting of trees shall be done in accordance with either the standardized landscape specifications jointly adopted by the Virginia Nurserymen’s Association, the Virginia Chapter of Landscape Designers, and the Virginia Chapter of the American Society of Landscape Architects, or the Road and Bridge Specifications of the Virginia Department of Transportation. Wheel stops, curbing, or other barriers shall be provided to prevent damage to landscaping by vehicles. Where necessary, trees shall be welled or otherwise protected against change in grade. All pervious areas of the site shall be permanently protected from soil erosion with grass, ground cover, or mulch material.~~

B. All required landscaping shall be planted according to the following standards:

- 1. All trees to be planted shall meet the specifications of the American Landscape Association.*
- 2. The planting of trees shall be done in accordance with either the standardized landscape specifications jointly adopted by the Virginia Nurserymen's Association, the Virginia Chapter of Landscape Designers, and the Virginia Chapter of the American Society of Landscape Architects, or the Road and Bridge Specifications of the Virginia Department of Transportation.*
- 3. All required landscaping shall be planted between September 15 and June 30, provided that the ground is not frozen.*

C. Wheel stops, curbing, or other barriers shall be provided to prevent damage to landscaping by vehicles.

D. Where necessary, trees shall be welled or otherwise protected against change in grade. Such protection measures shall be sited to minimize disturbance within the drip line of trees designated for protection on the landscape plan.

E. All pervious areas of the site shall be permanently protected from soil erosion with grass, ground cover, or mulch material.

Sec. 22-24-5. Requirements.

~~A. It is the specific intent of these requirements to promote landscape design and installation to mitigate the effects of new development on surrounding areas and specifically not to use plantings as a means of drawing attention to new development. To promote the protection and preservation of rural character, a palette of plant materials appropriate to the various zoning districts has been prepared and shall be followed as a general guideline in preparing plant plans for the various zones. The Landscape Plan should utilize those plant species that are best suited for the site. To facilitate this, a list of recommended and prohibited plants are broken down into native, assimilated non native, exotic, and invasive species is available from the Director of Planning. Applicants may add plants to this list with the prior approval of the Director of Planning.~~

- ~~1. Residential zoning districts: Plantings shall be native and assimilated non-native, except in village or commercial settings. In these settings, where plantings are internal and generally not in view of the public road, street, or adjacent property, exotic species may be used.~~
- ~~2. Business and Industrial zoning districts: Plantings shall be native and assimilated non native, except in areas generally not in view of the public road or adjacent properties. In these areas exotic species may be used.~~
- ~~3. Agricultural and all other districts: Plantings shall be native and assimilated non-native.~~

A. It is the specific intent of these requirements to promote landscape design and installation to mitigate the effects of new development on surrounding areas and

B. *The Landscape Plan shall utilize native and assimilated non-native species listed within the Fluvanna County Plant List. Applicants may add plants to this list with the prior approval of the Zoning Administrator, provided that the proposed species have a rated hardiness and growth habit appropriate for the intended location. A mixture of plant species should be used on each site.*

C. ~~Trees~~ *Street trees shall be required along existing or proposed public streets ~~in~~ within or adjacent to any ~~non-residential development, or non-residential part of a mixed-use or multi-family development~~ site that is subject to site plan approval, as follows: and all major subdivisions with an average lot size of one (1) acre or less. The placement of street trees shall be in accordance with Virginia Department of Transportation (VDOT) standards and shall not be located within any sight triangle. The required plantings shall be located either within the right-of-way itself or within a five-foot (5') landscape preservation easement continuous to such right-of-way. Existing, healthy trees with a caliper of eight inches (8") or greater located within ten feet (10') of the right-of-way may be used to satisfy the planting requirement, provided the trees are encumbered by a landscape preservation easement and protected in accordance with the standards contained in this Chapter. When located within an easement, the subdivider shall dedicate the easement, together with a maintenance easement, to the property owners' association or other entity approved by the county attorney. The street trees shall be planted at the following rate:*

1. ~~Two (2) large shade trees per 100 feet, on both sides of the street.~~
2. ~~An average of one (1) ornamental tree per one hundred (100) feet, on both sides of the street.~~
3. ~~An average of two (2) medium or small evergreen trees per one hundred (100) feet, on both sides of the street. Medium shade trees may be substituted for large shade trees at a ratio of 2 to 1, but may not constitute more than 40% of the total shade trees provided.~~

1. *One (1) large shade tree shall be required for every forty(40) feet of road frontage; or*
2. *One (1) medium shade tree shall be required for every twenty-five (25) feet of road frontage.*

D. *Minimum tree canopy coverage shall be provided for all new commercial, industrial, and multi-family residential development in accordance with the following requirements:*

1. *Tree canopy coverage shall include all areas of coverage by plant material exceeding five feet in height, and shall be measured **ten years maturity** after planting.*

2. *Tree canopy coverage shall be calculated for new plantings using **ten-year tree canopy coverage standards** published by the Virginia Nursery and Landscape Association or other set of standards approved by the Zoning Administrator. When a coverage interval is cited in such standards, the smallest coverage figure for each interval shall be used.*
3. *All landscape plans shall include the preservation of existing trees, the planting and replacement of trees, or any combination thereof, to the extent that, at maturity of **ten** years, a minimum tree canopy shall be provided as follows:*
 - a. *Ten percent (10%) tree canopy for a site developed with commercial, office, institutional, or industrial uses;*
 - b. *Fifteen percent (15%) tree canopy for a multi-family residential site developed at a gross density of more than ten but less than twenty dwelling units per acre; and*
 - c. *Twenty percent (20%) tree canopy for a multi-family residential development developed at a gross density of ten or fewer dwelling units per acre.*
4. *A bonus credit toward tree canopy requirements may be given for the preservation of existing wooded areas, clusters of trees, or mature trees (healthy trees with 12 inches or greater diameter at breast height) as follows:*
 - a. *The credit provided for the preservation of existing trees, wooded areas, or clusters of trees shall be 1.50 multiplied by the area defined by the existing drip line of the tree, wooded area, or cluster of trees.*
 - b. *The credit provided per mature tree shall be 2.0 multiplied by the area defined by the boundaries of the existing drip line of the tree.*
 - c. *A certified landscape architect or arborist must provide written verification that the trees for which credit will be awarded are in healthy condition; will likely survive for at least twenty years following landscape plan approval; will not be severely impacted by construction activities on site; will not interfere with the growth of other viable landscaping; and will not compromise safety. Credit towards tree canopy requirements shall not be given for any tree deemed to be in poor to fair condition by the Zoning Administrator, nor for any plant designated as invasive on the list maintained by the Zoning Administrator.*
 - d. *In the event that one or more trees to be awarded bonus credit under this section is destroyed, significantly damaged during clearing or construction activities, or is willfully destroyed or removed, the person responsible for such destruction, injury, or removal shall replace each tree destroyed with two (2) large shade trees planted on-site.*
5. *For the purpose of calculating the total area of a site to determine tree canopy coverage requirements, the following areas shall be excluded:*
 - a. *Properties reserved or dedicated for future street construction or other public improvements.*
 - b. *Ponds and un-wooded wetlands.*
 - c. *Properties reserved or dedicated for school sites, playing fields and non-wooded recreation areas, and other facilities and areas of a similar nature.*

- d. *Portions of a site containing existing structures that are not the subject of a pending application.*
- E. *All sites subject to site plan approval and all major subdivisions must reserve a riparian protection area in accordance with the following requirements:*
1. *The riparian protection area shall be at least 50 feet wide along both sides of all intermittent streams, at least 75 feet wide along both sides of all perennial streams, and at least 100 feet wide along both sides of the Hardware River, Rivanna River, and James River.*
 2. *Indigenous vegetation, including existing ground cover, shall be preserved to the maximum extent practicable, consistent with the use or development proposed. Dead, diseased, or dying vegetation may be pruned or removed as necessary, pursuant to sound horticultural practices. **No logging or silvicultural activities may take place within the riparian protection area.***
 3. *No portion of any on-site sewerage system, drain field, reserve drain field, or building shall be placed within the riparian protection area. This statement shall be on all plats and site plans of affected lots.*
 4. *If otherwise authorized by the applicable regulations of this chapter, the following types of development shall be permitted within the riparian protection area, provided that the requirements of this section are met:*
 - a. *A building or structure which existed on the date of adoption of this article may continue at such location. However, nothing in this section authorizes the replacement, expansion, or enlargement of such building or structure.*
 - b. *On-site or regional stormwater management facilities and temporary erosion and sediment control measures, provided that:*
 1. *To the extent practical, as determined by the Zoning Administrator, the location of such facilities shall be outside of the riparian protection area.*
 2. *No more land shall be disturbed as necessary to provide for the construction and maintenance of the facility, as determined by the Zoning Administrator.*
 3. *The facilities are designed to minimize impacts to the functional value of the riparian protection area and to protect water quality; and*
 4. *Facilities located within a floodplain adhere to the floodplain regulations of the County Code.*
 - c. *Water-dependent facilities; water wells; passive recreation areas, such as pedestrian trails and bicycle paths; historic preservation; archaeological activities, provided that all applicable federal, state and local permits are obtained. All pedestrian trails and bicycle paths shall be constructed using permeable paving materials.*
 - d. *Stream crossings of perennial and intermittent streams for roads, streets, or driveways, provided that the stream buffer disturbance shall be the minimum necessary for the lot(s) to be used and developed as permitted within the underlying zoning district. Stream crossings shall not disturb*

- F. ~~No invasive species shall be planted, except in containers or completely enclosed planting areas that will prevent their spreading beyond the planting area. Certain invasive species indicated on the list maintained by the Director of Planning Zoning Administrator may not be used in any circumstance.~~ *Species identified on the Invasive Alien Plant Species of Virginia list published by the Virginia Department of Conservation and Recreation may not be used in any circumstance.*
- G. In areas in view of public roads and rights-of-way, landscape plans should specify plants and their spacing so they may grow in their natural habitat, achieving mature size with minor pruning and shaping.
- H. *Where landscaping is required, the property owner or developer shall provide performance guarantees as follows:*
1. *No certificate of occupancy shall be issued until the landscaping is completed in accordance with the approved landscape plan. When the occupancy of a structure is desired prior to the completion of the required landscaping, a certificate of occupancy may be issued only if the owner or developer provides a performance bond or other form of surety satisfactory to the Zoning Administrator in an amount equal to the costs of completing the required landscaping. All required landscaping shall be installed and approved by the end of the first planting season following issuance of a certificate of occupancy, or the surety described above may be forfeited to Fluvanna County.*
 2. *A maintenance bond for the landscaping required by this Chapter shall be posted by the developer in favor of Fluvanna County. If the landscaping is installed prior to the issuance of a certificate of occupancy, then the maintenance bond shall be posted prior to the issuance of the certificate of occupancy. If the landscaping is bonded for installation, rather than installed prior to the issuance of a certificate of occupancy, then the maintenance bond shall be posted when the materials are planted and before the performance bond is released. The maintenance bond shall be in the amount of one-third (1/3) the value of the landscaping and shall be held for a period of three (3) years following the planting date. At the end of the three (3) year time period, the bond shall be released if all plantings are in healthy condition as determined by the Zoning Administrator. If the plantings installed in accordance with an approved landscape plan are not properly maintained by the owner, the surety described above may be forfeited to Fluvanna County.*

- I. *The landowner shall be responsible for the general maintenance and the timely repair and replacement of all landscaping required by this Chapter. All landscaping shall be maintained as follows:*
1. *Plantings shall be kept mulched to prevent weed growth and to retain soil moisture;*
 2. *Plant material shall be pruned to maintain healthy and vigorous growth with all pruning performed in accordance with generally accepted maintenance standard practices;*
 3. *All turf areas shall be kept mown, **except for areas designated as a natural meadow on the landscape plan;***
 4. *All plant and landscape material and landscaped areas shall be kept free of refuse and debris; and*
 5. *The landowner shall maintain any plant material required by this Chapter and any plant material that dies must be replaced in kind, or with a suitable substitute as approved by the Zoning Administrator. Preserved existing trees, that subsequently die, shall be replaced by new trees of a caliper and/or height as would be required by this Chapter.*
- J. Any minor requirements above may be waived or modified by the ~~Director of Planning~~ **Zoning Administrator** on a site-specific basis where conditions peculiar to the site may warrant or the objectives of the ordinance can be better achieved by other means. The ~~Director of Planning~~ **Zoning Administrator** may also approve minor spacing variations. The decision of the **Zoning Administrator** ~~Director of Planning~~ in this regard is appealable to the ~~Planning Commission~~ **Board of Zoning Appeals**..

Sec. 22-24-6. Parking lot landscaping.

- ~~A. The intent, in addition to those stated for landscaping in general, is to achieve a minimum of 50% screening of parking areas from public streets and adjacent properties.~~
- A. All development subject to site plan approval shall include the following required landscaping for parking lots consisting of five (5) spaces or more.
- B. Minimum planting areas are to be provided as follows:
1. One ~~9' x 18'~~ **12' x 18'** planting island for every ~~twenty-five (25)~~ **twenty (20)** parking spaces in a row and at both ends of a parking bay.
 2. A nine- (9) foot planting strip between each adjacent area of parking of four (4) bays. ~~Where parking bays are adjacent to the nine (9) foot planting strip, no planting islands are required.~~
 3. A nine- (9) foot planting strip shall be provided between access roadways and adjacent properties' parking areas and adjacent property of the same use.
 4. A twenty-five (25) foot planting area shall be provided between parking and adjacent properties of a different use and public streets and rights-of-way. The

C. ~~Large shade trees~~ *Planting islands* shall be planted as follows:

1. One (1) large shade tree *and four (4) shrubs in each 9' 12' x 18'* planting island.
2. Large shade trees shall be arranged so that the canopy at maturity will cover thirty-five (35) percent of the parking area placed mainly around the perimeter of the parking area and at the end of parking bays.
3. Medium shade trees may be substituted for large shade trees at a ratio of two (2) to one (1), if appropriately spaced and meeting all other canopy criteria. Medium shade trees shall not exceed forty (40) percent of the total number of shade trees.

~~D. Internal planting strips shall be planted with large shade trees every thirty-five (35) feet, or medium shade trees as specified in the forgoing section. In addition, ornamental trees, small evergreen trees, evergreen shrubs, deciduous shrubs, and ground covers shall be planted to soften the visual impact of parked cars, create visual relief from expanses of pavement, help direct traffic, and create an aesthetically pleasing environment. The selection and arrangement of plant materials in these strips shall be to achieve these goals while avoiding conflict with sight distance, traffic safety standards, and handicapped accessibility. As a guideline, projecting plants sizes to maturity, thirty (30) percent of the strip should be covered by the canopy of ornamental trees, forty (40) percent by small, evergreen trees and shrubs, ten percent (10) covered by deciduous shrubs, and the remainder in ground cover, grass, or mulch.~~

D. *Internal planting strips shall be planted as follows:*

1. *One (1) large shade tree and six (6) shrubs every forty (40) feet.*
2. *Large shade trees shall be arranged so that the canopy at maturity will cover thirty-five (35) percent of the parking area placed mainly around the perimeter of the parking area and at the end of parking bays.*
3. *Medium shade trees may be substituted for large shade trees at a ratio of two (2) to one (1), if appropriately spaced and meeting all other canopy criteria. Medium shade trees shall not exceed forty (40) percent of the total number of shade trees.*

E. *Parking lots consisting of five (5) spaces or more shall be screened from view of public roads, rights-of-way, and adjacent properties. One of the following landscaping treatment options shall be utilized to meet the minimum screening requirements for parking lots:*

1. *Landscape Strip Option: One (1) tree and ten (10) shrubs shall be planted for each forty (40) linear feet, excluding driveway openings, within a planting strip that is ten feet (10') in width; or*
2. *Berm Option: One (1) tree and five (5) shrubs shall be planted for each forty (40) linear feet, excluding driveway openings. The berm must be at least thirty (30)*

3. *Woodlands Preservation Option: Existing woody vegetation shall be preserved as a buffer strip with a minimum width of thirty-five (35) feet. Additional tree or shrub plantings may be required by the Zoning Administrator. The woodlands preservation area must be placed in a landscape easement, and the landscape plan must demonstrate techniques to be used for removing underbrush, pruning, and protecting existing trees from any damage during site development; or*
 4. *Structural Option: A wall constructed of brick, stone, or architectural block, no shorter than three (3) feet and no taller than four (4) feet, shall be constructed along the entire width of the parking lot. One (1) tree and three (3) shrubs shall be planted for each forty (40) linear feet, excluding driveway openings.*
- F. *The placement of bioretention areas within required planting areas is encouraged, provided that the bioretention techniques utilized are approved as part of an erosion and sediment control plan, stormwater management plan, or similar document. Examples of bioretention techniques include, but are not limited to, rain gardens, swales, infiltration trenches, and tree box filters.*
- G. *When retaining existing trees in parking areas, enough ground around the tree should be left to allow for its survival or grass pavers should be used to allow air and moisture to reach the tree roots.*

Sec. 22-24-7. Screening.

- A. Screening shall be required in the following instances:
1. Commercial and industrial uses shall be screened from view adjacent properties in residential and agricultural zoning districts, except for commercial and industrial uses allowed by right in said districts.
 2. Parking lots consisting of five (5) spaces or more shall be screened from view of public roads, rights-of-way, and adjacent properties.
 3. Objectionable features, including but not limited to the following, shall be screened from the view of public roads, rights-of-way, and adjacent properties:
 - i. Loading areas
 - ii. Refuse areas
 - iii. Storage yards
 - iv. Dry Detention ponds
 - v. Maintenance areas
 4. If the required screening is consistent with an approved Master Plan subject to the requirements of the R-3 Residential zoning district.
 5. *The Zoning Administrator may require the screening of any use, or portion thereof, upon determination that the use would otherwise have a direct negative visual impact on a property designated as historic by its inclusion within the Historic Preservation chapter of the Comprehensive Plan.*

~~B. When required, screening shall consist of a planting strip, existing vegetation, berms, a wall or fence (fifty (50) percent solid), or a combination thereof to the reasonable satisfaction of the Director of Planning. When only vegetative screening is provided, such screening shall be provided to the reasonable satisfaction of the Director of Planning, but shall in no event be less than twenty five (25) feet in depth. Vegetative screening shall consist at a minimum of a double staggered row of large or medium evergreen trees planted at appropriate spacing for the species to achieve no less than thirty (30) percent screening at the time of planting. Areas indicated as tree protection zones may satisfy this requirement for screening.~~

B. *When required, screening shall consist of new plantings, existing vegetation, an opaque masonry wall or wooden fence, or combination thereof, to the reasonable satisfaction of the Zoning Administrator. Unless otherwise specified within this Chapter, one of the following landscaping treatment options shall be utilized to meet the minimum screening requirements:*

1. *Evergreen Option: Two (2) rows of evergreen trees shall be planted ten (10) feet on center and staggered within a planting strip that is twenty-five feet (25') wide; or*
2. *Berm Option: Two (2) rows of evergreen shrubs shall be planted ten (10) feet on center and staggered. The berm must be at least thirty (30) inches higher than the finished grade of the parking lot and shall not have a slope steeper than 2:1. The berm must be stabilized with groundcover or other vegetation; or*
3. *Mixed Vegetation Option: One (1) large shade tree, one (1) medium shade tree, one (1) evergreen tree, and three (3) evergreen shrubs for each twenty (20) linear feet, within a planting strip that is twenty-five feet (25') wide; or*
4. *Woodlands Preservation Option: Existing woody vegetation shall be preserved as a buffer strip with a minimum width of seventy-five (75) feet. Additional tree or shrub plantings may be required by the Zoning Administrator. The woodlands preservation area must be placed in a landscape easement, and the landscape plan must demonstrate techniques to be used for removing underbrush, pruning, and protecting existing trees from any damage during site development; or*
5. *Structural Option: A wall or fence, no shorter than six feet (6') in height, shall be provided and one (1) evergreen tree or shrub shall be planted every ten (10') feet along the side of any such wall or fence facing a public street or use for which the screening shall benefit.*

C. *Within commercial, industrial, and multi-family residential developments, dumpsters and other refuse areas visible from public roads, rights-of-way, and parking areas shall be completely screened from view by a masonry wall constructed using architectural block, brick, stone, or a similar material that is compatible with the architecture of the principal structure. Alternative materials that adequately screen the refuse areas and prevent debris from leaving the refuse area may be used with the prior approval of the Zoning Administrator*

D. *Parking lots of five (5) spaces or more shall be screened in accordance with Sec. 22-24-6. .*

Sec. 22-24-8.1: ~~Statement of Intent~~ Purpose of Tree Protection Plans.

The purpose of this section is to promote the general health, safety and welfare through the protection and preservation of existing tree stands, individual specimen trees, and understory plants during the land disturbance/site development process. Preservation of existing tree stands, individual specimen trees, and understory plants shall be a primary consideration in the planning for, and implementation of, land development activities. For tree protection, barriers are required to prevent physical damage to trees or understory plants, and to prevent soil disturbance and compaction within tree protection areas. The more intense the development of the site, the greater the need for the protection and preservation of existing trees and understory.

Sec. 22-24-8.2. ~~When Required~~ Activities Requiring Tree Protection Plans.

Compliance with the tree protection program of this section is required on all site development plans involving land clearance of more than one-half of one acre (21,780 square feet of cleared land) in size, and all activities requiring a land disturbing permit except for the construction of a single or two family dwelling on an individual lot.

All plans prepared for compliance with this chapter shall clearly delineate areas of tree protection and provide construction details of tree protection barriers. Measures for tree protection shall be outlined in the general notes of the plan, including construction, inspection, and maintenance of barriers. The general notes shall also outline prohibited activities within the tree protection zones. The tree protection zone shall, to the extent possible, conform to the drip line of the trees being protected.

Sec. 22-24-8.3. Tree Protection Plan Contents.

- A. All tree protection plans shall indicate tree protection zone(s), in accordance with the following guideline:
 - 1. Existing stands of trees or individual specimen trees whose removal is not necessary for the development of the site or the construction of any facility.
 - 2. Preservation of existing trees to comply with the Landscape Plan requirements.
- B. All areas of tree protection shall be bounded by a tree protection barrier at the perimeter of the tree protection zone. Barriers shall completely surround the tree protection area, except where the area extends more than one hundred (100) yards beyond the construction zone or routes of access to the construction zone. The tree protection areas, beyond the one hundred (100) yards, must be flagged every one hundred (100) feet with continuous ribbon with “Do Not Enter” signs stating prohibited activity. Barriers and flagging shall be installed prior to any land disturbing activity. Barriers shall be a minimum of five (5) feet in height, stationary, and constructed of rigid or semi-rigid materials that must be dismantled to be moved.

Barriers shall be of a color or flagged to be clearly visible by all people in the vicinity, particularly equipment and vehicle operators. Barriers shall be inspected and repaired on a routine basis and shall be completely removed prior to occupancy of the development. The purpose of the barrier shall be to prevent damage to trees or understory plants and to prevent soil disturbance and compaction within the zone.

- C. The following activities are prohibited within tree protection zones:
 - 1. Operation of any vehicle or machinery, except as may be necessary for the installation of utility lines.
 - 2. Parking of vehicles or equipment.
 - 3. Storage of any materials or equipment.
 - 4. Discharge of any substance that may be injurious to trees or understory plants.

- D. Wherever feasible, utilities shall be designed and routed to avoid tree protection zones. If it is necessary to route utilities through tree protection zones, the following shall apply:
 - 1. Route utility trenches outside the drip line of trees or as far as possible from tree trunks.
 - 2. In areas of multiple trees, where trenches must go between trees, preference should be given to stay away from larger specimen trees.
 - 3. Equipment that is the lightest weight and makes the least possible impact shall be used to dig trenches and install utilities.
 - 4. Rubber-tired, rather than track equipment, shall be used whenever possible.
 - 5. Excavation materials are not to be placed against tree trunks and shall be placed as far away from trunks as possible.
 - 6. Where excavation materials are to be placed, indicator ribbons shall be placed on undisturbed areas prior to excavation, to facilitate restoring the area to the original grade.
 - 7. Areas where excavated material have been placed shall be restored to the original grade with the least amount of disturbance possible.

- E. Any damage done to trees within tree protection zones shall be immediately repaired.

- F. Any clearing within tree protection zones shall be done by hand.

- G. Where grade differences occur between the tree protection area and the finished grade of the adjacent areas, retaining walls and dry wells shall be used to prevent the need for grading in tree protection zones.

Explanation of Modifications to the Tree Protection Ordinance

Sec. 22-24-3 (A)9	Modified to allow the use of symbols to label plants within the landscape plan (per recommendation of local landscape architect)
Sec. 22-24-4 (A)	Modified to Allow for Smaller Plantings Large Shade Trees: 1.5” (comparable to Albemarle, James City, Orange) Medium Shade Trees: 1.25” (comparable to Albemarle, James City, Orange) Ornamental: 1.25” (comparable to Culpeper, James City) Evergreen: 5’ tall (consolidated for simplification, comparable to Albemarle, Gloucester, Goochland) Shrubs: 18” (consolidated for simplification, comparable to Albemarle, Fauquier, Goochland, James City, New Kent)
Sec. 22-24-4 (B)1	Comparable to Albemarle, Culpeper, Fauquier, Loudoun
Sec. 22-24-4 (B)2	Comparable to Albemarle, Culpeper, Fauquier, Loudoun
Sec. 22-24-4 (B)3	Planting season proposal promoted by Planning Commission. Season length (Sept. 15 – June 30, provided ground is not frozen) was suggested by local landscape architect
Sec. 22-24-4 (C)	Comparable to Albemarle, Culpeper
Sec. 22-24-4 (D)	Requires protective wells to be sited to limit disturbance within the drip line of trees that are to be protected, based on a suggestion from a local landscape architect
Sec. 22-24-4 (E)	Comparable to Albemarle, Culpeper
Sec. 22-24-5 (B)	Requires use of species on updated Fluvanna County Plant List Comparable to New Kent
Sec. 22-24-5 (C)	Street trees required within all new developments requiring site plan approval and within major residential subdivisions with an average lot size of one acre or less (comparable to Charlottesville, New Kent). Existing trees may count towards requirements if encumbered by a tree preservation easement (comparable to New Kent).
Sec. 22-24-5 (D)	Tree canopy requirements are comparable to Albemarle, Culpeper Bonus tree credits are taken directly from the Culpeper County code Replacement of destroyed trees taken from the City of Chesapeake code Part 5 taken from language recommendations from RCS/UVA (memo dated 11/30/2010).
Sec. 22-24-5 (E)	Riparian Buffer Provisions Part 2 is taken from New Kent’s CBPA regulations Part 3, 4, 5 taken from RCS/UVA recommendations (Memo 11/30/2010)
Sec. 22-24-5 (F)	Changed language prohibiting invasive species, defining which species are invasive (comparable to Culpeper)
Sec. 22-24-5 (H)1	Added performance bonding requirements (comparable to Gloucester)
Sec. 22-24-5 (H)2	Added maintenance bonding requirements (comparable to Albemarle)
Sec. 22-24-5 (I)	Added maintenance requirements (comparable to Culpeper)
Sec. 22-24-6 (A) old	Removed because lacked clarity

Explanation of Modifications to the Tree Protection Ordinance

Sec. 22-24-6 (B)1	Changed 25 parking spaces to 20 parking spaces in a row (about 180' long rows, longer than 150' rows permitted in James City)
Sec. 22-24-6 (B)2	Removed provision that parking spaces adjacent to planting rows do not need islands.
Sec. 22-24-6 (C)1	Added shrub requirements (Comparable to Greene) Changed from letters to numbers to conform with the rest of the section.
Sec. 22-24-6(D)	Divided into sub-sections for clarity Added shrub requirements (Comparable to James City, New Kent County)
Sec. 22-24-6(E)	Moved parking lot screening requirements to the parking lots section. Screening Options Offered (Comparable to Fauquier, Gloucester)
Sec. 22-24-6(F)	Specifically permit the use of bioretention areas within parking areas.
Sec. 22-24-6(G)	Language encouraging the design of properly-designed islands when existing trees are preserved (City of Chesapeake Landscaping Design Manual)
Sec. 22-24-7(A)	Screening Options Offered (Comparable to Culpeper, Hanover)
Sec. 22-24-7(B)5	Added screening from historic sites requirements (Comparable to Culpeper)
Sec. 22-24-7(C)	Added screening requirements for dumpsters

	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Minimum Size of Plant Materials at Installation								
Deciduous Trees	Large Shade Trees: 2" caliper Medium Shade Trees: 1.5" caliper	Large Shade Trees: 1.5" caliper Medium Shade Trees: 1.25" caliper	Large Street Trees: 1.5-1.75" caliper Medium Street Trees: 1-1.25" caliper	2-2.5" caliper	Unspecified	2.25" caliper	Small: 2.5" caliper Large: 2.5" caliper	Unspecified
Evergreen Trees	Large Evergreens: 8' tall Medium Evergreens: 6' tall Small Evergreens: 4' tall	5' tall	4' – 5' tall	6' tall	Unspecified	6' tall	5' tall	Unspecified
Ornamental Trees	1.5" caliper	1.25" caliper	Unspecified	1-1.5" caliper	Unspecified	Unspecified	Unspecified	Unspecified
Shrubs	Large Shrubs: 2' tall Medium Shrubs: 2' tall Small Shrubs: 1' tall	18" tall	Screening Purposes: 18-30" tall Street Planting: 12-18" tall	24" tall	Unspecified	Evergreen Shrubs: 30" tall Dwarf Deciduous Shrubs: 18"	24" tall	Unspecified
Maintenance								
Maintenance Standards	The landscape plan must include general notes specifying the care and maintenance of plants for a period of three years following planting and the replacement of any dead, dying, or diseased vegetation required to be installed for the life of the project.	The landowner shall be responsible for the general maintenance and the timely repair and replacement of all required landscaping materials. Planting must be mulched. Plant material must be pruned. All turf areas must be mown. All plant material must be kept free of refuse and debris.	Unspecified	The landowner shall be responsible for the general maintenance, including but the watering of all landscaped areas and the timely repair and replacement of all required landscaping materials. Planting must be mulched. Plant material must be pruned. All turf areas must be mown. All plant material must be kept free of refuse and debris.	Required street trees must be maintained by the developer for up to 18 months, and replaced if necessary.	The owner is responsible for the maintenance, repair and replacement of all required landscape materials. All plant material shall be tended and maintained in a healthy growing condition, replaced when necessary and kept free of refuse and debris. Fences shall be maintained in good repair.	The owner shall be responsible for the maintenance, repair, and replacement of all landscape materials. All plant material shall be tended and maintained in a healthy growing condition and free from refuse and debris at all times. All unhealthy, dying, or dead plant material shall be replaced during the next planting season. All landscaped areas shall be provided with a readily available water supply shown on the landscape plan. The utilization of underground storage chambers to collect runoff for irrigation is encouraged.	Required landscaping must be maintained for the life of the development. Maintenance is the responsibility of the property owner.
Performance Guarantees	Unspecified	All landscaped shall be installed by the first planting season following the issuance of a Certificate of Occupancy. A maintenance bond for the landscaping shall be posted prior to the issuance of a Certificate of Occupancy. The maintenance bond must be equal to 1/3 of the value of the landscaping, and is held for 3 years following the planting date. After 3 years, if the zoning administrator determines the plantings are in healthy condition, the bond will be released.	All landscaped shall be installed by the first planting season following the issuance of a Certificate of Occupancy. A maintenance bond for the landscaping shall be posted prior to the issuance of a Certificate of Occupancy. The maintenance bond must be equal to 1/3 of the value of the landscaping, and is held for 12 months following the planting date. After 12 months, if the zoning administrator determines the plantings are in healthy condition, the bond will be released.	A bond, escrow, letter of credit or other performance guarantee must be provided in an amount sufficient for and conditioned upon installation and maintenance of all required plantings. The guarantee may be used to correct any violations associated with the landscape plan.	Unspecified	The landscaping shown on the initial plan must be completed or bonded prior to approval of any Certificate of Occupancy.	No certificate of occupancy may be issued until the landscaping plan is completed. When the occupancy of a structure is desired prior to completion of the required landscaping, a certificate of occupancy may be issued only if the owner provides a form of surety satisfactory to the Director of Community Development & Codes Compliance in an amount equal to the costs of completing the required landscaping.	Unspecified

	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Minimum Size of Plant Materials at Installation								
Deciduous Trees	Large Shade Trees: 2" caliper Medium Shade Trees: 1.5" caliper	Large Shade Trees: 1.5" caliper Medium Shade Trees: 1.25" caliper	2" caliper	2" caliper	1.5" caliper	Unspecified	10' tall, 4' spread, 2.25" caliper	1.25" caliper
Evergreen Trees	Large Evergreens: 8' tall Medium Evergreens: 6' tall Small Evergreens: 4' tall	5' tall	4 – 6' tall (Depending on Application)	6' tall	Multi-Stemmed: 8' tall Single-Stemmed: 1.25" caliper, 8' tall	Unspecified	8' tall, 4' spread, 2" caliper	Unspecified
Ornamental Trees	1.5" caliper	1.25" caliper	Unspecified	Unspecified	Single-Stemmed: 1.25" caliper, 8' tall Multi-Stemmed: 8' tall	Unspecified	8' tall, 4' spread, 1.75" caliper	Unspecified
Shrubs	Large Shrubs: 2' tall Medium Shrubs: 2' tall Small Shrubs: 1' tall	18" tall	15 – 18" tall	30" spread, 24" tall	Evergreen: 18" tall Deciduous: 22" tall	Unspecified	Deciduous Shrubs: 24" tall Evergreen Shrubs: 18" tall Flowering/Ornamental: 18" tall	Unspecified
Maintenance								
Maintenance Standards	The landscape plan must include general notes specifying the care and maintenance of plants for a period of three years following planting and the replacement of any dead, dying, or diseased vegetation required to be installed for the life of the project.	The landowner shall be responsible for the general maintenance and the timely repair and replacement of all required landscaping materials. Planting must be mulched. Plant material must be pruned. All turf areas must be mown. All plant material must be kept free of refuse and debris.	All landscaping must be maintained by the property owner and any plants that die or are destroyed must be replaced within 30 days.	Per the Subdivision Ordinance, buffers required around subdivisions must be maintained by the property owner or the homeowners' association.	The owner shall be responsible for the maintenance, repair, and replacement of all required landscaping materials, fences, and barriers. All plant materials, including existing trees preserved to meet the landscaping requirements, must be tended and maintained in a healthy growing condition, replaced when necessary, and kept free of refuse and debris. Fences and walls shall be maintained in good repair.	Unspecified	The owner and owner's successors are responsible for the maintenance of all landscaping, fencing and screening materials. All plant material must be tended and maintained in a healthy condition and replaced when necessary. All fences, walls and screening shall be maintained in good repair and kept free of litter and debris.	The property owner is responsible for maintaining landscaping and fencing, including the replacement of dead trees and shrubs and the repair of any damaged or broken fencing.
Performance Guarantees	Unspecified	All landscaped shall be installed by the first planting season following the issuance of a Certificate of Occupancy. A maintenance bond for the landscaping shall be posted prior to the issuance of a Certificate of Occupancy. The maintenance bond must be equal to 1/3 of the value of the landscaping, and is held for 3 years following the planting date. After 3 years, if the zoning administrator determines the plantings are in healthy condition, the bond will be released.	Unspecified	Unspecified	A certificate of occupancy will not be issued until all landscaping has been installed in accordance with the approved landscaped plan unless the installation of any incomplete landscaping is guaranteed.	Unspecified	If the landscape plan cannot be implemented before the Certificate of Occupancy because of seasonal conditions, a letter of credit or cash escrow is required to be submitted to the County for the estimated cost of installation plus a reasonable allowance for estimated administrative costs, inflation, and potential damage to existing vegetation.	Unspecified

	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County	
Screening									
Instances Required	<p>Commercial and industrial uses must be screened from adjacent residential and agricultural uses</p> <p>Loading areas, refuses areas, storage yards, dry detention ponds, and maintenance areas should be screened from public roads and adjacent properties.</p>	<p>Commercial and industrial uses must be screened from adjacent residential and agricultural uses</p> <p>Loading areas, refuses areas, storage yards, dry detention ponds, and maintenance areas should be screened from public roads and adjacent properties.</p> <p>The Zoning Administrator may require screening of a use that would have a direct negative impact on a property designated as historic in the Comp. Plan</p>	<p>Commercial and industrial uses must be screened from adjacent residential and rural area districts.</p> <p>Parking lots with 4 or more spaces must be screened from adjacent residential and rural area districts.</p> <p>Loading areas, refuse areas, storage yards, and detention ponds must be screened from residential and rural area districts and public roads.</p> <p>Double frontage residential lots shall be screened from between the rear of the home and public ROWs.</p> <p>The agent may require screening to protect views of and from properties on the Virginia Historic Landmarks Register.</p>	<p>Non-residential buildings, multi-family residential buildings and parking lots must be screened from adjacent land planned or zoned for agricultural, rural area, and residential uses.</p> <p>Loading and service areas, refuse areas, storage areas, pump stations, and tower sites must be screened from adjacent residential and agricultural uses and public streets.</p> <p>All utility and mechanical equipment must have a natural evergreen planting screen.</p> <p>The Approving Authority may require screening of a use that would have a direct negative impact on a property designated as historic in the Comp. Plan.</p>	Industrial uses must be screened from adjacent business and residential districts.	Screening is required along the perimeter of parcels used for non-residential purposes.	Screening is required long the perimeter of all parcels within the Highway Corridor Overlay District.	Commercial and industrial districts must be screened from adjacent residential, agricultural, and conservation districts	Multi-family residential districts must be screened from adjacent single-family residential, duplexes, and townhouses.
Composition	<p>May consist of a planting strip, existing vegetation, berms, a wall or fence (50% solid), or a combination thereof.</p> <p>Vegetative screening shall consist of a double staggered row of large or medium evergreen trees planted to achieve no less than 30% screening at the time of planting.</p>	<p>Five different screening options:</p> <ul style="list-style-type: none"> Evergreen Option: Double staggered row of evergreen trees planted 10' on center Berm Option: Double staggered row of evergreen shrubs planted 10' on center atop a berm at least 30" high. Mixed Vegetation Option: 1 large shade tree, 1 medium shade tree, 1 evergreen tree, and 3 evergreen shrubs for every 20' Woodlands Preservation Option: Existing vegetation preserved with a 75' buffer. Structural Option: 6' high wall with 1 evergreen tree/shrub planted every 10' <p>Dumpsters must be screened with a masonry wall.</p>	<p>Must consist of a planting strip, existing vegetation, a slightly opaque wall or fence, or combination thereof.</p> <p>Vegetative screening shall consist of a double staggered row of evergreen trees planted 15' on center, or a double staggered row of evergreen shrubs planted 10' on center.</p> <p>Fences or walls must be at least 6' tall and plantings may be required at intervals along the fence.</p>	<p>Screening may consist of new plantings, existing vegetation, an opaque wall or fence, or any combination.</p> <p>If new plantings are installed, it must consist of 2 rows of evergreen trees staggered and planted 10' on center OR a berm (slope 2:1 or less) with 2 rows of evergreen shrubs 20' on center.</p> <p>Alternative screening may be used with the approval of the Approving Authority: 1 large tree, 1 medium shade tree, and 1 evergreen shrub per 500 sq. ft., and 1 shrub per 50 sq. ft. of area.</p> <p>Walls/fences must be 6' high with evergreen plantings planted along the side of the wall facing a public street or use the screen is benefiting.</p>	Unspecified	<p>Front Yard:</p> <ul style="list-style-type: none"> Landscaped Option: 3 Canopy Trees, 3 Understory Trees, and 24 shrubs per 100' (20' depth). Woodland Option: Existing tree buffer (35' depth) <p>Rear Yard:</p> <p>4 Canopy Trees, 7 Understory Trees, 30 shrubs (75% must be evergreen) (25' depth)</p> <p>Side Yard:</p> <p>2 Canopy Trees, 5 Understory Trees, 20 shrubs (20' depth)</p> <p>Rear or Side Yard Adjacent to Rural or Residential District (Unless the property is designated commercial or industrial in Comp. Plan): 30' dense evergreen tree screen OR Combination Berm 2:1 slope and Evergreen Tree Screen</p>	<p>3 Types (A, B, C) Type A requires the greatest setback, Type C the least.</p> <p>Landscaping Type A: 1 large deciduous tree and 1 small deciduous tree per 50'; 1 evergreen tree per 30'; 1 medium shrub per 15'; low shrubs and groundcover throughout.</p> <p>Landscaping Type B: 1 large deciduous tree per 50'; 1 small deciduous tree and 1 evergreen tree per 30'; 1 medium shrub per 10'; low shrubs and groundcover throughout OR a 3' high berm with Type A plantings</p> <p>Landscaping Type C: 1 large deciduous tree per 50'; 1 small deciduous tree and 1 evergreen tree per 30'; 1 medium shrub per 5' or a continuous hedgeform or white picket fence (3-4' height); low shrubs and groundcover throughout OR a 3' high berm with Type B plantings</p>	<p>Screening yards must contain sufficient vegetation to provide and adequate screen between uses.</p> <p>Evergreen vegetation shall be planted and spaced in staggered rows 15' on center. Existing vegetation, such as hedgerows and trees, may be used to satisfy the screening requirements.</p> <p>Invasive plants are prohibited.</p>	

	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Screening								
Instances Required	<p>Commercial and industrial uses must be screened from adjacent residential and agricultural uses</p> <p>Loading areas, refuses areas, storage yards, dry detention ponds, and maintenance areas should be screened from public roads and adjacent properties.</p>	<p>Commercial and industrial uses must be screened from adjacent residential and agricultural uses</p> <p>Loading areas, refuses areas, storage yards, dry detention ponds, and maintenance areas should be screened from public roads and adjacent properties.</p> <p>The Zoning Administrator may require screening of a use that would have a direct negative impact on a property designated as historic in the Comp. Plan</p>	<p>Commercial and industrial uses must be screened from adjacent residential uses.</p>	<p>Screening is required between specified commercial uses (B-0, B-1, B-2, B-3) and residential districts, and between M-2/M-3 sites and AR, R, and A-1 districts.</p> <p>Buffers are required between commercial uses and major thoroughfares.</p> <p>Buffers are required between residential subdivisions in the Suburban Service District and major thoroughfares.</p>	<p>Planting areas are required along existing or planned ROWs.</p> <p>Refuse areas, storage yards, loading areas, and stormwater management facilities must be screened. Sites within view of Virginia Historic Landmarks must be screened. Lots with multiple frontages must be screened between the rear of the building and the ROW.</p> <p>In general, screening (transitional buffers) is required between industrial, commercial, multi-family uses and residential and agricultural districts.</p>	<p>Commercial and industrial uses must be screened from adjacent residential districts.</p>	<p>Matrix establishes buffer requirements. Generally required between commercial, industrial, and residential uses. All non-agricultural uses must be buffered from agricultural lands.</p> <p>Subdivision ordinance requires buffers between residential lots outside designated villages and major and scenic roadways</p>	<p>Most commercial and industrial uses must be screened from adjacent residential and agricultural uses.</p>
Composition	<p>May consist of a planting strip, existing vegetation, berms, a wall or fence (50% solid), or a combination thereof.</p> <p>Vegetative screening shall consist of a double staggered row of large or medium evergreen trees planted to achieve no less than 30% screening at the time of planting.</p>	<p>Five different screening options:</p> <ul style="list-style-type: none"> Evergreen Option: Double staggered row of evergreen trees planted 10' on center Berm Option: Double staggered row of evergreen shrubs planted 10' on center atop a berm at least 30" high. Mixed Vegetation Option: 1 large shade tree, 1 medium shade tree, 1 evergreen tree, and 3 evergreen shrubs for every 20' Woodlands Preservation Option: Existing vegetation preserved with a 75' buffer. Structural Option: 6' high wall with 1 evergreen tree/shrub planted every 10' <p>Dumpsters must be screened with a masonry wall.</p>	<p>Screening between commercial/industrial and residential sites may be achieved by:</p> <ul style="list-style-type: none"> Double row of 6' evergreen trees planted 10' on center OR 2 – 4' tall berm planted with 4' evergreen trees planted 10' on center. 	<p>Screening between Commercial/Residential:</p> <ol style="list-style-type: none"> If left in its natural state, the buffer is 100'. If left in its natural state and the existing vegetation can meet or exceed the required planting specified in (4) by a factor of 3 or the existing vegetation and a screen fence can exceed (4) by a factor of 2, the buffer is 75'. If left in its natural state and the existing vegetation can meet or exceed the required planting specified in (4) by a factor of 4 or the existing vegetation and a screen fence can exceed (4) by a factor of 3, the buffer is 50'. Buffer may be 25' deep with an undulating berm at least 4' high and at least 1 deciduous tree per 20', 1 evergreen tree per 10', 2 shrubs per tree, and suitable ground cover. <p>Along Major Thoroughfares: 1 deciduous or evergreen tree for every 50' of frontage, and 1 shrub for every 30' of frontage</p>	<p>ROW planting requirements: All existing viable mature trees and specimen trees must be preserved, as well as all understory trees with a DBH of 2" or greater.</p> <p>Transitional screening areas must be left in their undisturbed natural state and supplemented where necessary with additional plantings to provide an effective visual screen.</p>	<p>Unspecified</p>	<p>Three different types of buffers (A, B, C). Different buffer types required between different uses. In general, Type A is required between the least incompatible uses, while Type C is required between the most incompatible uses.</p> <ul style="list-style-type: none"> Type A: 1 large evergreen tree and 1 medium evergreen tree per 15' (35' depth) Type B: 1 large evergreen tree, 1 medium evergreen tree, 2 small evergreen trees or shrubs per 15' (50' depth) Type C: 1 large evergreen tree, 2 medium evergreen trees, 3 small deciduous, ornamental or evergreen trees per 15' (75' depth). <p>Buffers between residential lots (outside designated villages) and major roadways: 35' depth with landscape preservation easement; 100' depth along scenic byways.</p>	<p>Must be suitably fenced and/or landscaped for C-2/I-1 districts</p> <p>Screening between I-2 districts and residential and agricultural districts must consist of a 8' solid fence or landscaping consisting of 2 rows of evergreen trees (8' tall) planted 20' apart and staggered.</p>

	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Screening (continued)								
Depth	25' (if only vegetative screening is provided)	Evergreen Option: 25' Mixed Vegetation Option: 25' Woodlands Preservation Option: 75' Other options unspecified	20' (if only vegetative screening is provided)	20' (if only vegetative screening is provided)	Unspecified	Front Yard: 20-35' Rear Yard: 20-30' Side Yard: 20-30'	Front Yard: 50-70' Rear Yard: 20-30' Side Yard: 10-20' Developers may receive an up to 10' setback reduction for utilizing exceptional architectural treatments on buildings.	20'
Street Trees								
Locations Required	Existing or proposed public streets in any non-residential development, or non-residential part of a mixed-use or multi-family development that is subject to site plan approval.	Existing or proposed public streets within or adjacent to any site subject to site plan approval and all major subdivisions with an average lot size of one (1) acre or less.	Existing or proposed public streets in any development subject to site development plan approval in all commercial and industrial districts and residential districts ≥ 4 DU/acre.	Existing and proposed public streets in any commercial or industrial development subject to site plan approval and all multi-family residential developments.	Streets in major residential subdivisions.	All areas used for vehicular access within residential uses not requiring site plan approval (landscape plan required with Record Plat or Construction Drawings, whichever comes first).	All roads in major residential subdivisions with an average lot size of 2 acres or less.	Unspecified
Spacing	Large Shade Trees: 1 per 100' of road frontage Ornamental Trees: 1 per 100' of road frontage Medium/Small Evergreens: 2 per 100' of road frontage	Large Shade Trees: 1 per 40' of road frontage OR Medium Shade Trees: 1 per 25' of road frontage	Large Street Trees: 1 per 50' of road frontage Medium Street Trees: 1 per 40' of road frontage	1 tree per 50' of road frontage	1 tree per 50' of road frontage	1 tree per 50' of road frontage	1 tree per 50' of road frontage	Unspecified

	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Screening (continued)								
Depth	25' (if only vegetative screening is provided)	Evergreen Option: 25' Mixed Vegetation Option: 25' Woodlands Preservation Option: 75' Other options unspecified	Unspecified	25-100' depending on type selected Along Major Thoroughfares: 15-25' (depending on road)	ROW Landscape Areas: 50' along Community Character Corridors, 30' along other roads. Transitional buffers range from 30-50', with industrial uses requiring the greatest buffer.	25'	35-75' depending on type required	Unspecified
Street Trees								
Locations Required	Existing or proposed public streets in any non-residential development, or non-residential part of a mixed-use or multi-family development that is subject to site plan approval.	Existing or proposed public streets within or adjacent to any site subject to site plan approval and all major subdivisions with an average lot size of one (1) acre or less.	Unspecified	Unspecified	Along all ROWs within and abutting residential subdivisions.	Unspecified	Along all ROWs within and abutting major subdivisions with lots less than five acres (except industrial)	Unspecified
Spacing	Large Shade Trees: 1 per 100' of road frontage Ornamental Trees: 1 per 100' of road frontage Medium/Small Evergreens: 2 per 100' of road frontage	Large Shade Trees: 1 per 40' of road frontage OR Medium Shade Trees: 1 per 25' of road frontage	Unspecified	Unspecified	Trees: 1 tree every 40' Shrubs: 1 shrub every 20'	Unspecified	1 tree every 40'	Unspecified

	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Plant List								
Is there a plant list?	Yes	Yes	Yes	No Some suggested species are listed within the ordinance.	No	No	No	No
Does it include native plants?	Yes	Yes	Yes	N/A	No	No	No	No
Are the use of native plants required?	No	No	No	No The Culpeper County Design Guidelines promote natives.	No	No	No	No
Tree Preservation								
Are existing trees required to be preserved?	No Encouraged by Code	No Encouraged by Code	No	No	No	No Clear-cutting of projects requiring site plans is limited to areas required for loading, parking, streets, stormwater management, and buildings; in residential subdivisions, it is limited to areas required for house pad, yard, drainfields, streets, stormwater management, and recreational facilities.	Yes Existing trees of 8" in diameter or more must be preserved to the maximum extent possible.	No
Are credits given for the preservation of existing trees?	Yes Areas indicated as tree protection zones may satisfy screening requirements.	Yes Existing trees may be used to meet the screening requirements, and bonuses are awarded for preserving existing trees as part of the canopy requirements	Yes Existing trees or wooded areas may be preserved in lieu of planting new materials in order to satisfy the landscaping and screening requirements.	Yes Existing trees preserved receive bonus credit under the tree canopy requirements.	Unspecified	Yes Existing trees or wooded areas may be preserved in lieu of planting new materials in order to satisfy the landscaping and screening requirements.	Yes Existing trees and shrubs may be preserved in lieu of planting new materials in order to satisfy the landscaping and screening requirements.	Yes Existing vegetation may be used to meet the screening requirements.
Is there a tree preservation buffer along waterways?	No	Yes 50' along all intermittent streams, 75' along all perennial streams, and 100' along the Hardware, James, and Rivanna rivers. Indigenous vegetation shall be preserved to the maximum extent practical, consistent with the use or development proposed.	In Development Areas: 100' along perennial streams and contiguous wetlands In Water Supply Protection Area or Rural Land: 100' along perennial or intermittent streams and contiguous wetlands OR limits of floodplain, whichever is greater. Agricultural Cropland: 25' perennial streams and contiguous wetlands No live tree with a diameter of 6" or greater within 15' of any perennial stream may be cut down.	All new development subject to stormwater regulations must retain or establish stream buffers. Rappahannock, Rapidan, Hazel, Thornton Rivers: 100' on each side Perennial Streams: 50' on each side Ephemeral streams, intermittent streams, or streams with evidence of channel formation: 25' on each side	No	No	Yes (per CBPA regulations) 100' vegetated buffer adjacent to tidal wetlands, nontidal wetlands connected by surface flow to perennial water bodies, and tidal shores.	No
Is there a tree preservation buffer along roadways?	No	Yes (part of subdivision ordinance)	No	No	No	No	Landscaped areas are required along roadways in the Highway Corridor Overlay District.	No

	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Plant List								
Is there a plant list?	Yes	Yes	No	Yes	Yes	No	Code references the list of native species on the VA DCR website as the plant list.	No
Does it include native plants?	Yes	Yes	No	Yes	Yes	No	Yes	No
Are the use of native plants required?	No	No	No	No	No	No	Unless a certified landscape architect specifies an alternative species that has a hardiness and growth rate suitable for the location.	No
Tree Preservation								
Are existing trees required to be preserved?	No Encouraged by Code	No Encouraged by Code	Yes (within buffers) Trees with a 6" caliper or greater located within buffer areas must be retained.	No	Yes Existing mature trees outside impervious areas must be preserved. The PC may require specific trees to be preserved.	No	No Encouraged within Code	No
Are credits given for the preservation of existing trees?	Yes Areas indicated as tree protection zones may satisfy screening requirements.	Yes Existing trees may be used to meet the screening requirements, and bonuses are awarded for preserving existing trees as part of the canopy requirements	Unspecified	Yes Existing trees or wooded areas may be preserved in lieu of planting new materials in order to satisfy the screening requirements.	Yes 1 existing viable ornamental tree = 1 planted ornamental tree 3 existing viable trees = 1 planted tree 1 viable mature tree = 2 planted trees 1 viable specimen tree = 3 planted trees	Unspecified	Yes Existing trees or wooded areas may be preserved in lieu of planting new materials in order to satisfy the landscaping and screening requirements.	Unspecified
Is there a tree preservation buffer along waterways?	No	Yes 50' along all intermittent streams, 75' along all perennial streams, and 100' along the Hardware, James, and Rivanna rivers. Indigenous vegetation shall be preserved to the maximum extent practical, consistent with the use or development proposed.	No (generally) Within the Rural Preservation District, a 100' buffer is required along perennial streams and a 50' buffer is required along intermittent streams.	Yes (per CBPA regulations) 100' vegetated buffer adjacent to tidal wetlands, nontidal wetlands connected by surface flow to perennial water bodies, and tidal shores.	Yes (per CBPA regulations) 100' vegetated buffer adjacent to tidal wetlands, nontidal wetlands connected by surface flow to perennial water bodies, and tidal shores.	Forested buffers (25-100') are encouraged, and sometimes required, along Lake Anna	Yes (per CBPA regulations) 100' vegetated buffer adjacent to tidal wetlands, nontidal wetlands connected by surface flow to perennial water bodies, and tidal shores.	No
Is there a tree preservation buffer along roadways?	No	Yes (part of subdivision ordinance)	No	Screening is required along major thoroughfares for most new development.	Landscaped areas are required along roadways.	No	Landscape preservation areas are required along major roads and scenic roads (see Screening).	No

	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Tree Canopy Requirements								
Requirements	None	Commercial, Office, Institutional or Industrial Uses: 10% canopy Multi-Family Residential (Density 10-20 DU/ac): 15% canopy Multi-Family Residential (Density ≤10 DU/ac): 20% canopy	Commercial, Office, or Industrial Uses: 10% canopy Residential Site (Density ≥20 DU/ac): 10% canopy Residential Site (Density 10-20 DU/ac): 15% canopy Residential Site (Density ≤10 DU/ac): 20% canopy	Commercial, Office, Institutional or Industrial Uses: 10% canopy Multi-Family Residential (Density 10-20 DU/ac): 15% canopy Multi-Family Residential (Density ≤10 DU/ac): 20% canopy	None	Commercial or Industrial Zoned Properties requiring a Site Plan: 10% canopy Residential or PUD Zoned Properties requiring a Site Plan: 15% canopy Residential Subdivisions not requiring a Site Plan: 15%	None	None
Existing Tree Credits	N/A	Bonus credit is awarded for preserving existing wooded areas, clusters of trees or mature trees (DBH ≥12") Mature Trees: Credit of 2.0x the area defined by the drip line Wooded Areas/Clusters: Credit of 1.5x the area defined by the drip line	Where existing trees are maintained, a canopy bonus is granted as follows: <ul style="list-style-type: none"> The canopy area is calculated at 10 additional years of maturity; The resultant area is multiplied by 1.25. 	Bonus credit is awarded for preserving existing wooded areas, clusters of trees or mature trees (circum. ≥42" 5' above grade). Mature Trees: Credit of 2.0x the area defined by the drip line Wooded Areas/Clusters: Credit of 1.5x the area defined by the drip line	N/A	Existing trees may be counted as part of the tree canopy calculations.	N/A	N/A

	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Tree Canopy Requirements								
Requirements	None	Commercial, Office, Institutional or Industrial Uses: 10% canopy Multi-Family Residential (Density 10-20 DU/ac): 15% canopy Multi-Family Residential (Density ≤10 DU/ac): 20% canopy	None	None	None	None	None	None
Existing Tree Credits	N/A	Bonus credit is awarded for preserving existing wooded areas, clusters of trees or mature trees (DBH ≥12") Mature Trees: Credit of 2.0x the area defined by the drip line Wooded Areas/Clusters: Credit of 1.5x the area defined by the drip line	N/A	N/A	N/A	N/A	N/A	N/A

	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Parking Lot Landscaping								
Interior Landscape Area	<p>1 planting island (9' x 18') per 25 parking spaces in a row at both ends of the parking bay.</p> <p>9' planting strip between 4 adjacent parking bays</p> <p>9' planting strip between access roadways</p>	<p>1 planting island (12' x 18') per 20 parking spaces in a row at both ends of the parking bay.</p> <p>9' planting strip between 4 adjacent parking bays</p> <p>9' planting strip between access roadways</p>	<p>An area equal to 5% of the paved parking area must be landscaped</p> <p>1 shade tree is required per 10 parking spaces</p>	<p>An area equal to 5% of the paved parking area must be landscaped</p> <p>1 canopy tree is required per 10 parking spaces</p> <p>120 sq. ft. of contiguous pervious area is required per tree</p>	Unspecified	No parking space may be more than 80' from a landscaped open space or a canopy tree.	<p>20 sq. ft. of interior landscaping per parking space</p> <p>1 small deciduous tree per 100 sq. ft. of landscaped area OR 1 large deciduous tree per 200 sq. ft. of landscaped area</p> <p>All landscape areas shall be planted with shrubs and other vegetative ground cover compatible with tree landscaping, so that no bare ground exists.</p>	<p>An area equal to 5% of the paved parking area must be landscaped</p> <p>In plans that bioretention is used as a stormwater feature, the planting areas may be 3% or more of the total parking area</p>
Landscaped Islands	<p>1 planting island (9' x 18') per 25 parking spaces in a row at both ends of the parking bay.</p> <p>1 large shade tree per island</p> <p>1 large shade tree for every 35' of internal planting strip</p>	<p>1 planting island (12' x 18') per 20 parking spaces in a row at both ends of the parking bay.</p> <p>1 large shade tree and 4 shrubs per island</p> <p>1 large shade tree and 6 shrubs per 35' of internal planting strip</p>	Must be evenly dispersed throughout the parking lot	<p>No size requirements</p> <p>Must be evenly dispersed throughout the parking lot</p>	Unspecified	<p>Islands must be located at the end of each row of parking. They must be 6' wide and equal in length to the adjacent parking space.</p> <p>1 canopy tree is required per island.</p> <p>Curbs are required around the islands.</p> <p>Must be evenly dispersed throughout the parking lot</p>	Each island must be at least 100 sq. ft. and have a minimum width of 9'.	Islands must be at least 150 sq. ft. and have at least 1 tree and 3 shrubs for every 150 sq. ft.
Canopy Requirements	<p>35%</p> <p>1 large shade tree per island</p> <p>Medium shade trees may be used instead of large trees at a ratio of 2:1. Medium shade trees may not exceed 40% of required trees.</p>	<p>35%</p> <p>1 large shade tree per island</p> <p>Medium shade trees may be used instead of large trees at a ratio of 2:1. Medium shade trees may not exceed 40% of required trees.</p>	1 shade tree per 10 parking spaces	1 canopy tree per 10 parking spaces	Unspecified	<p>1 tree per 10 parking spaces</p> <p>Plus 1 tree per island</p>	<p>1 small deciduous tree per 100 sq. ft. of landscaped area OR 1 large deciduous tree per 200 sq. ft. of landscaped area</p> <p>Existing large deciduous trees of 8" or greater in diameter at DBH shall be credited as 2 newly-planted large deciduous trees.</p>	Unspecified

	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Parking Lot Landscaping								
Interior Landscape Area	<p>1 planting island (9' x 18') per 25 parking spaces in a row at both ends of the parking bay.</p> <p>9' planting strip between 4 adjacent parking bays</p> <p>9' planting strip between access roadways</p>	<p>1 planting island (12' x 18') per 20 parking spaces in a row at both ends of the parking bay.</p> <p>9' planting strip between 4 adjacent parking bays</p> <p>9' planting strip between access roadways</p>	<p>Each zoning district has its own requirements regarding parking lot landscaping.</p> <p>All Commercial and Industrial zones are required to have the following planting requirements between the parking lot and the street: A 3' evergreen hedge or 2'-4' berm with a 2' evergreen hedge is required.</p>	Unspecified	<p>Interior landscaping area must be equal to at least 10% of the surface area parking.</p> <p>1 tree and 2 shrubs are required for every 5 parking spaces.</p> <p>1 viable mature tree that is preserved may substitute for 2 planted trees; 1 viable specimen tree substitutes for 3 planted trees.</p> <p>At least 35% of trees must be evergreen, at least 50% of trees must be deciduous shade trees, and at least 50% of shrubs must be evergreen.</p>		<p>2 trees required for every 10 parking spaces.</p> <p>4 shrubs are required for every 10 parking spaces.</p>	<p>200 sq. ft. of landscaped area per 10 parking spaces</p> <p>1 shade tree per 10 parking spaces</p>
Landscaped Islands	<p>1 planting island (9' x 18') per 25 parking spaces in a row at both ends of the parking bay.</p> <p>1 large shade tree per island</p> <p>1 large shade tree for every 35' of internal planting strip</p>	<p>1 planting island (12' x 18') per 20 parking spaces in a row at both ends of the parking bay.</p> <p>1 large shade tree and 4 shrubs per island</p> <p>1 large shade tree and 6 shrubs per 35' of internal planting strip</p>		Unspecified	<p>Parking spaces must be grouped into bays; at the end of each bay, there must be a landscaped island that is at least 9' x 15'. No parking bay may be more than 150' long without the construction of a landscaped island.</p> <p>Islands must be protected by curbs or buffers.</p>		<p>Landscaped islands are required at the end of each parking bay.</p> <p>Each island must be at least 10' x 15'.</p>	1 shade tree per 10 parking spaces
Canopy Requirements	<p>35%</p> <p>1 large shade tree per island</p> <p>Medium shade trees may be used instead of large trees at a ratio of 2:1. Medium shade trees may not exceed 40% of required trees.</p>	<p>35%</p> <p>1 large shade tree per island</p> <p>Medium shade trees may be used instead of large trees at a ratio of 2:1. Medium shade trees may not exceed 40% of required trees.</p>		Unspecified	<p>Trees may be spaced no more than 75' apart throughout the parking lot.</p> <p>Parking lots shall be designed to preserve existing viable trees to the maximum extent possible.</p>		<p>2 trees required for every 10 parking spaces.</p>	<p>1 shade tree per 10 parking spaces</p> <p>At least 1 shade tree is required for every 50' of frontage.</p> <p>If 20 or more trees are required, no more than 1/4 of the trees may be any one species.</p>

	Existing Ordinance	Proposed Ordinance	Albemarle County	Culpeper County	Cumberland County	Fauquier County	Gloucester County	Greene County
Parking Lot Landscaping (continued)								
Buffer from Roadways	There should be a minimum of 50% screening of parking areas from public streets and adjacent properties.	<p>Four different screening options:</p> <ul style="list-style-type: none"> Landscape Strip Option: 1 tree and 10 shrubs per 40' of frontage Berm Option: 1 tree and 5 shrubs per 40' of frontage with a berm that is at least 30" tall Woodlands Preservation Option: Existing vegetation preserved with a 35' buffer. Structural Option: 3-4' high wall with 1 tree and 3 shrubs per 40' of frontage 	<p>Large street trees must be planted along the public street frontage which abuts a parking lot. 1 large shade tree is required for every 50 feet of road frontage. Medium shade trees may be used if there are spacing constraints; if medium shade trees are used, 1 tree is required per 40 feet of road frontage.</p> <p>When parked cars are visible from a public street, a buffer of low shrubs is required. Shrubs should be planted in a single row and spaced 5' apart. Alternative modes of screening may be approved by the reviewer.</p>	<p>Parking lots must be screened from adjacent land planned or zoned for agricultural, rural area, and residential uses.</p> <p>Lots with 10 or more spaces visible from public streets must be screened with a single row of shrubs between the parking lot and the street. The plantings must provide a continuous barrier at one year's maturity. Alternative methods of screening (low walls, berms) may be used with if approved by the Approving Authority.</p>	Unspecified	<p>All parking lots with more than 20 spaces must have landscaping along the perimeter of the parking area with a minimum of 1 canopy tree per 10 spaces.</p> <p>A 10' wide landscaping strip is required between the parking lot and street ROW. The parking area must be screened to a height of 30". The screening options are:</p> <ul style="list-style-type: none"> Landscape Strip Option: 1 canopy tree and 10 shrubs should be planted per 35 linear feet of frontage (excluding driveway openings) in a 10' wide strip. Berm Option: 1 canopy tree and 5 shrubs per 35 linear feet of frontage (excluding driveway openings). The berm must be at least 30" higher than the finished grade of the parking lot, and it may have a slope no steeper than 2:1. There are no set dimensions regarding the width of the buffer. Woodlands Preservation Option: Allows for the preservation of an existing woodlands strip with a minimum width of 35'. No additional plantings are required. The strip must be placed in easement, and the landscape plan must include techniques to be used for removing underbrush, pruning, and to protect the trees from any damage during site development. 	<p>Lots with more than 5 spaces visible from a public ROW must be screened. There are 3 options for screening:</p> <ul style="list-style-type: none"> A continuous evergreen hedge at least 3' tall; A continuous undulating earthen berm at least 3' tall and landscaped with groundcover and other stabilizing vegetation; and/or A continuous picket fence, 3-4' tall, painted white or whitewashed (a plastic composition fence, designed to look like a white picket fence, shall also be permitted). 	<p>50% of the required landscape shall be planted around the building and perimeter of the parcel. 1 tree and 3 shrubs are required for every 150 sq. ft.</p> <p>A minimum 10' wide buffer is required between the parking lot and adjacent right-of-way. There may be:</p> <ul style="list-style-type: none"> 1 small tree and 3 shrubs per 20 linear feet; or 1 large tree and 5 shrubs per 40 linear feet.

	Existing Ordinance	Proposed Ordinance	Goochland County	Hanover County	James City County	Louisa County	New Kent County	Orange County
Parking Lot Landscaping (continued)								
Buffers from Roadways	There should be a minimum of 50% screening of parking areas from public streets and adjacent properties.	<p>Four different screening options:</p> <ul style="list-style-type: none"> Landscape Strip Option: 1 tree and 10 shrubs per 40' of frontage Berm Option: 1 tree and 5 shrubs per 40' of frontage with a berm that is at least 30" tall Woodlands Preservation Option: Existing vegetation preserved with a 35' buffer. Structural Option: 3-4' high wall with 1 tree and 3 shrubs per 40' of frontage 	<p>Each zoning district has its own requirements regarding parking lot landscaping.</p> <p>All Commercial and Industrial zones are required to have the following planting requirements between the parking lot and the street: A 3' evergreen hedge or 2'-4' berm with a 2' evergreen hedge is required.</p>	<p>All commercial uses on a designated major thoroughfare must have a buffer of at least 15' along the road frontage; no parking areas are allowed in the buffer. The buffer increases to 25' along select primary roads.</p> <p>The buffer must include: 1 deciduous or evergreen tree for 50' of frontage, 1 shrub for 30' of frontage, and reasonably-dispersed ground cover</p> <p>When a berm that is at least 3' tall is provided (and does not have a slope greater than 3:1), there is a 50% reduction in the number of required trees.</p>	All parking lots must be screened from the public ROW by evergreen plantings or berms to create a screen at least 3' high.	Minimum 10' buffer between parking lot and ROW	<p>Minimum 10' buffer is required between the parking lot and the ROW and adjacent property liens.</p> <p>The required strip along the side lot lines may be reduced by 5' if an equal amount is added to the buffer along the ROW.</p> <p>Existing trees and natural vegetation should be retained wherever possible.</p>	<p>Parking lots must be set back 15' from any front property line.</p> <p>At least 1 shade tree is required for every 50' of frontage.</p>



COUNTY OF FLUVANNA

“Responsive & Responsible Government”

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Memo

To: Fluvanna County Planning Commission

From: Andrew J. Pompei, Planner

Date: March 8, 2012

Re: Amendments to the Subdivision and Zoning Ordinances Related to Landscaping and Off-Street Parking

Over the past year, the Planning Commission and Department of Planning & Community Development have worked together to amend the subdivision and zoning ordinances, so that these policies are consistent with the intent of the current Comprehensive Plan. Since late 2011, the Planning Commission has considered changes to the Tree Protection and Off-Street Parking sections of the zoning ordinance. Possible amendments were discussed at the Planning Commission work sessions in January and February.

To ensure that the proposed amendments are consistent with the rest of the Fluvanna County Code, the Planning Commission may consider changing other parts of the zoning ordinance, as well as the subdivision ordinance. Planning Staff has recommended the following changes:

- Amending the subdivision ordinance (Chapter 19: Article 7) to require riparian protection areas along streams that are within, or adjacent to, major subdivisions;
- Amending the subdivision ordinance (Chapter 19: Article 8) to require street trees to be planted along roadways within, and adjacent to, major subdivisions;
- Amending the subdivision ordinance (Chapter 19: Article 8) to specifically allow the use of low-impact development (LID) techniques within new developments;
- Amending the subdivision ordinance (Chapter 19: Article 8) to require landscape preservation buffers along major roadways and scenic byways; and
- Adding definitions to the zoning ordinance (Chapter 22: Article 22) to further clarify terms used within the Tree Protection and Off-Street Parking sections of the zoning ordinance.

The agenda packet for the Planning Commission work session on March 14 includes the following documents related to the proposed amendments to the subdivision and zoning ordinances:

- Draft of the Subdivision Ordinance (Article 7 & Article 8)
- Explanation of Modifications to the Subdivision Ordinance
- Additions to Article 22 (Definitions) of the Zoning Ordinance

If you have any concerns, please contact the Planning Department at (434) 591-1910 or via email.

Article 7. Subdivision Design Standards

Sec. 19-7-1. Generally.

The subdivider and the county shall be mutually responsible for the orderly development of the land. Nothing herein shall be deemed to require the approval of any plat which the Subdivision Agent shall determine to be contrary to sound engineering or surveying practice or which shall constitute a danger to the public health, safety or general welfare. The Subdivision Agent shall review all subdivisions, and may require reasonable changes to the design of such plats to ensure that the development is in conformity with the Comprehensive Plan, rationally designed, suitably adapted to the topography, efficient for the provision of utilities and services, coordinated with the future provision of capital improvements in the surrounding area, and has minimal negative impact on adjoining property. Their discretion shall be guided by the standards set forth in this article.

Sec. 19-7-2. Rural Cluster subdivisions.

All subdividers shall strive to conserve the noteworthy features of the parcel to be subdivided and the rural landscape, in accordance with the Comprehensive Plan and the purpose of this chapter. To achieve these objectives, the subdivider shall follow the process set forth below in developing rural cluster subdivisions for the subdivision of a tract. All major subdivisions in the A-1 Agricultural General Zoning District Classification shall be Rural Cluster subdivisions and subject to this section.

- (a) Determine the number of lots desired, not exceeding the number allowed to be subdivided from the tract under the density provisions of Chapter 22;
- (b) Delineate areas of the tract to be conserved due to their noteworthy features and value to the continued rural character of the county, including, but not limited to, lands with high value for continued agricultural or forestry production, high scenic value including riparian corridors and wildlife habitat; high environmental sensitivity such as steep slopes, wetlands, floodplains; high recreational value and/or having noteworthy historical, natural, or cultural features;
- (c) Locate potential house sites on the area of the tract not delineated as conservation areas, with due consideration for topography, soil suitability for construction and septic system use, and efficient service by public or central water and/or sewerage systems, as applicable;
- (d) Align streets to serve house sites, with due consideration for topography and connections to existing, planned or potential streets in adjacent areas, and align pedestrian trails if planned; and
- (e) Delineate boundaries of individual residential lots and any residue, in accordance with the lot size, dimension, setback, and yard requirements of Chapter 22.

Sec. 19-7-3. Rational design.

Lot sizes and shapes, block sizes and shapes, and street networks and alignments shall be designed in accordance with accepted planning practices to produce a rational and economical system without undue clearing or grading.

Sec. 19-7-4. Suitability to topography.

If the site contains floodplains, wetlands or slopes steeper than 20%, the proposed development shall be designed to protect against such dangers as erosion, sedimentation, flooding, landslide or subsidence.

Sec. 19-7-5. Infrastructure.

All streets, water systems, sewer systems, storm drainage systems, solid waste collection systems, and other utilities and services shall be coordinated with the existing and planned systems in the surrounding area, and shall be designed and constructed so as to minimize the cost of operation and maintenance and so as to maximize the safety, convenience and efficiency thereof. All lots shall be designed to provide for safe and convenient vehicular access to public streets. Driveway locations, which shall conform to good engineering practice and, in particular, to the regulations of the Virginia Department of Transportation, shall be specified on the plat.

Sec. 19-7-5.1. Street layout.

The following requirements and standards of street layout shall apply:

- (a) The subdivision street layout shall conform in all essential respects with any adopted small area plan and the transportation element and other aspects of the Comprehensive Plan. Proposed streets shall provide for the continuation of existing, planned or platted streets on adjacent tracts, unless such continuation shall be prevented by topography or other physical condition, or unless such extension is found by the Subdivision Agent to be unnecessary for the coordination of development between the subdivision and such adjacent tract.
- (b) Where the subdivision abuts or contains an existing public road, the Subdivision Agent may require that measures be taken to reduce the impact of heavy traffic on the lots abutting or fronting upon such road, and to conserve the capacity of such road to serve through traffic, by one of the following means:
 - 1. By providing vehicular access to such lots by means of a service drive separated from the existing public road by a planting strip and connecting therewith at infrequent intervals.
 - 2. By designing reverse frontage lots having access only from a parallel minor street or from cul-de-sac or loop streets, and with vehicular access

3. By increasing setbacks by not less than 25% for all structures and requiring the joint use of driveways.

The choice of the most appropriate method of accomplishing the desired purpose in a specific instance shall be made by the Subdivision Agent giving consideration to topography and other physical conditions, the character of existing and contemplated development in the subdivision and its surroundings, and other pertinent factors.

- (c) Cul-de-sacs shall serve five or fewer lots, and shall be connected to other streets by pedestrian paths.
- (d) Intersections of streets shall be at an angle as nearly 90 degrees as topography and good design will permit.
- (e) Alleys may be provided in the rear of lots.
- (f) Cross access easements may be provided for any commercial, multi-family, and industrial subdivision and shall meet the surfacing requirements of the proposed off-street parking as required by the type of use and development contemplated, in compliance with Chapter 22 of this code. Any such easement is subject to the approval of the County Attorney.

Sec. 19-7-5.2. Lot layout.

The lot arrangement, design and orientation shall be such that all lots will provide satisfactory building sites, properly related to topography and the character of surrounding development. All lots shall be designed to provide for safe and convenient vehicular access to public streets.

- (a) Where lots must have direct access to an existing thoroughfare rather than an internal street, driveway locations shall conform to good engineering practice and, in particular, the regulations of the Virginia Department of Transportation. Joint access driveways shall be provided where practical. All restrictions regarding lot access and driveway location shall be specified on the plat.

If a tract is subdivided into fewer lots than the maximum allowed by its zoning classification, or the Comprehensive Plan designates the tract for a higher density of development than its present zoning classification allows, the Subdivision Agent may require the subdivider to arrange the lots so as to allow the opening of future streets and logical further subdivision.

- (b) The dimensions and layout of lots reserved or planned for commercial, multi-family, and industrial purposes shall be adequate to provide for any off-street parking and service facilities required by the type of use and development contemplated, in compliance with Chapter 22 of this code. The Subdivision Agent may require the subdivider to demonstrate compliance by providing a schematic layout of the anticipated development of such lots.

Sec. 19-7-5.3. Easements.

Where a proposed subdivision is traversed by any stream, water course or drainageway, or a drainageway is proposed, the subdivider shall make adequate provision for the proper drainage of surface water, including the provision of easements along such streams, water courses, and drainageways. The Subdivision Agent may require permanent easements of appropriate width for poles, wires, conduits, storm and sanitary sewers, gas, water mains, and other public utilities, and temporary easements for the future construction thereof, along all lot lines and in other locations deemed necessary to adequately and efficiently serve all subdivision lots and the surrounding area. Such easements may be required for both existing and planned utilities.

Sec. 19-7-5.4. Lands designated for public or common ownership.

When the subdivider proposes to designate lands for public or common ownership, the following standards shall apply:

Where the proposed subdivision includes lands proposed for use as public parks, school sites, or public water or sewer provision under the Comprehensive Plan, the Subdivision Agent shall request the subdivider to indicate the location of such lands on the subdivision plat. The Subdivider shall also provide the written agreement for the acquisition of the lands or facilities between the subdivider and the receiving agency. No public agency is compelled by this chapter to accept any proposed land or facilities.

Sec. 19-7-6. Phasing.

If the subdivider desires to complete the improvements shown on the preliminary plat over a period of more than one year, he may submit a preliminary plat showing the entire development at completion, and delineating two or more phases to be improved in succession, together with a schedule for completion of each phase. After such plat has been approved, he may construct the improvements in, and submit a final plat for, each phase, consistent with the approved schedule. Pursuant to the requirements of Section 15.2-2241(5) of the Code of Virginia, if a developer records a final plat which is a section of a subdivision as shown on an approved preliminary plat, the developer shall have the right to record the remaining sections shown on the preliminary plat for a period of five years from the recordation date of the first section.

Sec. 19-7-7. Noise, glare and pollution.

The proposed development shall be designed to minimize the impact of noise, glare and pollution on adjoining property, and to protect the surrounding lands from the same.

Sec. 19-7-8. Riparian protection areas.

To protect local water quality, all major subdivisions must reserve a riparian protection area in accordance with the following requirements:

- (a) *The riparian protection area shall be at least 50 feet wide along both sides of all intermittent streams, at least 75 feet wide along both sides of all perennial streams, and at least 100 feet wide along both sides of the Hardware River, Rivanna River, and James River.*
- (b) *Indigenous vegetation, including existing ground cover, shall be preserved to the maximum extent practicable, consistent with the use or development proposed. Dead, diseased, or dying vegetation may be pruned or removed as necessary, pursuant to sound horticultural practices. No logging or silvicultural activities may take place within the riparian protection area.*
- (c) *No portion of any on-site sewerage system, drain field, reserve drain field, or building shall be placed within the riparian protection area. This statement shall be on all plats and site plans of affected lots.*
- (d) *If otherwise authorized by the applicable regulations of this chapter, the following types of development shall be permitted within the riparian protection area, provided that the requirements of this section are met:*
 - 1. *A building or structure which existed on the date of adoption of this article may continue at such location. However, nothing in this section authorizes the replacement, expansion, or enlargement of such building or structure.*
 - 2. *On-site or regional stormwater management facilities and temporary erosion and sediment control measures, provided that:*
 - a. *To the extent practical, as determined by the agent, the location of such facilities shall be outside of the riparian protection area.*
 - b. *No more land shall be disturbed as necessary to provide for the construction and maintenance of the facility, as determined by the agent.*
 - c. *The facilities are designed to minimize impacts to the functional value of the riparian protection area and to protect water quality; and*
 - d. *Facilities located within a floodplain adhere to the floodplain regulations of the County Code.*
 - 3. *Water-dependent facilities; water wells; passive recreation areas, such as pedestrian trails and bicycle paths; historic preservation; archaeological activities, provided that all applicable federal, state and local permits are obtained. All pedestrian trails and bicycle paths shall be constructed using permeable paving materials.*

4. *Stream crossings of perennial and intermittent streams for roads, streets, or driveways, provided that the stream buffer disturbance shall be the minimum necessary for the lot(s) to be used and developed as permitted within the underlying zoning district. Stream crossings shall not disturb more than thirty (30) linear feet of stream for driveways and sixty (60) linear feet for roads or streets, provided that the agent may allow additional length of stream disturbance where fill slopes or special conditions necessitate additional length.*

Sec. 19-7-8. Sec. 19-7-9. Compliance with Chapter 22 of this code.

No subdivision plat shall be approved unless and until it shall be determined that the same complies with Chapter 22 of this code. Subdivisions that are prepared consistent with approved Master Plans as provided in Chapter 22 of this code, shall be subject to the street and lot layout design and improvement standards provided for in that Master Plan.

Article 8. Required Improvements

Sec. 19-8-1. Streets.

An adequate system of streets shall be constructed to provide access from all lots to the state highway system.

- (a) In any major subdivision, as defined herein, all streets shall be designed and constructed in conformance with the Virginia Department of Transportation's subdivision street requirements. Preliminary plans for all such streets shall have been approved by the Virginia Department of Transportation prior to approval of the preliminary plat.
- (b) Proposed street names shall be shown on the preliminary plat, and may be changed by the Subdivision Agent. Names of new streets shall not duplicate names of existing streets, irrespective of suffixes. Any street that is a continuation of an existing street shall bear the name of the existing street. The governing body may institute a fee in order to acquire and install all street identification signs. Where a street is planned for future extension, and a stub street serving three or more lots is proposed for construction as part of a subdivision, a temporary turnaround shall be provided on such stub street. Such turnaround shall be of adequate location, size and design as determined by the Subdivision Agent. All stub streets shall be marked with a metal sign clearly providing public notice that the street is subject to future extension.
- (c) Any private road in a subdivision which will not be constructed to Virginia Department of Transportation standards shall be located in a right-of-way or easement at least 50 feet in width and shall be so designed and built as to provide adequate access by ordinary passenger vehicles in all weather, in accordance with the provisions of this section as set forth hereinafter. All lots that are within a subdivision which is served by any private road shall be prohibited direct vehicular access from an existing public road by deed restriction or other means. Except in the case of lots intended, designed and used (a) for attached single-family, two-family or multi-family dwellings; (b) for rural cluster lots; or (c) for commercial or industrial uses, no lot served by a private road may be less than 10 acres in area, and no such private road shall serve more than 5 lots. The plat, and each deed, shall clearly state that the county and Commonwealth are not responsible for the maintenance of the roads. A road maintenance agreement, approved by the county attorney and the Subdivision Agent, shall be filed with the deeds of all lots to be served by such private road. Such agreement shall require the landowners, jointly and severally, to cooperate in and pay for the maintenance of the road such that emergency vehicles and other necessary traffic can reach all of the lots with reasonable ease. Each plat showing any such private road shall contain a certification from a registered surveyor or engineer in substantially the following form: "The private road shown on this plat will provide reasonable

Number of Lots	Right-of-Way Width	Minimum Width of Travelway	Surface Treatment	Minimum Ditchline	Maximum Grade
1-5	50 feet	14 feet	Gravel (#25 or #26), 3 inches in depth over suitable base	4 feet in width, with a minimum of 4% slope from the travelway and ditches a minimum of 18 inches in depth	9%

(Ord. 11-17-04)

Sec. 19-8-2. Water supply.

The subdivider shall provide evidence satisfactory to the Subdivision Agent that each lot which is proposed to be created shall have available to it potable water sufficient in quantity and quality to provide for the uses to which such lot may lawfully be put. For any major subdivision, all phases included, one or more sources of water of acceptable quality and quantity shall be approved by the county prior to submittal of the preliminary plat. The water supply shall meet all applicable federal, state and local regulations and the Hydrogeologic Test Requirements.

Sec. 19-8-2.1. Hydrogeologic test requirements.

Prior to the approval of the preliminary plat, the subdivider shall provide evidence that the parcel proposed to be subdivided has sufficient supply of potable water to serve each of the proposed lots. In the case of a subdivision which is proposed to be served by either a public water system, a public service company or a central water supply, the subdivider shall demonstrate that the subdivision has a capacity equal to 1 gallon per minute for each proposed lot after a 48 hour continuous constant rate test. (Ord. 03-15-06)

Sec. 19-8-2.2. Quality.

Water quality shall comply with the requirements defined in the Virginia Department of Health Waterworks Regulations.

Sec. 19-8-2.3. Quantity.

If the proposed subdivision is to be served by individual groundwater wells, the sufficiency of the quantity of water shall comply with the requirements of the Virginia Department of Health Private Well Regulations at the time that a certificate of occupancy is sought as to any occupied building on each lot. If any subdivision is to be served by an existing public or central water system, the subdivider shall obtain a certificate of availability from the operator of the water system. If it is to be served by a new public or central water system, the subdivider shall obtain the necessary permits from all applicable reviewing bodies, including, without limitation, the governing body, the State Corporation Commission, the Virginia Department of Health and the Virginia Water Control Board, and approval of the design and written commitment to operate and maintain the system from an agency approved by the county. (Ord. 06-21-06)

Sec. 19-8-2.4. Fire protection.

The subdivider shall make reasonable provision for fire protection. For any subdivision with a public or central water system, the subdivider shall provide a fire protection system consisting of fire hydrants at intervals of no more than 1,000 feet served by water lines six inches or larger in diameter, or a system of comparable effectiveness. Such plans shall be reviewed and approved by the Fluvanna County Fire Department Chief prior to preliminary plat approval.

Sec. 19-8-2.5. Maintenance.

Upon their completion and final approval, all water systems, other than those connected to a public system, shall be dedicated to an agency approved by the county for ownership, operation and maintenance.

Sec. 19-8-3. Wastewater treatment.

A wastewater collection, treatment and disposal system shall be provided to remove wastewater from the proposed development without undue threat of contamination of surface water or groundwater. Such preliminary plans shall have been approved by the Virginia Department of Environmental Quality or appropriate state agency prior to approval of the preliminary plat.

- (a) If individual sewerage systems are proposed, the subdivider shall demonstrate that each lot which is proposed to be created complies with Section 22-17-10 of this code. (Ord. 9-17-08)

- (b) If a central sewerage system is proposed, the subdivider shall secure approval of the design, and written commitment to operate and maintain the system, from an agency approved by the county, including any special use permit which is required pursuant to Chapter 22 of this code¹, prior to approval of the preliminary plat. (Ord. 9-17-08)
- (c) If a proposed system is subject to regulation by the any state agency, the subdivider shall secure the necessary permits prior to plat approval.

Sec. 19-8-3.1. Maintenance.

Upon their completion, all central sewerage systems, other than those connected to a public system, shall be dedicated to an agency approved by the county for ownership.

Sec. 19-8-4. Storm drainage.

Proper and adequate storm drainage systems shall be installed as required by the Virginia Department of Transportation and/or Chapter 6 of this code, such that the proposed development will not result in undue increase in runoff, erosion or sedimentation to any downhill or downstream area. Such plans shall have been reviewed by the Soil and Water Conservation District office, and approved by the county and the Virginia Department of Transportation, as applicable, prior to the approval of the preliminary plat.

- (a) Wherever required by the Virginia Department of Transportation, or under an approved Master Plan or Conditional Zoning provisions of Chapter 22, concrete curb and gutter shall be installed along both sides of street serving 200 or more lots, and on at least one side of every street serving 50 or more lots, and an enclosed storm drainage system shall be installed. *The use of perforated curbs and cul-de-sacs with landscaped islands is permitted.* All such improvements shall comply with Virginia Department of Transportation standards.
- (b) Drainage easements of an appropriate width, not less than six feet, shall be reserved where necessary, and shall be shown on the plat.
- (c) All streets and building sites shall be at least one foot above the floodplain elevation.
- (d) *The use of low-impact development (LID) techniques to control stormwater runoff is encouraged. Examples of LID techniques include, but are not limited to, the use of permeable paving materials, rain gardens, bioswales, infiltration trenches, and tree box designed to capture stormwater and facilitate on-site infiltration.*

¹ *Editor's Note:* Capitalization corrected by editor.

Sec. 19-8-5. Monuments.

Iron rods or pipes shall be set at all lot corners and at all points of curvature or tangent on streets. Rods or pipes shall be at least one-half inch in diameter and 24 inches long, and shall be set flush with the finished grade.

Sec. 19-8-6. Recreation.

For any major subdivision, as defined in this chapter, if the average lot size for that subdivision is five acres or less, except for Rural Cluster Subdivisions, the subdivider shall provide space and facilities for recreation. Such space shall be clearly labeled on the plat, and shall be dedicated to an entity approved by the county for ownership and maintenance.

- (a) Space for recreation shall be provided at the rate of 5,000 square feet per lot in the subdivision or 15% of the total acreage of the subdivision, whichever is more. This area shall not be developed for parking, roadways, refuse collection, or similar use. An area of ½ acre or more shall be located within ½ mile of each proposed dwelling unit as part of the recreation area, and shall be improved with facilities for sports, picnicking, tot lot equipment, active playground with equipment, or similar uses.
- (b) Each area reserved for recreation shall be of a size and shape conducive to the proposed recreational use.

Section 19-8-7. Utilities.

For major and minor subdivisions, all utilities including, but not limited to, wires, cables, pipes, conduits and appurtenant equipment for electric, telephone, gas, cable television, or similar services shall be placed underground except, however, the following shall be permitted above ground.

- (a) Electric transmission lines and facilities in excess of 50 kilovolts.
- (b) Equipment, including electric distribution transformers, switch gear, meter pedestals, telephone pedestals, streetlighting poles or standards, radio antennae, traffic control devices, and associated equipment which is, in conformance with accepted utility practices, normally installed above ground.
- (c) Meters, service connections and similar equipment normally attached to the outside wall of a customer's premises.
- (d) Temporary above ground facilities required in conjunction with an authorized construction project.
- (e) Existing utilities located above ground in proposed subdivisions may be maintained, repaired or upgraded to maintain current levels of service.

- (f) Whenever any existing above ground utilities internal to a major subdivision require relocation for any reason they shall be placed underground.

Sec. 19-8-8. Sidewalks

For all major subdivisions within all zoning districts, sidewalks shall be provided along both sides of all proposed public roads and private roads with a sidewalk compliant with current VDOT standards.

Sidewalks shall also provide connections to active or passive open space, schools, or to adjacent commercial and residential developments.

Sidewalks may be paved using hard-surfaced pervious paving materials, such as porous asphalt, porous concrete, or block pavers, as a method of stormwater management, provided that the use of such materials does not compromise the safety of pedestrians.

(Ord. 5-4-11)

Sec. 19-8-8.1. Sidewalk variation

A variation to the sidewalk regulations may be granted by the Planning Commission for projects where:

- a) The Virginia Department of Transportation prohibits the construction of sidewalks;
- b) The physical conditions on the lot or adjoining lots, including but not limited to, existing structure and parking areas, existing utility easements, environmental features, or the size and shape of the lot, make it impossible or unfeasible to provide the required sidewalks;
- c) The application of the before mentioned requirements would not further the goals of the Comprehensive Plan or otherwise serve the greater public's health, safety, and welfare.

The applicant shall file a written request with the Department of Planning and Community Development stating why application of a sidewalk variation is necessary and how the before mentioned circumstances may apply to the property.

The Planning Commission shall act on the variation request in conjunction with the county's action on the site plan, subdivision plat or special use permit or, if no such action is required, within sixty (60) days of the date the application was submitted and determined to be complete. The Planning Commission may grant the variation if it determines that one or more applicable circumstances exist. In granting a variation, the Planning Commission may impose conditions deemed necessary to protect the public health, safety, or welfare.

The denial of a variation, or the approval of a variation with conditions objectionable to the applicant, may be appealed to the Board of Supervisors. In considering a variation on appeal, the Board of Supervisors may grant or deny the variation based upon its determination of whether one or more applicable circumstances exist, amend any condition imposed by the Planning Commission, or impose any conditions deemed necessary to protect the public health, safety, or welfare.

Section 19-8-9. Street trees.

Street trees shall be required along existing or proposed public streets within or adjacent to any major subdivisions within an average lot site of one (1) acre or less. The placement of street trees shall be in accordance with Virginia Department of Transportation (VDOT) standards and shall not be located within any sight triangle. The required plantings shall be located either within the right-of-way itself or within a five-foot (5') landscape preservation easement continuous to such right-of-way. Existing trees within a caliper of eight inches (8") or greater located within ten feet (10') of the right-of-way may be used to satisfy the planting requirement, provided the trees are encumbered by a landscape preservation easement and are protected in accordance with the standards contained in the Virginia Erosion and Sediment Control Handbook. When located within an easement, the subdivider shall dedicate the easement, together with a maintenance easement, to the property owner' association or other entity approved by the county attorney. The street trees shall be planted at the following rate:

- (a) One (1) large shade tree shall be required for every forty (40) feet of road frontage; or*
- (b) One (1) medium shade tree shall be required for every twenty-five (25) feet of road frontage.*

Section 19-8-10. Landscape Preservation Buffers.

A landscape preservation buffer, broken only by necessary entrances approved by the agent, shall be established on all residential lots along all interstate, arterial and collector roads and all scenic byways, as designated by the Virginia Department of Transportation (VDOT), abutting a proposed subdivision with an average lot size of five (5) acres or less, except within designated growth areas.

- (a) The minimum width of said buffer shall be fifty feet (50') measured from the edge of the existing or reserved right-of-way. Along all scenic byways, the landscaped buffer shall be no less than one-hundred feet (100') in width.*
- (b) A landscape preservation easement, acceptable as to content and form by the county attorney and encompassing the required buffer, shall be granted to the county.*
- (c) The preservation of existing trees and shrubs within the required buffers shall be maximized to provide continuity and improved screening. All trees located within the buffer shall be retained, unless removal is necessary to accommodate vehicular access and/or utilities that run generally perpendicular to the buffer. Dead, diseased, or dying vegetation may be pruned or removed as necessary, pursuant to sound horticultural practices. No logging or silvicultural activities may take place within the landscape preservation buffer. Pastureland and fields existing at the time of the subdivision may remain as open land, provided no healthy trees or shrubs existing at the time of subdivision are removed. Fences or walls may be constructed within the landscape preservation buffer, provided that such features are no taller than five feet (5') in height and are designed to be compatible with the rural nature of the surrounding area.*

(d) Additional plantings within the landscape preservation buffer are permitted and encouraged. Any plantings required by County Code may be located within the landscape preservation buffer.

Explanation of Modifications to the Subdivision Ordinance

Sec. 19-7-8	Added language from proposed tree protection changes specifically requiring riparian preservation areas within major subdivisions. Riparian Buffer Provisions Part 2 is taken from New Kent's CBPA regulations Part 3, 4, 5 taken from RCS/UVA recommendations (Memo 11/30/2010)
Sec. 19-8-4a	Specifically allow the use of perforated curbs and landscaped islands per RCS/UVa recommendation
Sec. 19-8-4d	Specifically allow/encourage the use of LID techniques Language from proposed parking changes
Sec. 19-8-8	Added language from proposed parking changes specifically allowing the use of pervious paving materials for sidewalks
Sec. 19-8-9	Added language from proposed tree protection changes requiring street trees in major subdivisions Street trees required within major residential subdivisions with an average lot size of one acre or less (comparable to Charlottesville, New Kent). Existing trees may count towards requirements if encumbered by a tree preservation easement (comparable to New Kent).
Sec. 19-8-10	Requires landscape preservation buffers along major roads and scenic byways (Comparable to New Kent).

Additions to Article 22: Definitions
Definitions related to Tree Protection & Off-Street Parking
March 8, 2012

Explanation

To further clarify terms used within the Tree Protection and Off-Street Parking sections of the zoning ordinance, Planning Staff are proposing the addition of twenty (20) more terms to the Definitions section (Article 22) of the zoning ordinance.

Proposed Definitions

BICYLCE PARKING: Bicycle racks and similar structures, permanently affixed to the ground, designed and used for storing bicycles in a secure, upright position.

BIOTENTION AREA: A vegetated depression engineered to collect, store, and infiltrate runoff generated on-site.

CALIPER: A measure of tree size, determined by measuring the diameter of a tree at a point six inches (6") above the root ball, at the time of planting, or twelve inches (12") above the ground, for established vegetation.

DIAMETER AT BREAST HEIGHT: A measure of tree size, determined by measuring the diameter of a tree at a point four and one-half feet (4.5') above the ground.

DRIPLINE: A vertical projection to the ground surface from the furthest lateral extent of a tree's leaf canopy.

LOW-IMPACT DEVELOPMENT: A design strategy with the goal of maintaining or replicating the pre-development hydrologic regime through the use of design techniques to create a functionally-equivalent site design. Hydrologic functions of storage, infiltration and groundwater recharge, as well as the volume and frequency of discharges, are maintained through the use of integrated and distributed micro-scale stormwater retention and detention areas, reduction of impervious surfaces, and the lengthening of runoff flow paths and flow time. Example of low-impact development techniques include, but are not limited to, the use of permeable paving materials, rain gardens, bioswales, infiltration trenches, and tree box filters.

NATURAL MEADOW: A continuous area designated on a landscape plan that is planted with grasses and wildflowers native to Virginia that are allowed to grow in their natural habit. Such areas are actively managed to prevent the growth of woody vegetation and invasive species.

PARKING BAY: A continuous row of parking, containing twenty (20) parking spaces or less, bounded on both ends by a parking island, as specified in Article 22 of this chapter.

RIPARIAN PROTECTION AREA: A vegetated zone adjacent to an intermittent or perennial stream where development is restricted or controlled to minimize the effects of development on local water quality. Indigenous vegetation, including existing ground cover, is preserved to the maximum extent possible.

Additions to Article 22: Definitions

SHRUB: A low woody plant, with multiple shoots or stems from the base, which attains a mature height of less than fifteen (15) feet.

STREAM, INTERMITTENT: A natural stream or portion of a natural stream containing flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow. Such streams are defined as a dotted blue line on the 1:24,000 USGS topographic maps.

STREAM, NATURAL: A non-tidal waterway that is part of the natural topography, which typically maintains a continuous, seasonal, or intermittent flow during the year, and which is characterized as being irregular in cross-section with a meandering course. A constructed channel such as a drainage ditch or swale is not a natural stream.

STREAM, PERENNIAL: A natural stream or portion of a natural stream containing flowing water year-round during a year of normal precipitation. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow. Such streams are defined as a solid blue line on the 1:24,000 USGS topographic maps.

TREE CANOPY: All areas of coverage by plant material exceeding ten (10) feet in height at a maturity of ten (10) years after planting, in accordance with Article 22 of this chapter.

TREE, EVERGREEN: A tree with foliage year-round, planted primarily for screening or ornamental purposes, which attains a mature height of at least fifteen (15) feet.

TREE, LARGE SHADE: A tree, usually deciduous, planted primarily for overhead canopy, which attains a mature height of at least forty (40) feet.

TREE, MATURE: An existing tree with a diameter at breast height (DBH) of twelve inches (12") or greater, which is in healthy condition as determined by a certified landscape architect or arborist.

TREE, MEDIUM SHADE: A tree, usually deciduous, planted primarily for overhead canopy, which attains a mature height of twenty-five (25) to forty (40) feet.

TREE, ORNAMENTAL: A tree, either single-stemmed or multi-stemmed, noted for its flowers, leaves, bark, form, shape, and/or other aesthetic characteristics, which attains a mature height of ten (10) to thirty (30) feet.

TREE, STREET: A shade tree planted along an existing or proposed public street, either within the right-of-way itself or within a landscape conservation easement continuous to such right of way.



COUNTY OF FLUVANNA

"Responsive & Responsible Government"

P.O. Box 540 Palmyra, VA 22963 (434) 591-1910 FAX (434) 591-1911 www.co.fluvanna.va.us

Memo

To: Fluvanna County Planning Commission

From: Andrew J. Pompei, Planner

Date: March 8, 2012

Re: **Review of the Erosion & Sedimentation Control Regulations (Chapter 6)**

To reduce the impact of new development on local water quality, the Planning Commission may consider working with the Department of Planning & Community Development, the Department of Building Inspections, and the Board of Supervisors to amend Chapter 6 (Erosion & Sedimentation Control) of the Fluvanna County Code. Several local organizations have recommended that Fluvanna County adopt more stringent erosion and sediment control regulations, to prevent the degradation of local streams.

The Planning Commission may consider some of the following amendments:

- *Require all erosion and sediment control plans to include a time limit by which all denuded terrain must be permanently revegetated.*

Based on recommendations from the Rivanna Conservation Society (RCS) and the University of Virginia: School of Law, Fluvanna County may consider requiring that permanent vegetation be restored to all denuded areas of a construction site within a certain number of months after grading begins. In 2009, Albemarle County amended its erosion and sediment (E&S) regulations to include a nine-month deadline for stabilizing disturbed sites. While the ordinance provides a clear deadline for stabilization, it does allow for some flexibility; staff may grant a six-month extension, and the Board of Supervisors may grant longer extensions.

- *Expand the list of erosion control measures explicitly referenced in the form contract the County uses for agreements-in-lieu-of-a-plan.*

When a land-disturbing activity results from the construction of a single-family residence, Virginia law and the current E&S ordinance allow the contractor to enter into an agreement-in-lieu-of-a-plan, rather than submit a full E&S plan. An agreement-in-lieu-of-a-plan is a short form in which the landowner pledges to comply

with all applicable erosion control requirements. Based on recommendations from the Rivanna Conservation Society (RCS) and the University of Virginia: School of Law, Fluvanna County may consider specifically mentioning which practices must be implemented as part of an agreement-in-lieu-of-plan.

- *Require that the construction of erosion and sediment control measures be inspected and certified by a qualified engineer.*

The Department of Buildings Inspections currently requires E&S plans to be prepared by an certified engineer, architect, landscape architect, or other qualified professional; however, the actual construction of E&S control structures does not have to be inspected by an certified engineer. To provide additional assurance that these structures are built to the specifications described in the approved E&S plan, Fluvanna County may consider requiring all improvements to be inspected and certified by a qualified professional prior to the release of the performance bond.

- *Provide a mechanism to enforce the stabilization requirements associated with the construction of single-family homes.*

After a Certificate of Occupancy is granted, the Department of Building Inspections does not have a mechanism it may use to require disturbed slopes to be stabilized if the initial revegetation fails. County staff recommends that the existing regulations and/or the agreement-in-lieu-of-plan be modified to stipulate that, after a Certificate of Occupancy is granted, the current owner is responsible for stabilizing the property.

County staff is in the early stages of discussing possible amendments to these ordinances and is seeking input from the Planning Commission. Based on input from the Planning Commission and other organizations, proposed regulations will be drafted over the next few months.

If you have any concerns, please contact the Planning Department at (434) 591-1910 or via email.



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Memo

To: Fluvanna County Planning Commission
From: Andrew J. Pompei, Planner
Date: March 9, 2012
Re: **CPA 12:01**

At its meeting on February 15, the Board of Supervisors adopted a resolution initiating a Comprehensive Plan Amendment (CPA 12:01). The Board of Supervisors has proposed amending the *Vision* chapter of the Comprehensive Plan to include its newest Vision Statement, which was developed at the Board Retreat on January 6. The proposed amendments further explain the meaning and policy implications of the new Vision Statement.

Attached is an original draft of the proposed amendments, which was prepared by the Board of Supervisors. Formatting changes and grammatical corrections may be made before formal consideration by the Planning Commission at its meeting on April 25, 2012.

If you have any questions or concerns, please contact the Planning Department at (434) 591-1910 or via email.

FLUVANNA COUNTY // VISION 2032

Vision Statement

Fluvanna County through self-reliance, self-sufficiency, and self-government is the ideal place to raise families, foster entrepreneurship, and do business in the Commonwealth.

-- Fluvanna County Board of Supervisors (2012)

Fluvanna County's vision is based on the following key principles, which are used as guides for future development, governance, and land use policies for the county:

- That good government is no substitute for self government,
- That our government should reflect the values and principles of the people, ~~and not mold either citizens or taxpayers into a vision directed by government,~~
- That solidarity and prosperity, ~~not sustainability or coercion,~~ are the proper means of fostering communities,
- That people, ~~not planning,~~ forge economies and communities,
- That our rural character and natural resources are part of Fluvanna's unique heritage, and should be preserved where practical,
- That the individual citizens and taxpayers of Fluvanna consist of our community, and that their individual interests and rights subordinate the collective desires of our government,
- That a comprehensive, accessible, and quality system of education enabling a modern, highly skilled 21st century workforce is to be fostered,
- That future development be fiscally prudent while respecting individual property rights,
- That our infrastructure requirements are maintained and first-class,
- That our public safety personnel are properly equipped and compensated in a manner and means that respects their sacrifice,
- That Fluvanna's rich community heritage and our history be the cornerstones of our shared identity moving forward into the 21st century,
- That our rights as enumerated in the Virginia Declaration of Rights and the Virginia Constitution are to be maintained both in letter and in spirit.

In our vision, Fluvanna County will look like this over the next 20 years:

OVERVIEW

Fluvanna County by 2032 will sit along a thriving I-64 corridor between metropolitan Richmond and Charlottesville. No longer a bedroom community, Fluvanna County's mixed use development project at Zion Crossroads has landed at least one major anchor, as well as having become its own population center in its own right.

Fluvanna County's objectives in retaining its rural setting will have been overwhelmingly

successful, with small home-oriented businesses complimenting large farms and tracts of forestry as well. Lake Monticello and Pleasant Grove are neatly aligned, while popular tourism becomes a growing pastime among those seeking what "Thomas Jefferson's Virginia" may have looked and how Fluvanna's unique rural heritage appears and is preserved today.

Towns and villages such as Fork Union, Palmyra, and Zion Crossroads remain convenient places to spend an afternoon, while the Town of Columbia's revitalization effort completes its process and begins to rejuvenate Virginia's oldest incorporated town as a point of interest.

Property taxation rates remain remarkably beneath the regional average, while the public education system enjoys a large degree of harmony with private, charter, and home schooling efforts. Housing prices, though modestly above average for the region, remain affordable for retirees, families, and couples through a wide variety of housing options. Moreover, previously successful efforts at fostering economic development within Fluvanna and around Lake Monticello are now complimented and eclipsed by Zion Crossroads and the green shoots of mixed use development near Ferncliff and Columbia.

This healthy mix of residential and commercial/industrial growth finally begins to aggressively pay down the old high school debt service, enabling Fluvanna to go beyond meeting the required services for the growing population at Zion Crossroads. By this time, Fluvanna has invested once again in cost-effective measures to accommodate the increased number of students, looking towards a new upper elementary school and significant technology upgrades at the existing school buildings. Proffers over the last two decades have allowed Pleasant Grove to become much more than a park, having now become a destination for tourism, recreation, hiking, fishing along the Rivanna River, and other outdoor events. Such foresight and investment continues to earn the admiration and imitation of other localities in the Commonwealth.

// Population and Taxation //

Fluvanna's population will approach 36,000 people by 2032 as new residents, eager for the opportunities 21st century workspaces and work environments afford, come to Zion Crossroads to work, live, shop, and play near the I-64 corridor.

Thanks to investments on behalf of the Commonwealth, both the I-64 corridor and the rail system along the James have become ideal paths for commuters to and from Richmond. Routes 15 and 53 are modern, safe, and effective means of transport, while Route 6 remains a scenic byway.

Most of Fluvanna's population are white collar workers, with a sizable portion of the population being blue or green collar skilled workers. Fluvanna's continued successes with entrepreneurship and public education have gained Fluvanna the reputation of generating skilled individuals ready to immediately participate in an innovation economy.

Tax rates continue to be far lower than the surrounding region thanks to early investment in commercial and industrial growth inside the urban planning areas. Though there is an aversion to incurring public debt, Fluvanna County maintains a healthy cash reserve to support its long-

established capital reserve, thus enabling Fluvanna to hold and maintain a triple-A rating.

Thanks to an aggressive and early policy of fostering workforce development and entrepreneurship, both Fluvanna's median salary and per capita salaries remain well above the regional average.

// Infrastructure //

Basic infrastructure such as water, sewer, and roads have all been identified as key areas of improvement over the last three decades. As a result, both the I-64 corridor as well as Lake Monticello-Pleasant Grove-Palmyra possess the basic core infrastructure to support their respective capacities free of public subsidy.

Universal broadband has long been in place in Fluvanna as digital bandwidth has been reapplied, offered both privately and through "hot spots" of public access in key areas of Fluvanna. Every homeowner in Fluvanna has the option of either purchasing or using some form of broadband access.

Roads in Fluvanna are maintained and clear, with adequate paths for biking along Route 76 to complement Fluvanna's bike trails and walking paths along Pleasant Grove. Roundabouts, where applicable, have been substituted for traffic signals, and improvements have mitigated some of Fluvanna's more treacherous roads in rural parts of the county.

Pleasant Grove has integrated most parts of the center of the county for the better part of a decade. Biking and walking trails enable one in the summer to travel from Lake Monticello early the morning, spend the lunch hour in Palmyra, then travel back to Pleasant Grove in the afternoon for weekly events before making one's way back to Lake Monticello that evening. Of particular interest are the old canal locks, including parts of the Rivanna Canal near the old town of Bernardsberg, where tourists as well as Fluvanna residents can view the well-preserved remnants of Thomas Jefferson's canal.

// Education //

Fluvanna's public education systems continues to preserve its upper quartile standing in virtually all areas of academic achievement. The old Fluvanna High School, now approaching its 20th anniversary, still continues to produce some of the best educated students in the Commonwealth, with students matriculating to the best Virginia public and private colleges, including quality universities out of state. Alumni returning to Fluvanna offer some of the best opportunities for economic activity, as doctors, lawyers, entrepreneurs, and others bring their skills back to raise their own families in the community they call home.

One of Fluvanna's key strengths in public education is its attention to workforce development, both within the high school and once students graduate from the high school. Fluvanna students are instantly prepared to enter the workforce should they choose, with a fully staffed and funded vocational training center as well as educational opportunities working with Piedmont Valley Community College.

Fluvanna's pilot initiatives concerning workforce development have borne fruit, as incoming businesses cite the flexibility of the workforce as one of the reasons businesses locate to and start in Fluvanna. This emphasis on a skilled workforce continues to compliment the public education system in Fluvanna as yet another tool making Fluvanna a great place for families to live.

// Economic Development //

Fluvanna's destination as a well-supported locality to do business allows Zion Crossroads to be in a position to bring practically any commercial or industrial firm, thanks to the flexibility and the robust nature of the regional workforce.

Infrastructure along the I-64 corridor remains robust and strong, while the availability of broadband allows many start-ups and other innovation-oriented firms to jumpstart themselves at Zion Crossroads.

Fluvanna's early start in microfinance has earned the county a reputation as a regional incubator for entrepreneurial ideas. Fluvanna continues to find new ways protect this status versus competing localities -- not with further incentives -- but with fewer regulations and red tape to allow small firms the head start they need to develop, all run through a well-staffed and motivated Office of Economic Development.

Agri-tourism and other home-based businesses continue to proliferate in Fluvanna County. Local produce and other small scale industries and agriculture enjoy a friendly government that treats them in a similar manner to every other enterprise in Fluvanna, making significant allowances for property improvements that do not adversely impact viewsheds or quality of life.

// Public Safety //

Fluvanna County's public safety personnel are fully integrated and fully meet the needs of Fluvanna County. Emergency services personnel are well paid, working in partnership with a first-class volunteer network.

// Social Services //

The Fluvanna County Department of Social Services is a leader in collaboration with other community agencies, promoting self-reliance, opportunity, well-being, and the best possible quality of life for county citizens and taxpayers. Affordable housing opportunities, as well as access to workforce development and adult-education classes, offer paths to independence rather than dependence.

// Tourism & Agriculture //

Tourism remains a part of the economic renaissance over the last two decades, as the link between Fluvanna's heritage and history meets the opportunities Fluvanna enjoys along the I-64 corridor. Tourists come from as far away as Washington, Staunton, Hampton Roads and

Danville to enjoy a weekend along the trails at Pleasant Grove's Heritage Museum, or to drive the circuit from Palmyra to Monticello and back. Working with the Fluvanna Historical Society, the rich heritage of Fluvanna's history from the Revolutionary War to the modern day offers a visitor a glimpse at what early America was like, what early America became, and perhaps an opportunity to both do business in -- and possibly move to -- Fluvanna County.

// Land Use //

Fluvanna's land use practices ensure the rural appearance of the county is not substantially different than it was 20 years ago, even though Fluvanna now has a larger population and a healthier economic base.

Land use is directly related to quality of life. Natural resources are protected, ensuring that our rivers and streams are clean and full of life. The land's relationship to the availability of clean and adequate water, clean air, and successful forestry and agriculture production -- both large scale and small scale -- are just a few of the factors considered in planning decisions.

Other land use planning decisions include the direction of residential and commercial/industrial growth to areas that have facilities and adequate infrastructure, both public and private. Areas of service include Columbia, Fork Union, Palmyra, Lake Monticello, and Zion Crossroads. Water and sewer systems will have a minimal, if not negligible, impact on local streams, rivers, and groundwater.

The continued protection of the Rivanna River remains a priority as a scenic river. Zoning and subdivision regulations provide for the preservation of a significant amount of open space, particularly within designated rural residential and rural preservation areas.

Agriculture, open space, and forestry continue to be important land uses over the next two decades. Networks and infrastructure for local farm and forest products and the expansion of diversified local and speciality markets continue to strengthen. Farmers and other large landowners will have local and state guidance in successfully navigating the challenges of increasing costs for energy, fertilizer, and other inputs.

Lake Monticello

Lake Monticello continues to be the center of gravity for the county population, now being serviced with a collection of small shops as well as a completed set of biking trails and walking paths leading south to Pleasant Grove and Palmyra. Fire and rescue services continue to be well maintained, and Lake Monticello as a place to live and raise families continues to enjoy the broad support of Fluvanna County's government.

Zion Crossroads

As an emerging mixed use development based along the Urban Development Area's (UDA's) guidelines, Zion Crossroads will have an eclectic but well planned mix of large box stores, small boutiques, bookstores, walkable communities, high-tech industries, government and contracting

firms, light manufacturing, an appropriate mixture of residential buildings, as well as having landed a major anchor for the UDA.

Fork Union

Fork Union Military Academy continues to be the major highlight of the area, as improvement to the village with sidewalks and other amenities continue to make Fork Union a well-maintained and visually appealing community. Repair and maintenance of the Fork Union Sanitary District (FUSD) allows the opportunity for at least one mid-level firm to relocate nearby.

Columbia

After having been neglected for many years, Columbia's revitalization efforts has finally come to a completion, relocating a major portion of the town to the heights just west along Route 6 -- allowing for a view of the James River while incorporating historical markers within the flood plain, a self-guided walking tour, a sustainable and walkable community, and storefront opportunities within the new town.

Scottsville

The picturesque quality of the southwestern part of Fluvanna remains one of our hidden jewels, with motorists enjoying the trip from Columbia to Fork Union and through to Scottsville being the lucky few to enjoy the trip.

Kents Store

Kents Store remains as it has for over 50 years, with a fire station and rescue station to serve the northeastern part of the county. Ferncliff just four miles away begins to see the first green shoots of economic activity, while planners and leaders begin to plot out how the Ferncliff area should be developed in a manner consistent with the successes of the previous two decades.

// Community //

Fluvanna's rich heritage and history are found in its people, and nowhere is this story better told or best lived than among the many communities and churches that dot the rural landscape.

The Fluvanna Board of Supervisors, following many of its peers during the late 1960s and early 1970s, commissions an authoritative and exhaustive history of Fluvanna leading up to the turn of the century. This exercise helps define the narrative of Fluvanna leading into the rapid changes of the early 21st century, and becomes the one-volume centerpiece for those coming to and experiencing Fluvanna for the first time.

Pleasant Grove continues to serve as a historical portrait of Fluvanna, with the Rivanna Canal locks and the Heritage Museum playing key roles in how this story is told.

Fluvanna's churches and their rich history are collected and shared by local historians, adding to the patchwork quilt that makes Fluvanna what it is today.

Local modes of economy are encouraged and established, allowing communities to find the nearby mechanic, technician, farmer, butcher, developer, carpenter, mason, or plumber to assist them with their needs.

Fluvanna continues to have a robust and active system of non-profits who perform various activities, some of which are assisted directly by the public trust with an eye towards self-sufficiency in the future.

The civic virtues of self-reliance, self-sufficiency, and self-governance continue to be emphasized by example in Fluvanna, thus creating the solidarity, community, and prosperity in which families, ideas, and businesses can live and thrive.

VISION 2029

Fluvanna County is the most livable and sustainable community in the United States.

—Fluvanna County Board of Supervisors

The Fluvanna County vision is based on the following key goals, which are used as guides for future development and land use policies of the county:

- To preserve natural resources.
- To preserve rural character.
- To manage growth by concentrating development in designated areas.
- To approve development that is fiscally self-sustaining and has a clear financial benefit to county taxpayers.
- To provide adequate infrastructure to support the needs of the county.
- To promote economic development
- To provide excellent educational opportunities.
- To protect individual property rights.
- To provide excellent safety and security for citizens.
- To provide safe and adequate transportation infrastructure.

In our vision, Fluvanna County will look like this over the next twenty years:

The county's land-use practices strive to ensure that the rural appearance of the county is not significantly different than it was twenty years ago, even though Fluvanna now has a larger population and a healthier economic base. Land use is recognized as directly



Figure V-1, Currin's Tavern

related to quality of life. Natural resources are protected: rivers are clean and full of life. The land's relationship to the availability of clean and adequate water supplies, clean air, and successful agricultural and forestry production are just a few of the factors routinely considered in planning decisions. Other land-use planning decisions include the direction of residential and commercial/industrial growth to community planning areas that have public facilities and adequate infrastructure. Areas of service for water

and sewer include Fork Union, Palmyra, Zion Crossroads, and other community planning areas. Water and sewer systems are designed, maintained, and operated to minimize negative impacts on local streams, rivers, and groundwater. Similarly, the continued protection of the Rivanna River remains a community priority, particularly since it's

Virginia's first designated scenic river. Zoning and subdivision regulations provide for the preservation of a significant amount of open space, particularly within designated rural residential and rural preservation areas.

Agriculture, open space, and forestry continue to be important land uses. Networks and infrastructure for local farm and forest products and the expansion of diversified, local, and specialty markets continue to strengthen. Demand for biofuels and other uses of bulk farm commodities such as corn, soybeans, and timber as sources of energy continues to increase and diversify, and these commodities are managed in an environmentally sustainable manner. Farmers and other large landowners have local and state support to successfully navigate the challenges of increasing costs for energy, fertilizer, and other inputs. Incentives also exist to help farmers and foresters, by assisting their business endeavors, maintain their property as farms, managed forest, and other viable open spaces.



Figure V-2, Agricultural Land

The county promotes phased residential and economic growth in the Zion Crossroads urban development area as well as other growth areas. These growth areas, locally referred to as community planning areas, offer high-quality living and business environments that are well buffered and attractive. The existing and planned infrastructure provides a safe and healthy environment for the community planning areas.



Figure V-3, Fork Union Military Academy Pedestrian Crosswalk

Desirable business and industrial uses are attracted to the county's community planning areas, particularly the Zion Crossroads urban development area, where they are integrated appropriately with a variety of residential choices. Many employment opportunities are available to our citizens. Through careful planning, the county seeks to achieve a healthy balance between residential and business tax revenues. One-third of tax revenues come from the business base, as is common in most economically viable communities.

Tourism has established itself as a significant contributor to the county's economy. This is primarily due to recreational resources such as fishing, hunting, trails, golfing, and our many historic structures and areas. These amenities have spawned new restaurants, bed and breakfasts, and other tourism-oriented businesses.

In the community planning areas, subdivisions and businesses are linked by greenways and hard surface paths so that bicycling and walking are a practical means of transportation between residential and commercial areas. Pedestrian and bicycle access are provided in appropriate settings. In addition, there is a good mix of public and private transportation options. Numerous park-and-ride facilities exist around the county. Areas in proximity to Interstate 64 and Lake Monticello are particularly well suited to these facilities. The county and the Virginia Department of Transportation (VDOT) work together to ensure safe and adequate transportation. Primary roads that have heavy commercial, industrial, and residential traffic are designed and constructed to handle the traffic. Secondary roads in the county are improved without losing their rural character. Dangerous curves and acute-angle intersections are eliminated. New roads have been built to accommodate the county's transportation needs. Properly designed private roads continue to be a part of the transportation system.

The county provides an excellent education in a healthy, nurturing, safe, and intellectually stimulating environment. The outstanding curriculum includes life skills, the arts, civics, finance, economics, and technology skills that help children with real-world challenges. Higher-level classes are offered to prepare children for post-high school education. Schools strive to keep class size to twenty or fewer students, allowing teachers to meet the special needs of an individual child. Schools provide cooperative work/school programs for students. Partnerships



Figure V-4, Carysbrook

continue to exist and expand with area institutions of higher learning and community programs. Schools provide the most current technology to their students. Classrooms are networked with other schools and educational sites. In addition, wide area networks are available for educational purposes for all residents of the county. Homeschooled populations retain the freedom to attend public classes and extracurricular activities, and have access to virtual classrooms that can provide a high-school diploma. Private schools continue to offer quality educational opportunities as well. Adult-education classes have their own center and cooperate with the county extension services in an outreach program.

The Department of Public Safety offers integrated, professional emergency management services that fully meet the needs of Fluvanna County. Fluvanna has well-paid personnel in fire and rescue stations, working in partnership with invaluable volunteers. Fork Union and Kents Store have new fire stations.

The Fluvanna County Department of Social Services is a leader in collaboration with other community agencies, promoting self-reliance, well-being, and the best possible quality of life for county citizens. Services that affect county residents include housing,

education, and health services. Affordable housing programs are integrated into all aspects of planning and development, resulting in housing for a wide variety of incomes, located in safe, healthy, and walkable environments.

Through thoughtful planning, Fluvanna County offers its residents the benefit of a rural environment while retaining a strong sense of community. Residents live in small villages of historic importance, open lands with forests and farms, small lots clustered to form a planned community, or more urban, mixed-use neighborhoods. These livable places, combined with the citizens' sense of place and history, make Fluvanna the most sustainable and livable community in the country.