

BOARD OF SUPERVISORS WORK SESSION

GOVERNMENT CENTER BOARD ROOM

JULY 26, 2011 - 4 P.M.

A. Call to Order

B. Roll Call

C. Board Discussions

1. Stage II Zoning Ordinance Update for Development Standards and Cumulative Impacts ([Summary](#)) ([Memorandum](#)) ([Attachment 1a](#)) ([Attachment 1b](#)) ([Attachment 2](#)) ([Attachment 3](#)) ([Attachment 4](#)) ([Attachment 5](#)) ([Attachment 6](#)) ([Attachment 7](#)) ([Attachment 8](#)) ([Attachment 9](#)) ([Attachment 10](#)) ([Attachment 11](#)) ([Attachment 12](#)) ([Attachment 13](#)) ([Attachment 14](#)) ([Attachment 15](#)) ([Attachment 16](#)) ([Attachment 17](#)) ([Attachment 18](#)) ([Attachment 19](#)) ([Attachment 20](#)) ([Attachment 21](#)) ([Attachment 22](#))

2. Transfer of Development Rights (TDR) Feasibility Study: Market Analysis and Update ([Summary](#)) ([Memorandum](#)) ([Attachment 1](#)) ([Attachment 2](#))

D. Break



MEMORANDUM COVER

Subject: Stage II Zoning Ordinance Update for Development Standards and Cumulative Impacts

Action Requested: Shall the Board concur with staff's recommendations and provide guidance for proceeding to Stage III of the zoning and subdivision ordinance update for the presented topics?

Summary: For Stage II of the zoning and subdivision ordinance update process, staff has constructed draft ordinances and guidelines for multiple items that fall into the development standards category. The following specific sections are included in this category:

- 1. Soundwalls
- 2. Outdoor lighting
- 3. Tree preservation
- 4. Community Character Corridor buffer treatments and parking lot landscaping
- 5. Parking standards
- 6. Private streets
- 7. Pedestrian accommodations (sidewalks)
- 8. Timbering
- 9. Floodplain

The draft ordinances, guidelines, and pedestrian accommodation master plan have been attached for your review prior to Stage III, when the Policy Committee, Planning Commission, and Board of Supervisors will review the final ordinance language in the coming months.

Since there is no ordinance text associated with cumulative impacts tracking, an update to staff's progress and summary of upcoming milestones is presented.


Fiscal Impact: N/A

FMS Approval, if Applicable: Yes No

Assistant County Administrator

Doug Powell _____

County Administrator

Robert C. Middaugh 

Attachments:
1. Memorandum
2. 22 Attachments

WORK SESSION

Date: July 26, 2011

MEMORANDUM

DATE: July 26, 2011

TO: The Board of Supervisors

FROM: Tamara M. Rosario, Principal Planner
Allen J. Murphy, Jr., Director of Planning/Assistant Development Manager

SUBJECT: Stage II Zoning Ordinance Update for Development Standards and Cumulative Impacts

I. Development Standards

For Stage II of the zoning and subdivision ordinance update process, staff has constructed draft ordinances and guidelines for multiple items that fall into the development standards category. The following specific sections are included in this category:

1. Soundwalls
2. Outdoor lighting
3. Tree preservation
4. Community Character Corridor buffer treatments and parking lot landscaping
5. Parking standards
6. Private streets
7. Pedestrian accommodations (sidewalks)
8. Timbering
9. Floodplain

The Policy Committee discussed initial proposals for the above items at meetings in February 2011, and the Board discussed these items at work sessions in February and March 2011. The Policy Committee considered draft ordinance and policy language in June.

The draft ordinances, guidelines, and pedestrian accommodation master plan have been attached for your review prior to Stage III, when the Policy Committee, Planning Commission, and Board of Supervisors will review the final ordinance language in the coming months. The following list represents a brief summary of each of the above items (*the italicized sections represent Policy Committee recommendations that were not included in the draft ordinance*).

1. Soundwalls

A set of draft guidelines has been created to assist staff in working with the Virginia Department of Transportation (VDOT) on soundwall design and construction. The intent is to communicate James City County's expectations for effective, aesthetically pleasing, and cost effective walls before any design work is done to better ensure certain standards are included in the final product. *The Policy Committee supported staff's proposed guidelines.*

2. Outdoor Lighting

The draft ordinance for outdoor lighting is intended to apply dark sky principles to areas of development other than the existing parking lot lighting regulations, to promote energy efficient designs, and to protect citizens against the adverse effects of light pollution. The highlights of the ordinance include requiring

full cut-off fixtures for all outdoor lighting proposals, requiring all outdoor fixtures to be shown on lighting plans, and requiring Iso-footcandle diagrams for parking lots and canopies. The new ordinance consolidates all outdoor lighting requirements into one section of the zoning ordinance. *The Policy Committee supported staff's proposal and suggested changing glare requirements for parking lots. The change would allow glare adjacent to pedestrian walkways, noting that spillover from parking lots to pedestrian walkways would be beneficial.*

3. Tree Preservation

Staff has drafted a new tree preservation section to be incorporated into the existing landscaping section of the zoning ordinance; a new Outstanding Specimen Tree Option and amendments to the Streetscape Policy. Highlights to the tree preservation section include submittal requirements for tree preservation plans, submittal requirements for phased clearing, and tree preservation site inspections by staff. The Outstanding Specimen Tree Option gives developers an incentive to preserve outstanding specimen trees on development sites by providing five-tree credits for every selected preserved tree. The amendments to the Streetscape Policy are intended to prescribe the amount of area between a proposed street tree and the existing right-of-way and to expand the suggested tree species list. *The Policy Committee supported staff's proposals and asked for some minor clarifications on the requirements and language. Staff is currently reviewing this request.*

4. Community Character Corridor (CCC) Buffer Treatments and Parking Lot Landscaping

Staff has drafted Community Character Corridor (CCC) buffer landscape treatments guidelines with sample drawings, a map designating the type of landscape treatment for every CCC in the County, and amendments to the ordinance to reference the buffer landscape treatment designations. The outdoor operations section was relocated to the landscape section to consolidate and simplify the requirements. Additional amendments have been drafted for parking lot design and parking lot landscaping. The major changes to parking lot design and parking lot landscaping included changing spacing of parking lot islands from 150 feet to 90 feet and changing the spacing of parking lot trees from 75 feet to 99 feet. These changes were proposed to reflect what the County typically receives in landscape proposals and to coordinate the parking lot design and parking lot landscaping sections. Other amendments to the parking lot landscape section include reducing the 35 percent evergreen tree requirement to 25 percent and requiring parking lot islands to be excavated and backfilled with top soil to ensure suitable growing areas. *The Policy Committee supported staff's proposals and suggested minor changes to clarify language in the buffer treatment descriptions.*

5. Parking Standards

The draft ordinance for parking standards includes the following updates: addition of an administrative waiver process by which applicants can propose an alternative number of spaces less than the ordinance requirement, establishment of a cap of 120 percent of the minimum parking requirement, an adjustment to uses in high demand parking, a requirement to internally connect commercial development in Community Commercial and Neighborhood Commercial designated land, a reduction in the maximum parking bay size requirement to be consistent with the landscape ordinance, and an incentive to promote side and rear parking for commercial sites. *The Policy Committee supported staff's proposed ordinance revisions.*

6. Private Streets

Staff has drafted a new ordinance section that clarifies when and where private streets are permitted and provides a construction standard waiver provision when an unusual street feature is proposed that would not be generally permissible by VDOT (staff enforces VDOT construction standards for private streets). Additionally, the proposed ordinance section clarifies that private streets shall meet VDOT construction and geometric standards unless waived. *The Policy Committee supported staff's proposed ordinance section.*

7. Pedestrian Accommodations (Sidewalks):

The draft ordinance for pedestrian accommodations includes the following highlights: adding a reference to the new Pedestrian Accommodation Master Plan; providing exemptions for small or temporary structures, industrial parks, and some office parks; referencing VDOT's Secondary Street Acceptance Requirements (SSARs) for pedestrian standards in the ordinance with parallel requirements for private streets; allowing a fee in-lieu-of constructing pedestrian accommodations option when they are shown on the Pedestrian Accommodation Master Plan and there are topographical hardships; providing the Planning Director with the ability to request right-of-way as a condition of any exception if needed; requiring internal connections to adjacent public facilities and to community amenities; and creating minimum construction standards based on VDOT's standards. *The Policy Committee supported the draft ordinance, but recommended that the Pedestrian Accommodation Master Plan either not require a sidewalk along Brick Bat Road or be changed to provide an option for a multi-use path connecting Centerville Road to John Tyler Highway.*

8. Timbering

Based on feedback, staff researched surrounding and out-of-state localities and consulted with Billy Apperson of the Virginia Department of Forestry (VDOF) to develop three draft ordinance options to address buffering and setbacks for timbering in A-1 areas outside the Primary Service Area (PSA). The three options summarized in Table 1 are intended to present different levels of buffer requirements and County notification. Additional information about each option is provided in the attached Policy Committee memorandum. Each option is acceptable under State Code; however, Mr. Apperson noted that since Virginia is a right-to-timber state, he did not favor any additional requirements that would add cost or time to timber harvesting or detract from the value of the property. Staff also developed an application form for timber buffer/setback modifications as requested and an application for the pre-harvest plan submission in the event that the Board endorses Option 2 or Option 3. As a result of these discussions, staff recommends draft ordinance Option 1.

Table 1:

Summary of Options	Option 1	Option 2	Option 3
State Code and VDOF's suggested changes	X	X	X
Memorandum of Agreement with VDOF for notification of timbering activity	X		
Pre-harvest plan required for timbering on any property		X	X
No buffers required for A-1 outside the PSA	X	X	
50-foot buffer for A-1 properties along CCC outside the PSA			X

The Policy Committee asked staff to present these options to the full Planning Commission on July 6. The Planning Commission recommended Option 3 by a vote of 5-2 and suggested that staff consider how buffers on properties in Agricultural and Forestal Districts (AFDs) could fit into the timbering requirements. Staff is currently investigating the legality of this request. Finally, in their opinion, the majority of the Commission noted that the provisions included in Option 3 for property owners to recover some of the buffer's economic value and account for public safety allayed their previous concerns about requiring buffers outside the PSA. Staff does not support Option 3 and has concerns of the legality of this request (AFDs) and the additional concerns expressed by Mr. Apperson.

9. Floodplain

Changes to the floodplain ordinance included increasing the freeboard requirement for construction, requiring hydrologic and hydraulic studies for any encroachment into the floodplain referencing the Virginia Uniform Statewide Building Code for the purposes of requiring flood proof construction, and changing the definition of flood. *The Policy Committee endorsed these amendments and requested clarification on whether Section No. 24-596 applies to buildings or all structures.*

Staff requests that the Board of Supervisors offer comment on these draft ordinances and guidelines prior to presenting the final ordinance language to the Policy Committee later in the fall and making preparations for advertising the ordinance this winter during Stage III of the process.

II. Cumulative Impacts

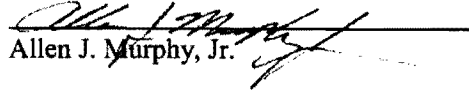
Since there is no ordinance text associated with the cumulative impacts database for the purposes of Stage II of the zoning and subdivision ordinance update, this section is intended as an update to staff's progress and summary of upcoming milestones. Staff has accomplished several objectives since the Board work session based on feedback including:

- Looking at ways to simplify the tracking method;
- Discussing broadening the analysis to look at fiscal impacts with the Director of Financial and Management Services;
- Meeting with representatives from James City County Citizens Coalition (J4C) to discuss the methodology and data sources for their annual growth reports;
- Manually classifying more than 38,000 parcels into broad land use categories for a separate task associated with the Hampton Roads Transportation Planning Organization;
- Completing work on residential development in the Jamestown District and beginning work on the Roberts District, which has involved multiple re-workings of the tracking spreadsheet; and
- Determining a way to include approved but not-yet-built development into the existing tracking spreadsheet rather than waiting until a later stage in the project to incorporate that data.

More detail about each of these items is available in the attached Policy Committee memorandum. The Policy Committee endorsed staff's progress and directed staff to proceed as presented.

Staff anticipates having a draft report of the raw residential figures ready for review by the Policy Committee this fall for inclusion in the Planning Commission Annual Report. At this time staff also hopes to present the Committee with proposed methodologies for assessing impacts of residential development for comment.


Tamara A.M. Rosario


Allen J. Murphy, Jr.

CONCUR:


Steven W. Hicks

TMR/AJM/nb
DevS-StageII_mem

Attachments:

1. Unapproved Policy Committee Minutes (June 7 and June 16)
2. Soundwalls - Draft Guidelines
3. Outdoor Lighting - Draft Ordinance
4. Tree Preservation - Draft Ordinance
5. Tree Preservation - Outstanding Specimen Tree Option
6. Tree Preservation - Outstanding Specimen Tree Option Request Form
7. Tree Preservation - Streetscape Policy Amendment
8. Community Character Corridor Buffer Treatments and Parking Lot Landscaping - Draft Ordinance
9. Community Character Corridor Buffer Treatments and Parking Lot Landscaping - Buffer Landscape Treatment Guidelines
10. Community Character Corridor Buffer Treatments and Parking Lot Landscaping - Designated Buffer Treatment Map
11. Community Character Corridor Buffer Treatments and Parking Lot Landscaping - Draft Amendment to Parking Lot Design
12. Private Streets - Draft Ordinance
13. Parking - Draft Ordinance
14. Pedestrian Accommodation - Draft Master Plan (under separate cover)
15. Pedestrian Accommodation - Draft Ordinance
16. Timbering - Policy Committee Memorandum
17. Timbering - Option 1 Draft: Staff's Original Recommended Changes
18. Timbering - Option 2 Draft: Pre-harvest Plan Submission
19. Timbering - Option 3 Draft: Pre-harvest Plan Submission and Required Setbacks for Timbering Outside the PSA
20. Floodplain - Draft Ordinance
21. Cumulative Impacts - Policy Committee Memorandum
22. Cumulative Impacts - Jamestown District Sample Residential Tracking Table

POLICY COMMITTEE MEETING

June 7, 2011

7:00 p.m.

County Complex, Building A

1) Roll Call

Present

Mr. Reese Peck, Chair
Mr. Al Woods
Mr. Jack Fraley
Mr. Tim O'Connor

Staff Present

Mr. Allen Murphy
Ms. Tammy Rosario
Mr. Christopher Johnson
Ms. Leanne Reidenbach
Ms. Christy Parrish
Ms. Jennifer VanDyke

Mr. Reese Peck called the meeting to order at 7:00 p.m.

2) Minutes

a) April 25, 2011

Mr. Peck stated that he wanted his own presentation about urban development areas to be included in the minutes. Mr. Jack Fraley moved for approval for the April 25, 2011 minutes with the inclusion of the presentation. The minutes for April 25, 2011 were approved.

3) Old Business

4) New Business

a) Cumulative impact of development

Ms. Christy Parrish and Ms. Leanne Reidenbach discussed the materials on cumulative impact of development.

Mr. Al Woods asked if this is the same document the Policy Committee had reviewed previously.

Ms. Reidenbach stated that at one time the Board of Supervisors (BOS) had suggested simplifying the methodology. She stated that upon further examination a consensus was reached that essential information was lost or compromised if simplified. She stated that they then returned to the original matrix.

b) Pedestrian accommodations

Ms. Reidenbach reviewed some of the modifications made to the master plan.

Mr. Peck asked if there is enough room to accommodate a sidewalk along News Road.

Ms. Reidenbach stated that staff did not complete a right of way analysis. She stated that for Virginia Department of Transportation (VDOT) to assume maintenance the sidewalk needs to be placed in the right-of-way.

Mr. Allen Murphy stated that there is enough right-of-way along the main section of News Road to accommodate a path.

Mr. Peck stated that he is uncertain of the area around Matoaka Elementary school. He stated that it seems out of place to put sidewalks in an area that is remote.

Ms. Reidenbach stated that staff elected to go one-half mile in either direction to the schools in that area. She stated that this was intended to accommodate students in the area. She stated that the Policy Committee had previously called out Brick Bat Road, Lake Powell Road and Jolly Pond Road as areas of interest.

Mr. Peck asked if there are sidewalks within the neighborhoods in the Jolly Pond Road area.

Ms. Reidenbach stated that she did not know. She stated that currently there are proposals for subdivisions along Jolly Pond that include three acre lots.

Ms. Tammy Rosario stated that staff can go back and look at the density in that area past Matoaka Elementary school. She stated that there would be benefits to having a sidewalk in the area adjacent to the Greensprings West subdivision.

Mr. Peck stated that it may be best to have a multi-use path in that area to accommodate bikes as well.

Mr. Fraley stated that we want to maintain inter-connectivity.

Mr. Tim O'Connor stated that he is concerned with removing the sidewalk requirements. He stated that within McLaws Circle he sees people walking in the middle of the road because the area lacks sidewalks. He stated that many employees working in Stonehouse Industrial Park use public transportation. He stated that it is important to have sidewalks in these areas to better facilitate the use of public transportation.

Mr. Fraley stated that he would like to see sidewalks in office parks.

Ms. Reidenbach stated that new office parks require sidewalk installation. She stated that for any subdivision that has internal public streets, VDOT will require sidewalks on either one or both sides of the development if it meets certain thresholds. She stated that if they are private streets, staff has written a provision that would mirror VDOT requirements. She stated that industrial parks and industrial portions of economic opportunity areas are other places where there would be no County sidewalk requirements for private streets but that would still have to adhere to VDOT regulations. She stated that new office parks and commercial and retail establishments would be included in sidewalk requirements.

Mr. Fraley stated that including industrial parks for sidewalk requirements may be advantageous.

Mr. Murphy stated that staff has spoken with the Director of Economic Development regarding sidewalk requirements in industrial areas. The director stated that he was more comfortable with not making it a requirement.

Ms. Reidenbach stated that if the street is public then the property needs to be developed per VDOT's requirements.

Mr. Woods asked staff to explain what differentiates public and private streets.

Ms. Reidenbach stated that public streets will be wholly governed by VDOT's requirements. She stated that staff decided to stick with VDOT's requirements and reference their guidelines. She stated that private streets would not have to meet VDOT standards relating to sidewalks, unless the Ordinance required it. She stated that staff wrote language in the Ordinance requiring sidewalks on private streets that mirrored VDOT's requirements.

Mr. Woods asked why staff elected not to require sidewalks in industrial areas.

Ms. Reidenbach stated that the Director of Economic Development did not want to burden business owners with the cost.

Mr. Woods asked what the typical size of a business would be in an industrial park.

Ms. Reidenbach stated that it varies depending on the use.

Ms. Rosario stated that the Wal-Mart distribution center would be an example of a large industrial operation, a smaller one might be 13,000 square feet.

Mr. Woods stated, as an example, the Wal-Mart distribution center would have required sidewalks throughout with the new requirements.

Ms. Reidenbach stated that she does not know their floor area ratio.

Mr. Murphy stated that they do not front on a public street. He stated that they would also have to meet a certain floor-area ratio in order to trigger the requirement.

Ms. Reidenbach stated that in the areas that are master planned, such as Stonehouse Commerce Center if their pedestrian accommodations are shown on the master plan that would take priority.

Mr. Rich Costello, 10020 Sycamore Landing Road, asked for clarification regarding Sec. 24-35(a)(4).

Mr. Murphy stated that staff's intent was to meet Americans with Disabilities Act (ADA) standards. He stated that this particular clause is intended to identify special requirements for the Economic Opportunity zone.

Ms. Reidenbach stated that there is also a clause that speaks to connecting a development with any existing public transit stop.

c) Floodplain overlay

Ms. Reidenbach reviewed some of the changes to the draft Floodplain Ordinance.

Mr. Fraley asked for clarification regarding the last sentence in Sec. 24-596.

Mr. Costello asked if staff really meant structures instead of buildings. He stated that structures would be more inclusive.

Ms. Reidenbach stated that it is currently written in the Ordinance as structures.

Mr. Fraley read the definition of structure from the Ordinance.

Mr. Murphy stated that staff will clarify this to apply to buildings only.

d) Timbering ordinance

Ms. Reidenbach relayed some of the previous discussions with the BOS regarding timbering. She stated that much of discussion revolved around buffers outside the Primary Service Area (PSA). She stated that there was interest in requiring buffering in these locations but, making sure that it was either added as an incentive or that the property owners would not be penalized monetarily. She stated that timbering is a crop for those outside the PSA. She stated that requiring a buffer would not penalize them or they would be compensated. She stated that staff's approach to the direction provided by the BOS was to offer three levels of options to choose from. She stated that the first option represents staff's original proposal to the Policy Committee. She further discussed the details pertaining to option one.

Mr. Peck asked what it means to be a right to timber state.

Ms. Reidenbach stated that being a right to timber state means that property owners have a fundamental right to timber. She stated that localities can apply certain limitations, but the property owner cannot be obstructed from timbering their property.

Mr. Peck confirmed that there are provisions that allow localities to require buffers.

Ms. Reidenbach discussed the details of the second option. Ms. Reidenbach stated that this option includes a requirement to notify the County at least ten days prior to any timbering activities.

Mr. Woods asked why ten days.

Ms. Reidenbach stated that this was the length of notification cited in State Code. Staff has a maximum of ten days to review any plans for timbering.

Mr. Peck stated that outside the PSA there are only parcels with very small acreages that would be covered by this.

Ms. Reidenbach stated, yes. She stated that staff was focusing on Community Character Corridors.

Mr. Peck stated that the primary distinction between option one and option two is the ten day notification.

Ms. Reidenbach stated that option two is an attempt to achieve balance between the Board's desire to protect buffers and their desire to not be punitive. She stated that option three, the most restrictive, requires fifty foot buffers along any Community Character Corridor for A-1 property outside the PSA. She stated that with this requirement, property owners would be allowed to remove up to half of the basal area of the buffer in order to realize the full value of timber on the property.

Mr. Fraley stated he is comfortable with option one.

Mr. O'Connor stated option one seems the most appropriate.

Mr. O'Connor asked if staff does not respond within ten days then by default the proposal is approved.

Mr. Murphy stated yes.

Ms. Reidenbach stated that one advantage of requiring the ten day notification is that it gives staff the ability to verify that buffers and other required elements have been including, which would help avoid violations, and it also gave the County a chance to consider whether timbering rights to a buffer area should be acquired with greenspace funds.

Mr. O'Connor stated he is reluctant to support any new regulation requiring timbering review plans.

Ms. Reidenbach explained further details related to option three regarding the advantage of leaving trees that are ten inches in diameter. She stated that the trees that are most valuable - the largest, oldest trees - may not be the most ideal to retain in a buffer. These older trees are susceptible to being damaged in heavy winds.

Mr. Peck stated that he likes option three.

The Policy Committee decided to have this discussed further at the next Planning Commission meeting.

e) Commercial districts

Mr. Chris Johnson reviewed the proposed revision to Sec. 24-147, Development Review Committee (DRC) triggers.

In reference to Sec. 24-149, Mr. Woods asked if the Planning Commission reviews plans that have been granted expedited review status.

Mr. Johnson stated that expedited review status for commercial projects does not exempt them from DRC review, if it is necessary. Sec. 24-149 allows the DRC chair to designate two members to review site plans during the initial expedited review timeframe.

Mr. Fraley asked if there would be any changes to the Ordinance regarding the DRC subdivision review trigger.

Mr. Johnson stated that this is a Subdivision Ordinance issue, which is a non-priority item. Mr. Johnson stated that the threshold triggering DRC review of subdivisions will be addressed at a later date.

Mr. Fraley stated that he does not see a need for the DRC to review any of the uses called out in Sec. 24-147. Mr. Fraley stated that he did not think it is appropriate to have the Economic Development Director decide which proposals are granted expedited review status.

Mr. Johnson stated that staff had been directed previously by the Policy Committee to facilitate modifications to the role of the DRC. Mr. Johnson stated that the new role would define the DRC as a strategic body at the front end of the development review process and as an appellate body in later stages. The DRC would be more involved during the conceptual review of both legislative and certain administrative proposals.

Mr. Peck stated that he supports changing the role of the DRC to a strategic and appellate body.

Mr. Murphy stated that if the DRC review triggers are removed, reviews can be done administratively.

Mr. Johnson stated that the collective expertise of development management staff is fully capable of handling the vast majority of issues and concerns currently reviewed by the DRC.

Mr. Woods stated that he can recall a previous discussion at a Planning Commission meeting where retaining the existing DRC thresholds was preferred.

Mr. O'Connor stated that he generally supports changing the criteria but, this discussion should include the entire DRC.

Mr. Woods stated that if the DRC triggers were removed one advantage would be a streamlined review process for the applicant.

Mr. Fraley asked staff to review the proposed revisions to Sec. 24-11, commercial Special Use Permit (SUP) triggers.

Mr. Johnson pointed out the building size threshold increasing from 10,000 to 20,000 and noted that the exemptions for office and industrial building square footage and trip generation would remain unchanged. Mr. Johnson added that the recommended revisions would have eliminated roughly half of the commercial SUP's over the past decade.

Mr. Richard Costello, of AES stated that exemptions (d)(1) and (d)(2) are outdated and could be removed.

Mr. Johnson reviewed the proposed revisions for the Limited Business District, LB.

Mr. Fraley stated that the Ordinance materials related to LB are of particular importance since these districts are located near residential areas. Mr. Fraley asked why staff chose to add the new language seen in Sec. 24-367.

Mr. Johnson stated that Sec. 24-367 is a statement of intent for the district and language contained therein is not enforceable. It is meant to be a general, guiding statement of intent for the regulations outlined in the rest of the chapter.

Mr. Fraley stated he would prefer to see more substantive language.

Mr. Murphy stated that it does explain the specific requirements that are seen in the text later in the chapter.

Mr. Fraley stated that he expected to see more uses shift from specially permitted to permitted and fewer uses that require a SUP. Mr. Fraley stated that he anticipated seeing more performance standards for uses requiring SUP's.

Mr. Murphy stated that staff made an effort to meet this expectation. Mr. Murphy stated that if the Policy Committee wants to shift more uses than staff will consider them.

Mr. Fraley asked for clarification on the condition placed on Veterinary hospitals under Sec. 24- 368.

Mr. Johnson stated that requiring animals to be kept on a leash would prevent outdoor dog runs which create noise outside normal working hours yet still allows employees to walk or exercise dogs during the day.

Mr. Fraley suggested requiring an extra setback in Sec. 24-370(1), perhaps increasing the front setback to 75 feet.

Mr. Fraley asked for clarification regarding Sec. 24-391 pertaining to convenience stores.

Mr. Murphy stated that all convenience stores require a SUP, even those that do not sell fuel.

Mr. Johnson stated that convenience stores typically remain open for extended late night hours and promote the congregation of people around them later into the evening which can cause impacts on adjacent residential properties and often increase police presence. He stated convenience stores typically have bright lighting and other design issues that require careful review during a legislative process.

Mr. Fraley stated he was alarmed to hear at the last Board of Supervisors meeting that it is difficult for the County to enforce hours of operation. Mr. Fraley asked why convenience stores are not listed in M-2.

Mr. Murphy stated that convenience stores were deemed an inappropriate use for M-2. He stated that it was the county's intent to retain M-2 for heavy industrial uses.

Mr. Costello asked staff if outdoor centers of amusement are permitted in any other district besides, B-1.

Mr. Johnson stated that it is only permitted in B-1 with a SUP. Mr. Johnson stated that outdoor centers of amusement are not appropriate uses in industrially zoned areas or adjacent to residential neighborhoods in LB.

5) Other Business

a) Administrative policy and procedures manual

Mr. Peck noted that he had a several comments regarding the organization of the administrative policies and procedures. He noted that he could not find the County's administrative regulations (ARs) on the website.

Mr. Murphy clarified that ARs are internal guidance to the County and do not apply to outside developers, which is why they are not posted publically.

Mr. Peck noted that policies were categorized by their adoption status. He was interested in creating a numbering system that classified policies that dealt with similar topics (for example, site plan review) in the same numbered section to make them easier to find. He also wanted to establish a more consistent process for adopting and amending policies, such as what is adopted by just the Policy Committee versus the Board of Supervisors, and developing criteria for figuring out what is worthy of a policy. He noted that putting sunset clauses on regulations may be a good idea to require them to be reconsidered every 5 years and brought up to date. He also recommended inserting hyperlinks in the County Code to referenced policies where pertinent and cross-referencing any guidance documents in the Zoning Ordinance as well.

Mr. Murphy noted that the policies were recently added to the website in the development procedures and policies, guidelines, and procedures tabs. He asked that Committee members look at the website organization and offer feedback.

Mr. Fraley and Mr. Peck discussed whether there were any policies other than the bylaws pertaining to the Planning Commission.

Adjournment

Mr. Fraley moved to adjourn. The meeting was adjourned at 9:00 p.m.

Reese Peck, Chair of the Policy Committee

POLICY COMMITTEE MEETING

June 16, 2011

7:00 p.m.

County Complex, Building A

1) Roll Call

Present

Mr. Reese Peck, Chair
Mr. Al Woods
Mr. Jack Fraley
Mr. Tim O'Connor

Staff Present

Mr. Allen Murphy
Ms. Tammy Rosario
Mr. Scott Whyte
Mr. Luke Vinciguerra
Mr. Brian Elmore

Mr. Reese Peck called the meeting to order at 7:00 p.m.

2) New Business

A) Tree Preservation

Mr. Jack Fraley requested moving the Tree Preservation and Landscaping topics to the beginning of the agenda to accommodate members of the public.

Mr. Scott Whyte stated that staff moved the tree preservation ordinances into the landscaping ordinance due to technical issues related to numbering and order.

Mr. Al Woods asked why staff did not bring forward tree canopy percentage regulations.

Mr. Whyte stated tree canopy regulations, using the Fairfax County ordinance as a guide, fall short of current ordinance requirements. He stated single-family lot landscaping has never been regulated, and staff did not feel there was Board support to make such a major change at this time.

Mr. Fraley stated Fairfax was the first county to implement tree canopy ordinances after the state gave localities the authority to adopt them.

Mr. Tim O'Connor asked if the ordinance could allow latitude on general standards, including changing the ratio of five average trees replacing one specimen tree.

Mr. Whyte stated the ordinance allows flexibility. He stated applicants get five credits for saving an outstanding specimen tree, for example, to use elsewhere on the property to remove other trees.

Mr. Allen Murphy stated the ordinance also allows latitude when the applicant exceeds the minimum tree preservation requirements.

Mr. Fraley asked staff to review language on site balance achieved by moving dirt excavated onsite to fill other parts of the development.

Mr. Murphy stated that type of language should be included.

Mr. Fraley questioned the ordinance's 25-acre threshold for clear cutting regulations.

Mr. Murphy stated staff views 25 acres as the correct threshold.

Mr. Whyte stated during his research, the only similar ordinance he found included a 30-acre threshold.

Mr. Fraley stated agreement with public comments he had heard, that the ordinance should address impacts on neighboring properties. He stated site work could harm trees on adjacent property.

Mr. Woods stated roots lie nearer the surface in local soil conditions. He stated heavy equipment could cause root compression, killing the tree in a few years. It could prove difficult to determine exactly how the tree died. He asked how staff would establish cause of tree death and enforce this type of ordinance.

Mr. Whyte stated disputes between developers and adjacent properties are normally civil cases. He stated if tree preservation measures are taken correctly, that situation should not happen.

Mr. Fraley stated the language's goal was to put developers on notice regarding adjacent property impacts rather than providing enforcement.

Mr. Murphy stated the ordinance narrative could be amended in Section 24-88(7) to require developers to list in their tree preservation and clearing plan how adjacent property landscaping and buffers will be protected.

Mr. Whyte stated staff would review the plans with an eye for potential adjacent property impacts, including those areas with heavy grading near the property line.

Ms. Tammy Rosario stated staff may suggest the developer install additional fencing to more clearly delineate clearing limits.

Mr. Peck asked staff to address the concerns stated in the public comments attachment in the packet. He asked staff to send a response to the Committee on how they addressed citizen comments.

Mr. Murphy stated staff could provide responses to citizen comments if they were received early enough. He stated Mr. Whyte would meet with the citizens after the meeting.

Mr. Whyte stated most of the comments received had already been addressed by staff.

Mr. Fraley asked about the 10-acre threshold for waiving tree tagging in Section 24-92. He stated a site like Courthouse Commons, just under 10 acres, should be tagged.

Mr. Murphy stated staff was comfortable with the 10-acre waiver threshold. He stated as Planning Director, he can waive the requirement for sites under 10-acres, depending on the circumstances.

Mr. Fraley stated he dislikes ordinances being written with modifications and waivers. He stated the public doesn't like the practice either.

Mr. Murphy stated there are circumstances where a waiver makes sense, including sites with no trees, a development parcel so small the trees must be removed, or an urban corridor parcel where staff wants the building closer to the road. He stated a universal standard is difficult to apply.

Mr. Peck stated when waivers are granted, a letter citing reasons for the waiver should be included.

Mr. Fraley stated he would be comfortable with the 10-acre threshold if staff included illustrations of waivers in the ordinance. He stated there should be some flexibility in the ordinance.

Mr. Fraley asked about specimen trees being visible from "publically accessible locations".

Mr. Whyte stated if the county was giving tree credit for saved specimen trees, it would preferable for them to be seen. He stated if not, the environmental benefits would still exist.

Mr. Fraley stated saving specimen trees was more about environmental and stormwater benefits than aesthetics.

Mr. Whyte stated the phrase on public locations could be removed.

Mr. Murphy stated the preserved specimen tree could be viewed and appreciated. He stated environmental benefits would occur regardless of the age of trees onsite. Developers should be credited for their efforts and expenses to preserve specimen trees.

Ms. Sarah Kadec, representing the J4C, stated she preferred Landscaping and Tree Preservation as separate ordinances, due to trees' differences and additional benefits. She stated the J4C did not like the waiver system, as it gives developers bonuses to continue. Developers can cause tree damage and loss to adjacent property owners, and construction can block public views of preserved trees. The J4C would also like language included in the tree preservation ordinance describing the value of trees.

Mr. Peck stated he was fine with that statement in the beginning of the ordinance. He asked staff to draft a response to submitted J4C comments.

B) Community Character Buffers

Mr. Fraley stated he was pleased with staff's progress on the Urban/Suburban, Wooded, and Open/Agricultural Community Character Corridor buffers work.

Mr. Whyte stated Chris Basic with Greensprings Landscape Architecture had recently drawn illustrations *pro bono* for the County, which will be included in future versions.

Mr. Peck asked if the buffer guidelines would be classified as ordinances, guidelines, or policies.

Mr. Murphy stated they will have the status of an endorsed policy cross-referenced in the ordinance.

Mr. Fraley stated the Planning Commission will consider at its July meeting four options for timbering in areas with open/agricultural corridor buffering: no buffers, buffers with forms submitted, forms and buffers, and Mr. Peck's suggestion of buffering everywhere.

Mr. Whyte stated the open/agricultural corridors designation would only apply to existing agricultural areas.

Mr. O'Connor stated he wanted to ensure consistency and avoid conflict within the ordinance.

C) Private Streets

Mr. Luke Vinciguerra stated although there have been no problems with the private street ordinance, it lacks clarity regarding when private streets are permitted and the related approval process. The new ordinance section shows when and where they are permitted and their approval process.

Mr. Peck asked staff to number handout items and assemble Committee materials to always include the topic memo first.

Mr. Vinciguerra stated the ordinance language has not been changed, but clarified. He stated a chart has been added for additional clarity. A standardized waiver provision based on the waiver language in the R-4 and Mixed Use districts has been added. The new language also clarifies that the County will enforce VDOT's geometric standards for private street construction.

Mr. Rich Costello stated even if private streets are constructed to VDOT standards initially, they become more unacceptable as potential public roads over time, due to VDOT constantly evolving standards.

Mr. Fraley stated he was pleased with staff work on the topic.

D) Highways, Streets, Parking, and Loading

Mr. Vinciguerra stated the updated language gives the Planning Director discretion to allow a minimum parking standards waiver if the applicant demonstrates the minimum standards are too high. He stated a parking cap of 120% of the minimum requirement has been drafted, with waiver requests going to the Planning Director and appeals going to the Development Review Committee (DRC). Certain uses currently rated as high-demand parking have been redesignated as moderate-demand parking. The draft ordinance incentivizes side and rear parking for Urban/Suburban Community Character Corridors.

Mr. Fraley asked why there were different parking standards for outlet malls versus other shopping centers. He asked why the Pottery was not classified as an outlet mall.

Mr. Woods stated the data supports different requirements since traffic counts at outlet malls are greater than regular shopping centers.

Mr. Costello stated the Pottery is not defined as an outlet mall because it doesn't sell the goods of a single manufacturer, overstock, discontinued, or similar goods.

Mr. Murphy stated it was difficult to apply a universal standard to parking requirements. Generally, there has been too much parking in general shopping centers, which has led to staff designing the parking cap. The parking standard is acceptable for most outlet malls, with the exception being Premium Outlets.

Mr. Fraley asked staff about any major uses being reclassified from high-demand to medium-demand parking.

Ms. Rosario stated retail parking was the biggest change.

Mr. Woods asked if side and rear parking incentives had been successful in communities where they were tested.

Ms. Rosario stated the concept was new to the County and specially crafted for our circumstances. She stated the county was experimenting with using incentives instead of requirements for this matter.

Mr. Woods asked if the Community Character Corridors were mostly developed.

Ms. Rosario stated Community Character Areas such as Norge and Toano could be redeveloped and put this provision to use.

Mr. Woods asked whether the County would allow frontal parking for a new Community Character Corridor development.

Mr. O'Connor stated new developments in those corridors could have front parking if the lot had enough depth.

Mr. Woods asked why the County would not simply require side and rear parking, where practical.

Mr. Murphy stated the County is in an evolutionary stage, moving incrementally toward various sustainability items.

E) Sound Walls

Mr. Woods stated that even with someone from the County attempting to influence it, VDOT would still do what it wants.

Mr. Whyte stated the sound wall design guidelines are based on the federal sound wall standards, which VDOT should be following already.

Mr. Murphy stated the County cannot regulate state agencies. He stated VDOT does listen to communities, has participated in Board meetings, and tries to cooperate with County standards.

Mr. Fraley stated he liked the sound wall illustrations.

F) Lighting

Mr. Costello requested changing the ordinance language in Section 24-57(C)3 to replace "public right of way" with "pavement in public right of way" in the first sentence to allow light to reach sidewalks. He stated sidewalks along the roads that would be safer with some light spilling onto them.

Mr. Peck asked staff to try to incorporate those comments.

3) Adjournment

Mr. Fraley moved to adjourn. The meeting was adjourned at 8:50 p.m.

Reese Peck, Chair of the Policy Committee

James City County Sound Wall Design Guidelines

Highway noise barriers tend to dominate their surroundings since they must be placed close to the roadway, frequently extend for thousands of feet along the right-of-way, and often must be over eight feet in height to be effective. The potential for adverse impact should be minimized by utilizing design principles in the planning process, and by a thorough analysis of the site and existing conditions prior to design.

James City County has created these guidelines in order to work closely with the Virginia Department of Transportation (VDOT) to establish a set of consistent specifications expected for building sound walls within the County. It is the County's intention to streamline the procedure, ensure that sound walls within the County are both effective sound barriers and aesthetically pleasing.

Principles of Line and Form

The line and form of a noise barrier are its two most dominant features. The line of a noise barrier is expressed as its outline in plan view, and as its top surface in elevation. Both are equally important visually to the motorist and highway neighbor. Long straight lines are monotonous and make a wall seem longer than it actually is. The effect on the motorist is that of being enclosed, as in a tunnel. High walls adjacent to a roadway tend to create anxiety in motorists - they slow down and unconsciously attempt to move away from the wall. The effect of a high, straight wall on the highway neighbor is that of forced enclosure. Corresponding negative attitudes about the wall may develop particularly if the wall is bare and without visual interest. Therefore the designer should consider the line of the noise barrier as a possible adverse visual impact and examine alternatives for reducing this impact.

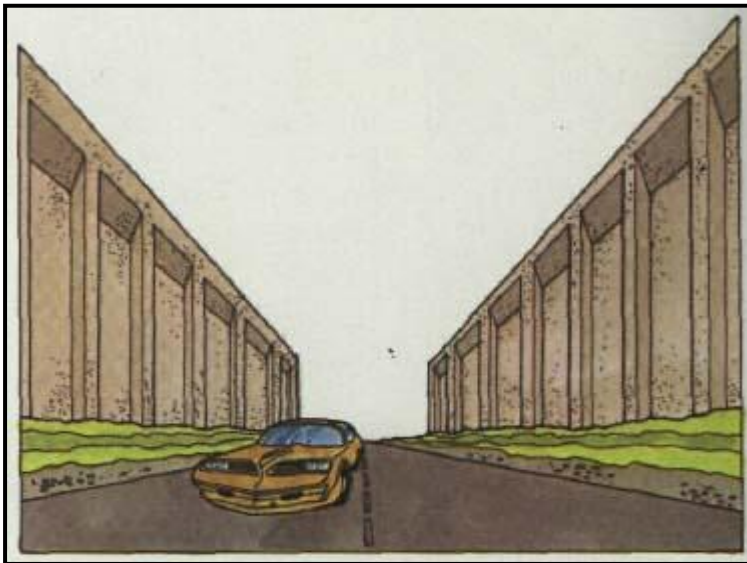


Figure 1-Tunnel effect of high walls

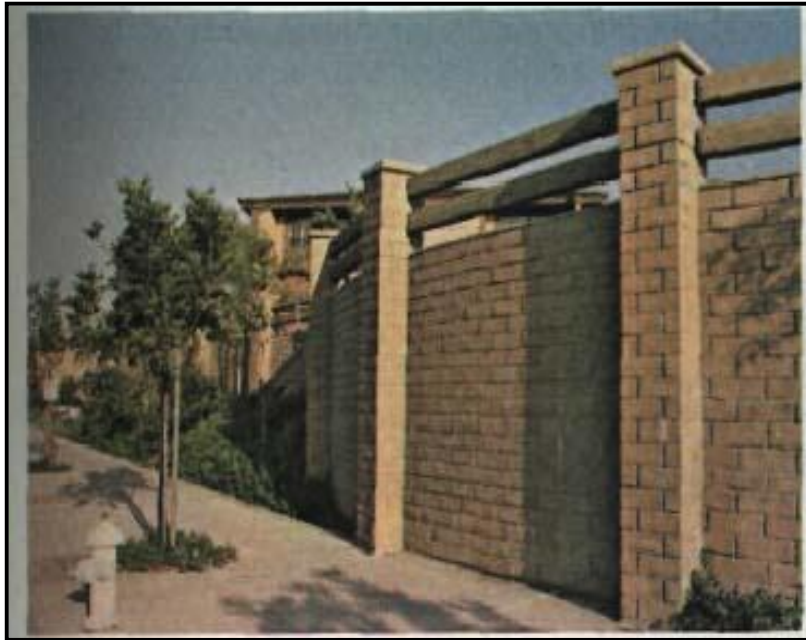
The line of a noise barrier should reflect similar lines of the surrounding environment. In rolling terrain, a straight line seems out of place and attention is drawn to that line. However, in flat terrain, where the horizon is visible as a straight line and the highway is straight, a straight line in a noise wall may be appropriate. A uniform top line of a wall would be appropriate in this case.

Where horizontal lines are evident in nearby structures, a horizontal line would be suitable in a noise wall. In a situation where the horizon is composed of alternating heights of buildings, an appropriate top line of a wall might vary in height as a reflection of the lines on the horizon.

Horizontal lines within the wall tend to make an object appear longer and lower. Vertical lines within the wall have the effect of added height and tend to make an object appear narrower. Sound walls tend to be long and high; therefore, both horizontal and vertical lines, if used improperly, may emphasize undesirable features in a wall. Horizontal lines are difficult to utilize in rolling terrain and should be avoided in this situation. Vertical lines should be avoided on extremely high walls. Combinations of horizontal and vertical lines may be effective where extreme height is a visual problem. The introduction of a vertical element is the key to proper visual balance. A vertical line should be distinct and massive enough to register as such. Noise barriers, as strong horizontals, need a correspondingly strong vertical for asymmetrical balance. Strong verticals may be designed into a wall through the use of pilasters, which further serve as structural support.

Plantings can be effective means of emphasizing vertical lines in a noise barrier. Columnar trees can be used even where space is limited. The use of vertical lines in the form of trees or through wall design should be as an accent, a balance with the horizontal. One should not replace predominantly horizontal with predominantly vertical lines. Care should be taken to achieve a balance between the vertical and the horizontal lines in noise barriers.

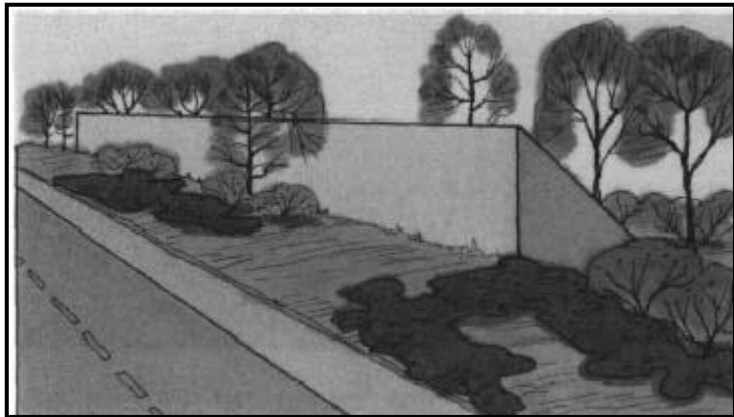
Sound walls which begin and end abruptly and consist of straight, unbroken lines often appear



to be discordant elements in the landscape. These should appear to be a part of the highway scene wherever possible, and not give the impression of being placed as an afterthought. Walls should begin and end in a natural transition from ground plane to the desired height. Where space allows, the best transition is through the use of an earth berm or by tying the wall into the natural hillside. The line of the wall then appears to originate from the landscape.

Figure 2-Pilasters serve as vertical elements in the wall

This may further be avoided by either a gradual tapering of the wall to a point near the ground or by stepping the wall in even increments until a point is reached where the wall is no longer visually dominant. Where possible, walls should tie into existing structures such as



bridge abutments, retaining walls, etc., in order to achieve continuity of line.

The line of a wall may vary in plan view in order to reduce the straight line effect. A series of jogs in a wall serve to break the monotony of a straight wall and create pockets which may be used for plantings.

Figure 3-Lines appear to be part of the landscape

The breaks may further be used as transition points for change in texture, color, or wall height. The line may vary in a curvilinear manner to produce a serpentine wall, which likewise creates visual interest in a wall, and provides the opportunity for planting pockets.

Plantings also may be used to break an undesirable line in a wall. Trees in front of a wall soften the harsh lines; the eye perceives the form and outline of the trees as one with the line of the wall. Vines allowed to grow over a wall will likewise soften an otherwise highly visible hard line. Tree groupings should alternate on both sides of a wall - the viewer becomes less aware of the line of the wall since it becomes part of a composition of forms, rather than a

separate element.



Figure 4- Plant Materials to help soften the wall

Guidelines for the use of Line and Form

The lines and form designed into sound walls within James City County should mimic the lines and forms in the natural surrounding. If the terrain is rolling hills, then the lines and form of the wall should have horizontal and vertical elements and if the terrain is primarily flat then the design should incorporate predominantly horizontal lines.

Principles of Color

Harmonious colors tend to soothe, contrasting colors tend to attract the eye, and clashing colors irritate. A sound wall placed along the highway may evoke similar responses in the motorist, depending upon the colors chosen. The motorist should be directed past a barrier with as little visual disruption as possible, because the primary attention of the driver should be on the road ahead and local traffic conditions. The colors chosen for the barrier should reflect and harmonize with the predominant colors of the highway environment in which it is placed. They should not attempt to match the color of trees, grass, or shrubbery because they are not related to such natural features by form. Rather, harmonious colors should be utilized. When used on structures in the landscape, earth colors (browns and grays of various tones) help to blend the structures into their environment. Structures which utilize these colors seem to belong to the landscape - they appear to be part of the landscape, rather than an unharmonious element added as an afterthought.

Color interest and variety may be achieved through the use of plant materials instead of by direct application on barriers. The added advantage of plantings is in seasonal variation of color. Plants which change color in spring, summer, and fall, when used in conjunction with a barrier, will impart a seasonal variation in the barrier as well. In most cases, the barrier should be of a neutral color which blends with the environment, rather than attracting attention.

Guidelines for the use of Color

The color of sound walls within James City County should be a natural earth tone that blends into the color of the existing terrain but does not match the color of plant materials that are to be placed in front of the wall. The wall should be a neutral color that will help the plant materials placed in front stand out. Walls that are over ten feet in height and one thousand feet in length should incorporate two colors to break up monotony and give the wall some added interest. Incorporating more than two colors should only be applied to walls that are extremely

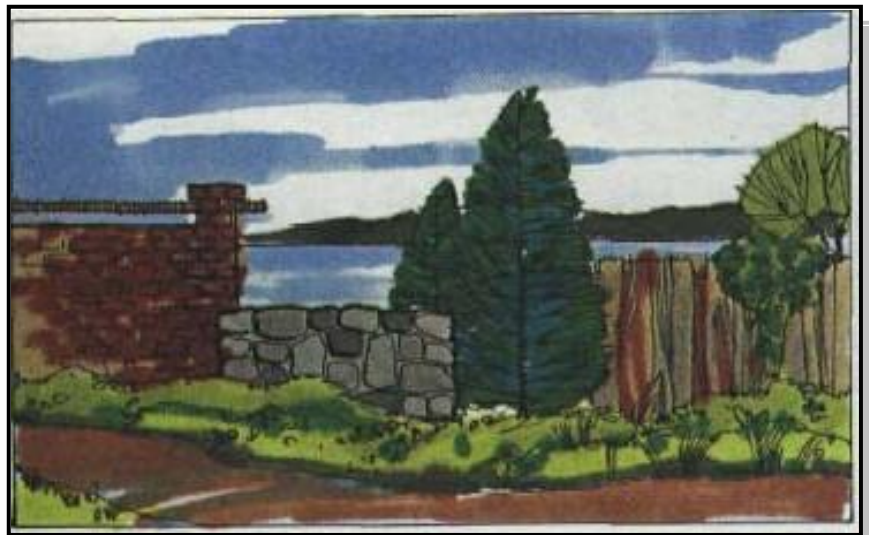


Figure 5-Tone colors blend the walls with the landscape

large, and is not recommended for the smaller applications found in James City County.



The color of the plant materials selected to go in front of the walls should compliment but not match the color of the wall. The color of the plants should vary so as the motorist drives along it creates a progression of colors.

Figure 6-A mixture of texture adds interest to the wall

Texture in Walls

The use of texture on sound walls helps to create a pleasant variety for both the motorist and the resident. A motorist views a barrier at speeds up to 55 mph and has little opportunity to examine details. Most details flash by in a blur. Walls present good opportunities for textural treatment. Texture should be used wherever possible for maximum visual potential. Cast-in-place and precast concrete has flexibility for variations in surface texture. Texture may be created during the casting process or applied afterward.

Exposed aggregate finishes create interesting textures, particularly where coarse aggregate is used in the mix. This is also effective when used alternately with other textures. The added advantage of exposed aggregate is low light-reflectance which helps to reduce the visual impact of the barrier. Wall colors can be varied, depending on the color of the aggregate.

Shadows created in the forming process help to create texture and break up the visual monotony of a plain wall. These may be created through the use of rustication strips placed in the forms, or by variation in the form itself. Horizontal overhangs or vertical jogs in a wall should be deep enough to cast a discernable shadow visible from a distance.

Perhaps the most visually effective method of creating texture in concrete is by using a combination of methods and textures, particularly for long and high barrier walls. Interesting effects may be obtained by varying the texture of a long section of wall; however, textures should be compatible and similar in contrast. Rarely should more than two textures be used on the same wall; the designer should avoid alternating textures in even, repetitive patterns. By varying the textures of the wall and textures of the plant materials the designer can create interest and break up monotony. Sound walls within James City County should be designed so that the texture on the motorist side of the wall is

a coarse texture that can be seen at high speeds and the residential side of the walls should have a fine texture that is easily seen by slow moving pedestrians.

The texture between the plants and the wall should differ slightly and offer some contrast so the plants will stand out and not blend into the wall. Applying too many textures to the same wall can result in cluttered appearance that is not easily ignored by passing motorists. James City County does not recommend using more than two textures on sound walls and using even, repetitive treatment of textures on long walls.

Creating Texture with Plants

Each type of noise barrier presents the opportunity for textural variation, which will aid in public acceptance of the barrier. Textural variation in earth berms can, perhaps, be best accomplished through the use of plantings. Plantings on the highway side should be arranged in large groupings or masses of a single plant type, size, or color. Plants with large leaves represent the coarsest textures and should be used "en masse" where this texture is desired. Massing should be in irregular, free-form patterns of varying size, rather than equally spaced and repetitive. There should be a contrast between the texture of the wall and the texture of the plants.

Principles of Contrast

A noise barrier may contrast with its surroundings by its line, form, texture, or color. In residential areas, the barrier should be unobtrusive and, therefore, low in contrast. On the highway side, a barrier should blend rather than contrast with the surroundings since high contrast is distracting to the driver. Plantings can either increase or decrease contrast of a noise barrier. Plantings that are similar in form, color and texture to other native plants present in the area help to reduce the contrast of a noise barrier. Plantings that are unique in form or color or that are dissimilar to native plants in an area tend to increase contrast. Likewise, to decrease contrast, plantings should be arranged in informal, natural groupings rather than in obvious, equally spaced, patterns.

Contrast may also be increased or decreased via color of the barrier itself. Where high contrast is desired, lighter colors or wall graphics may be used effectively. Darker, earth colors tend to reduce contrast. The designer should examine the site and surroundings in order to determine the predominant natural colors and choose similar or harmonious colors for the noise barrier where low contrast is desired.



Guidelines for the use of Contrast

The design of sound walls in James City County should incorporate construction materials and plants that contrast slightly to their surroundings, helping to make the wall seem to be part of the landscape while contrasting enough to make the planting in front of the walls stand out. Line, form, color, and texture all contribute to contrast and each should be considered when choosing construction materials and plants.

Figure 7-Less contrast would have helped blend this wall into its surrounding

Principles of Sequence

Travel on a highway is a continuous, ever-changing experience of vision and motion. A planned sequence of events creates interest for the moving observer; a static event creates monotony. A sound wall can create a pleasant visual experience for the motorist through a progression or planned sequence. The transition from ground plane to maximum barrier height should be a sequence of gradually increasing steps or a continuous sweeping line to help create this effect. A sequential experience may be created through the arrangement of plantings, by a gradual increase in height of trees and shrubs. Plant masses can be used to define a space by becoming, in effect, the walls of the enclosure. Varying the position of these masses with respect to the road creates a succession of confined and relatively open spaces. This pleasant feeling of motion and rhythm imparted to the moving observer tends to dramatize the experience of passing through the space.

Guidelines for Sequencing

A sense of sequencing should be an element of all sound walls within James City County. Sequencing should be designed into the wall and the landscaping. Longer sound walls should have sequencing in the height of the wall and create areas that change the distance from the wall to the road. Indentations in the wall can create attractive niches that help break up the long expanse of wall and add a series of interesting spaces that change as the motorist moves by. Such indentations enable the designer to incorporate sequenced changes to the landscape and wall. Landscaping should be an informal design that changes as you progress along the wall. Groups of trees and shrubs should be utilized, repetitive treatments should be avoided. Treatment should change as the motorist moves along to pull the eye along the progression.

Principles of Dominance

A dominant element attracts attention to itself in a visual scene. A noise barrier should not be the dominant feature along a highway. Dominance of a single element can be reduced through the introduction of other dominant elements which balance each other in the visual

composition. Plantings in front of a barrier help to reduce visual dominance, particularly if the plantings are native varieties commonly found or present in an area. Color can also affect dominance. Brighter, contrasting colors make an object more dominant. Subdued, harmonious colors, similar to surrounding colors in intensity, tend to make an object less dominant. Wall design can also affect dominance of a noise barrier. Straight, high walls adjacent to the roadway appear imposing, an encroachment upon the space. Walls which step back in some way relieve this tight constricted feeling, and become less of a dominant element in the highway environment. Similar patterns of dominance occur on the residential side of barriers, with equally similar effects upon the resident.

Guidelines for Dominance

Sound wall design within James City County should incorporate construction materials and plantings that reduce the visual dominance of the wall and emphasize the natural terrain and vegetation. The wall can appear to be part of the natural landscape by starting the placement of the wall from a wood line or berm and having the height increase as you progress and then decrease as you come to the end. The configuration of the wall should mimic the natural terrain and the landscaping should mimic the natural vegetation.

Principles of Landscaping



Figure 8 Informal landscape design

The landscape treatment of sound walls should use plants that are similar to existing vegetation in the area and planted in an informal design that makes the wall appear to be part of the natural landscape. Repetitive uniform plantings should be avoided. Groups of plants placed in an informal pattern that pulls the eye along as you progress is preferred.

Guidelines for Landscaping

Sound walls built within James City County should always have landscaping installed in front and when possible have tall existing vegetation behind the wall. The County is aware that it is not always possible for enough right of way area to be provided for landscaping. However every effort should be made to utilize as much area for landscaping that is practical. The landscape design should incorporate the design principles of line, form, texture color, dominance, sequencing, and dominance discussed above.

Construction Materials

There are a wide range of construction materials available for sound wall construction, ranging from wood, steel, rock, concrete, concrete block, and precast. All of these materials offer their own aesthetic and sound absorbing or sound reflecting properties. Typically the precast systems offer the most flexibility in design and are most often the most economical choice.



Figure 9 Pre cast concrete systems are economical and attractive and offer a wide variety of styles

Construction Material Guidelines

All sound walls within James City County should utilize the most aesthetically pleasing products that offer suitable sound absorbing properties, and are readily available on the market today. Since sound walls are primarily funded by the Federal Government, efforts to keep cost below the \$30,000.00 per affected resident standard should be made. James City County would consider any construction material that can provide the proper noise abatement and costs within the proposed budget. Aesthetics should be the primary emphasis when choosing the type of construction material used, with cost also taken into consideration.

Conclusion

The intent of these guidelines is to enable James City County to work closely with VDOT through the design process of sound walls. These guidelines will be made available to VDOT so the County's desired treatment of sound walls can be known before the design process begins. Once the design process begins the County shall be active in the public meetings portion. VDOT advertises the public meetings in local newspapers and sends out notices to the affected property owners. The meetings are typically held at local schools. It is the County's intent to have a representative at each of these meetings to advocate the design principles contained in these guidelines. The guidelines are intended to enhance the operation of these meetings by making the County's preferences known ahead of time and to ensure that the design of sound walls within the county are designed to be efficient sound mitigation facilities that are cost effective and aesthetically pleasing. The following bullet points summarize the James City County's expectations for the design and construction of sound walls.

- The line and form of sound walls should mimic the line and form found in the natural landscape making the wall appear to belong as an element of the natural topography.
- Colors in sound walls should be earth tones that blend into the natural surroundings, and no more than two colors should be used.
- Textures used in sound walls should be compatible similar in contrast. Rarely should more than two textures be used on the same wall. The textures of plant materials should contrast slightly with the texture of the wall to make the plants stand out.
- Sound walls should contrast with their surroundings only slightly so the wall blends into the natural landscape. Some contrast between the wall and plant materials should exist to make the plants stand out but not enough to be distracting.
- Sound walls should be designed to create a progression of line, form, color, texture and contrast known as sequencing. Sequencing should add changing interest to the wall and pull the eye along as one progress along the wall.
- Sound walls within James City County should never dominate their surroundings. Sound walls should be designed to reduce the visual dominance of the wall and emphasize the natural terrain and vegetation.
- All sound walls in James City County should have landscaping install in front when possible. Every effort should be made to provide a planting area. The landscape design should incorporate elements of line, form, color, texture, and contrast to reduce the visual dominance of the wall and make it blend into the natural surroundings. Landscaping should soften the wall and create a progression that pulls the eye along as one proceeds.
- Construction materials should be selected based on their aesthetic value and sound absorbing properties. The cost of materials should also be considered and an effort to keep cost below the proposed budget should be made.

Development Standards Draft Ordinance Language

Chapter 24

Article I. In General

24-2. Definitions

- a) **FOOTCANDLE:** A measure of light falling on a surface. One (1) foot-candle is equal to the amount of light generated by one (1) candle shining on one (1) square foot surface located one (1) foot away. Foot-candle measurements shall be made with a photometric light meter and with a specified horizontal orientation.
- b) **LIGHTING FIXTURE:** A complete lighting unit consisting of the lamp, lens, optical reflector, housing and an electrical components necessary for ignition and control of the lamp, which may include a ballast, starter and/or photo control.
- c) **LIGHTING FIXTURE, DIRECTIONALLY SHIELDED:** A lighting fixture which emits a light distribution where some light is emitted at or above a horizontal plane located at the bottom of a fixture. Such fixtures may contain visors, louvers or other types of shields or lenses which are designed to direct light onto a targeted area and to minimize stray light.
- d) **LIGHTING FIXTURE, FULL CUT-OFF:** A lighting fixture from which no light output is emitted at or above a horizontal plane drawn through the bottom of the lighting fixture. Lighting fixtures located within those portions of open-sided parking structures that are above ground which meet the angle requirements set forth above through the use of any portion of the ceiling or walls of the parking structure shall be deemed full cut-off lighting fixtures.
- e) **LUMEN:** A quantitative unit measuring the amount of light emitted from a light source.
- f) **PHOTOMETRIC DIAGRAM:** A diagram depicting the location of all light poles and building mounted lighting fixtures in a specified area and a numerical grid of the maintained lighting levels that the fixture will produce in that specified area

Chapter 24. Zoning

Article II, SPECIAL REGULATIONS

Division 7 OUTDOOR LIGHTING

Section 24-1000: Statement of intent

The intent of this ordinance is to require and set minimum standards for outdoor lighting to provide for and control lighting in outdoor public places where public health, safety and welfare are potential concerns. These concerns include protecting drivers and pedestrians from the glare of non-vehicular light sources; protecting neighbors, and the night sky from nuisance glare and light trespass from improperly selected, placed, aimed, applied, maintained or shielded light sources; promoting energy

efficient lighting design and operation; and protecting and retaining the intended visual character of the various county venues.

Section 24-1001 Plan Submission

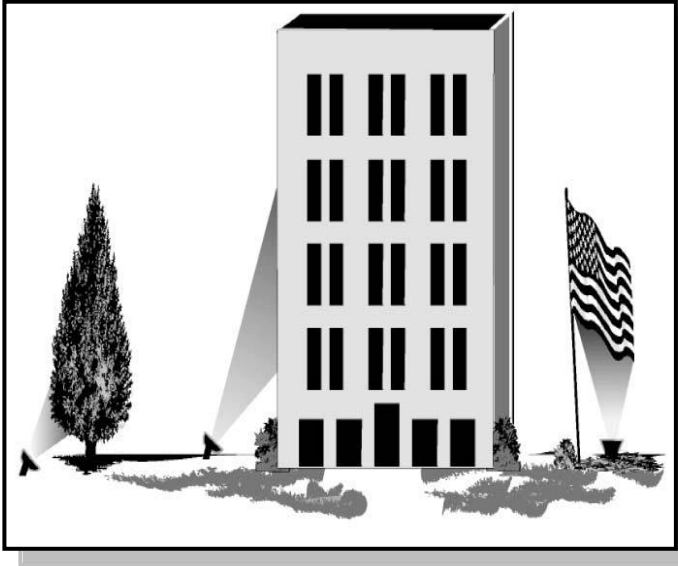
Where site lighting is required by this section, is otherwise required by the county, or is proposed by applicant, lighting plans shall be submitted for county review and approval for site plans, and subdivision plans. The submitted information shall include the following:

- a) A plan or plans of the site, complete with all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), existing and proposed trees, and adjacent uses that might be adversely impacted by the lighting. The lighting plan shall contain a layout of all proposed and existing luminaires, including but not limited to area, architectural, building entrance, canopy, soffit, landscape, flag, sign, etc., by location, orientation, aiming direction, mounting height, lamp, photometry, and type.
- b) Landscaping plans shall contain luminaire locations, demonstrating that the site lighting and landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
- c) Plan Notes – The following notes shall appear on the lighting plan:
 - 1) Post-approval alterations to lighting plans or intended substitutions for specified lighting equipment on the approved plan shall be submitted to the county for review and approval prior to installation. Requests for substitutions shall be accompanied by catalog cuts of the proposed equipment that demonstrate the proposed substitution is equal to or exceeds the optical quality and maintainability of the specified luminaires, and accompanied by a lighting plan, including a point-by-point plot, which demonstrates that proposed substitutions will result in a lighting design that equals or exceeds the quality of the approved plan.
 - 2) The county reserves the right to conduct post-installation inspections to verify compliance with the requirements of this section and the approved lighting plan commitments, and if deemed necessary, to require remedial action at no expense to the county.
 - 3) All exterior lighting, including building-mounted lighting, shall meet Illuminating Engineering Society of North America (IESNA) full-cutoff criteria unless otherwise specifically approved by the county.

Section 24- 1002: General Outdoor Lighting Standards

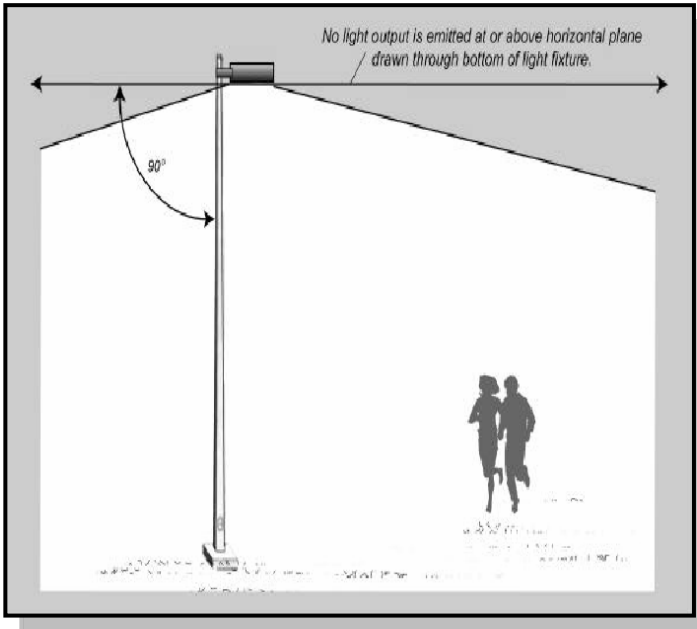
- a) For the lighting of predominantly horizontal surfaces such as, but not limited to parking areas, roadways, vehicular and pedestrian passage areas, merchandising and storage areas, automotive-fuel dispensing facilities, automotive sales areas, loading docks, active and passive recreational areas, building entrances, sidewalks, bicycle and pedestrian paths, and site entrances, luminaires shall be aimed straight down and shall meet IESNA full-cutoff criteria.
- b) For the lighting of predominantly non-horizontal surfaces such as, but not limited to, buildings, facades, landscaping, signs, displays, and statuary, when their use is specifically permitted by the

county, luminaires shall be full cut-off or shielded and shall be installed and aimed so as to not project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward or onto a public roadway and shall comply with all regulations for sign lighting found in 24-69 through 24-74.



Lighting used for architectural/landscaping lighting shall be aimed and controlled so that light is confined, as much as possible, to the objects that are intended to be lit

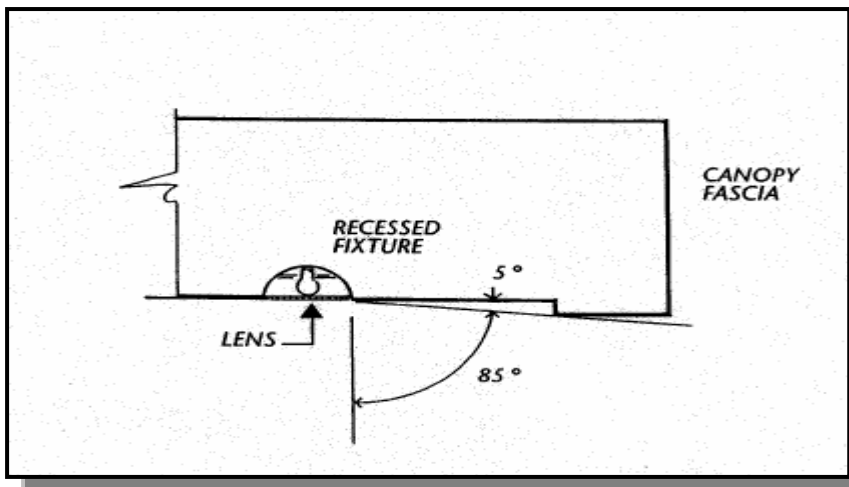
- c) Full Cut-Off Lighting Fixtures – All outdoor lighting fixtures shall be full cut-off lighting fixtures used for but not limited to all outdoor walkways, parking lots, canopy and building/ wall mounted lights. A full cut-off lighting fixture is a fixture from which no light output is emitted at or above a horizontal plane drawn through the bottom of the lighting fixture.



Example of full cut-off lighting fixture

Section 24-1003 Control of Glare

- a) All lighting shall be aimed, located, designed, fitted and maintained so as not to present a hazard to drivers by impairing their ability to safely traverse and so as not to create a nuisance by projecting or reflecting objectionable light onto a neighboring use or property.
- b) Directional luminaires such as floodlights and spotlights, when their use is specifically approved by the county, shall be so shielded, installed and aimed that they do not project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward or onto a public roadway.
- c) Vegetation screens shall not be employed to serve as the primary means for controlling glare. Rather, glare control shall be achieved primarily through the use of such means as cutoff luminaires, shields and baffles, and appropriate application of luminaire mounting height, wattage, aiming angle and luminaire placement.
- d) Flag lighting sources shall not exceed 7,000 aggregate lamp lumens per flagpole. The light source shall have a beam spread no greater than necessary to illuminate the flag and shall be shielded so the light source (lamp and reflector) is not visible at normal viewing angles.
- e) Under-canopy lighting for such applications as gas/service stations, hotel/theater marquees, fast-food/bank/drugstore drive-ups, shall be directed so as not to produce glare on any adjacent property or public right-of-way. Luminaires shall be mounted horizontally and shall be recessed fixtures with no bulb, lens or globe extending below the casing. The casing shall be opaque and shall completely surround the entire light fixture and light source in such a manner that all light will be directed downward and the light source is not visible from the side (refer to the following graphic). Plans detailing the illumination patterns (Iso-footcandle diagrams) and specific design of all lighting fixtures shall be submitted for review along with the site or subdivision plan.



Example of full cut-off fixture for canopy lighting

Section 24-1004 Installation of lighting fixtures;

- a. Pole mounted luminaires for lighting horizontal tasks shall be aimed straight down.

- b. Poles and brackets for supporting luminaires shall be those specifically manufactured for that purpose and shall be designed and rated for the luminaire and mounting accessory weights and wind loads involved.
- c. Pole foundations shall be designed consistent with manufacturer's wind load requirements and local soil conditions involved.

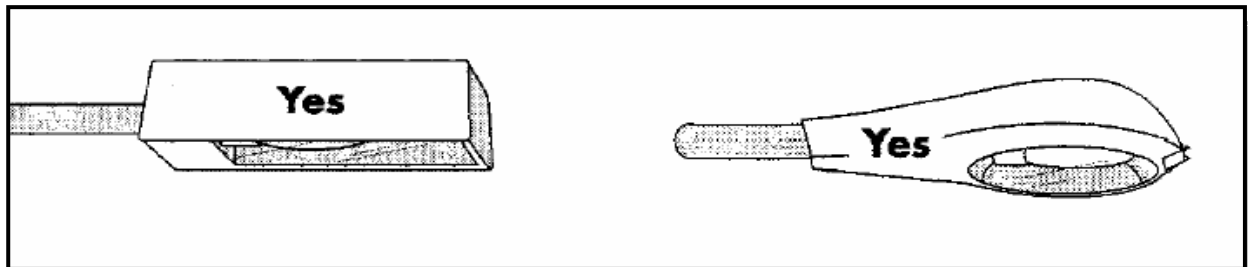
Section 24-1005 Maintenance

- a) Luminaires and ancillary equipment shall be maintained so as to always meet the requirements of this ordinance.

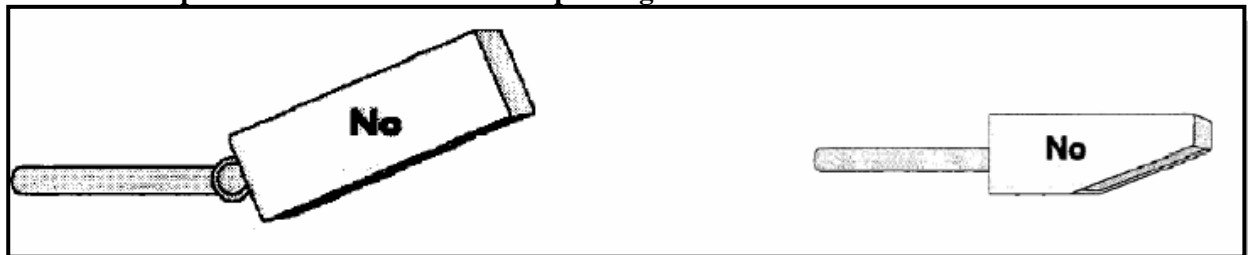
Section 24-1006: Parking Lots

(*NOTE: These are not new requirements, they are relocated from section 24-57 (c) so that all outdoor lighting requirements are located or referenced in one place.)

- a) Adequate lighting shall be provided if the uses which are served by the parking lot will be in operation at night.
- b) No lighting fixture shall exceed a height of 30 feet. Height of the light fixture shall be the distance from ground or finished grade level to the highest point of a luminary.
- c) The lighting in parking lots shall be directed so as not to produce glare on any adjacent property or public right-of-way. Luminaries shall be mounted on light poles horizontally and shall be recessed fixtures with no bulb, lens or globe extending below the casing. The casing shall be opaque and shall completely surround the entire light fixture and light source in such a manner that all light will be directed downward and the light source is not visible from the side (refer to the following graphic). Plans detailing the illumination patterns (Iso-footcandle diagrams) and specific design of all lighting fixtures shall be submitted for review along with the site plan.



Examples of full cut off fixtures for parking lots



Examples of non full cut off fixtures

Section 24-1007 Signs

- a) All outdoor lighting associated with illuminating signage shall be required to follow specifications for sign lighting found in Article 2, Division 3.

Chapter 24

ARTICLE II. SPECIAL REGULATIONS

DIVISION 4. *TREE PRESERVATION AND* LANDSCAPING

Sec. 24-86. Statement of intent.

The purpose of this article is to promote the preservation and planting of trees in order to safeguard and enhance residential and commercial real estate values; reduce noise, glare, and heat; conserve energy; buffer noise and wind; mitigate storm water runoff; protect properties from erosion; and provide habitats for wildlife.

These objectives will be realized through regulatory measures which seek to encourage planting of trees and discourage their removal and promote preserving specimen trees. The preservation, installation, and maintenance of plant materials will:

~~The purpose of this section is to promote the public health, safety and welfare by providing for the preservation, installation and maintenance of trees and plant materials which will:~~

- (1) Ensure development which is consistent with the goals of the Comprehensive Plan related to natural resources, environmental and land use standards, Community Character Corridors, and aesthetics;
- (2) Retain the historic and natural character of James City County by reducing the visual impact of signs, parking lots, buildings and structures and protecting, preserving and enhancing its natural physical wooded character with emphasis on preserving the existing tree canopy and other indigenous vegetation and providing such canopy and vegetation where it does not exist;
- (3) Minimize the environmental and land use impacts of developments associated with noise, glare, dust and movement; changes in appearance, character and value of neighboring properties; and effects on air and water quality, stormwater runoff, groundwater recharge and soil erosion by preserving existing tree canopies and indigenous vegetation and restoring such canopies and vegetation and providing other landscape features;
- (4) Promote traffic safety by controlling views and visually defining circulation patterns;
- (5) Provide more comfortable exterior spaces and conserve energy by preserving and providing tree canopies and other landscape features which provide shade and windbreaks; and
- (6) Ensure the location, type, and maintenance of plant materials creates and maintains a safe environment for users of the site.

Sec. 24-87. Administration.

(a) Tree Preservation Plan; when required. A tree preservation plan shall be required for any development that requires a site plan under the provisions of ordinance section 24-143 and. Such a plan shall be submitted at time of application for plan approval. The Tree Preservation Plan should be prepared and approved in accordance with Article 3 Site Plan.

(b) Tree Preservation Plan; who prepares. Tree preservation plans shall be prepared and/or certified by design professionals practicing within their areas of competence as prescribed by the Code of Virginia including certified engineers, architects, landscape architects, and other professionals related to this field.

~~(a)~~(c) *Landscape plan; when required.* A landscape plan is required for any site plan or subdivision plan for development subject to sections 24-98 (f) and (g) and shall be submitted at the time of application for plan approval. The landscape plan shall be prepared and approved in accordance with article III, Site Plan. The landscape plans shall also indicate the location of all existing and planned utilities.

~~(b)~~(d) *Landscape plan; who prepares.* A Virginia registered landscape architect, a member of the Virginia Society of Landscape Designers, or a Certified Virginia Nurseryman with experience preparing planting plans and landscape construction drawings, shall prepare landscape plans for projects that propose a new building or group of new buildings whose building footprint(s) exceeds 2,500 square feet; or propose site improvements which result in the disturbance of 5,000 or more square feet of land area.

~~(e)~~(e) *Plan requirements and determinations.* Where requirements of this section are based on zoning or planning designations, such designations shall be determined by the county zoning district map, Comprehensive Plan and Six-Year Secondary Road Plan and the official planning and zoning documents of the adjoining jurisdiction if applicable. Required landscape areas shall exclude any planned future right-of-way as designated on the Comprehensive Plan, Six-Year Primary or Secondary Road Plan, Peninsula Area Transportation Plan, approved master plan, or any road plan adopted by the board of supervisors.

~~(d)~~(f) *Installation of required landscaping, performance guarantee.* Where a landscape plan is required, landscaping shall be installed and existing trees shall be preserved in conformance with the approved landscape plan. A certificate of occupancy shall not be issued until all landscaping has been installed in accordance with the approved landscape plan unless the installation of any incomplete landscaping is guaranteed as provided in section 24-8.

~~(e)~~(g) *Maintenance of landscaping.* The owner, or his agent, shall be responsible for the maintenance, repair and replacement of all landscaping materials, fences and barriers as may be required by the provisions of this section. All plant materials, including existing trees preserved to meet the requirements of this section, shall 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. Replacement material shall conform to the original intent of the approved landscape plan and any replacement planting shall meet the minimum requirements of this section.

Sec.24-88. Tree Preservation Plan: Submittal requirements.

(a) Tree preservation plans shall be incorporated into clearing plans when required by the County's Chesapeake Bay Preservation ordinance.

(b) Tree preservation plans shall show the following site conditions:

(1) An inventory of all existing trees on the site with a trunk diameter of 24 inches or greater, measured at breast height. Large areas of trees proposed to be preserved can be shown as an area and do not need to be shown as individual trees;

- (2) *An inventory of all trees with a caliper greater than 24 inches that are proposed to be removed;*
- (3) *Any designated outstanding specimen trees;*
- (4) *The location of existing and proposed buffer plantings, street trees and any other landscaping areas required by the zoning ordinance or subdivision ordinance;*
- (5) *All tree protection measures required by section 24-88 of the zoning ordinance drawn to scale at exact locations;*
- (6) *A phased clearing plan when required by section 24-89;*
- (7) *A narrative explaining how only trees necessary for the development of the site are proposed to be removed.*

Sec.24-89. Tree protection and criteria for tree removal for all uses requiring a landscape plan.

- (a) *Standards for tree protection and impervious cover.* Existing mature trees shall be preserved except in impervious areas and impervious cover shall be limited to the extent permitted in the county's Chesapeake Bay Preservation Ordinance. Existing mature and specimen trees shall be integrated into the overall plan of development and shall be preserved so as to promote the intent of this section. The commission or planning director, depending upon the applicable review process, may require that certain mature trees or specimen trees be preserved upon determination that they contribute significantly to the character of the county and that preservation is necessary to satisfy the intent of this section. The purpose of this paragraph is to protect such trees and other amenities which could otherwise be lost due to careless site design or construction. All trees to be preserved shall be protected in accordance with the standards of this section.
- (b) *Tree protection.*
 - (1) All trees to be preserved shall be protected before, during and after the development process in accordance with specifications contained in the *Virginia Erosion and Sediment Control Handbook*. The applicant shall include a conservation checklist for review and approval by the environmental director which shall ensure that the specified trees will be protected in accordance with these specifications.
 - (2) Groups of trees shall be preserved rather than single trees. Trees or groups of trees to be preserved shall be clearly marked in the field.
 - (3) Trees and groups of trees to be preserved shall be enclosed by a substantial, temporary fence or barrier as specified by the environmental director. The location, type, and installation standards for protective tree fencing shall be clearly shown on the site plan. The fence or barrier shall be located and maintained outside the dripline before commencement of clearing or grading. The fencing or barrier shall remain throughout construction and any subsequent grading or excavation unless otherwise approved on a clearing and grading plan. In no case shall materials, debris, fill, vehicles or equipment be stored within this enclosure, nor shall the topsoil layer be disturbed except in accordance with tree protection standards approved as part of the conservation checklist.

- (4) The developer shall be responsible for ensuring these areas are protected in accordance with this section. Where changes from the existing natural grade level are necessary, permanent protective structures, such as tree walls or wells, shall be properly installed in accordance with the *Virginia Erosion and Sediment Control Handbook*, as required by the environmental director.

(c) *Tree removal:*

Outside impervious areas, trees may be removed in accordance with sections 24-96 (e) (2) and (3).

Sec. 24-90. Phased Clearing Plan: Submittal requirements.

“Phased clearing” means the clearing or grading a parcel of land in distinct sections with the stabilization of each phase before the cutting and removal of trees or grading of the next. A phased clearing plan shall be required to be submitted with the tree preservation plan on all sites disturbing greater than 25 acres. The size of each phase will be established at site plan review and as approved by the Planning Director or Development Review Committee (DRC) and the commission for plans meeting the criteria of section 24-147.

Sec. 24-91. General standards.

- (a) *All tree removal shall be limited to the area required for the practical development of the site. No clear cutting shall be permitted except when it can be shown that the removal of vegetation is necessary for the development of the site. Clear cutting is defined as removal of large areas of existing vegetation in areas not necessary for the construction of buildings and or the infrastructure associated with the development.*
- (b) *For properties subject to this ordinance, the Tree Preservation Plan shall show which existing trees will be removed in order to develop the property. No existing tree greater than 24 inches in diameter shall be destroyed unless written approval has been granted by the county during the process of approving the Tree Preservation Plan. Tree removal shall take place before development or construction begins.*
- (c) *This ordinance strongly encourages the planting of trees native to Eastern Virginia and/or adaptable to the coastal conditions and climate of James City County. As a resource for developing tree plans, the Planning Director or his designee shall maintain and make available to the public a list of desirable trees based on their adaptability to the climate of Eastern Virginia.*
- (d) *If any of the trees specified in the Tree Preservation and Planting Plan are severely damaged during construction or should die within 12 months after project completion, the developer or property owner shall replace the trees. Replacement must happen within six months at a ratio of 1:1 for trees up to 12 inch caliper, 2:1 for trees greater than 12 inches but less than 24 inches, and 3:1 for trees greater than 24 inch caliper, and 5:1 for designated outstanding specimen trees.*

Sec. 24-92. Tree Preservation plan site inspections

- (a) *The Planning Director or his designee shall inspect the sites subject to this ordinance prior to Certificate of Occupancy to determine compliance.*

(b) Upon approval of the Tree Preservation Plan and prior to any land disturbance permit being issued the developer shall arrange a meeting with the Planning Director or his designee to tag all trees over 24 inches identified in the plan to be preserved and to coordinate tree protection measures required by section 24-88. The Planning Director may waive this requirement upon finding that the development is less than 10 acres, and not subject to any proffers or conditions pertaining to tree preservation.

Sec. 24-88 93. Modification, substitution, transfer.

- (a) *Findings for acceptance of modifications, substitutions, or transfers.* The commission or planning director may modify, permit substitutions for any requirement of this section, or permit transfer of required landscaping on a site upon finding that:
- (1) Such requirement would not promote the intent of this section;
 - (2) The proposed site and landscape plan will satisfy the intent of this section and its landscape area requirements to at least an equivalent degree as compared to a plan that strictly complies with the minimum requirements of this section;
 - (3) The proposed site and landscape plan will not reduce the total amount of landscape area or will not reduce the overall landscape effects of the requirements of this section as compared to a plan that strictly complies with the minimum requirements of this section;
 - (4) Such modification, substitution or transfer shall have no additional adverse impact on adjacent properties or public areas; and
 - (5) The proposed site and landscape plan, as compared to a plan that strictly complies with the minimum requirements of this section, shall have no additional detrimental impacts on the orderly development or character of the area, adjacent properties, the environment, sound engineering or planning practice, Comprehensive Plan, or on achievement of the purposes of this section.
- (b) *Cases for modifications, substitutions, or transfers.* Requests for modifications, substitutions or transfers may be granted in the following cases:
- (1) The proposed landscape plan, by substitution of technique, design or materials of comparable quality, but differing from those required by this section, will achieve results which clearly satisfy the overall purposes of this section in a manner clearly equal to or exceeding the desired effects of the requirements of this section;
 - (2) The proposed landscape plan substantially preserves, enhances, integrates and complements existing trees and topography;
 - (3) Where, because of unusual size, topography, shape or location of the property or other unusual conditions, excluding the proprietary interests of the developer, strict application of the requirements of this section would result in significant degradation of the site or adjacent properties;
 - (4) The proposed landscape design or materials involve a readily discernible theme, historic or otherwise, or complements an architectural style or design;

- (5) Where it is necessary to allow the subdivision of property on which commercial or industrial units will be for sale, for sale in condominium or for lease, and such units are constructed as part of a multiunit structure in which the units share common walls or are part of a multiple-structure development, and the entire development has been planned and designed as a cohesive, coordinated unit under a single master plan; or
- (6) Where transfers of required landscape areas to other areas on a site are necessary to satisfy other purposes of this section, including transfers to increase screening or preserve existing trees, provided such transfers do not reduce overall landscape requirements for a development.

(c) *Process for requesting modifications, substitutions, or transfers.* Requests for modifications, substitutions or transfers shall be filed in writing with the planning director and shall identify the specific requirement of this section and the reasons and justifications for such request together with the proposed alternative. Depending upon whether the landscape plan is subject to commission or administrative review, the commission or planning director shall approve, deny, conditionally approve or defer action on such request and shall include a written statement certifying the above findings. The commission or planning director may require the applicant to provide plans, documentation or other materials to substantiate these findings.

In the case of approvals or conditional approvals, this statement shall include a finding as to the public purpose served by such recommendations, particularly in regard to the purposes of this section. The planning director shall notify the applicant in writing as to the reasons for such action within 30 days of submittal of administrative plans meeting all applicable submittal criteria or within five working days of such decision by the commission.

Sec. 24-90 94. Size requirements for new plantings

Planted trees and shrubs shall conform to the minimum size requirements outlined in the following table.

Size Requirements for New Plantings		
Category	Type	Minimum Size at Planting
Trees	Deciduous Shade Tree (D)	Minimum Caliper is= 1.5".
	Evergreen (E)	If multi-stemmed, minimum height shall be 8-feet. If single-stemmed, minimum caliper shall be 1.25" with minimum height of 8-feet.
Ornamental Tree	Single-Stemmed (D) or (E)	8-feet in height.
	Low Growing Woody Plant having several permanent stems.	18" if evergreen. 22" if deciduous.
Caliper - The diameter of a tree trunk measured 6" above-ground for nursery stock.		

Sec. 24-91 95 Summary of definitions for trees and shrubs

Outlined below is a quick reference of the definitions for trees and shrubs. Please refer to section 24-2 for complete definitions of these terms.

Type	Character	Minimum Size
Specimen Tree	Free of disease and significant damage or which is notable by virtue of its outstanding size and quality for its particular species.	Diameter at breast height (DBH) is 24" or greater.
<i>Outstanding Specimen Tree</i>	<i>Free of disease and significant damage or which is notable by virtue of its outstanding size, form, shape, spread, and quality for its particular species as determined by the Planning Director or his Designee per the Outstanding Specimen Tree Designation Guidelines and Form.</i>	<i>Trees designated as outstanding specimens by the Planning Director or his Designee.</i>
Mature Tree	Free of disease and significant damage.	DBH is 8" or greater
Understory or Ornamental Tree	Trees that typically do not exceed a height of 40-feet at maturity. Understory are those trees typically found within a native plant community. Common understory examples include: Wax Myrtle, American Holly, and Dogwood. Examples of ornamental trees include Japanese Maple and Crape Myrtle.	
Overstory Tree	Trees that typically exceed a height of 40-feet at maturity. Common examples include: Loblolly Pine, Oaks, Red Maple, and London Plane Tree.	
Diameter at breast height (DBH) B The diameter of a tree trunk measured 4.5 feet from the ground.		

Sec. 24-92 96 Plant Material Standards

- (a) All required plantings shall conform with the most recent edition of *American Standard for Nursery Stock*, published by the American Association of Nurserymen, and shall be planted in accordance with the most recent edition of *Guidelines for Planting Landscape Trees and Planting and Care of Trees and Shrubs*, published by the Virginia Cooperative Extension Service.
- (b) Required planting materials shall be of a species that promotes the intent of this division and that is compatible with the proposed planting environment.

- (c) Transplanting for the purpose of achieving a larger size tree may be approved, provided it is done in accordance with accepted horticultural and silvicultural practices.

Sec. 24-93-97. Tree credits.

- (a) Existing viable trees, preserved on the site in accordance with the tree protection standards outlined in section 24-89 (b), may provide tree credits which shall reduce the number of new trees required to be installed.
- (b) The trees to be saved shall be clearly identified on the landscaping plan. The plan shall identify the general location, number, size, and type of trees proposed to be saved and the requested tree credits.
- (c) The amount of tree credit is outlined in the following chart.

Tree Credits	
Trees to be saved:	Tree Credits:
1 viable ornamental tree meeting the minimum size at planting as described in Section 24-90.*	1 planted ornamental tree.
3 viable trees meeting the minimum size at planting as described in section 24-90.*	1 planted ornamental tree.
1 viable mature tree.	2 planted trees.
1 viable specimen tree.	3 planted trees.
<i>1 viable outstanding specimen tree as approved by the Planning Director or his designee.</i>	<i>5 planted trees</i>
No credit shall be given for any trees that are not protected in full compliance with the tree protection standards listed in section 24-89(b).	
* The trees to be saved shall be “tagged” in the field and the planning director or his designee shall inspect the trees to determine which trees are eligible to receive credit. Only those trees which are healthy, of the minimum size noted above, and are of a suitable quality shall be deemed acceptable for receiving credit.	

JAMES CITY COUNTY OUTSTANDING SPECIMEN TREE OPTION GUIDELINES

The purpose of the Outstanding Specimen Tree Option is to identify, maintain, and protect designated outstanding specimen trees located within the county. It is the intent of the option to increase public awareness of specimen trees located in the county as well as to provide reasonable assurance that James City County's tree heritage will continue for future generations. The intent of this option is not to be regulatory or punitive but rather to heighten public consciousness by informing and educating the public of the benefits that specimen trees provide. The option is intended to be a means to preserve specimen trees during development of private or public property by giving developers an incentive for doing so. The incentive will allow developers by ordinance to preserve outstanding specimen trees that may be located in areas that are not required to be preserved in exchange for 5 tree credits that can be counted towards satisfying tree credit requirements any where else on site.

OUTSTANDING SPECIMEN TREE OPTION GOALS:

The James City County Outstanding Specimen Tree Option has three major goals:

- To establish a process of designating and protecting outstanding specimen trees located on either public or private property.
- To encourage proper maintenance, care and protection of designated trees.
- To give developers an incentive to preserve outstanding specimen trees on development sites.

CRITERIA FOR REQUESTING OUTSTANDING SPECIMEN TREE DESIGNATION:

Any tree within the boundaries of the James City County that meets the following criteria as described below can be considered for an outstanding specimen tree designation with an Outstanding Specimen Tree Designation Request form.

1. Must be architecturally sound, true to its genetic form, and not topped or poorly pruned.
2. Be of exceptionally mature size and form, in healthy condition, free of disease, insect infestation, and storm damage.
3. Must be visible from publicly accessible location(s).

In addition to meeting the three criteria above, any tree being considered for nomination as a specimen tree must meet at least one of the following descriptions:

1. Outstanding Specimen Tree – Notable by virtue of its outstanding size and quality for its particular species as determined by the Planning Director or his designee.
2. Heritage Tree – Notable for its historic or cultural significance as determined by the Planning Director or his designee.

OUTSTANDING SPECIMEN TREE DESIGNATION REQUEST FORM

Applicant: _____

Date: ____/____/____

Address: _____

Phone (h): (____)-____-____

E-Mail: _____

Phone (c): (____)-____-____

Signature: _____

Private: _____ Public: _____

Tree Description (species, dimensions): _____

Tree Location (closest address, park location):

Justification: _____

Approved _____ Disapproved _____ Approved with conditions _____

Reason(s) for selected action: _____

Date: ____/____/____

STREETSCAPE GUIDELINES POLICY

Goal

To preserve and/or establish tree canopies along residential streets, subdivision entrances, and common areas. Plant new trees appropriate to the climate and soils of James City County, enhancing existing healthy, durable, and mature trees in these areas.

Tree preservation/planting shall be accomplished such that, within 20 years growing time, the minimum tree canopy over residential streets shall be *established*.20%. The environmental and aesthetic benefits from tree planting enhance the quality, character, and health of the community.

Guidelines for Street Trees

In all residential subdivisions, deciduous shade trees and/or shrubs shall be planted along all rights-of-way within and abutting the subdivision. Street tree plans shall be prepared by a Virginia Landscape Architect and shall be reviewed and approved by the Development Manager or Designee. The street tree plans shall adhere to the following guidelines:

- Trees and/or shrubs shall be located within a minimum five-foot landscape preservation easement contiguous to such right-of-way *or within the right of way, with VDOT approval.* Every effort should be made to avoid conflict between the landscape preservation easement and the utilities during the design phase of the subdivision. If a conflict cannot be avoided, the landscape preservation easement shall be placed as close to the right-of-way as the design allows. *All landscape easements shall be located no greater than 30% of the distance from the edge of curb to the proposed building envelop*
- - The easement shall contain, at a minimum, one tree per an average 40 linear feet of street on each side of the street or one shrub per an average 20 linear feet of street on each side of the street. The mix of trees and shrubs shall be approved by the Planning Director or his designee.
 - Trees and/or shrubs shall be spaced no greater than 75 feet apart along 60% of the street frontage.
 - All trees that are planted shall be native species or street trees commonly planted in the James City County area that are adapted to the soils and climate. At the time of planting, trees shall have a minimum caliper of 1 ½". Shrubs are to be a minimum of 22" in height at the time of planting. Please refer to the Table 1 for street tree suggestions. Although plant material is not restricted to the list provided, any trees or shrubs that are invasive or require extensive maintenance for disease or pest control will not be approved.

- Existing trees which are ~~within 20 feet of the edge of the right-of-way~~ *within the proposed landscape preservation easement*, and which are protected and preserved in accordance with the requirements of the Zoning Ordinance, may be used to satisfy this planting requirement if approved by the Planning Director. Canopies that are a mixture of existing and planted trees or shrubs shall have similar or complementary branch characteristics.
- Plantings are to occur between November 1 and March 31 while the plant material is dormant to reduce the stress of transplanting. Prior to final site plan approval, the plantings and installation are to be bonded.

Upon completion of installation, *the Planning Director or his designee shall inspect the plantings to verify on behalf of the applicant that the job was completed, or a Virginia Landscape Architect Designer shall can verify, in writing on behalf of the applicant*, that the specified trees or shrubs were installed in the locations shown on the plans. A signed letter from the Landscape ~~Architect~~ *Designer* shall be submitted to the Planning ~~Division~~ *Director or his designee* at the time of verification.

Guidelines for Entrances and Common Areas

Entrances shall be landscaped with native and/or climate and soil appropriate trees, shrubs, grasses, and ground covers except where the existing mature trees have been preserved or protected in such areas. Plant material to be used in these areas shall be specified from Table 2 or, if not on the list, meet the above criteria. Unless the Director of Planning or his designee determines that such landscape treatment is unnecessary, impractical, or in conflict with drainage, utilities, sight distance, or other required features of the subdivision, the cleared portions of the entrances and associated common areas in a residential subdivision shall be landscaped with a minimum of 1 tree and 3 shrubs per 400 square feet exclusive of roadways, sidewalks, recreation facilities or other impervious areas.

In wooded areas, entrance features including walls, fences and signs shall be minimized to reduce the amount of clearing to accommodate entrance roads. In no case shall clearing for entrance roads and abutting utility easements exceed 60 feet in width.

Table 1. Suggested Street Trees

- Acer campestre*, Hedge Maple*
- Acer rubrum*, Red Maple
- Fraxinus pennsylvanica*, Green Ash (seedless cultivars)
- Ginkgo biloba*, Maidenhair Tree (male cultivars)*
- Nyssa sylvatica*, Black Tupelo*
- Ostrya virginiana*, American Hophornbeam*
- Plantanus X acerifolia* London Planetree
- Quercus palustris* Pin Oak
- Quercus phellos*, Willow Oak
- Quercus shumardii*, Shumard Oak
- Ulmus parvifolia*, Lacebark Elm*

Zelkova serrata, Japanese Zelkova*

**Trees recommended for thin planting strips or adjacent to sidewalks.*

This list is suggested. Trees used are not required to be from this list.

Table 2. Suggested Plant Material for Entrances and Common Areas

Trees

Betula nigra, River Birch
Carya ovata, Shagbark Hickory
Cercis Canadensis, Eastern Redbud
Cornus kousa, Kousa Dogwood
Juniverus virginiana, Eastern Redcedar
Pinus taeda, Loblolly Pine

Shrubs

Hamamelis virginiana, Witch Hazel
Ilex opaca, Inkberry
Ilex vomitoria, Yaupon Holly
Myrica cerifera, Wax Myrtle
Viburnum dentatum, Arrowwood Viburnum

Groundcovers and other Herbaceous Plants

Calamagrostis acutiflora, Feather Reed Grass
Ceratostigma plumbaginoides, Plumbago
Coreopsis verticillata, Threadleaf Coreopsis
Deschampsia caespitosa, Tufted Hair Grass
Festuca cinerea, Blue Fescue
Helictotrichon sempervirens, Blue Oat Grass
Hemerocalis, Daylily
Hypericum calycinum, St. Johnswort
Liriope muscari, Blue Lily-turf
Miscanthus sinensis, Japanese Silver Grass
Panicum virgatum, Switch Grass
Potentilla fruticosa, Bush Cinquefoil

This list is suggested. Plants used are not required to be from this list.

Chapter 24

ARTICLE II. SPECIAL REGULATIONS

DIVISION 4. **TREE PRESERVATION AND LANDSCAPING**

Sec. 24-96-100. Landscape area(s) along right(s)-of-way.

(a) *Width requirements.* A landscape area having an average width as specified in the following chart shall be provided adjacent to any existing or planned road right-of-way.

Width Requirements for Landscape Areas along Right(s)-of-Way.			
(1) Community Character Corridors			
	Standard	Minimum width conditioned upon approval of planning director. Reference section 24-96 (d) for the criteria.	Reduction for lots less than 1.5 acres which were recorded or legally in existence prior to July 3, 1990.
Average Width	50-feet	30-feet	20-feet or 10% of the average lot depth, whichever is greater.
Minimum Width	25-feet	20-feet	15-feet
(2) All Other Roads			
	Standard		Reduction for Lots less than 1.5 acres which were recorded or legally in existence prior to July 3, 1990.
Average Width	30-feet		20-feet or 10% of the average lot depth, whichever is greater.
Minimum Width	15-feet		15-feet
(3) Further Reductions for Master Planned Communities with approved Design Guidelines.			
The standards provided above can be further reduced for developments that are part of an approved master-planned community and have a governing set of design guidelines approved by the county. The design guidelines shall specify architectural standards, building placement and massing, parking location, sidewalks, street-lighting, streetscape standards, landscaping, signage, and other important community aesthetic features.			

(b) *Square footage calculation for landscape areas.* All landscape areas along a right-of-way shall contain a minimum amount of square footage which shall be equal to:

Square Footage Calculation
Square Footage = [Applicable Average Width Requirement] * [Length of Right-of-Way Frontage]

In no case shall any portion of any landscape area located more than 65 feet from the right-of-way of a Community Character Corridor or 45 feet from the right-of-way along all other roads be counted toward meeting the requirements of this paragraph. All required square footage shall be contiguous and located in an area that is directly adjacent to the right-of-way except as provided for in section 24-96-100 (e)(1).

Development Standards: CCCC Buffer Treatments, Parking Lot Landscaping, Outdoor Operations and Storage

(c) *Outdoor operations and storage. Any commercial or industrial operation or storage conducted in whole or in part out-of-doors shall:*

*(*NOTE: Items 2-5 below are not new, they were relocated from section 24-41: Item 1 is new per stage I discussion)*

(1) *The operations shall be screened from the right of way and conform the landscape requirements in section 24-94 and 24-96 (a) of the zoning ordinance Evergreen tree and shrub mixture requirements of section 24-94 (b) shall be used to screen the outdoor operations from the public right of way.*

(2) *Be well drained with adequate provisions to control storm drainage and erosion; and*

(3) *Where the ground cover would be routinely disturbed because of the nature of the activity to be conducted or because of vehicular traffic, the area shall be maintained in an all-weather surface; and*

(4) *Be screened from adjacent property by landscaping and fencing, except the outdoor displays for sale of vehicles, equipment, machinery and plant materials are exempt from the screening requirements where such screening would interfere with the visibility of the items for sale from a public road; and*

(5) *Be limited to uses and items to be stored which do not create noise, odor, dust or other objectionable effects. The effects of an activity shall be measured at the nearest property line.*

~~(c)~~(d) *“Construction zone” setback for structures.*

(1) All structures shall be setback a minimum of 15-feet from the perimeter of the landscape area buffer required in section 24-96 (a). For example, if the required landscape area buffer measures 50-feet in width from the right-of-way, then the structure(s) shall be no closer than 65-feet from the right-of-way.

(2) The “construction zone” setback shall be shall be clearly delineated on the site plan.

(3) This “construction zone” setback shall not apply to parking lots. Parking lots may be constructed up to the edge of the required landscape buffer provided no grading, tree removal, or land disturbance occurs within the required landscape buffer.

~~(d)~~(e) *Waiver criteria for landscape areas along Community Character Corridors. The average width requirement of the required landscape areas along Community Character Corridors may be reduced by the planning director if number (1) and/or (2) provided below is satisfied. In no case shall the total reduction exceed 20 feet. In deciding whether a reduction in the standard landscape area width is warranted, the planning director shall consider the impact of proposed road and/or utility improvements on existing trees and vegetation. Planned road and/or utility improvements that will remove existing trees and vegetation will reduce the likelihood of a reduction in landscape area required. In approving a reduction request, the*

Development Standards: CCCC Buffer Treatments, Parking Lot Landscaping, Outdoor Operations and Storage

planning director may require additional plantings beyond the minimum ordinance requirements, alter the mixture of plantings provided, and/or specify the types of plantings to be used.

- (1) The applicant may achieve a maximum reduction of 10 feet by providing superior site design with a combination of elements such as:
 - a. Parking located away from public view behind buildings or screened by other architectural features (i.e. decorative brick walls);
 - b. Innovative use of grading and topography to minimize visual impacts of parking and other unsightly features (i.e. dumpsters, HVAC equipment, loading areas, etc.);
 - c. Provision of pedestrian amenities beyond what the ordinance requires. Examples may include brick pavers to connect existing and planned pedestrian walkways, lighting, and benches; or
 - d. The use of monument style signs that are of a scale and type that complement the positive features of the surrounding architecture and streetscape. The use of wood, brick, or other natural features is recommended.
- (2) The applicant may achieve a maximum reduction of 15 feet by providing superior architecture and building materials that meet the following standards.
 - a. The building architecture and materials complement the positive features of nearby existing or planned development and/or the character of Colonial Williamsburg and James City County;
 - b. Architecture and materials should be unique and not replicate standard and/or conventional prototypes; and
 - c. The proposed location of the building and parking areas shall not require the removal of specimen trees or large stands of viable mature trees.

~~(e)~~(f) *Right-of-way landscape area performance standards.*

- (1) Permitted breaks in landscape areas.
 - a. All landscape areas along right-of-ways shall be continuous along the road right-of-way frontage, except where driveway, utility or other breaks running perpendicular to the right-of-way are necessary, and shall be designed in a manner that achieves the intent of this division.
 - b. No new utilities, outside of those running parallel to permitted breaks in the required landscape areas, shall be located within the required landscape area(s) unless a waiver is granted by the planning director. The planning director shall grant a waiver only if the applicant can sufficiently demonstrate that there are unavoidable physical or regulatory constraints that warrant an intrusion into the landscape area.

Development Standards: CCCC Buffer Treatments, Parking Lot Landscaping, Outdoor Operations and Storage

(2) Tree preservation and criteria for tree removal.

- a. All existing viable mature trees (eight inches or greater diameter at breast height (DBH)) and specimen trees (24 inches or greater DBH) shall be preserved within the required right-of-way landscape area. All understory trees of two inches or greater DBH shall be preserved.
- b. The planning director or his designee may permit the removal of understory and overstory trees exceeding these size thresholds after an on-site inspection. The trees must be tagged to allow for easy identification. The planning director or his designee shall authorize removal of the tagged trees only if they are of poor quality, diseased, not consistent with the existing or planned plant species and design, poorly situated so as to interfere with the growth of other viable trees and/or shrubs, compromise safety, or interfere with other planned site improvements such as sidewalks and/or signs.

(3) Buffer grooming and enhancement.

- a. Trees below the size thresholds stated above in paragraph (2) and underbrush may be hand-removed from the landscape area. No grading shall be permitted except as permitted in section 24-100 (f) (1); however, hand grooming is permitted.
- b. Overstory tree limbs may be removed/"limbed-up" to a maximum height of ten feet above the base of the tree. Understory tree limbs may be removed/"limbed-up" to a maximum height of six feet. These height limitations shall not restrict the removal of dead, diseased, or injured tree limbs above the height limits mentioned above.

(4) Tree protection required. The required landscape area shall be fully protected by a substantial, temporary fence or barrier with a minimum height of 40-inches. The location, type, and installation standards for this fence shall be clearly shown on the site plan. This fence shall be installed prior to the issuance of a land disturbance permit and shall remain standing until all construction activities on site have been completed.

(5) Landscaping required. Required landscape areas shall be supplemented where necessary with planted trees and shrubs to achieve the minimum number of trees and shrubs specified in paragraph section 24-94.

(6) Landscaping treatments of Community Character Corridor buffers. Right of way landscape areas along Community Character Corridors as designated on the Community Character Corridor Buffer designation and treatment map shall be designed to meet the design standards found in the Community Character Corridor Buffer Treatment Guidelines as determined by the Planning Director.

Sec. 24-97 101. Off-street parking lot landscaping.

Parking areas, accessory or otherwise, containing ten or more parking spaces shall contain landscaping and landscape areas in accordance with all of the following:

- (a) *Preservation of trees.* Parking lots shall be designed and constructed so that existing viable trees are preserved in a manner which will meet the intent and satisfy the requirements in this section to the maximum extent possible. Where such existing trees do not fully satisfy these requirements, additional trees shall be planted in an amount which meets or exceeds the stated minimum requirements. The requirements in this paragraph shall be in addition to other requirements stated in this section.

- (b) *Landscape area and planting requirements.* Total landscape area within the parking lot shall at least meet the minimum standards specified in the following chart.

(1) General Requirements for Parking Lot Landscaping.	
Percentage of Landscape Area Required within the Parking Lot	Based On:
Minimum 10%	Surface Area of Parking, including drives & circulation areas, exclusive of any perimeter landscape areas or landscape areas around the building.
Lots less than 65,000 square feet recorded or legally in existence prior to July 3, 1990	
Minimum 7.5%	Surface Area of Parking, including drives & circulation areas, exclusive of any perimeter landscape areas or landscape areas around the building.

(2) Quantity Requirements for Parking Lot Landscaping.		
AND		
Number of Trees	Number of Shrubs	Per
1	2	5 parking spaces in the parking lot.
Lots less than 65,000 square feet recorded or legally in existence prior to July 3, 1990		
1	2	10 parking spaces in the parking lot.
As provided above, each mature existing tree or specimen tree may be counted toward meeting the required minimum number of trees, with one (1) viable mature tree substituting for two (2) planted trees and one viable specimen tree substituting for three planted trees. No credit shall be given for any mature or specimen tree which is not protected in full compliance with the tree protection standards in section 24-89 (b) above.		

(3) Size and Mixture Requirements for Parking Lot Landscaping.		
Percentage	Of	Shall Be:
At least 35% <u>25%</u>	Trees	Evergreen Trees which will achieve a minimum height of 40 feet at maturity.
At least 50%.	Trees	Deciduous Shade Trees with a 2.5 inch caliper which will achieve a minimum height of 50 feet at maturity.
At least 50%	Shrubs	Evergreen

(4) Minimum Spacing Requirements for Required Trees in Parking Areas
The required trees shall be spaced no more than 75 <u>99</u> feet apart throughout the parking lot. These trees shall be evenly and reasonably distributed throughout the parking lot in a manner that promotes the intent of this section.

(c) *Parking lot screening.* In addition to the above tree and shrub requirements, all parking lots shall be visually screened from public road rights-of-way by evergreen plantings or berms that create a screen a minimum of three feet in height. Such berms shall have a maximum side slope ratio of three horizontal feet to one vertical foot and a level crown with a minimum width of three feet for maintenance and planting purposes. Any berm shall be designed and constructed to ensure that proper erosion prevention and control practices have been utilized.

(d) *Special requirements for bus parking lots.* Bus parking areas shall contain landscape areas in accordance with the above requirements except that plantings shall be provided as follows:

(1) Quantity Requirements for Bus Parking Lots		
AND		
Number of Trees	Number of Shrubs	Per
1	2	2 bus parking spaces

(2) Size & Mixture Requirements for Bus Parking Lots		
Percentage	Of	Shall Be:
At least 35% 25%	Trees	Evergreen Trees which will achieve a minimum height of 40 feet at maturity.
At least 50%	Trees	Deciduous Shade Trees with a 2.5 inch caliper which will achieve a minimum height of 50 feet at maturity.

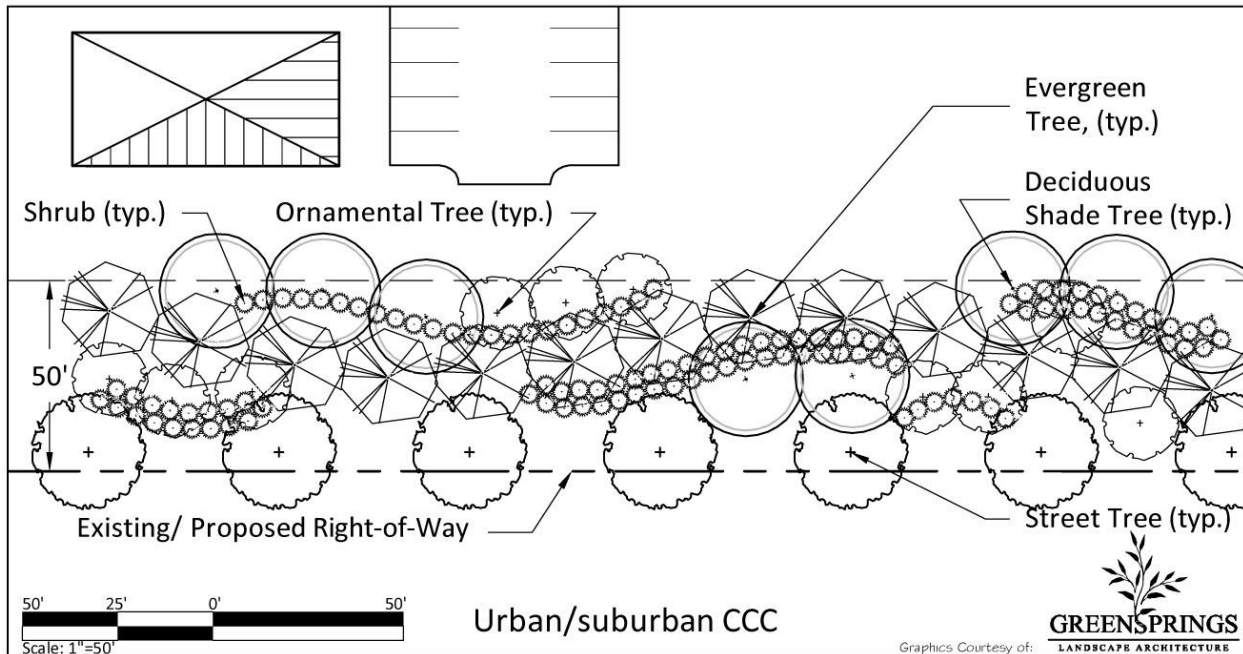
(e) *Excavation of parking lot islands.*

- 1) *All parking lot islands, peninsulas, and planting areas shall be excavated to remove all crusher run or parking lot base material and back filled with quality top soil, except those areas where existing vegetation is to be preserved. The top soil shall be high in organic matter and will allow water to percolate. The excavation of these planting areas shall be to a minimum of 24" and will freely allow penetration of a hand-held probe to a minimum of 24".*
- 2) *Inspection of these planting areas shall be conducted by environmental inspectors during the construction process. Failure to comply with these requirements can result in a stop work order issued by environmental inspectors.*

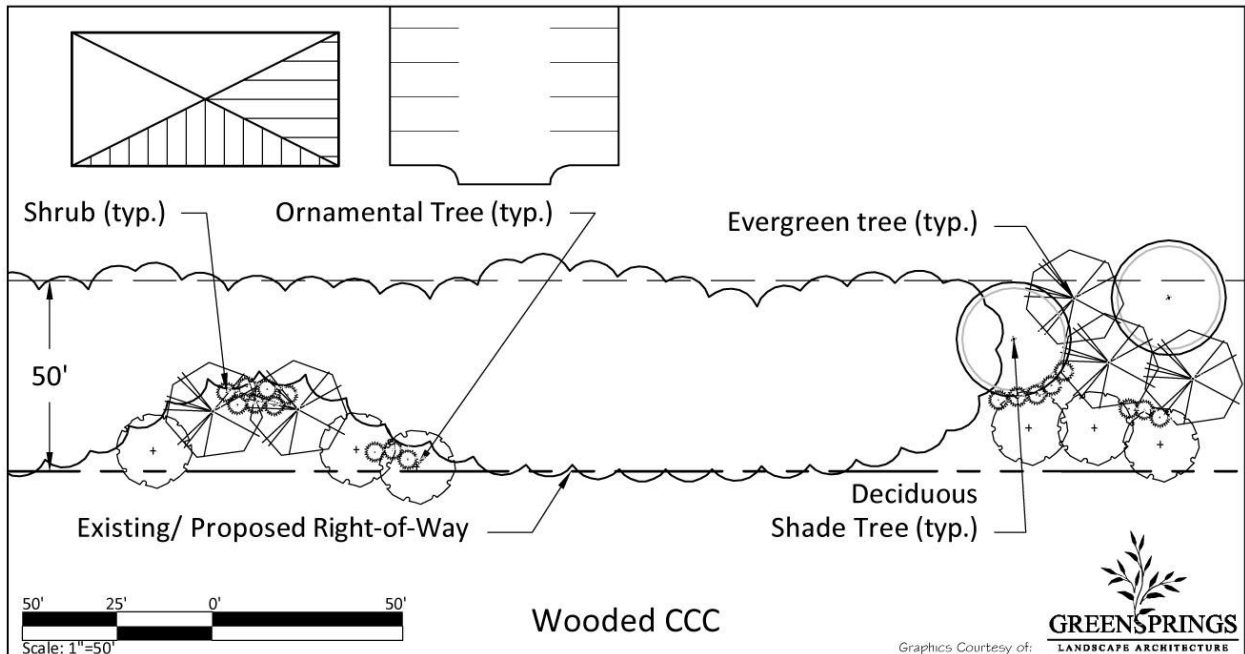
Community Character Corridor Buffer Treatments Guidelines

Purpose: James City County has designated all Community Character Corridor (CCCs) buffers as Urban/Suburban, Wooded, or Open/Agricultural. All commercial developments along these roads are required to provide a 50 foot average buffer. Through the designation of these buffers and their types the County is providing direction on design guidelines for landscape areas along these buffers. Below are design guidelines of the various types of buffers, including descriptions of their landscape treatments and a sample drawing of the landscaping style required.

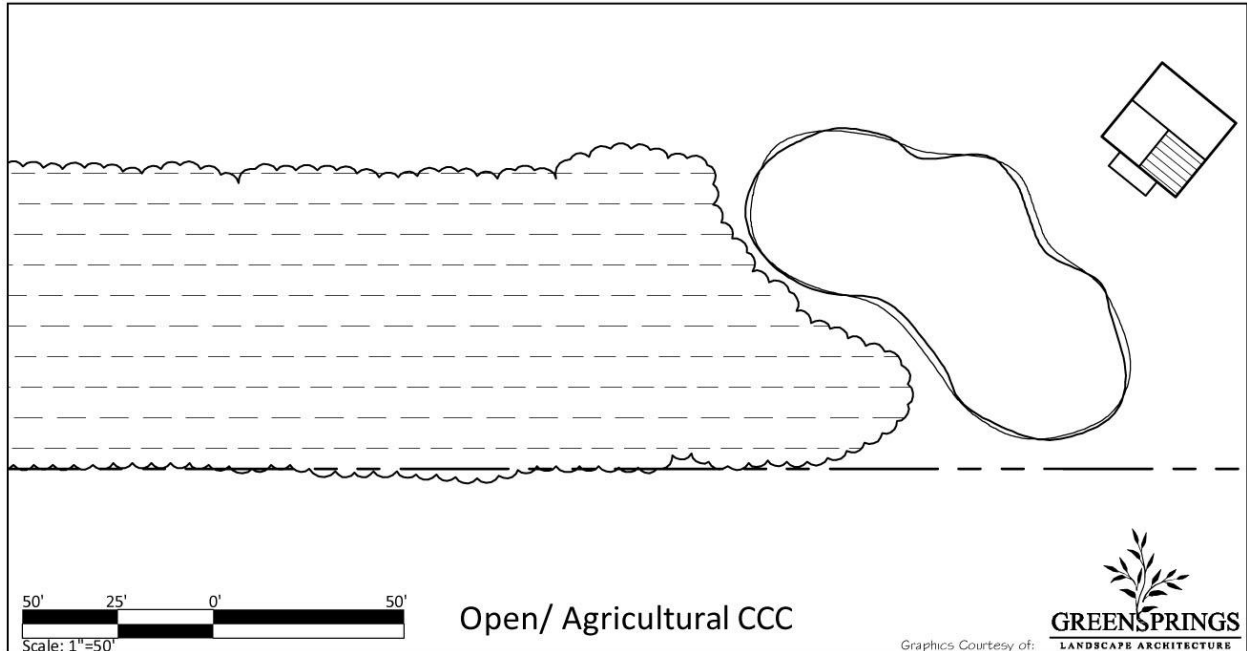
Urban/Suburban CCCs - An urban/suburban area is characterized as having high to moderate traffic, commercial, and some residential uses. The predominant visual character of these areas should be the built environment and the natural landscape, with parking and other auto-related areas as a secondary component. The buffer treatments should incorporate existing specimen and understory trees, required plantings and any legislated enhancements such as over-sized landscape plants, the use of berms, and other desirable design features which compliment and enhance the visual quality of the urban corridor. Auto-related activities such as parking lots and other outdoor operations should be screened with required evergreen plantings. This treatment provides the applicant with the most visibility of the commercial use and the most flexibility in establishing a manicured and/ or formal look compared to the Wooded and Open/Agricultural treatments. The areas designated with this type of treatment are the Community Character Areas and other urban areas of the County that have mainly commercial uses. Roads in New Town, Five Forks, Toano, Norge, and Richmond Road are examples of the urban/suburban type of treatment.



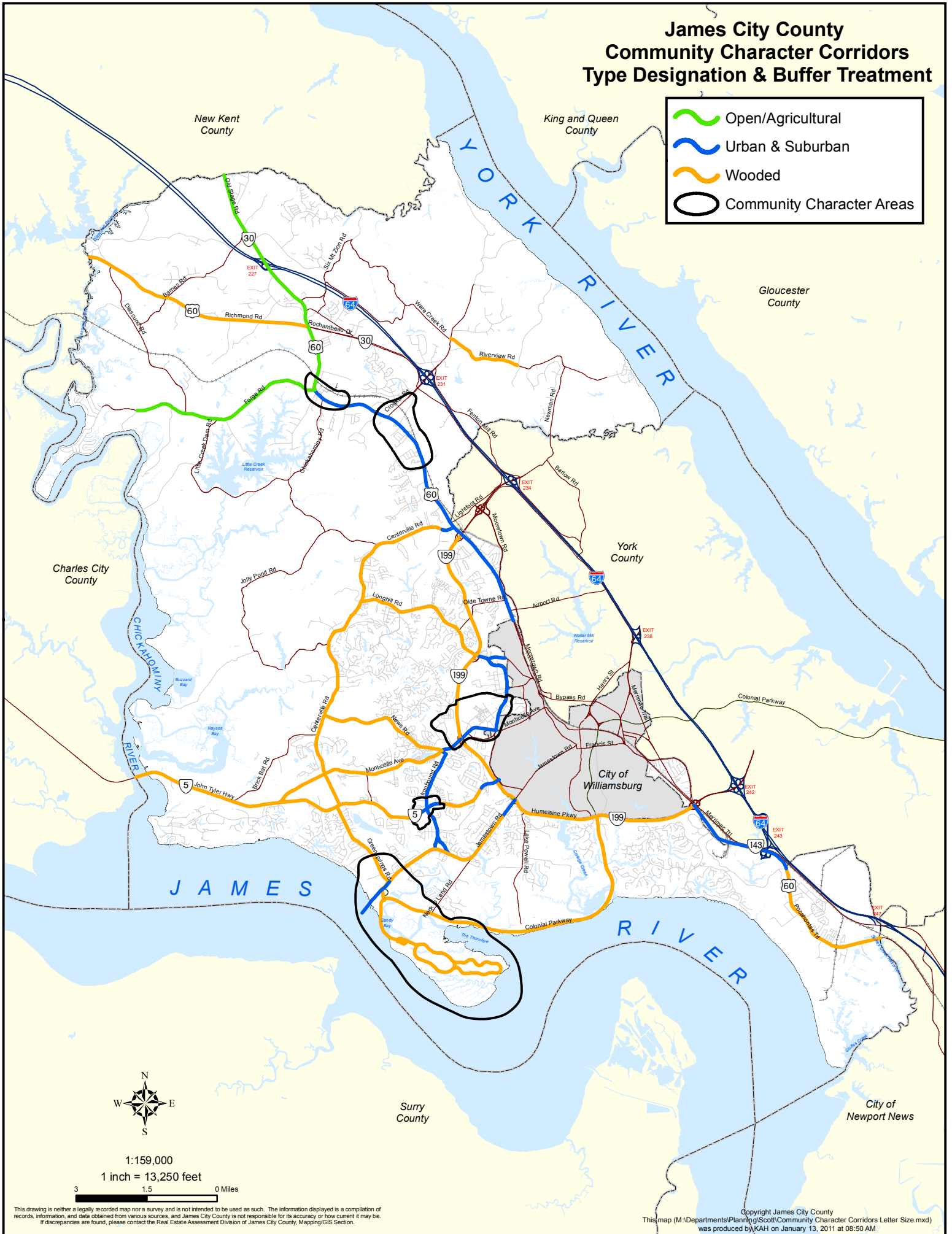
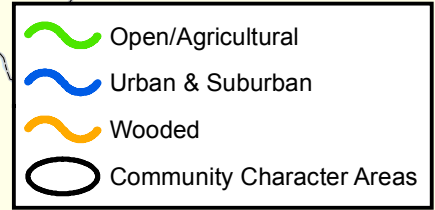
Wooded CCCs - A wooded CCC is characterized as an area having natural wooded areas along the road, with light to moderate traffic and minimal existing or planned commercial development. The objective of the buffer is to visually screen the development from the road. Ideally, existing vegetation should be preserved or supplemented to create a wooded buffer that preserves open space and wildlife habitat to maintain the natural character of the County. Areas of the County that are appropriate for this type of treatment include areas that have existing vegetation consisting of mature trees and shrubs and that are mostly developed with residential uses. Areas of John Tyler Highway, Centerville Road, Longhill Road, and Greensprings Road, and Route 199 are examples of the wooded landscape type treatment. This type of treatment offers the least amount of visibility to the development, and the intent is to preserve the natural beauty of the site. The design should be informal and natural.



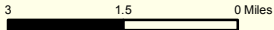
Open/Agricultural CCCs - An open/agricultural CCC is characterized as an area that is located primarily in rural lands where farming and forestry activities are predominant or sought to be preserved. The objective of the Open/Agricultural designation is to preserve the view and integrity of farm fields and natural open spaces so they remain the dominant visual features. This type of treatment is appropriate for the agricultural areas that exist in the County. Areas around Anderson's Corner, Forge Road, and Old Stage Road are examples of the open/agricultural treatment type.



James City County Community Character Corridors Type Designation & Buffer Treatment



1:159,000
1 inch = 13,250 feet



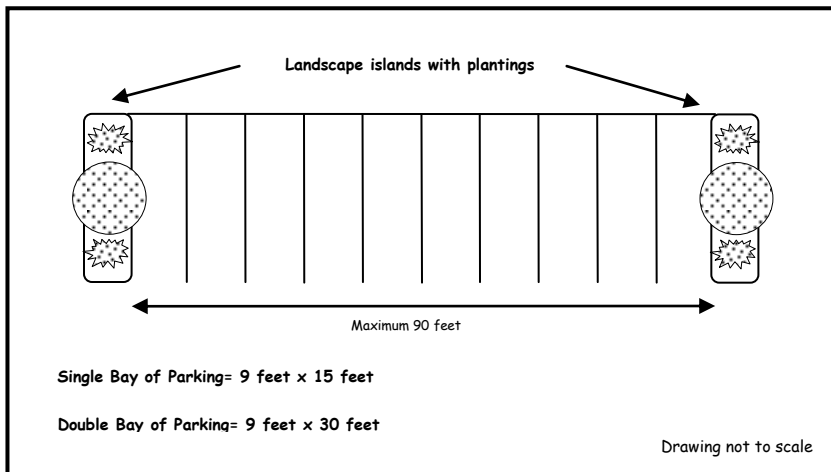
This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and James City County is not responsible for its accuracy or how current it may be. If discrepancies are found, please contact the Real Estate Assessment Division of James City County, Mapping/GIS Section.

Sec. 24-57. Parking lot design.

Parking areas shall be arranged for functional efficiency and safety for both vehicles and pedestrians and shall be designed to be amenable to surrounding property. Parking areas, accessory or otherwise, shall comply with the following:

- (a) *Dimensions of parking bays and required islands.* The parking lot shall be constructed so that spaces are grouped into bays. At the end of each bay, a landscape island of at least nine feet in width and 15 feet in length shall be built to separate the bays from each other or from traffic lanes. When the parking bays contain double rows of parking spaces, the landscape island shall be increased to nine feet in width and 30 feet in length. A parking bay may not be constructed to a length of more than ~~150~~ 90 feet without constructing a landscape island. The planning director may approve islands which vary from nine-foot by 15-foot or nine-foot by 30-foot rectangles in order to provide desirable geometric design features such as rounded corners and angles to facilitate maneuvering of automobile traffic. However, in no case shall the total area of an island be decreased as a result of such design change.

Figure 01-Parking Bays and Landscape Islands Dimensions



- (b) *Protection of landscape areas and location of parking areas and drive aisles.* All landscape areas contiguous to parking bays shall be protected from intrusion by vehicles by curbs or bumpers. Parking areas shall not be located within five feet of any building. Driveways shall not be located within five feet of any building except where vehicular access is necessary. The above-mentioned five-foot setback for parking areas and drives shall not be required for vehicle parking areas and drives (including those serving the parking area) located underneath a building or within a parking garage.

Chapter 24

ARTICLE II. SPECIAL REGULATIONS

DIVISION 1. IN GENERAL

Sec. 24-42. Special provisions for townhouse and condominium development.

Pavement for roadways shall meet the design and construction requirements of the Virginia Department of Transportation's standards or Sec. 24-62 if streets are to be private. and p Parking areas to serve townhouse and condominium development shall be constructed and certified in accordance with the Administrative Guidelines For certification of Private Street Construction—prepared by the county engineer. Criteria to be considered under this requirement shall be strength of foundation soils and type and depth of pavement components. Until such time as the development manager county engineer or his designee has accepted and approved such certification, surety required to assure proper pavement construction shall not be released. Production and installation of base aggregate and wearing surface, or equivalent pavement design approved by the development manager county engineer or designee, shall be certified as complying with ordinance requirements and approved plans.

Chapter 24

ARTICLE II. SPECIAL REGULATIONS

DIVISION 2. HIGHWAYS, STREETS, PARKING AND LOADING

Sec. 24-62. Provisions for private streets in qualifying industrial parks. Special provisions for private streets

(a) Approval process:

(1) Generally. Private streets may be permitted for the uses listed in Table 1 below upon approval of the board of supervisors unless otherwise specified and shall be coordinated with existing or planned streets of approved master plans and the county Comprehensive Plan. Such approval shall be requested in writing through the planning division.

(*Note: This is not a new requirement. It is being relocated from existing language in individual zoning districts, such as Sec.24-290(b) in R-4, to create a standardized set of private road requirements.)

Table 1: Zoning districts and uses where private streets may be permitted

Use	Qualified Industrial Park per Sec. 24-62(a)(2)	Manufactured Home Park per Sec. 24-181	Single Family Residential	Multi-Family Residential	All uses permitted in zoning district
<i>A-1, General Agriculture</i>	X	✓	x	x	x
<i>R-1, Limited Residential</i>	X	x	x	x	x
<i>R-1, with cluster overlay</i>	X	x	x	x	x
<i>R-2, General Residential</i>	X	x	x	x	x
<i>R-2 with cluster overlay</i>	X	x	x	✓	x
<i>R-4, Residential Planned Community</i>	✓	✓	✓	✓	✓
<i>R-5, Multi-Family Residential</i>	x	x	B	B	B
<i>R-5, with cluster overlay</i>	x	x	B	B	B
<i>R-6, Low Density Residential</i>	X	x	x	x	x
<i>R-8, Rural Residential</i>	X	✓	x	x	x
<i>LB, Limited Business</i>	X	x	x	x	x
<i>B-1, General Business</i>	X	x	x	x	x
<i>M-1, Limited Business/Industrial</i>	✓	x	x	x	x
<i>RT, Research & Technology</i>	✓	x	x	x	x
<i>M-2, General Industrial</i>	✓	x	x	x	x
<i>PUD, Planned Unit Development</i>	✓	✓	✓	✓	✓
<i>MU, Mixed Use</i>	✓	✓	✓	✓	✓
<i>PL, Public Land</i>	X	x	x	x	x
<i>EO, Economic Opportunity</i>	✓	✓	✓	✓	✓

✓: permitted with board approval x: not permitted B: By-right

(*Note: This table is a consolidation of current ordinance requirements and does not create any new requirements. Private streets in the R-5 district are by-right.)

(a) Private streets may be permitted within qualifying industrial parks upon approval of the board of supervisors. Such approval shall be requested in writing through the planning division. The request shall include a traffic impact study and square footage estimates for the proposed industrial park. The traffic impact study shall be prepared by an individual or firm qualified to conduct traffic engineering studies in a manner and form acceptable to the planning director. The traffic impact study shall address projected traffic generation; internal road needs including, but not limited to, circulation and capacity; external traffic; turning movements and distribution at each access point; traffic distribution; capacity of surrounding roads; and road and access improvements. Private streets shall be coordinated with existing or planned streets on the approved master plan of development and the county comprehensive plan. Private streets shown on the final plan shall meet the requirements of the Virginia Department of Transportation, except as specified in paragraph (d) below.

~~The construction of streets, whether public or private, shall be guaranteed prior to construction by appropriate surety, letter of credit, cash escrow, or other form of guarantee approved by the county attorney.~~

(2) Qualifying Industrial Parks

~~(b)~~(i) A "qualifying industrial park" shall be defined as an industrial and/or business park that has an actual or planned size of at least 1,000,000 square feet. The "Qualifying Industrial Park Square Footage Adjustments" shall be applied, to determine the qualifying industrial park square footage in order to determine whether the qualifying threshold can or would be reached. Qualifying square footage is computed by multiplying the existing or planned total square footage by the square footage credit listed in the following chart.

Qualifying Industrial Park Square Footage Adjustments	
Use	Square Footage Credit
Existing industrial/office/warehouse development	1
Other Permitted Development	0.75
Planned industrial/office/warehouse development	0.75
Other Permitted Development	0.5

The planned development adjustments listed above shall be applied to undeveloped property zoned Mixed-Use, MU; Limited Business/Industrial District, M-1; General Industrial District, M-2; Research and Technology District, RT; and Planned Unit Development and allows nonindustrial/office and/or nonwarehouse activity to occur based on master plan projections which have been approved by the board of supervisors. For undeveloped property not subject to a binding master plan the square footage shall be determined by multiplying 0.75 by 25 percent of the net-developable area of the project.

If an industrial/office/warehouse development is proffered exclusively, the existing development adjustments listed above may be applied upon examination of the proffers.

(ii) Requests for board approval of private streets in qualifying industrial parks shall include a traffic impact study and square footage estimates for the proposed industrial park. The traffic impact study shall be prepared by an individual or firm qualified to conduct traffic engineering studies in a manner and form acceptable to the planning director. The traffic impact study shall address projected traffic generation; internal road needs including, but not limited to, circulation and capacity; external traffic; turning movements and distribution at each access point; traffic distribution; capacity of surrounding roads; and road and access improvements.

(3) Guarantees. The construction of streets whether public or private shall be guaranteed by appropriate surety, letter of credit, cash escrow or other form of guarantee approved by the county attorney and the development manager or his designee.

~~(e)~~(4) To the extent streets are private rather than public, the applicant shall also submit assurances satisfactory to the county attorney that a property owner's community association or similar organization has been legally established under which the lots within the area of the final *development* plan shall ~~shall~~ *will* be assessed *for* the cost of maintaining ~~the~~ private streets; and that if *such* assessments are not paid, it shall constitute a pro rata lien upon the individual lots shown on the final *development* plan.

(*Note: This is not new language, this section has been moved from Sec. 24-62 of the ordinance.)

(b) Minimum Standards:

(1) Private streets shown on the development plan shall meet the construction and geometric requirements of the Virginia Department of Transportation and the Administrative Guidelines For Certifications of Private Street Construction, except as specified in paragraph (2) below.

~~(d) — The uniqueness of each proposal for a qualifying industrial park requires that the specifications for the width, surfacing, construction and geometric design of streets, alleys, ways for public utilities and the specifications for curbs, entrances, gutters, sidewalks, street lights and stormwater drainage be subject to modification from the specifications established in chapter 19. The planning commission may, therefore, within the limits hereinafter specified, waive or modify the specifications otherwise applicable for a particular facility when the planning commission finds that such specifications are not required in the best interests of the occupants, workers or customers of the businesses located within a qualifying industrial park and that the modifications of such specifications are not inconsistent with the interests of the county.~~

(2) If the uniqueness of a proposal requires that the specifications for the width, surfacing, construction and geometric design of streets, alleys, ways for public utilities, with associated drainage and specifications for curbs and gutters be subject to modification from the specifications established in chapter 19, the development manager or his designee, within the limits hereinafter specified, may waive or modify the specifications otherwise applicable for a particular facility when the development manager or designee finds the specifications are not required in the interests of the residents, occupants, workers, customers of businesses and property owners of the development and that the modifications of such specifications are not inconsistent with the interests of the entire county.

It shall be the responsibility of the applicant to demonstrate to the satisfaction of the ~~planning commission~~ *development manager or his designee* with respect to any requested waiver or modification that:

~~(1)~~(i) The waiver or modification shall result in design and construction that is in accordance with accepted engineering standards;

~~(2)~~(ii) The waiver or modification is reasonable because of the uniqueness of the ~~qualifying industrial park~~ *development* or because of the ~~development~~ *large area of the qualifying industrial park* within which the *nature and excellence of* design and construction will be coordinated, preplanned and controlled;

~~(3)(iii)~~ Any waiver or modification pertaining to streets is reasonable with respect to the generation of vehicular traffic that is estimated to **will** occur ~~within the area of the qualifying industrial park with the area of development;~~

~~(4)~~ Any waiver or modification pertaining to sidewalks is justified on the basis of anticipated pedestrian traffic or because other provisions are made for pedestrian traffic; and

~~(5)(iv)~~ Traffic lanes of streets are sufficiently wide **enough** to carry the anticipated volume and speed of traffic and in no case ~~shall two-lane roadways be less than 20~~ **ten** feet wide; ~~and~~

~~(v)~~ *Waivers or modifications as to base and surface construction of streets and as to the condition of ditches or drainage ways be based upon the soil tests for California Bearing Ratio value and erosion characteristics of the particular subgrade support soils in the area.*

The applicant may appeal the decision of the development manager or designee to the development review committee.

(*Note: These standards are based on the requirements from MU and R-4 districts. The current ordinance gives the planning commission authority to review waivers, this has been changed to the development manager or designee .)

Chapter 24

ARTICLE IV. Manufactured Home Parks

Sec. 24-181. Streets required.

Each manufactured home lot shall front on a public or private street. All **dedicated public** streets **shown on the development plan** shall meet the design and construction ~~standards~~ **requirements** of the Virginia Department of Transportation's **standards** or the county's subdivision ordinance, whichever is greater. *Such public streets shall be coordinated with the major transportation network shown in the county Comprehensive Plan.* ~~The construction and maintenance of private streets shall be guaranteed by a surety bond, letter of credit, cash escrow or other form of surety approved by the county attorney and the environmental director.~~ Public streets shall be part of the Virginia Department of Transportation road system. *Private streets may be permitted per Sec. 24-62.*

Chapter 24

ARTICLE V. Districts

DIVISION 5: RESIDENTIAL PLANNED COMMUNITY DISTRICT, R-4

Sec. 24-290. Street improvements.

(a) All dedicated public streets shown on the ~~final~~ development plan shall meet the design and construction requirements of the Virginia Department of Transportation's standards or the county subdivision ordinance, whichever is greater. Such public streets shall be coordinated with the major transportation network shown in the county Comprehensive Plan.

(b) Private streets may be permitted *in accordance with the provisions of Sec. 24-63*, ~~upon approval of the board of supervisors and shall be coordinated with existing or planned streets of both the master plan and the county Comprehensive Plan. Private streets shown on the final plan shall meet the requirements of the Virginia Department of Transportation, except as specified in paragraph (d) below.~~

~~The construction of streets whether public or private shall be guaranteed by appropriate surety, letter of credit, cash escrow or other form of guarantee approved by the county attorney and director of code compliance.~~

~~(c) To the extent streets are private rather than public, the applicant must also submit assurances satisfactory to the planning commission that a property owner's community association or similar organization has been legally established under which the lots within the area of the final plan will be assessed for the cost of maintaining private streets and that such assessments shall constitute a pro rata lien upon the individual lots shown on the final plan.~~

~~(d) The uniqueness of each proposal for a residential planned community requires that the specifications for the width, surfacing, construction and geometric design of streets, alleys, ways for public utilities and the specifications for curbs, gutters, sidewalks, street lights and storm water drainage be subject to modification from the specifications established in Chapter 19. The planning commission may, therefore, within the limits hereinafter specified, waive or modify the specifications otherwise applicable for a particular facility where the planning commission finds that such specifications are not required in the interests of the residents of the residential planned community and that the modifications of such specifications are not inconsistent with the interests of the entire county.~~

~~It shall be the responsibility of the applicant to demonstrate to the satisfaction of the planning commission with respect to any requested waiver or modification:~~

- ~~(1) That the waiver or modification will result in design and construction that is in accordance with accepted engineering standards;~~
- ~~(2) That the waiver or modification is reasonable because of the uniqueness of the residential planned community or because of the large area of the residential planned community within which the nature and excellence of design and construction will be coordinated, preplanned and controlled;~~
- ~~(3) That any waiver or modification as to streets is reasonable with respect to the generation of vehicular traffic that is estimated will occur within the area of the master plan;~~

- (4) ~~That any waiver or modification as to sidewalks in AB@, AC@, AD@, or AE@ density areas be justified on the basis of anticipated pedestrian traffic or because other provisions are made for pedestrian traffic.~~
- (5) ~~That traffic lanes of streets are sufficiently wide to carry the anticipated volume and speed of traffic and in no case less than ten feet wide; and~~
- (6) ~~That waivers or modifications as to base and surface construction of streets and as to the condition of ditches or drainage ways be based upon soil tests for CBR value and erosion characteristics of the particular subgrade support soils in the area.~~

Chapter 24

ARTICLE V. Districts

DIVISION 6. MULTIFAMILY RESIDENTIAL DISTRICT, R-5

Sec. 24-314. Requirements for improvements and design.

(f) *Streets.* All **dedicated public** streets **shown on the development plan** shall meet the design and construction requirements of the Virginia Department of Transportation's **standards** or the **requirements of the county subdivision ordinance, regulations,** whichever is greater. **Such public** All streets shall be **coordinated consistent** with the major **transportation network thoroughfare plan of shown in** the county Comprehensive Plan. **Private streets may be permitted** in accordance with the provisions of **Sec. 24-62.** The traffic generated by a Multifamily Residential District, R-5, shall not exceed the capacity of adjoining thoroughfares. The daily traffic shall be determined by multiplying the number of proposed dwelling units by the appropriate trip generation rate as listed in the latest edition of a book entitled *Trip Generation* published by the Institute of Transportation Engineers and compared to the existing traffic and road capacity as determined by the highway engineer. ~~The construction of private streets shall be guaranteed by appropriate surety, letter of credit, cash escrow or other form of guarantee approved by the county attorney and director of code compliance.~~

Chapter 24

ARTICLE V. Districts

DIVISION 14. PLANNED UNIT DEVELOPMENT DISTRICTS

Sec. 24-497. Requirements for improvements and design.

- (d) *Street.* All **dedicated public** streets **shown on the development plan** shall meet the **design and construction** requirements of the Virginia Department of Transportation's **standards** or the

~~requirements of the county subdivision ordinance, regulations, whichever is greater. Such public streets shall be coordinated with the major transportation network shown in the county Comprehensive Plan. The construction of streets, whether public or private, shall be guaranteed by appropriate surety, letter of credit, cash escrow or other form of guarantee approved by the county attorney and environmental director. Private streets may be permitted upon the approval of the board of supervisors~~ *in accordance with the provisions of Sec 24-62.*

Chapter 24

ARTICLE V. Districts

DIVISION 15. MIXED USE, MU

Sec. 24-528. Street improvements.

(a) All dedicated public streets shown on the development plan shall meet the design and construction requirements of the Virginia Department of Transportation's standards or the county subdivision ordinance, whichever is greater. Such public streets shall be coordinated with the major transportation network shown in the county Comprehensive Plan.

(b) Private streets may be permitted upon the approval of the board of supervisors *in accordance with the provisions of Sec. 24-62.* ~~and shall be coordinated with existing or planned streets of both the master plan and the county Comprehensive Plan. Private streets shown on the development plan shall meet the requirements of the Virginia Department of Transportation, except as specified in paragraph (d) below.~~

~~The construction of streets whether public or private shall be guaranteed by appropriate surety, letter of credit, cash escrow or other form of guarantee approved by the county attorney and environmental director.~~

~~(c) To the extent streets are private rather than public, the applicant must also submit assurances satisfactory to the planning commission that a property owner's community association or similar organization has been legally established under which the lots within the area of the development plan will be assessed for the cost of maintaining private streets and that such assessments shall constitute a pro rata lien upon the individual lots shown on the development plan.~~

~~(d) The uniqueness of each proposal for a mixed use development requires that the specifications for the width, surfacing, construction and geometric design of streets with associated drainage and the specifications for curbs and gutters be subject to modification from the specifications established in chapter 19. The planning commission may, therefore, within the limits hereinafter specified, waive or modify the specifications otherwise applicable for these facilities where the planning commission finds that such specifications are not required in the interests of the residents and property owners of the mixed use development and that the modifications of such specifications are not inconsistent with the interests of the entire county.~~

~~It shall be the responsibility of the applicant to demonstrate to the satisfaction of the planning commission with respect to any requested waiver or modification:~~

- ~~(1) That the waiver or modification will result in design and construction that is in accordance with accepted engineering standards;~~
- ~~(2) That the waiver or modification is reasonable because of the uniqueness of the mixed use development or because of the large area of the mixed use development within which the nature and excellence of design and construction will be coordinated, preplanned and controlled;~~
- ~~(3) That any waiver or modification as to streets is reasonable with respect to the generation of vehicular traffic that is estimated will occur with the area of the master plan;~~
- ~~(4) That traffic lanes of streets are sufficiently wide enough to carry the anticipated volume and speed of traffic and in no case less than ten feet wide; and~~
- ~~(5) That waivers or modifications as to base and surface construction of streets and as to the condition of ditches or drainage ways be based upon the soil tests for California Bearing Ratio value and erosion characteristics of the particular subgrade support soils in the area.~~

Chapter 24

ARTICLE II. SPECIAL REGULATIONS

DIVISION 2. HIGHWAYS, STREETS, PARKING AND LOADING

Sec. 24-55. General provisions.

(a) *Certificate of occupancy required and exemptions.* No certificate of occupancy shall be issued for any structure which does not comply with these requirements; however, structures already in use are exempted; provided that:

- (1) Such structure at the time of its erection complied with the provisions of all applicable ordinances of James City County;
- (2) Exempted buildings remain in continuous use and at no time remain vacant or unused for a continuous period of one year; and
- (3) No parking lot for any exempted property is enlarged or materially altered. If such a parking lot is to be enlarged or materially altered, the existing parking area as well as the new parking area shall be brought into conformance with this chapter; provided, however, the ~~planning commission~~ *development review committee* may waive the setbacks and geometric design requirements found in sections 24-57 (a), (b), and (f) as they apply to existing parking areas, upon finding that the costs of complying with these standards would impose a severe hardship or that insufficient area exists to allow such revision.

For purposes of this section, "enlarged or materially altered" shall mean expansion or change in the parking lot which either increases the number of parking spaces by more than 15 percent or reduces the landscaped areas of the parking lot by more than 15 percent. Nothing in this section is intended to prohibit paving or surfacing of parking lots, the installation of curbs or bumpers, or other improvements which do not affect the number of spaces or the areas of the site dedicated to landscaped open space.

(b) *Location of off-street parking.*

- (1) Required off-street parking spaces shall be located on the same lot as the structure or use to which they are accessory or on a lot adjacent thereto which has the same zoning classification or a zoning classification that would allow the use that the parking will serve. The rights of use of any such adjacent property shall be secured by ownership, easement or similar recorded covenant or agreement approved as to form and content by the county attorney, in order to assure the permanent availability of such parking.
- (2) Off-site parking spaces shall be permitted by the *planning director* ~~Development Review Committee (DRC)~~ which are not located on the same property or use they serve, provided they meet the criteria specified in this section. All such parking shall be easily and safely accessible to pedestrians. The rights of use of any such property and pedestrian walkways shall be provided for by ownership, easement or similar recorded covenant or agreement, approved as to form and content by the county attorney, in order to assure the permanent availability of such parking.

- (3) *An incentive for developments that provide off-street parking only to the side or rear of a site that:*
 - (i) *is located along an urban/suburban Community Character Corridor as designated on the James City County Community Character Corridors Type Designation and Buffer Treatment Map; and*

(ii) provides parking that is screened by landscaping or a building; and
(iii) the development plan complements the design standards of the corridor or area to the satisfaction of the planning director;

the planning director may grant one of the following incentives as chosen by the applicant:

(i) front building setback reduction; or
(ii) front landscape area width reduction; or
(iii) minimum parking lot landscaping requirement reduction.

In no case shall a reduction be more than 20% of the ordinance requirement.

Appeals of the planning director's decision shall be made to the development review committee.

(c) *Types of vehicles permitted in parking spaces.* Off-street parking spaces shall be used solely for the parking of vehicles in operating condition by patrons, occupants or employees of the use to which such parking is accessory. Permanent storage of vehicles shall not be allowed. Storage of vehicles for sale shall not be allowed.

(d) *Parking of vehicles for sale/rent permitted and prohibited.*

(1) The following provisions shall apply to the parking or placement of automobiles, trucks, trailers, recreational vehicles, motorcycles, boats (a boat displayed for sale with a trailer shall be construed as a single vehicle), tractors, heavy construction equipment or other types of motorized vehicles or equipment with the intent to offer such vehicles or equipment for sale or rent. For the purposes of this section, the presence of signs, lettering, papers, flyers or other visible advertisement or information on or within the vehicle or the use of internet or print media indicating it to be for sale or rent shall be deemed evidence of such intent.

(2) The owner or occupant of a parcel on which an occupied residential, commercial or industrial structure is located may park a legally inspected and tagged automobile, light-duty truck, recreational vehicle or trailer, boat or cargo trailer on the property for the purpose of selling or offering the vehicle for rent, provided that:

a. The vehicle is owned by the owner or occupant of the property, or a member of the owner/occupant's immediate family living on the property. For the purposes of this section, the term "immediate family" shall be deemed to include spouse, natural or legally defined offspring or parents or grandparents of the owner or occupant of the premises. The owner must produce proof of ownership in the form of title or current registration if requested by inspection staff.

b. The vehicle is parked on a cleared area on the property, and shall not be parked on forested or landscaped portions of the property.

c. Any signs or lettering advertising the vehicle to be for sale or rent shall be attached to or applied to the vehicle and shall not exceed six square feet in area.

d. Not more than two vehicles shall be parked or displayed for sale or rent at any time and not more than five vehicles may be parked or displayed for sale or rent on any property within the same calendar year.

e. In the event the commercial or industrial use occupying the property is authorized to include the on-premises parking or storage of heavy construction equipment, large trucks, and similar vehicles/equipment, the above-noted limitation to "light-duty trucks" shall be waived.

- f. Parking of vehicles or equipment for sale or rent on undeveloped or vacant property, or on property on which the principal structure(s) are unoccupied, shall be prohibited.
- (3) Violations of the terms of this section shall be enforceable against the owner of the property and/or the owner of the vehicle.
 - (4) The provisions of this section shall not be deemed to prohibit the sale or rental of vehicles or equipment when conducted from a site which has been authorized, pursuant to the terms of this chapter, for the conduct of vehicle or equipment sales/rental as a principal use of the property.
 - (5) Violation of any of these terms may result in court action in accordance with section 24-22 in addition to having the vehicle towed from the property at the owner's expense.
 - (6) The provisions of this section are not intended to prevent temporary parking related to day-to-day use and operation of the vehicle (i.e. shopping, normal road use) and should not be construed as such.

Sec. 24-57. Parking lot design.

Parking areas shall be arranged for functional efficiency and safety for both vehicles and pedestrians and shall be designed to be amenable to surrounding property. Parking areas, accessory or otherwise, shall comply with the following:

- (a) *Dimensions of parking bays and required islands.* The parking lot shall be constructed so that spaces are grouped into bays. At the end of each bay, a landscape island of at least nine feet in width and 15 feet in length shall be built to separate the bays from each other or from traffic lanes. When the parking bays contain double rows of parking spaces, the landscape island shall be increased to nine feet in width and 30 feet in length. A parking bay may not be constructed to a length of more than ~~150~~ 90 feet without constructing a landscape island. The planning director may approve islands which vary from nine-foot by 15-foot or nine-foot by 30-foot rectangles in order to provide desirable geometric design features such as rounded corners and angles to facilitate maneuvering of automobile traffic. However, in no case shall the total area of an island be decreased as a result of such design change.

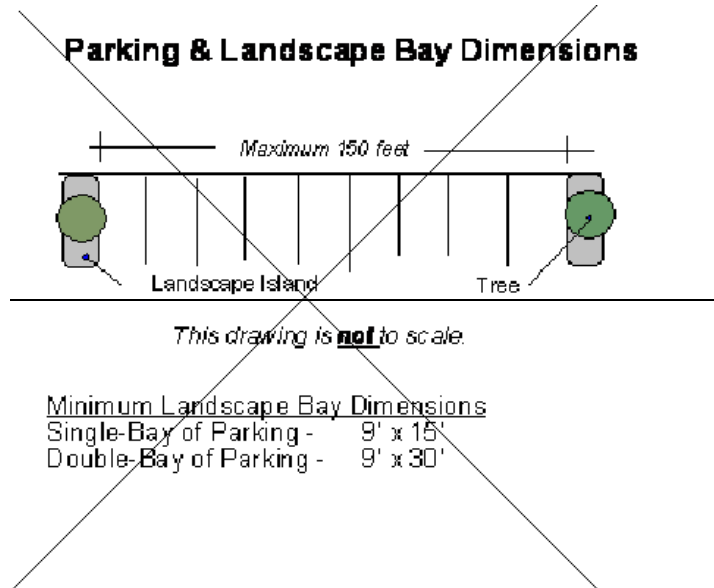
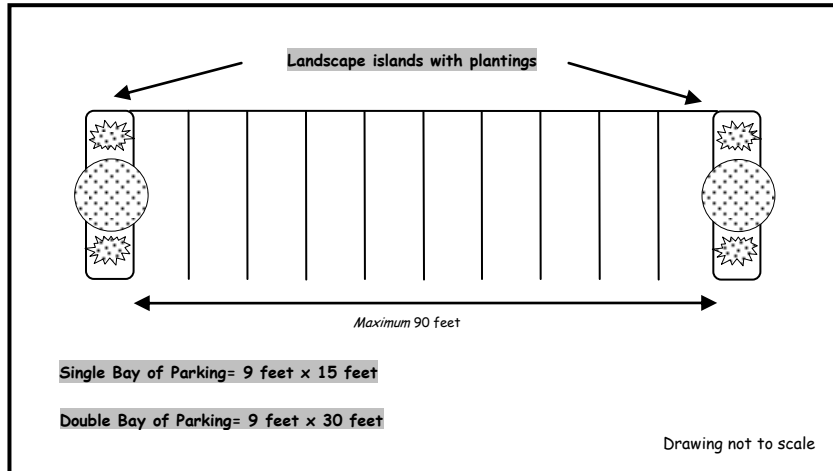


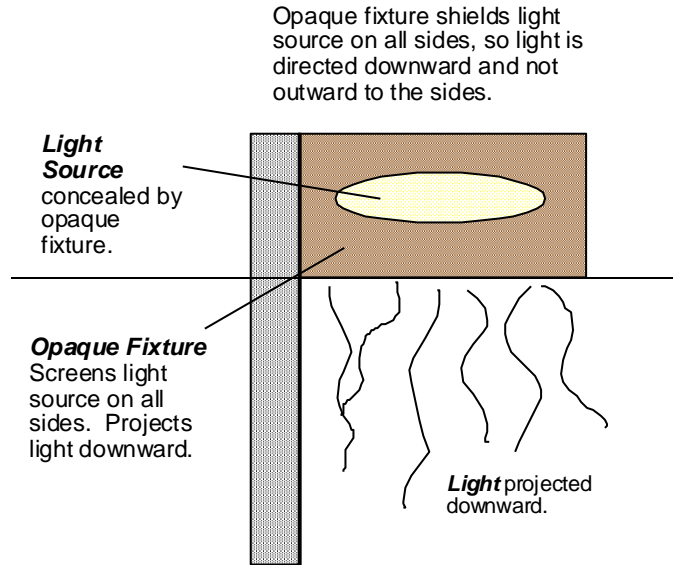
Figure 01-Parking Bays and Landscape Islands Dimensions



(b) *Protection of landscape areas and location of parking areas and drive aisles.* All landscape areas contiguous to parking bays shall be protected from intrusion by vehicles by curbs or bumpers. Parking areas shall not be located within five feet of any building. Driveways shall not be located within five feet of any building except where vehicular access is necessary. The above-mentioned five-foot setback for parking areas and drives shall not be required for vehicle parking areas and drives (including those serving the parking area) located underneath a building or within a parking garage.

~~(c) *Required lighting.*~~

- ~~(1) Adequate lighting shall be provided if the uses which are served by the parking lot will be in operation at night.~~
- ~~(2) No lighting fixture shall exceed a height of 30 feet. Height of the light fixture shall be the distance from ground or finished grade level to the highest point of a luminary.~~
- ~~(3) The lighting in parking lots shall be directed so as not to produce glare on any adjacent property or public right of way. Luminaries shall be mounted on light poles horizontally and shall be recessed fixtures with no bulb, lens or globe extending below the casing. The casing shall be opaque and shall completely surround the entire light fixture and light source in such a manner that all light will be directed downward and the light source is not visible from the side (refer to the following graphic). Plans detailing the illumination patterns (Iso footcandle diagrams) and specific design of all lighting fixtures shall be submitted for review along with the site plan.~~



~~(4) Upon application to the planning director, the applicant may request a waiver to allow for the height of the luminaries to be raised to a height in excess of 30 feet up to the height of the main structure on the property or a maximum of 60 feet above grade which ever is less. Such a waiver shall only be granted if the following conditions are met:~~

- ~~a. The horizontal distance of the luminary from any public right of way or adjacent residential or agricultural property shall be at least four times the height of the luminary.~~
- ~~b. The applicant shall demonstrate to the planning director that no glare will be shed upon adjacent properties and roadways by the placement of higher poles.~~

(*This language will be moved to the new lighting ordinance)

(c) Connections to adjacent parcels. Commercial development designated as community commercial or neighborhood commercial on the county's comprehensive plan shall connect to similarly designated adjoining parcel(s) via a stub-out to the property line(s) with the objective of providing internal vehicular and pedestrian access between neighboring commercial parcels. The planning director may waive the connection requirement upon finding that such connection is found to be illogical, infeasible, or opposed by the adjacent property owner.

(d) *Geometric standards.*

(1) The design of the parking lot shall meet the minimum geometric standards presented in the following table:

Minimum Off-Street Parking Area Dimensions			
Angle of Parking (Degrees)	Direction of Traffic	Dimension of Stall (in feet)	Width of Aisle (in feet)
Parallel	One-Way	8 x 22	12
30	One-Way	9 x 18	14
45	One-Way	9 x 18	14
60	One-Way	9 x 18	18
90	Two-Way	9 x 18	24

(2) Other parking angle and aisle dimensions other than those listed in the chart contained in (d) (1) above may be permitted by the planning director or his designee upon finding that they conform to commonly accepted engineer design standards and do not compromise the safety, appearance, or function of the parking area. In no case shall the stall dimensions for angle parking be less than nine feet by 18 feet.

(3) The minimum aisle dimension of any parking lot designed to accommodate at least 500 vehicles and intended for long-term parking may be reduced by four feet, provided the lot is designed and marked for one-way traffic, the parking spaces form an angle of 80 degrees to 90 degrees with the aisle, each vehicle is individually guided to a parking space by an attendant, and the safety and effective operation of the lot has been clearly demonstrated.

For the purpose of this section, the phrase "long-term parking" shall mean parking the duration of which is on the average six hours or more.

(e) *Surface and drainage of parking areas.* Parking areas, driveways and entrances shall be surfaced with gravel, stone, asphalt or concrete and shall be maintained in good repair. Adequate drainage shall be provided in all parking areas for the removal of stormwater and a drainage plan shall be submitted with the site plan and approved by the environmental director.

The use of grass pavers may be permitted in low-traffic areas (i.e. overflow parking for churches, special events, etc.) upon approval from the planning director, where it can be demonstrated that the vegetation will survive the amount of expected traffic.

(f) *Entrances to parking areas from public or private roads.* The location, size, and number of entrances from parking areas onto public or private roads shall be shown on the site plan. Upon finding that on-site traffic circulation, offsite traffic flow or public safety would be impaired or improved, the planning commission may require the location, number, and/or size of proposed entrances to be modified, limited, or increased.

Sec. 24-59. Minimum off-street parking requirements.

(a) *Residential uses.*

(1) *Minimum number of resident parking spaces.* The minimum number of off-street parking spaces required for residential uses is provided in the following table.

Type of Residential Unit	Minimum Number of Spaces Required
Single-Family Unit	2
Single-Family Unit with an accessory apartment	3
Townhouse Unit	2.5
1-Bedroom Apartment	1.5
2 or more Bedroom Apartment	2.2
Manufactured Home	2
Other Residential Units	1.5

Spaces in garages shall be counted towards the required minimum number of parking spaces for each dwelling. The parking space within the garage shall be large enough to provide an adequate parking space for a full size automobile and necessary space for ingress and egress out of the vehicle as determined by the zoning administrator. Building plans shall be submitted that demonstrate the adequacy of the garage(s) for accommodating parking, adequate ingress and egress out of the vehicle, and interior access to the residential unit.

(b) *Commercial uses.* Commercial and institutional uses shall be divided into various categories according to the parking demand which they generate, as follows:

Category A - High demand. High parking demand generators shall provide a minimum of one parking space per 200 square feet of retail and/or office floor area but not more than 120% of the minimum requirement, to include:

- ~~= All other commercial uses not specified in Category B or C below.~~
- ~~= Arcades.~~
- = Dance Halls/Clubs.
- = Drug stores.
- ~~= Laundries and dry cleaners.~~
- = Libraries.
- ~~= Lodges, civic clubs, fraternal organizations, service clubs, and private clubs.~~
- = Post offices.
- ~~= Public billiard parlors and pool rooms.~~
- ~~= Retail stores, general.~~
- = Retail food stores, bakeries and fish markets.
- ~~= Retail and service stores, including: antiques, arts and crafts, books, candy, coin, dressmaking, duplicating services, florist, furrier, garden supply, gift shops, greeting card, handicrafts, hardware, home appliance sales and service, ice cream, jewelry sales and service, locksmith, music and records, novelty, office supply, paint, pet, picture framing, plant supply, shoe, sporting goods, stamp, tailor, tobacco and pipes, toys, travel bureau, upholstery, wearing apparel, and yard goods.~~

- Convenience stores
- Liquor stores
- Truck stops

Category B - Moderate demand. Moderate parking demand generators shall provide a minimum of one parking space per 250 square feet of retail and/or office floor area *but not more than 120% of the minimum requirement*, to include:

- Arcades.
- All other commercial uses not specified in Category A or C.
- Banks and financial institutions.
- Corporate, business, and professional offices.
- Laundries and dry cleaners.
- Lumber and building supply.
- Machinery sales and service.
- Photography studios and sales and artist and sculptor studios.
- Plumbing and electrical supply.
- Public billiard parlors and pool rooms.
- Retail and service stores, including: antiques, arts and crafts, books, coin, dressmaking, duplicating services, florist, furrier, garden supply, gift shops, greeting card, handicrafts, hardware, home appliance sales and service, jewelry sales and service, locksmith, music and records, novelty, office supply, paint, pet, picture framing, plant supply, shoe, sporting goods, stamp, tailor, tobacco and pipes, toys, travel bureau, upholstery, wearing apparel, and yard goods.
- Retail stores, general.
- Tire, transmission, glass, body and fender, and other automotive product sales and service.

Category C - Uses with unique requirements. Category C uses shall provide minimum parking as stated below but not more than 120% of the minimum requirement:

- (1) *Bowling alleys.* Three spaces per alley plus one space for every 200 square feet of accessory business use.
- (2) *Barber shops and beauty shops.* At least three spaces plus two spaces for every barber or beautician chair.
- (3) *Furniture and carpet stores and/or show rooms.* One space for every 400 square feet of retail floor area.
- (4) *Hospitals.* Two parking spaces for every bed.
- (5) *Indoor vehicular sales show rooms.* One space for every 400 square feet of retail floor area.
- (6) *Medical office/clinic (reference (18) below for Veterinary Hospitals).* Seven spaces per practitioner, or one space per 250 square feet, whichever is greater.
- (7) *Mini-storage warehouses.* One space per 100 units, plus two spaces per on-site caretaker residence.
- (8) *Mortuaries and funeral homes.* The applicant shall provide a rationale justifying the number of parking spaces provided. The rationale should cite commonly accepted industry standards, provide information on peak parking demands, shared parking opportunities, hours of operation, and other variables which would influence the number of parking spaces provided on-site. The

planning director shall review and approve the number of parking spaces provided prior to final site plan approval.

- (9) *Motels, hotels, and tourist homes.* One space per rental unit plus four parking spaces for every 50 rental units plus one space per five persons to the maximum capacity of each public meeting and/or banquet room. Accessory uses (restaurants, bars, etc.) shall provide the number of parking spaces required for those uses individually.
- (10) *Nursing homes or convalescent homes.* One space for every four residents, plus one parking space for each employee on the largest shift.
- (11) *Outdoor retail sales/display areas.* At least one space per 500 square feet of area.
- (12) *Outlet malls.* Five spaces per 1,000 square feet of retail floor area. For the purposes of this provision, an “outlet mall” shall be defined as four or more stores which (1) are physically connected or are otherwise arranged in an integrated manner, (2) share a common parking area, and (3) the majority of the individual stores primarily sell the goods of a single manufacturer or sell returned, discontinued, overstock, and/or similar goods..
- (13) *Planned shopping centers, excluding outlet malls,* with four or more stores using a common parking lot, shall provide parking spaces according to the following schedule:

Total Retail Floor Area per 1,000 square feet	Number of Spaces per 1,000 square feet
1 to 300,000	4
Over 300,000	4.5

Where a theater is proposed in conjunction with any shopping center which contains at least 60,000-square feet of retail floor area, the number of parking spaces required for the theater may be reduced by 25 percent of what would have been required under subsection (17) below.

- (14) *Recreation facilities.* For recreation facilities not listed herein, the applicant shall provide a rationale justifying the number of parking spaces provided. The rationale should cite commonly accepted national park and recreation standards, provide information on peak parking demands, shared parking opportunities, hours of operation, and other variables which would influence the number of parking spaces provided on-site. The planning director shall review and approve the number of parking spaces provided prior to final site plan approval.
- (15) *Rental of rooms.* Rental of rooms to a maximum of three rooms shall provide off-street parking totaling one more parking space than the total number of rooms to be rented.
- (16) *Restaurants.* One space for every four seats based upon the maximum seating capacity allowed.
- (17) *Theaters, auditoriums, and places of public assembly.* One parking space per five seats based upon the planned seating capacity. For uses with bench seating, each 24 inches of bench shall be counted as one seat. In calculating the number of seats, all resulting fractions shall be rounded up to the nearest whole number.
- (18) *Veterinary hospital.* Three spaces per examination or treatment room, plus one space per employee on the largest shift.

(c) *Industrial uses.* Industries, warehouses and wholesale establishments not selling directly to the public shall provide a minimum of one parking space per two employees on the largest shift.

(d) *All other uses - planning director determination.* Where the required number of parking spaces is not set forth for a particular use in the preceding subsections, where the applicant is uncertain as to final use or size of the structure or where there is no similar general type of use listed, the planning director shall determine the number of spaces to be provided.

(e) *Shared parking.* Shared use of required parking spaces may be permitted where two or more uses on the same or separate sites are able to share the same parking spaces because their parking demands occur at different times. The location of such shared parking area(s) shall also be in compliance with section 24-55 (b). Shared use of required nonresidential parking spaces is allowed if the following documentation is submitted in writing to the planning director as part of the site plan review:

- (1) The names and addresses of the uses and of the owners or tenants that are sharing the parking;
- (2) The location and number of parking spaces that are being shared;
- (3) An analysis showing that the peak parking times of the uses occur at different times and that the parking area will be large enough for the anticipated demands of both uses; and
- (4) A legal instrument such as an easement or deed restriction that guarantees access to the parking for both uses and perpetual maintenance of the shared parking facilities. The rights of use of any such lots and pedestrian walkways shall be provided for by ownership, easement or similar recorded covenant or agreement, approved as to form and content by the county attorney, in order to assure the permanent availability of such parking.

(f) *Mass or alternate transportation plans.*

- (1) The minimum number of required parking spaces may be reduced upon the approval of a mass transportation or alternate transportation plan, which details arrangements for the mass or alternate transit of potential visitors to the site, including residents, employees, and customers. The plan shall also demonstrate that facilities exist or will be provided to accommodate the safe loading and unloading of mass transit passengers. A facility which provides a safe and comfortable waiting area for passengers shall also be provided.

Such plans shall be subject to the review and approval of the planning director and transit manager prior to the reduction of the number of required parking spaces.

- (2) Each lot for which the minimum number of parking spaces has been reduced shall show a reserve area sufficient in size to accommodate the number of parking spaces which were not required to be constructed.
- (3) Every approved mass transportation or alternate transportation plan shall be reviewed by the planning director and transit manager every two years. The purpose of the review is to ascertain whether the plan has the effect of significantly reducing the automobile traffic to and from the site, and whether the reduced number of parking spaces is sufficient to accommodate the automobile traffic to the site. The planning director and the transit manager shall make a determination to this effect.
- (4) In the event that the planning director and transit manager determine that an approved mass transportation plan or alternate transportation plan has not had the effect of significantly reducing automobile traffic to a site, and that the reduced number of parking spaces is not sufficient to

accommodate the automobile traffic to a site, the owner shall construct the number of parking spaces necessary to meet the minimum required under this ordinance.

(g) *Structured Parking.* ~~The maximum parking requirement shall not be applicable for uses utilizing structured parking.~~






~~(g)~~ (h) *Appeals and waivers:*

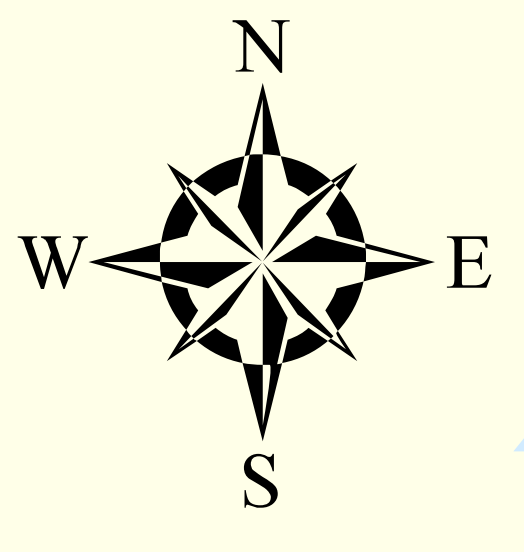
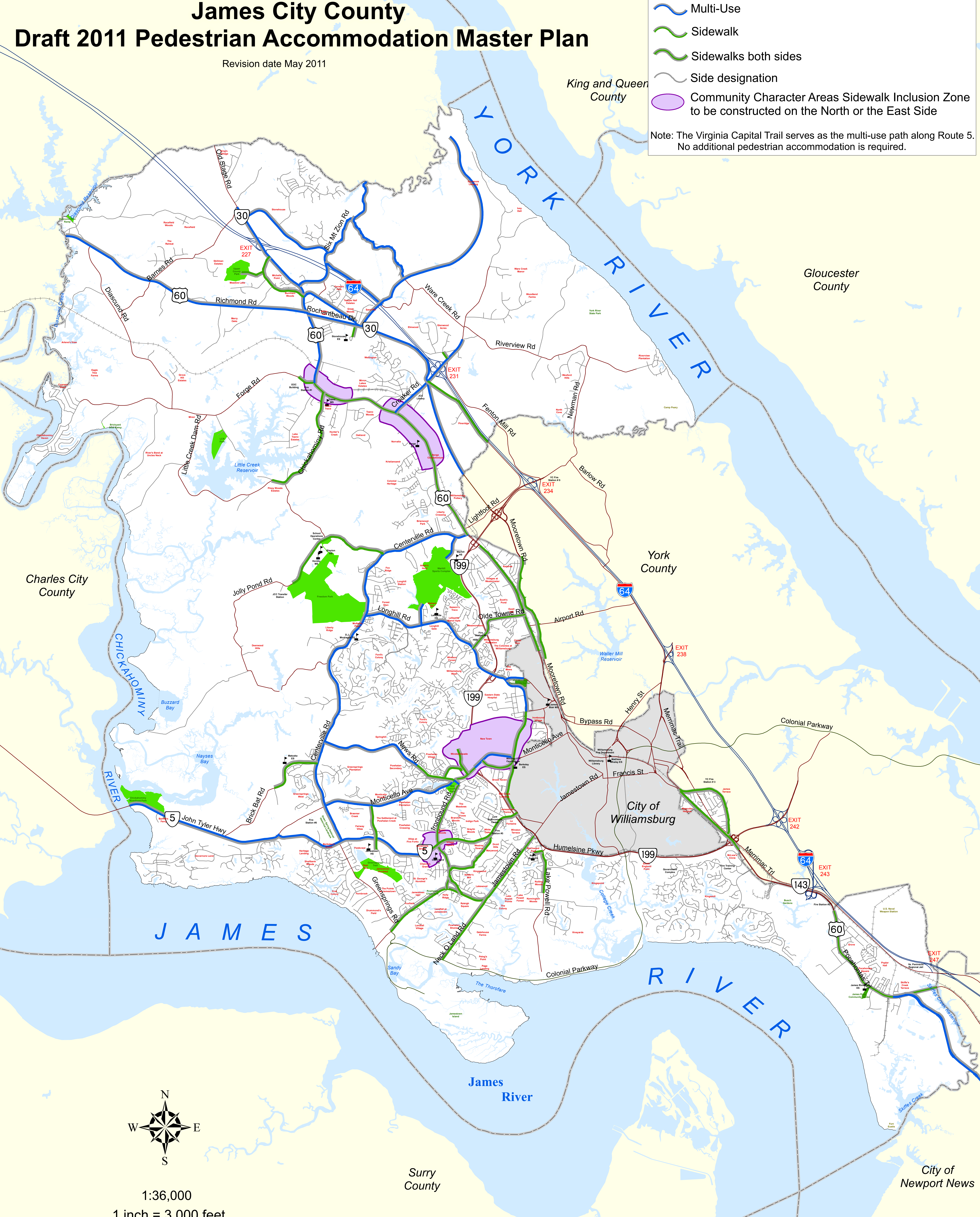
(1) *Appeals.* A property owner may appeal for a change of a commercial use from Category A to Category B or a less restrictive requirement ~~within Category C~~; however, the burden of proof shall be upon the applicant to show that the particular activity will not reasonably generate parking demand sufficient to justify the parking requirement of its present classification. Appeals for changes to ~~different~~ parking classifications shall be made to the ~~planning director~~ *planning commission*.

(2) *Waivers.* A property owner may be granted a waiver by the ~~planning commission~~ *planning director* from the ~~minimum 120 % maximum off-street parking cap requirements~~ if it can be shown that due to unique circumstances a particular activity would not reasonably be expected to generate *more* parking demand sufficient to justify the ~~than that allowed by the maximum parking requirement cap~~. Any waiver granted by the ~~planning commission~~ shall apply only to the number of spaces required and shall not allow a greater building area than would have been possible had the original parking requirement been enforced. ~~The planning commission~~ *planning director shall make a determination if the requested additional parking is necessary. The applicant shall demonstrate efforts toward utilizing a shared parking agreement or implementing a parking management plan to meet demand. At its discretion, the planning director* may place conditions upon the granting of a waiver and may require that the parking area ~~not required upon the granting of the waiver~~ be landscaped in addition to the minimum landscaping requirements. *Appeals of the planning director's decision shall be made to the development review committee.*

James City County Draft 2011 Pedestrian Accommodation Master Plan

Revision date May 2011

-  Multi-Use
 -  Sidewalk
 -  Sidewalks both sides
 -  Side designation
 -  Community Character Areas Sidewalk Inclusion Zone to be constructed on the North or the East Side
- Note: The Virginia Capital Trail serves as the multi-use path along Route 5. No additional pedestrian accommodation is required.



1:36,000

1 inch = 3,000 feet

3 1.5 0 Miles

This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and James City County is not responsible for its accuracy or how current it may be. If discrepancies are found, please contact the Real Estate Assessment Division of James City County, Mapping/GIS Section.

Pedestrian Accommodations Draft Ordinance Language

Chapter 24 Article I. In General

Sec. 24-2. Definitions

Pedestrian Accommodation. A paved right-of-way for pedestrians and/or bicyclists that is separate and protected from the traveled portion of the roadway and is free of vehicular traffic that may include but is not limited to sidewalks and multiuse paths.

Chapter 24 Article II. Special Regulations Division I. In General

Sec. 24-35. ~~Sidewalks~~ *Pedestrian Accommodation.*

(a) ~~Sidewalks~~ *Pedestrian accommodations* shall be required for all projects requiring site plan ~~or major subdivision~~ review ~~and residential developments~~ in accordance with the following:

(1) *External sidewalks: Pedestrian accommodations shall be required along all public roads abutting property to be developed as shown on the pedestrian accommodation master plan.*

(2) *Internal public streets. Pedestrian accommodation internal to a residential, commercial, office, or industrial development with public streets shall be required pursuant to the Secondary Street Acceptance Requirements found in 24VAC30-92 as amended.*

(3) *Internal private streets.*

(i) *Pedestrian accommodation internal to a residential, commercial, or office development with private streets shall be required on at least one side of all internal streets.*

(ii) *For development designated by the comprehensive plan as mixed use; moderate density residential; or the residential, commercial, and office sections of an economic opportunity area, pedestrian accommodations shall be required on both sides of the private streets.*

(iii) *Sidewalks on private streets shall not be required internal to industrial parks or industrial sections of areas designated economic opportunity on the comprehensive plan.*

(iv) *The planning director or his designee may approve alternative locations for pedestrian accommodations that are found to have equivalent connectivity as providing sidewalks along the roads internal to the development, such as paved connections between or from cul-de-sacs to other pedestrian accommodations.*

~~(1) Sidewalks shall be built to VDOT standards and located within VDOT right-of-ways when they are to be publicly maintained. If sidewalks are to be privately maintained, they shall be built to standards acceptable to the county engineer or the planning commission.~~

(4) *Interconnectivity internal to a parcel. Sidewalk plans* *Pedestrian accommodations shall be required providing for internal pedestrian access between parking areas, buildings, and public areas as well as access to abutting property shall be provided for multifamily residential, development and for commercial, and office nonresidential development sites. Pedestrian accommodation internal to a development shall link with any existing or master planned pedestrian accommodation along an abutting road external to the development and any existing public transit stops. Development within industrial parks and industrial sections of the Economic Opportunity zone shall be required to meet ADA requirements and standards only for connecting buildings and parking areas.*

(5) *Interconnectivity between parcels. Pedestrian accommodations shall be required between residential developments and adjoining schools, park, or recreational facilities as determined by the planning director or his designee. The property owner shall provide a connection internal to the development to the property line with the adjoining facility. This criterion may be waived by the planning director or his designee if the owner of the contiguous parcel objects to a connection or if a significant obstruction exists (such as wetlands, slopes exceeding 25% gradient and guardrails) that would prohibit a connection.*

~~(3) Sidewalks shall be provided along all existing public roads abutting property to be developed.~~

~~(4) Sidewalks shall be provided for one block commencing at the entrance(s) on at least one side of all entrance roads serving residential developments which shall or would be expected to serve more than 500 vehicles per day based on the application of the Institute of Transportation Engineers' traffic generation rates to a projected density assigned to undeveloped land remaining within a proposed subdivision. Sidewalks shall be provided on one side of all roads which shall serve or would be expected to serve more than 1,000 vehicles per day based on the method listed above.~~

(b) *Construction Standards: Pedestrian accommodations required by 24-35(a) shall be built in accordance with the following construction standards:*

(1) *Pedestrian accommodations shall be built to VDOT standards and located within VDOT right-of-way when they are to be publicly maintained. If accommodations are to be privately maintained, they shall be built to VDOT construction standards.*

(2) *Right-of-way and pedestrian accommodations shall be shown on the final plat.*

(3) *Sidewalks shall be paved and a minimum of 5 feet in width. Multi-use paths shall be paved and a minimum of 8 feet in width. All pedestrian accommodations shall meet the requirements of the Americans with Disabilities Act Accessibility Guidelines.*

(c) *Exemptions: Exemptions to this section may be granted by the planning director or his designee if:*

(1) *a proposed temporary structure(s) will not be erected for more than six (6) months; or*

(2) *a proposed addition to an existing structure is less than 1,000 square feet or no changes to the building footprint are proposed; or*

(3) *the development is located within an office park with private streets in existence prior to (date of ordinance adoption) and providing pedestrian accommodations along the frontage of the development site would not result in a safe and continuous connection to an existing or planned pedestrian accommodation or public transit stop.*

(d) *Exceptions: Exceptions to this section may be granted by the planning director or his designee if:*

(1) *a pedestrian accommodation is required; however, would be substantially damaged or need to be replaced as a result of a fully engineered roadway construction project implemented by the County or VDOT. The planning director or his designee may request dedication of sufficient right-of-way for pedestrian accommodations related to said road project in lieu of construction of the pedestrian requirement. The requirement to dedicate right-of-way shall be based on existing right-of-way, the design of the engineered project, and additional right-of-way that is needed; or*

(2) *in cases where topographical conditions make construction of pedestrian accommodations impractical, the planning director or his designee may approve an alternative alignment that is accessible by the public that differs from the pedestrian accommodation master plan that links with adjacent pedestrian accommodations ; or*

(3) *pedestrian accommodations shown on a master plan approved by the board of supervisors differs from the pedestrian accommodation master plan.*

(4) *If an exception is granted for (d)(1) or (d)(2) above, the applicant shall be required to pay into the pedestrian accommodation construction and maintenance fund in an amount determined by the*

engineering and resource protection division director or his designee. The amount shall be based on:

- (i) projected engineering costs;
- (ii) projected material costs;
- (iii) projected labor and mobilization costs;
- (iv) current topographical conditions of the site; and
- (v) linear feet of road frontage.

The applicant may appeal the decision of the planning director to the development review committee.

- ~~(b) Upon a favorable recommendation of the development review committee, the planning commission may modify the requirements listed in item (4) above; provided, that equivalent pedestrian facilities have been provided which adequately provide for pedestrian access within the development and to abutting property.~~
- ~~(c) Upon a favorable recommendation of the development review committee, the planning commission may modify the requirements listed in item (3) above; provided that:~~
 - ~~(1) Sidewalks are provided along an existing public road as identified in the transportation element of the Comprehensive Plan; or~~
 - ~~(2) Access to abutting properties has been provided for by way of a pedestrian connection constructed to the minimum standards listed in (d) below; or~~
 - ~~(3) A combination of (1) and (2) above, have been provided in a manner and location acceptable to the development review committee.~~
- ~~(d) Where pedestrian connections are provided in accordance with (c)(2) above, such connections shall be constructed to the following minimum standards:~~
 - ~~(1) Such pedestrian connections should avoid lands with greater than 25 percent slopes, areas subject to flooding, environmentally sensitive land or lands otherwise designated as a resource protection area.~~
 - ~~(2) Such pedestrian connections shall be at least eight feet wide and constructed of an all-weather surface. In instances where a soft surface is provided, the surface shall be underlaid with filter cloth. In no case shall a multi-use pedestrian connection be closer than five feet to the property line of an adjoining residential property.~~
 - ~~(3) The right of way and pedestrian connection shall be indicated on the final plat.~~

MEMORANDUM

DATE: June 7, 2011
TO: Policy Committee
FROM: Leanne Reidenbach, Senior Planner
SUBJECT: Development Standards: Draft Timbering Ordinance

Staff presented a framework for revisions to timbering requirements to the Policy Committee in February 2011. At that meeting, the Policy Committee generally concurred with staff's recommended amendments. The Committee suggested that staff consider treating land outside the Primary Service Area (PSA) that is zoned R-8 the same as land zoned A-1. The Committee also suggested requiring timbering buffers along rights-of-way for properties zoned A-1 outside the Primary Service Area. Staff supports not changing the current timbering ordinance requirements as stated above, but recommends Option 1 listed below.

Following this meeting, the Board of Supervisors held multiple work sessions to discuss priority ordinance sections. As part of the timbering discussion, the Board recommended developing an application and guidelines for owners who request a modification to the timber buffer and setback requirements. The Board also expressed an interest in considering ways to preserve buffers along Community Character Corridors (CCCs) for A-1 properties outside the PSA that preserved the aesthetics but were either based on incentives or at least not punitive.

Since these meetings, staff has developed an application form for timber buffer/setback modifications. Staff also looked at R-8 properties outside the PSA and determined that there are few R-8 parcels outside the PSA that appear to be wooded. The majority of these parcels are located along Chickahominy Road and Little Creek Dam Road and no parcels were along Community Character Corridors. Most of the area is developed as single-family residential and only a few are larger wooded tracts. The decision on whether to treat these parcels the same as A-1 areas outside the PSA will rest on how the Board decides to treat those A-1 parcels (see discussion below).

Based on these questions and directives, staff researched surrounding and out-of-state localities (including York County, Charles City County, New Kent County, Loudoun County, Clarke County, New Hampshire, Georgia, and North Carolina) to determine current practices in timber buffering. There was a mix of localities that required buffers on all public rights-of-way and those that did not have performance standards. Those localities that did require buffers (York County; Clarke County; DeKalb County, GA; and Holly Springs, NC), also required that the property owner contact the county or submit a forestry management or pre-harvest plan in advance of commencing timbering activities. Currently, James City County does not receive notification of timbering activities. Requiring a plan or similar notification could give the County the ability to evaluate the location of the property and suggest that a buffer be left if the property is along a CCC or verify that buffers already required by the ordinance are incorporated in the timbering plan. It would also give staff the opportunity to contact the Greenspace coordinator to evaluate whether this may be an area where the County would be interested in purchasing timbering rights on the property. In any of these options, the intent in acquiring a conservation easement or timbering rights would be to protect the visual corridor and any easements could be tailored to the specific property and written in a way that would not limit proposed road projects along the property's frontage.

Staff consulted with Billy Apperson, the James City County Forester for the Virginia Department of Forestry (DoF). His comments are incorporated in the summary of options listed below but he did note that each option was acceptable under State code. He also noted that since Virginia is a right-to-timber state, he did not favor any additional requirements that would add cost or time to timber harvesting or detract from the value of the property.

Staff has provided three draft timbering ordinances for consideration:

- **Option 1** is based on staff’s initial recommendations to the Policy Committee. Mr. Apperson suggested that if this option is selected, the County can develop a Memorandum of Agreement stating that the DoF will verbally notify a designated Development Management representative of timbering activity, giving the County the opportunity to consider acquiring a timbering easement along any rights-of-way.
- **Option 2** includes a requirement that landowners submit a pre-harvest plan to the County at least 10 days prior to commencing timbering activities. Staff would accept a relatively simple hand-drawn plan with the intention of it serving as notification to the County and as the property owner’s acknowledgement of any ordinance buffer requirements. This requirement would apply to all timbering operations regardless of zoning or location relative to the PSA and the proposed language mirrors requirements in York County. Mr. Apperson was generally opposed to anything that would require a property owner to submit a more formal plan or drawing showing the timbering operation as it would be an additional requirement and could delay the timbering process. He also recommended that the pre-harvest plan notification only be required for parcels with buffer requirements or parcels outside the PSA that are on a Community Character Corridor. Based on consultation with the County Attorney’s office, requiring a pre-harvest plan only in certain circumstances as recommended by Mr. Apperson is not legally defensible.
- **Option 3** includes requirements for submission of a pre-harvest plan and for setbacks for timbering on A-1 properties outside the PSA. It includes language for a 50 foot setback, which aligns with the setback requirement for A-1 properties inside the PSA. Additionally, landowners would be permitted to conduct limited timbering inside the setback in order to obtain valuable trees. This provision would allow landowners to still realize the full value of timbering their property. Mr. Apperson noted that the setback would be able to withstand most wind damage if hardwood trees of less than 10 inch diameter are left, but that a setback is still not a safe or appropriate treatment for every property. Staff included a clause in the ordinance allowing the setback requirement to be modified if the DoF determines that the required buffer could cause a threat to public health or safety. DoF reviewed the proposed draft language and noted that it would provide the property owner flexibility in allowing them to harvest within the setback and would provide a solid buffer within five years of the initial timbering that would be less subject to wind and other damage. Staff does not support Option 3.

Staff requests the Policy Committee offer comments on this draft ordinance and the alternative options prior to the Board of Supervisors work session in July. Staff recommends that the Policy Committee endorse Option 1, including developing a Memorandum of Agreement with DoF.

Attachments:

1. Timber Buffer Modification application
2. Pre-Harvest Plan application
3. Option 1: Staff draft ordinance
4. Option 2: Notification only required
5. Option 3: Notification and setback outside the PSA required

Option 1 DRAFT: Staff's original recommended changes

Chapter 24 Article I. In General

Sec. 24-2. Definitions.

Setback for timbering. The distance which any timbering activity must be set back from a public road right-of-way. It is an area in which no timbering shall occur except in accordance with section 24-43.

Timbering. Tree harvesting, cutting, or removal where the total amount of land on which tree cutting occurs exceeds 10,000 square feet, *which is performed in accordance with accepted Virginia Department of Forestry best management practices for timber harvesting as determined by the state forester pursuant to § 10.1-1105 of the Code of Virginia, and which includes reforestation either by natural or artificial reforestation, or both.* However, timbering shall not include:

- (1) Harvesting, cutting, removal or other clearing of trees in accordance with an ~~approved~~ site plan, subdivision plan, or building permit *that is currently under review by the county or has received final approval*; or
- (2) *Removal of tree stumps or conduct of other land disturbing activities; or*
- ~~(2)~~ (3) Removal of dead, diseased, dying, or insect damaged trees.

Chapter 24 Article II. Special Regulations Division 1. In General

Sec. 24-43. Buffer and setback requirements for timbering activities.

The requirements in this section shall apply to timbering activities located in all districts. This section shall not apply to *tree removal* ~~timbering~~ activities conducted as part of an ~~approved~~ a site plan, subdivision plan, or building permit *that is currently under review by the county or has received final approval*. Approval of site plans, subdivision plans, or building permits shall be in accordance with other provisions of the zoning ordinance and shall not be governed or guided by the provisions of this section. This section shall also not apply to timbering activities where all timbering is conducted outside of the buffers or setback for timbering listed in paragraph (1), (2) or (3) or for timbering within such buffers or setback for timbering to construct access drives having a maximum width of 30 feet. The following provisions shall apply to all timbering activities subject to this section except as otherwise noted:

- (1) *Buffer along public roads.* This paragraph shall not apply to the General Agricultural District, A-1. An undisturbed buffer at least 75 feet wide shall be maintained along all public roads. No trees or other vegetation shall be removed from this buffer except as permitted under this section.

- (2) *Buffer along community character corridor.* This paragraph shall not apply to the General Agricultural District, A-1. On all other property fronting on roads that are identified as community character corridors on the Comprehensive Plan, an undisturbed buffer at least 150 feet wide shall be maintained along the community character corridor on properties that are zoned residential. No trees or other vegetation shall be removed from this buffer except as permitted under this section.
- (3) *Setback for timbering.* In the General Agricultural District, A-1, *for properties that are in the primary service area, all timbering activities shall be located a minimum of 50 feet from any public road right-of-way unless done in accordance with other provisions in section 24-43. This distance shall be known as the setback for timbering. In the General Agricultural District, A-1, for properties outside the primary service area, there shall be no setback for timbering.* ~~* a setback for timbering shall be provided in accordance with section 24-215(c).~~
(*NOTE: this language is not a new requirement. It is being relocated from Section 24-215(c) so that all timber buffer and setback information is in the same place.)
- (4) *Buffer and setback for timbering measurement and determinations.* The width of required buffers and setbacks for timbering shall exclude any planned future right-of-way as designated on the Six-Year Primary or Secondary Road Plan.
- (5) *Tree protection.* Required buffer areas and setbacks for timbering shall be marked by painting trees along the interior edge of the buffer. Equipment, timber, or other materials shall not be placed within the buffer or setback for timbering area.
- (6) *Processing requirements.* Prior to commencing any timbering activities within a buffer or setback for timbering except for a 30-foot access drive, the property owner or agent shall complete an application and submit it along with a James City County Tax Map (with topography ~~and planimetric detail at a scale of 1"=200'~~) to the planning director that shows the site's property lines, any existing and proposed driveway entrances, required buffer areas, and setbacks for timbering, and tree protection measures. The planning director shall determine whether to permit timbering activities within a buffer or setback for timbering in accordance with paragraphs (7) and (8) below. Upon approval of the application by the planning director, timbering activities within a buffer or setback for timbering may proceed. All timbering activities within a buffer or setback for timbering including location of driveways or any other land disturbing activities, shall take place only in those areas indicated on the approved map and in accordance with the methods approved by the planning director. The planning director shall have no more than ~~14~~ **10** *working* days from the filing of such application to approve or disapprove the application. If disapproved, the planning director shall write a letter to the applicant identifying the revisions to be made to gain approval.
- (7) *Modifications.* The planning director may grant modifications to the buffer, setback for timbering, and tree protection requirements when, in the opinion of the planning director,

an alternative design provides equivalent measures, or retains the rural character of the property, or when buffers, setbacks for timbering, or tree protection are unnecessary due to a site's physical conditions such as topography or presence of streambeds, wetlands or other natural features. The planning director may also permit tree removal within the buffer or setback for timbering when trees are weakened, dying, diseased, or insect damaged, or, in the opinion of the state forester *or a certified horticulturalist*, unlikely to survive or such removal will enhance the long term effectiveness of the buffer or setback for timbering as a visual barrier.

- (8) *Partial timbering within a buffer or setback for timbering.* The planning director may approve partial timbering of buffer areas and setback for timbering and the use and type of equipment for partial timbering, after considering the following:
- a. The effect of the timbering on the long-term effectiveness of the buffer area, or setback for timbering and on adjacent roads and properties;
 - b. The anticipated development of the property and the surrounding area;
 - c. The condition of any adjacent dwelling or subdivision including whether the structures are abandoned or dilapidated;
 - d. Any recommendations of the state forester *or certified horticulturalist*, including recommendations on the use and type of equipment for partial timbering;
 - e. The health and diversity of trees with emphasis on protection of mixed hardwood trees, and the reforestation of the buffer or setback for timbering; and
 - f. The market value of the timber in the buffer or setback for timbering and the timber to be removed, and the market value of the timber on the balance of the property.
- (9) *Development review committee review.* The development review committee shall consider the timbering application if there are unresolved problems between the applicant ~~or~~ *and* the planning director.
- (10) *Tree Replacement.* If timbering occurs within the buffers or setbacks for timbering described above in paragraphs (1), (2) and (3) and such timbering is not approved in accordance with paragraphs (7) and (8) above, trees shall be replaced at a ratio of one tree for each 800 square feet of area timbered. All replacement trees shall be of a species native to eastern Virginia. Such trees shall meet the standards for trees stated in section 24-2. The number and type of trees and their placement shall be approved by the planning director.

All trees shall be planted within 30 days from the date the trees were removed from the buffer or setback unless such period does not fall within the planting season. In such cases, their replacement in the next planting season (October 1 through March 31) shall be guaranteed by entering into a written agreement with the county and furnishing to the county a certified check, bond with surety satisfactory to the county, or a letter of credit in an amount to cover all costs of the plantings and their installation as estimated by the

planning director. Such written agreement shall be entered into and such financial guarantee shall be provided to the County within 30 days from the date the trees were removed. The form of the agreement, financial guarantee, or type of surety shall be to the satisfaction of and approved by the county attorney. If the improvements are not completed in a timely manner, the planning director shall proceed to complete the improvements by calling on the surety or financial guarantee. After the first full growing season (February 1 to November 30) after planting, any trees not in a healthy growing condition or determined to be dead, diseased, or dying, shall be replaced as determined by the planning director. Thereafter, all trees shall be maintained in a healthy growing environment and in a healthy growing condition.

The planning director may allow some or all of the trees required by this paragraph to be planted outside the buffer or off-site when, if in the opinion of the planning director, such an alternative mitigates the environmental, buffering, or wildlife habitat impacts of the tree removal.

- (11) Violations and penalties. Prior to any criminal or civil enforcement under this section, the administrator or his designee shall give five days written notice of the violation to the owner of the property prior to commencing enforcement. The violation of any provision of this section concerning tree replacement in paragraph 10 above is subject to a civil fine pursuant to section 24-22. The violation of any other provisions in this section is subject to a criminal sanction under section 24-22.

Chapter 24
Article V. Districts
Division 2. General Agricultural District, A-1

Sec. 24-212. Permitted uses.

~~Silviculture, with timbering in accordance with Section 24-215(c).~~

Timbering in accordance with section 24-43.

Sec. 24-215. Setback requirements.

~~(c) All timbering activities in the primary service area shall be located a minimum of 50 feet from any public road right of way unless done in accordance with section 24-43. This distance shall be known as the setback for timbering.*~~

(*NOTE: This text was relocated to Section 24-43(c)(3) above)

Option 2 DRAFT: Pre-Harvest Plan submission

Chapter 24 Article I. In General.

Sec. 24-2. Definitions.

Setback for timbering. The distance which any timbering activity must be set back from a public road right-of-way. It is an area in which no timbering shall occur except in accordance with section 24-43.

Timbering. Tree harvesting, cutting, or removal where the total amount of land on which tree cutting occurs exceeds 10,000 square feet, *which is performed in accordance with accepted Virginia Department of Forestry best management practices for timber harvesting as determined by the state forester pursuant to § 10.1-1105 of the Code of Virginia, and which includes reforestation either by natural or artificial reforestation, or both.* However, timbering shall not include:

- (1) Harvesting, cutting, removal or other clearing of trees in accordance with an ~~approved~~ site plan, subdivision plan, or building permit *that is currently under review by the county or has received preliminary or final approval*; or
- (2) *Removal of tree stumps or conduct of other land disturbing activities; or*
- ~~(2)~~ (3) Removal of dead, diseased, dying, or insect damaged trees.

Chapter 24 Article II. Special Regulations Division 1. In General

Sec. 24-43. ~~Buffer and setback r~~Requirements for timbering activities.

The requirements in this section shall apply to timbering activities located in all districts. This section shall not apply to *tree removal* ~~timbering~~ activities conducted as part of an ~~approved~~ a site plan, subdivision plan, or building permit *that is currently under review by the county or has received final approval*. Approval of site plans, subdivision plans, or building permits shall be in accordance with other provisions of the zoning ordinance and shall not be governed or guided by the provisions of this section. ~~This section shall also not apply to timbering activities where all timbering is conducted outside of the buffers or setback for timbering listed in paragraph (1), (2) or (3) or for timbering within such buffers or setback for timbering to construct access drives having a maximum width of 30 feet.~~ The following provisions shall apply to all timbering activities subject to this section except as otherwise noted:

- (a) *A pre-harvest plan for all timbering activities shall be submitted to and approved by the Virginia Department of Forestry and the planning director. The planning director shall review the pre-harvest plan for compliance with all applicable requirements of this chapter.*

The planning director shall either approve or disapprove the plan no later than ten (10) working days after submittal. If disapproved, the planning director shall identify in writing to the applicant what revisions must be made to gain approval. In no case shall timbering activities occur on any land that does not have a preliminary or final approved site plan, subdivision plan, or building permit without the approval of a pre-harvest plan by the planning director.

(b) All timbering activities shall be in accordance with the approved pre-harvest plan. A pre-harvest plan shall be in accordance with the Virginia Department of Forestry best management practices for timber harvesting and shall include:

(1) property address, property identification number, legal acreage of the parcel, and a description of any land not included in the pre-harvest plan;

(2) a description of the property to be timbered including its current condition, characteristics of adjacent property, identification of known cultural and historical resources, the presence of any known environmentally sensitive features, and the recommendations of a state forester or a certified horticulturist;

(3) a narrative description of harvesting procedures, timing of harvest, and tree protection measures for required buffer and setback areas;

(4) A map to scale showing the location of property lines, potential driveway entrances, resource protection areas, adjacent roadways, and required buffers and setbacks; and

(5) a timber buffer modification application, if applicable.

(c) The following buffer and setback requirements shall apply to all districts as follows:

(1) Buffer along public roads. This paragraph shall not apply to the General Agricultural District, A-1. An undisturbed buffer at least 75 feet wide shall be maintained along all public roads. No trees or other vegetation shall be removed from this buffer except as permitted under this section.

(2) Buffer along community character corridor. This paragraph shall not apply to the General Agricultural District, A-1. On all other property fronting on roads that are identified as community character corridor on the Comprehensive Plan, an undisturbed buffer at least 150 feet wide shall be maintained along the community character corridor on properties that are zoned residential. No trees or other vegetation shall be removed from this buffer except as permitted under this section.

(3) Setback for timbering. In the General Agricultural District, A-1, for properties that are in the primary service area, all timbering activities shall be located a minimum of 50 feet from any public road right-of-way unless done in accordance with other provisions in section 24-43. This distance shall be known as the setback for timbering. In the General

*Agricultural District, A-1, for properties outside the primary service area, there shall be no required setback for timbering.** ~~a setback for timbering shall be provided in accordance with section 24-215(c).~~

(*NOTE: this language is not a new requirement. It is being relocated from Section 24-215(c) so that all timber buffer and setback information is in the same place.)

- (4) *Buffer and setback for timbering measurement and determinations.* The width of required buffers and setbacks for timbering shall exclude any planned future right-of-way as designated on the Six-Year Primary or Secondary Road Plan.
- (5) *Tree protection.* Required buffer areas and setbacks for timbering shall be marked by painting trees along the interior edge of the buffer. Equipment, timber, or other materials shall not be placed within the buffer or setback for timbering area.
- (6) *Processing requirements.* Prior to commencing any timbering activities within a buffer or setback for timbering except for a 30-foot access drive, the property owner or agent shall complete an **timber buffer modification** application and submit it along with a James City County Tax Map (with topography ~~and planimetric detail at a scale of 1"=200'~~) to the planning director that shows the site's property lines, any existing and proposed driveway entrances, required buffer areas, and setbacks for timbering, and tree protection measures. The planning director shall determine whether to permit timbering activities within a buffer or setback for timbering in accordance with paragraphs (7) and (8) below. Upon approval of the application by the planning director, timbering activities within a buffer or setback for timbering may proceed. All timbering activities within a buffer or setback for timbering including location of driveways or any other land disturbing activities, shall take place only in those areas indicated on the approved map and in accordance with the methods approved by the planning director. The planning director shall have no more than ~~14~~ **10** *working* days from the filing of such application to approve or disapprove the application. If disapproved, the planning director shall write a letter to the applicant identifying the revisions to be made to gain approval.
- (7) *Modifications.* The planning director may grant modifications to the buffer, setback for timbering, and tree protection requirements when, in the opinion of the planning director, an alternative design provides equivalent measures, or retains the rural character of the property, or when buffers, setbacks for timbering, or tree protection are unnecessary due to a site's physical conditions such as topography or presence of streambeds, wetlands or other natural features. The planning director may also permit tree removal within the buffer or setback for timbering when trees are weakened, dying, diseased, or insect damaged, or, in the opinion of the state forester *or a certified horticulturalist*, unlikely to survive or such removal will enhance the long term effectiveness of the buffer or setback for timbering as a visual barrier.

- (8) *Partial timbering within a buffer or setback for timbering.* The planning director may approve partial timbering of buffer areas and setback for timbering and the use and type of equipment for partial timbering, after considering the following:
- a. The effect of the timbering on the long-term effectiveness of the buffer area, or setback for timbering and on adjacent roads and properties;
 - b. The anticipated development of the property and the surrounding area;
 - c. The condition of any adjacent dwelling or subdivision including whether the structures are abandoned or dilapidated;
 - d. Any recommendations of the state forester *or certified horticulturalist*, including recommendations on the use and type of equipment for partial timbering;
 - e. The health and diversity of trees with emphasis on protection of mixed hardwood trees, and the reforestation of the buffer or setback for timbering; and
 - f. The market value of the timber in the buffer or setback for timbering and the timber to be removed, and the market value of the timber on the balance of the property.

~~(d)(9)~~ *Development review committee review.* The development review committee shall consider the timbering *buffer modification* application if there are unresolved problems between the applicant ~~or~~ *and* the planning director.

~~(e)(10)~~ *Tree Replacement.* If timbering occurs *without an approved pre-harvest plan or* within the buffers or setbacks for timbering described above in paragraphs (1), (2) and (3) and such timbering is not approved in accordance with paragraphs (7) and (8) above, trees shall be replaced at a ratio of one tree for each 800 square feet of area timbered. All replacement trees shall be of a species native to eastern Virginia. Such trees shall meet the standards for trees stated in section 24-2. The number and type of trees and their placement shall be approved by the planning director.

All trees shall be planted within 30 days from the date the trees were removed from the buffer or setback unless such period does not fall within the planting season. In such cases, their replacement in the next planting season (October 1 through March 31) shall be guaranteed by entering into a written agreement with the county and furnishing to the county a certified check, bond with surety satisfactory to the county, or a letter of credit in an amount to cover all costs of the plantings and their installation as estimated by the planning director. Such written agreement shall be entered into and such financial guarantee shall be provided to the County within 30 days from the date the trees were removed. The form of the agreement, financial guarantee, or type of surety shall be to the satisfaction of and approved by the county attorney. If the improvements are not completed in a timely manner, the planning director shall proceed to complete the improvements by calling on the surety or financial guarantee. After the first full growing season (February 1 to November 30) after planting, any trees not in a healthy growing condition or determined to be dead, diseased, or dying, shall be replaced as determined

by the planning director. Thereafter, all trees shall be maintained in a healthy growing environment and in a healthy growing condition.

The planning director may allow some or all of the trees required by this paragraph to be planted outside the buffer or off-site when, if in the opinion of the planning director, such an alternative mitigates the environmental, buffering, or wildlife habitat impacts of the tree removal.

~~(f)(11)~~ Violations and penalties. Prior to any criminal or civil enforcement under this section, the administrator or his designee shall give five days written notice of the violation to the owner of the property prior to commencing enforcement. The violation of any provision of this section concerning tree replacement in paragraph 10 above is subject to a civil fine pursuant to section 24-22. The violation of any other provisions in this section is subject to a criminal sanction under section 24-22.

Chapter 24
Article V. Districts
Division 2. General Agricultural District, A-1

Sec. 24-212. Permitted uses.

~~Silviculture, with timbering in accordance with Section 24-215(c).~~

Timbering in accordance with section 24-43.

Sec. 24-215. Setback requirements.

~~(e) All timbering activities in the primary service area shall be located a minimum of 50 feet from any public road right-of-way unless done in accordance with section 24-43. This distance shall be known as the setback for timbering.*~~

(*NOTE: This text was relocated to Section 24-43(c)(3) above)

Option 3 DRAFT: Pre-Harvest Plan submission and required setbacks for timbering outside the PSA

Chapter 24 Article I. In General.

Sec. 24-2. Definitions.

Basal area per acre. The area of an acre of land that is occupied by tree trunks. Equivalent to the total cross sectional area of group of trees expressed in square feet per acre. Cross sectional area of each tree is measured at a point 4.5 feet above the ground.

Setback for timbering. The distance which any timbering activity must be set back from a public road right-of-way. It is an area in which no timbering shall occur except in accordance with section 24-43.

Timbering. Tree harvesting, cutting, or removal where the total amount of land on which tree cutting occurs exceeds 10,000 square feet, which is performed in accordance with accepted Virginia Department of Forestry best management practices for timber harvesting as determined by the state forester pursuant to § 10.1-1105 of the Code of Virginia, and which includes reforestation either by natural or artificial reforestation, or both. However, timbering shall not include:

- (1) Harvesting, cutting, removal or other clearing of trees in accordance with an approved site plan, subdivision plan, or building permit that is currently under review by the County or has received preliminary or final approval; or
- (2) Removal of tree stumps or conduct of other land disturbing activities; or
- (2) (3) Removal of dead, diseased, dying, or insect damaged trees.

Chapter 24 Article II. Special Regulations Division 1. In General

Sec. 24-43. ~~Buffer and setback r~~Requirements for timbering activities.

The requirements in this section shall apply to timbering activities located in all districts. This section shall not apply to ~~tree removal~~ timbering activities conducted as part of an approved a site plan, subdivision plan, or building permit that is currently under review by the County or has received final approval. Approval of site plans, subdivision plans, or building permits shall be in accordance with other provisions of the zoning ordinance and shall not be governed or guided by the provisions of this section. ~~This section shall also not apply to timbering activities where all timbering is conducted outside of the buffers or setback for timbering listed in paragraph (1), (2) or (3) or for timbering within such buffers or setback for timbering to construct access drives having a maximum width of 30 feet.~~ The following provisions shall apply to all timbering activities subject to this section except as otherwise noted:

(a) *A pre-harvest plan for all timbering activities shall be submitted to and approved by the Virginia Department of Forestry and the planning director. The planning director shall review the pre-harvest plan for compliance with all applicable requirements of this chapter.*

The planning director shall either approve or disapprove the plan no later than ten (10) working days after submittal. If disapproved, the planning director shall identify in writing to the applicant what revisions must be made to gain approval. In no case shall timbering activities occur on any land that does not have a preliminary or final approved site plan, subdivision plan, or building permit without the approval of a pre-harvest plan by the planning director.

(b) *All timbering activities shall be in accordance with the approved pre-harvest plan. A pre-harvest plan shall be in accordance with the Virginia Department of Forestry best management practices for timber harvesting and shall include:*

(1) *property address, parcel identification number, legal acreage of the parcel, and a description of any land not included in the pre-harvest plan;*

(2) *a description of the property to be timbered including its current condition, characteristics of adjacent property, identification of known cultural and historical resources, the presence of any known environmentally sensitive features, and the recommendations of a state forester or a certified horticulturist;*

(3) *a narrative description of harvesting procedures, timing of harvest, and tree protection measures for required buffer and setback areas;*

(4) *a map to scale showing the location of property lines, potential driveway entrances, resource protection areas, adjacent roadways, and required buffers and setbacks; and*

(5) *a timber buffer modification application, if applicable.*

(c) *The following buffer and setback requirements shall apply to all districts as follows:*

(1) *Buffer along public roads.* This paragraph shall not apply to the General Agricultural District, A-1. An undisturbed buffer at least 75 feet wide shall be maintained along all public roads. No trees or other vegetation shall be removed from this buffer except as permitted under this section.

(2) *Buffer along community character corridor.* This paragraph shall not apply to the General Agricultural District, A-1. On all other property fronting on roads that are identified as community character corridors on the Comprehensive Plan, an undisturbed buffer at least 150 feet wide shall be maintained along the community character corridor on properties that are zoned residential. No trees or other vegetation shall be removed from this buffer except as permitted under this section.

- (3) *Setback for timbering.* In the General Agricultural District, A-1, *for properties that are in the primary service area, all timbering activities shall be located a minimum of 50 feet from any public road right-of-way unless done in accordance with other provisions in section 24-43. This distance shall be known as the setback for timbering.* ~~*a setback for timbering shall be provided in accordance with section 24-215(c).~~

(*NOTE: this language is not a new requirement. It is being relocated from Section 24-215(c) so that all timber buffer and setback information is in the same place.)

In the General Agricultural District, A-1, for all properties that are outside the primary service area and front on roads that are identified as community character corridors on the Comprehensive Plan, a setback for timbering at least 50 feet wide shall be maintained. Within this setback up to 50% of the basal area per acre of the trees in the setback can be harvested. Existing hardwood trees with a diameter breast height 10 inches or less shall be preserved within the required setback. The planning director or his designee shall permit the harvesting of trees within the setback after submittal of a timber buffer modification application and documentation verifying consultation with the state forester or a certified horticulturalist. Any harvesting within the setback shall be in accordance with the tree protection standards in Section 24-89 (b) (3) and (4).

- (4) *Buffer and setback for timbering measurement and determinations.* The width of required buffers and setbacks for timbering shall exclude any planned future right-of-way as designated on the Six-Year Primary or Secondary Road Plan.
- (5) *Tree protection.* Required buffer areas and setbacks for timbering shall be marked by painting trees along the interior edge of the buffer. Equipment, timber, or other materials shall not be placed within the buffer or setback for timbering area.
- (6) *Processing requirements.* Prior to commencing any timbering activities within a buffer or setback for timbering except for a 30-foot access drive, the property owner or agent shall complete an *timber buffer modification* application and submit it along with a James City County Tax Map (with topography ~~and planimetric detail at a scale of 1"=200'~~) to the planning director that shows the site's property lines, any existing and proposed driveway entrances, required buffer areas, and setbacks for timbering, and tree protection measures. The planning director shall determine whether to permit timbering activities within a buffer or setback for timbering in accordance with paragraphs (7) and (8) below. Upon approval of the application by the planning director, timbering activities within a buffer or setback for timbering may proceed. All timbering activities within a buffer or setback for timbering including location of driveways or any other land disturbing activities, shall take place only in those areas indicated on the approved map and in accordance with the methods approved by the planning director. The planning director shall have no more than ~~14~~ *10 working* days from the filing of such application to approve or disapprove the application. If disapproved, the planning director shall write a letter to the applicant identifying the revisions to be made to gain approval.

- (7) *Modifications.* The planning director may grant modifications to the buffer, setback for timbering, and tree protection requirements when, in the opinion of the planning director, an alternative design provides equivalent measures, or retains the rural character of the property or when buffers, setbacks for timbering, or tree protection are unnecessary due to a site's physical conditions such as topography or presence of streambeds, wetlands or other natural features. The planning director may also permit tree removal within the buffer or setback for timbering when trees are weakened, dying, diseased, or insect damaged, or, in the opinion of the state forester *or a certified horticulturalist*, unlikely to survive; or such removal will enhance the long term effectiveness of the buffer or setback for timbering as a visual barrier; *or, in the opinion of the state forester or a certified horticulturalist, due to topography or other site specific conditions the buffer would result in a public safety hazard.*
- (8) *Partial timbering within a buffer or setback for timbering.* The planning director may approve partial timbering of buffer areas and setback for timbering and the use and type of equipment for partial timbering, after considering the following:
- a. The effect of the timbering on the long-term effectiveness of the buffer area, or setback for timbering and on adjacent roads and properties;
 - b. The anticipated development of the property and the surrounding area;
 - c. The condition of any adjacent dwelling or subdivision including whether the structures are abandoned or dilapidated;
 - d. Any recommendations of the state forester *or certified horticulturalist*, including recommendations on the use and type of equipment for partial timbering;
 - e. *The total basal area of trees per acre within the buffer or setback before and after proposed timbering within the buffer or setback;*
 - ef. The health and diversity of trees with emphasis on protection of mixed hardwood trees, and the reforestation of the buffer or setback for timbering; and
 - fg. The market value of the timber in the buffer or setback for timbering and the timber to be removed, and the market value of the timber on the balance of the property.
- ~~(d)~~(9) *Development review committee review.* The development review committee shall consider the timbering *buffer modification* application if there are unresolved problems between the applicant ~~or~~ *and* the planning director.
- ~~(e)~~(10) *Tree Replacement.* If timbering occurs *without an approved pre-harvest plan or* within the buffers or setbacks for timbering described above in paragraphs (1), (2) and (3) and such timbering is not approved in accordance with paragraphs (7) and (8) above, trees shall be replaced at a ratio of one tree for each 800 square feet of area timbered. All replacement trees shall be of a species native to eastern Virginia. Such trees shall meet the standards for trees stated in section 24-2. The number and type of trees and their placement shall be approved by the planning director.

All trees shall be planted within 30 days from the date the trees were removed from the buffer or setback unless such period does not fall within the planting season. In such cases, their replacement in the next planting season (October 1 through March 31) shall be guaranteed by entering into a written agreement with the county and furnishing to the county a certified check, bond with surety satisfactory to the county, or a letter of credit in an amount to cover all costs of the plantings and their installation as estimated by the planning director. Such written agreement shall be entered into and such financial guarantee shall be provided to the County within 30 days from the date the trees were removed. The form of the agreement, financial guarantee, or type of surety shall be to the satisfaction of and approved by the county attorney. If the improvements are not completed in a timely manner, the planning director shall proceed to complete the improvements by calling on the surety or financial guarantee. After the first full growing season (February 1 to November 30) after planting, any trees not in a healthy growing condition or determined to be dead, diseased, or dying, shall be replaced as determined by the planning director. Thereafter, all trees shall be maintained in a healthy growing environment and in a healthy growing condition.

The planning director may allow some or all of the trees required by this paragraph to be planted outside the buffer or off-site when, if in the opinion of the planning director, such an alternative mitigates the environmental, buffering, or wildlife habitat impacts of the tree removal.

~~(f)(11)~~ Violations and penalties. Prior to any criminal or civil enforcement under this section, the administrator or his designee shall give five days written notice of the violation to the owner of the property prior to commencing enforcement. The violation of any provision of this section concerning tree replacement in paragraph 10 above is subject to a civil fine pursuant to section 24-22. The violation of any other provisions in this section is subject to a criminal sanction under section 24-22.

Chapter 24
Article V. Districts
Division 2. General Agricultural District, A-1

Sec. 24-212. Permitted uses.

~~Silviculture, with timbering in accordance with Section 24-215(c).~~

Timbering in accordance with section 24-43.

Sec. 24-215. Setback requirements.

~~(c) All timbering activities in the primary service area shall be located a minimum of 50 feet from any public road right-of-way unless done in accordance with section 24-43. This distance shall be known as the setback for timbering.*~~

(*NOTE: This text was relocated to Section 24-43(c)(3) above)

Draft Floodplain Ordinance:

Chapter 24 Article I. In General

Sec. 24-2. Definitions.

Flood or flooding

- (1) A general or temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters or the unusual and rapid accumulation or runoff of surface waters from any source.
 - (a) the overflow of inland or tidal waters; or,
 - (b) the unusual and rapid accumulation or runoff of surface waters from any source.
 - (c) mudflows which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- (2) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph 1 (a) of this definition.

Floodplain *Flood-prone area*. Any land area susceptible to being inundated by water from any source.

Chapter 24 Article VI. Overlay Districts Division 3. Floodplain Area Regulations

Sec. 24-588 Compliance and liability

- (a) No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged or structurally altered except in full compliance with the terms and provisions of these regulations and any other applicable ordinances and regulations; including, but not limited to: *The Virginia Uniform Statewide Building Code (USBC), the Virginia Industrialized Building Safety Regulations (IBSR), and the Manufactured Home Safety Regulations (MHSR).*

Sec 24-590. Designation of Flood Districts

- (a) The various floodplain districts shall include areas subject to inundation by waters of the 100-year flood. The minimum basis for the delineation of these districts shall be, but not limited to, the September 28, 2007, flood insurance study prepared by the Federal Emergency

Management Agency (FEMA), Federal Insurance Agency (FIA), since other flood-prone areas exist in James City County which are not shown on the floodplain maps. To determine these areas, the 100-year flood elevations and floodways from federal, state and local sources may be used when available. Where the specific 100-year flood elevation cannot be determined for an area by using available sources of data, then the applicant for the proposed use, development and/or activity shall determine this elevation to the satisfaction of the county engineer in accordance with the hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., shall consider full development of the watershed and shall be submitted in sufficient detail to allow a thorough review by the county engineer.

Where flood elevations are provided by the FIAS, these elevations shall not be changed except with FEMA approval. Local sources of floodplain flood-prone area data include, but are not limited to, the following reports: *Drainage Study of Upper Powhatan Creek Watersheds, Camp Dresser and McKee, 1987; Mill Creek-Lake Watershed Study, GKY and Associates, 1988; Powhatan Creek Floodplain Study, Williamsburg Environmental Group, 2008; Upper Powhatan Creek Floodplain Study, Williamsburg Environmental Group, 2010.* (Ord. No. 31A-127, 10-29-90; Ord. No. 31A-179, 9-8-98; Ord. No. 31A-228, 9-25-07)

Sec. 24-595. Regulations for Construction

(a) The construction or placement of any structure or obstruction, filling or changing the cross-section or flow characteristics within the 100-year floodplain shall not be permitted unless the project is in conformance with the following requirements:

- (1) In case of residential usage, the finished ~~grade~~ *elevation of the lowest floor* shall be at least ~~one foot~~ *two feet* above the 100-year flood elevation ~~for the lowest floor~~, including basement or cellar of structure. For nonresidential structures, watertight floodproofing in accordance with the Virginia Uniform Statewide Building Code may be provided in lieu of the finished grade requirement described herein. Prior to issuance of a certificate of occupancy, the owner of any structure located in a floodplain district shall submit a completed elevation certificate or floodproofing certificate as appropriate to the director of ~~code compliance~~ *the building safety and permits division.*
- (2) Utility and sanitary facilities shall be flood proofed up to the level of *two feet above* the 100-year *base* flood *elevation.*
- (3) Encroachments, including fill, new construction, substantial improvements and other development are prohibited within the floodway *or any floodplain district having a 100-year elevation greater than 7-1/2 feet (North American Vertical Datum - NAVD, 1988)* unless it has been demonstrated through hydrologic and hydraulic analyses that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge. *Hydrologic and hydraulic analyses shall be undertaken by a professional engineer and shall be submitted in sufficient detail to allow a thorough review by the development manager or designee.*

- (4) All other federal and state permits shall be obtained by the applicant before a building permit can be issued.
- (b) It shall be the responsibility of the applicant to provide this data, certified by a licensed surveyor or engineer or other source acceptable to the director of ~~code compliance~~ *the building safety and permits division*.
(Ord. No. 31A-127, 10-29-90)

Sec. 24-596. Regulations for subdivisions and site plans

The applicant of any subdivision of land or site plan within the county shall submit with his application a statement by a licensed surveyor or engineer as to whether or not any property shown on the plat or plan is at an elevation lower than the 100-year flood level. Where a 100-year flood level exists, the extent of this area shall be shown on the plat or plan. Further, the elevation of the finished surface of the ground at each building location shall be shown. Lots created after February 6, 1991, which are within a floodplain district having a 100-year flood elevation greater than 7-1/2 feet, shall contain a natural, unfilled building site at least one foot above the 100-year flood elevation adequate to accommodate all proposed structures. All structures shall be constructed solely within such building site *and outside of the 100-year flood plain*.

(Ord. No. 31A-127, 10-29-90; Ord. No. 31A-228, 9-25-07)

Sec. 24-597. Regulations for replacement manufactured homes.

- (a) Replacement manufactured homes shall be elevated on a permanent foundation so that the lowest floor is ~~one foot~~ *two feet* above the level of the 100-year flood *elevation*.
- (b) In floodplain areas, replacement manufactured homes shall be anchored to resist flotation, collapse or lateral movement by providing over-the-top and frame ties to ground anchors in either of the following arrangements:
- (1) Over-the-top ties at each corner plus one frame tie at the middle of each side; or
 - (2) Frame ties at each corner plus no less than five evenly spaced additional frame ties per side.
- (c) All ties to the ground shall be able to carry a force of 4,800 pounds.
(Ord. No. 31A-127, 10-29-90)

Sec. 24-601. Watercourse modification.

The Federal Insurance Administrator, adjacent jurisdictions and the Department of Conservation and Recreation, Division of ~~Soil and Water Conservation~~ *Dam Safety and Floodplain Management* shall be notified prior to the alteration or relocation of any watercourse. The flood-carrying capacity to such watercourse shall be maintained.
(Ord. No. 31A-127, 10-29-90)

**READING FILE
MEMORANDUM**

DATE: June 7, 2011

TO: Policy Committee

FROM: Christy Parrish, Proffer Administrator
Leanne Reidenbach, Senior Planner

SUBJECT: Cumulative Impacts

Since there is no ordinance text associated with the cumulative impacts database, for the purposes of Stage II of the Zoning and Subdivision Ordinance Update, this memo is intended as an update to staff's progress and summary of upcoming milestones.

Staff presented an outline and series of stages necessary to track cumulative impacts of development at the January 31st Policy Committee meeting. As a review, the stages were identified as follows:

- I) Residential development tracking
- II) Residential assessment of key impacts
- III) Commercial development tracking
- IV) Water and sewer impacts of commercial projects
- V) Additional tracking and impacts
- VI) Adding tracking of by-right development potential

The Policy Committee provided feedback regarding the overall vision and uses for the cumulative impact tracking database and shared that the primary goal was to be able to track the location of development and the impact of that development on public facilities and infrastructure. The Committee identified schools, transportation, environment, and water/sewer as the four impacts of greatest importance and agreed that reporting should be presented annually through the Planning Commission Annual Report in tabular and graphical format.

Following this meeting, the Board of Supervisors held multiple work sessions to discuss priority ordinance sections. As part of the cumulative impacts discussion, the Board discussed simplifying the process if possible and including a more direct assessment of impacts in relation to finances. Specifically, Board members were interested in being able to assess the incremental impacts of new development to the overall tax rate and cost to provide County services. They also requested that the database be updated semi-annually and be a working database that staff can draw on for reports.

Since these meetings, staff has accomplished several objectives.

- (1) Based on the Board's feedback, staff considered ways to simplify the cumulative impact tracking method. All of the steps are necessary in order to produce a quality product that is replicable and does not require significant data verification every time the database is updated. Staff's efforts to simplify the scope will likely come as part of the actual analysis of impacts and limiting the areas (water, sewer, etc) that staff assesses into smaller more manageable groupings.
- (2) Based on the Board's feedback, staff met with the manager of Financial and Management Services to

discuss broadening out the cumulative impact analysis to also look at fiscal impacts. Due to the complexities of the issue, lack of fiscal impact data for older development projects, changes related to project-level fiscal assumptions, and changes to the uses of buildings, financial impacts are outside the scope of staff's current work program and would likely require outside consultant services to pursue further.

- (3) Staff met with representatives from J4C to discuss the methodology and data sources for their annual growth reports. The method that will be followed by staff is similar but more inclusive than J4C. The group's insight was helpful in forming ideas of categorizing neighborhoods and other potential data sources. Staff's database will also use similar data sources (like Real Estate Assessments and GIS) but will be able to pull directly from these sources. This will allow staff to refresh the data automatically every six months and map the data in GIS. Staff's database will also include all acreage parcels (parcels that are not included in a named subdivision such as Ford's Colony but still include residential units) and will differentiate between vacant parcels that can be developed into single-family homes and vacant parcels that are in common area or cannot be further developed. These considerations were not accounted for in the J4C report and could have measurable effects on cumulative impacts.
- (4) As part of a separate task associated with a request from the Hampton Roads Transportation Planning Organization (HRTPO), staff developed an existing land use map for the County. This involved manually classifying more than 38,000 parcels into broad land use categories. This is a good starting point for residential and commercial parcels for the purposes of the cumulative impact database; however, the classifications will need to be more specific and verified.
- (5) Staff completed classifying the existing residential development in the Jamestown District and is working toward completion of the Berkeley District. This has included more than 10,000 parcels and has involved multiple re-workings of the tracking spreadsheet to include as much information as possible. Staff has also determined a way to more easily incorporate approved but not yet built development into the current spreadsheet. As a result, staff has been including this information during the initial phase of spreadsheet development rather than waiting to later phases. Staff's goal is to finish classifying existing residential developments by the Board work session in July. A table demonstrating staff's progress on this item is found in attachment 1.

Staff anticipates having a draft report of the raw residential figures ready for review by the Policy Committee this fall for inclusion in the Planning Commission Annual Report. At this time staff also hopes to present the Committee with proposed methodologies for assessing impacts of residential development for comment.

Staff is not requesting additional feedback at the Policy Committee meeting, but will be available at the meeting for questions.

Attachments:

1. Jamestown District residential tracking table



MEMORANDUM COVER

Subject: Transfer of Development Rights (TDR) Feasibility Study: Market Analysis and Update

Action Requested: No action requested

Summary: This analysis and update is provided for informational purposes and to help in the final decision-making process later this year. Ms. Leanne Reidenbach will give a brief update at the work session for the benefit of the Board's ongoing discussion regarding the draft Economic Opportunity ordinance. When the remaining TDR Feasibility Study deliverables are finalized, the documents will be presented to the Board as a package by staff and DC&E at a work session in September or October where staff will look for guidance on how to proceed with TDR.


Fiscal Impact: N/A

FMS Approval, if Applicable: Yes No

Assistant County Administrator

Doug Powell _____

County Administrator

Robert C. Midaugh 

Attachments:

1. Memorandum
2. Market Analysis Methodology
3. Preliminary Sending and Receiving Area Guidance

WORK SESSION

Date: July 26, 2011

MEMORANDUM

DATE: July 26, 2011

TO: The Board of Supervisors

FROM: Leanne Reidenbach, Senior Planner
Allen J. Murphy, Jr., Director of Planning/Assistant Development Manager

SUBJECT: Transfer of Development Rights (TDR) Feasibility Study: Market Analysis and Update

Staff continues to work with the County's consultants, Design, Community, and Environment (DC&E) to complete recommendations on the feasibility of a Transfer of Development Rights (TDR) program. This work session and the attached information are intended to serve as a brief update on the progress of the TDR Feasibility Study for the benefit of the Board's ongoing discussions pertaining to Economic Opportunity (EO). To date, the following work tasks have been completed:

- Background research, comparative analysis, and kick-off work session (December 14, 2010);
- Stakeholder interviews (fall 2010 and spring 2011);
- Public forum (February 10, 2011);
- Contextual analysis showing how TDR could fit in with existing County programs (June 14, 2011 reading file item); and
- Draft market analysis (under review).

Outstanding work tasks include:

- Finalizing the market analysis, including looking at available land capacity in receiving areas;
- Developing recommendations; and
- Holding a work session with the Board this fall to discuss the results of the study.

Attachment No. 1 is a summary of the methodology for the market analysis for the TDR Feasibility Study. The specifics of the study are still in draft form and there are some additional analyses that DC&E will be completing in the next month related to land capacities before finalizing the document and providing the information to the Board. The market analysis identifies several prototypes for permitted development patterns to determine the costs to develop a piece of land, the profit margin a developer could expect to obtain, and the amount of money remaining above that profit margin that could fund the purchase of TDRs. DC&E examined the current three-acre by-right development scenario in A-1 as the sending area prototype. DC&E also considered a sending area prototype using a minimum lot size of 10 acres and will use this in the capacity analysis to simulate the impacts of pairing a TDR program with a down zoning of A-1 land. DC&E examined the following receiving area prototypes:

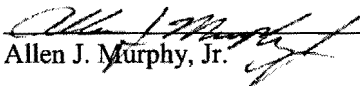
1. Single-family detached residential (similar to patterns in R-2 cluster areas like Windmill Meadows and Burlington Woods);
2. Townhome development (similar to patterns in R-5 areas like Warhill Green and Pocahontas Square);
3. Multi-family residential (similar to patterns in R-5 areas like Regency at Longhill and Station at Norge); and
4. Industrial/office development (similar to patterns in New Town and anticipated in the EO area).

In the end, the figures developed in the market analysis will identify what the market would dictate as a transfer ratio (for example, X transferred development rights from a sending area would result in Y units in a receiving area) to make a TDR program feasible. Using these transfer ratios, DC&E will use recommended sending and receiving areas to determine the number of development rights that could be accommodated in receiving areas and how many rights could be retired in sending areas. Staff provided starting points for sending and receiving areas based on prior feedback from the Board at its December 2010 work session and information gathered at February's public forum but notes that they are general for the purposes of the market analysis (see Attachment No. 2). If the Board were to decide to adopt a TDR program, these sending and receiving areas could be refined.

This analysis and update is provided for informational purposes and to help in the final decision-making process later this year. Staff will give a brief update at the work session for the benefit of the Board's ongoing discussion regarding the draft EO ordinance. When the remaining TDR Feasibility Study deliverables are finalized, the documents will be presented to the Board as a package by staff and DC&E at a work session in September or October where staff will look for guidance on how to proceed with TDR.



Leanne Reidenbach



Allen J. Murphy, Jr.

CONCUR:



Steven W. Hicks

LR/AJM/nb
TDRStudy_mem

Attachments:

1. Market analysis methodology
2. Preliminary sending and receiving area guidance

Attachment 1: Market Analysis Methodology

The methodology is based on the “residual land value” of a development project. The residual land value calculation is commonly used in the real estate development industry to determine if a developer could profit from purchasing the land and improving it in the manner specified in the analysis. All project costs and revenues (including expected profit) are calculated *except* the cost of the land. Any leftover positive cash-flow is considered “residual” land value.

If the residual land value is more than the actual cost of the land (i.e. residual land value of \$50 per square foot while the land costs \$40 per square foot) the project is feasible and the developer would purchase the land and build the project on it. If the land is more expensive than the residual land value, then the project is worth less than the land acquisition costs and the project is infeasible. The developer would analyze another project or decide not to purchase the land at this time.

The residual land value calculation includes an acceptable profit margin for the developer, yet some projects result in additional profit (i.e. if the residual land value is \$50 per square foot while the land costs \$40 per square foot, the developer would accrue \$10 per square foot in addition to the profit margin already calculated). This profit that is greater than the profit margin is more discretionary than the profit included in the profit margin that is required to continue business. It could be used for research and design, it could be invested in contingencies for other projects or it could be reinvested into the same project to provide more amenities. In this case we assume this profit could be used to purchase TDR bonus units defined as a unit that makes the gross site residential unit density or commercial floor area ratio higher than the baseline density permitted “by right” under the James City County Code

The model strives to accurately portray how developers approach the economics of development, and in so doing is broken into three basic sections: development program, project revenues, and projects costs. The variable inputs for each of the five prototypes will be described in a separate section of the final market analysis.

Attachment 2: TDR Market Analysis – Sending and Receiving Areas Guidance*

The following summary outlines areas for DC&E to use in their development of a market analysis for the TDR feasibility study. The purpose of identifying these preliminary areas is to get a sense for how many units could be available to transfer and how many of these units could be absorbed into receiving areas. This will help to calculate the balance of areas, figure out how much a sending area landowner may be willing to accept for a development right, and how much that right would be worth to a developer. The areas were identified based on guidance from the Board of Supervisors at their December work session, work related to identifying Urban Development Areas, and input received at the February public forum.

If the Board wishes to pursue a TDR program at the conclusion of the feasibility study, the map of sending and receiving areas used as guidance for market analysis can be revisited and refined to make sure there is adequate infrastructure (water, sewer, roads) available or planned for the receiving areas.

**The guidance is for the purposes of determining acreage available, potential units that can be transferred, and capacity to absorb those units in receiving areas (to establish a balance between sending and receiving areas). Proposed boundaries may not actually match the areas identified below and may also need to be further refined at a future stage.*

Criteria for creating map

Sending Areas:

All A-1 or R-8 Zoning Districts that meet the following criteria:

- Outside the Primary Service Area
- Re-developable or undeveloped
- Not in an existing Real Estate Assessments-designated subdivision per the GIS layer
- Not inside RPA Areas
- Not government or utility owned
- Not already acquired through PDR or greenspace programs or by the Land Conservancy
- Exclude area that is designated Economic Opportunity on the Comp Plan

Receiving Areas:

- Economic Opportunity (EO) area
- Available mixed use areas (GreenMount- #13, Treyburn- #14, Lightfoot- #6, Williamsburg Crossing- #9, and Croaker Interchange- #5) as shown on the 2009 Comprehensive Plan Land Use Map and determined to have capacity during the Urban Development Areas certification process.
- A-1 and R-8 zoned parcels that meet the following criteria:
 - o Not located in an existing Real Estate Assessments-designated subdivision per the subdivision GIS layer
 - o Not a developed parcel (based on the improvement/land value ratio)
 - o Not including parcels preserved through the greenspace program or by the Land Conservancy
 - o Not located inside an Agricultural Forest District (AFD)
- Commercial and residential zoned areas inside Stonehouse
- Eastern State Hospital Campus
- Not inside RPA areas