

# **Policy Committee Government Center Complex Large Conference Room, Building A**

**February 7, 2011 - 6:00 p.m.**

## **A. Roll Call**

## **B. Minutes**

## **C. Old Business**

Development Standards Zoning Ordinance Updates

- [Pedestrian Accommodation Attachment 1 - Master Plan \(PDF\)](#)
- [Pedestrian Accommodation Attachment 2 - 2SSARpedrequirements \(PDF\)](#)
- [Pedestrian Accommodation Attachment 3 - Requirements \(PDF\)](#)
- [Pedestrian Accommodation Attachment 4 - Comparing Regulations \(Word Doc\)](#)
- [Pedestrian Accommodation - Memorandum \(Word Doc\)](#)
- [Timbering Memorandum \(Word Doc\)](#)
- [Lighting \(PDF\)](#)
- [Parking \(PDF\)](#)
- [Private Streets Attachment 1 \(PDF\)](#)
- [Private Streets \(PDF\)](#)
- [Sound Walls \(PDF\)](#)

## **D. New Business**

## **E. Adjournment**

All agendas are posted on this web site the Friday before each meeting. Copies of DRC minutes and staff reports may be obtained by contacting the Planning office.

## MEMORANDUM

**DATE:** February 7, 2011  
**TO:** Policy Committee  
**FROM:** W. Scott Whyte, Senior Landscape Planner  
**SUBJECT:** Development Standards – Outdoor Lighting

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### I. Outdoor Lighting

Currently the County regulates outdoor lighting through parking lot and sign lighting as well as some street light regulations in R-5-Multifamily Residential, PUD-Planned Unit Development, and MU-Mixed Use. The majority of requirements for lighting are contained in section 24-57(c) for parking lot design.

There are three requirements for lighting in parking lots:

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. Plans detailing the illumination patterns and specific design of all lighting fixtures shall be submitted for review along with the site plan.

There are two conditions that must be met by an applicant seeking 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 whichever is less:

- 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.

The exterior sign section of the zoning ordinance has many requirements for sign lighting that were recently amended. Requirements for R-5, PUD, and MU districts restrict the height of the street lights and require the light fixture to not cast glare to adjacent properties.

During the Comprehensive Plan revision process, staff was asked to review our existing regulations on outdoor lighting and consider adding dark sky principles to other areas of development that are not currently addressed. Dark sky principles have been incorporated into the regulations for parking lot lighting, but not to all other areas of development. Dark sky principles are methods of decreasing the effects of man made light pollution. Light pollution occurs when outdoor lighting is misdirected, misplaced, unshielded, excessive or unnecessary. These conditions cause glare and light trespass, which

in some cases result in a nighttime urban “sky glow” which indicates wasted energy and obscures the stars overhead. By promoting the use of high efficiency fixtures that direct the light only where it is needed, the County can combat the effects of light pollution.

## II. Discussion items

### A. **Dark Sky Principles**

#### 1. Description of issue/problem

- *As development begins to fill within the Primary Service Area and reaches to the rural areas of the County, the potential of losing dark sky qualities increase. Currently the dark sky principles have been applied mainly to parking lots, and per the Comprehensive Plan, staff is considering ways to further encourage these principles and include them in other areas of development such as buildings, walk ways, public areas, roadways and other specialized uses.*

#### 2. History

- *Section 24-57(c) first appeared in the ordinance in 1988, and required that adequate lighting be provided in parking lots where the primary use would be in operation at night. It also restricted the height to no more than 30’. The lights had to be positioned so as not to cause objectionable glare on adjacent properties.*
- *Amendments were made in 1991 that restricted the height to 20’ without a waiver, required that no fixture was to be mounted at a greater angle than 15 degrees from horizontal. It also required a lighting plan that showed illumination patterns and fixtures proposed. A waiver application process was established to increase the height of the lights poles with the Planning Director’s approval, and a criterion was established for the waiver.*
- *The latest amendments were made in 1999 and changed the height limit to 30’ with waiver criteria to increase the height. Recessed fixtures and opaque casing mounted horizontally were added and are now required.*

#### 3. Comprehensive Plan GSAs, public input, and PC and BOS direction

- *CC 3.10 - Encourage on-site lighting that enables the retention of the rural “dark sky” qualities of the County by promoting the use of cut-off and glare reducing fixtures and low intensity lighting. Adopt guidelines that identify recommended lighting designs that address a wide range of lighting applications.*
- *PF 1.4.1 addresses the need to use high efficiency lights in our public facilities.*
- *H 1.3 – Require the provision of adequate street lighting, safe and convenient pedestrian circulation, and appropriate interconnections between residential developments.*
- *The sustainability audit recommends the following actions:*
  - *The lighting regulations in sec. 24-57(c) should establish maximum footcandle limits on the site and at residential property lines. Lighting intensity limits should be set at a maximum of 10 footcandles on the site and a maximum of 0.1 footcandle at a residential property line. Any site plan application for new or revised lighting should be required to include a photometric plan illustrating the proposed layout and footcandles of site lighting.*
  - *Metal halide or LED lighting is preferred over low pressure sodium.*
  - *The lighting regulations of sec. 24-57(c) should provide both maximum and minimum lighting requirements to ensure that commercial sites are adequately lit for security purposes, but in a manner that minimizes light pollution.*

4. Solutions and policy options

- *Several dark sky organizations exist that provide many sample lighting ordinances and lighting guidelines that promote the dark sky principles.*
- *Fairfax County has one of the most comprehensive outdoor lighting ordinances in the State and several other localities have used it as a model. All outdoor lighting requirements can be found in one section of the ordinance. The ordinance covers general performance standards for lighting, standards for certain commercial uses, and outdoor recreation and sport facility lighting. They have required full cut off fixtures for canopies, buildings, walls, walk ways and parking lots. They have also applied dark sky principles to lighting requirements for signs, directional lighting, HOA owned open space, construction sites, commercial uses, and athletic uses. A very extensive guide to their outdoor lighting standards has been created and developers can use it while preparing their lighting plans.*
- *The Community Appearance Guide could be expanded to cover a broader range of lighting suggestions or a separate guide could be created just for outdoor lighting. The suggestions would promote dark sky principles to reduce light pollution and promote energy efficiency.*
- *Added expense to developer through more expensive fixtures should be offset by energy savings that the fixtures can provide, and in many cases the fixtures that provide the directional features desired are not any more expensive.*

5. Staff recommendations

- *Staff recommends adding more language to the ordinance that requires the use of energy efficient fixtures that shine downward and don't cast glare, in areas other than just parking lots. They could be required for buildings, walk ways, canopies, and other public areas.*
- *Staff recommends expanding the Community Appearance Guide to include more suggestions on outdoor lighting techniques that promote dark sky principles or creating a separate guide for all outdoor lighting applications. The Community Appearance Guide should be expanded if only a small amount of the suggestions are proposed and a new guide should be created if it is decided to include a large amount of suggestions as Fairfax County has done. These could be used for a trial period so staff can evaluate how well the guidelines are received and applied on a voluntary basis. If needed, ordinance requirements could be added at a later time.*

**B. Comprehensive Outdoor Lighting Section**

1. Description of issue/problem

*Current lighting regulations are mostly contained in section 24-57 for parking lot design. More regulations that restrict height and glare on adjacent properties applicable to streets and public areas are contained in the PUD, MU, R-5, and A-1 districts, and those applicable to signage are found in the exterior sign section. This requires applicants to search through many areas of the zoning ordinance to find lighting regulations.*

2. History

- *See A above.*

3. Comprehensive Plan GSAs, public input, and Pc and BOS direction

- *See A above.*

4. Solutions and policy options

*One way to address this problem is to create a separate section just for outdoor lighting that would address all outdoor lighting regulations in one place. Many other localities in the State have done this, with Fairfax County's being the most comprehensive. A new outdoor lighting section could address all kinds of outdoor lighting situations that would not be practical to list in separate districts. The new section of the ordinance could address areas such as buildings, pedestrian accesses, and specialized uses such as various athletic fields and apply performance standards to reduce light pollution and promote energy.*

5. Staff recommendations

*Staff recommends locating all lighting regulations into one outdoor lighting section and modeling the ordinance's format to Fairfax County's, while addressing any concerns that may be unique to James City County.*

**III. Conclusion**

Staff recommends adding more language to the ordinance that requires the use of energy efficient fixtures that shine downward and don't cast glare, in areas other than just parking lots. Staff also recommends that the Policy Committee support consolidating requirements pertaining to lighting in a comprehensive outdoor lighting section in the zoning ordinance. Even if no new regulations are added, having the entire outdoor lighting requirement in one area of the zoning ordinance would result in an easier-to-read ordinance. Staff also recommends that the Policy Committee support creating a guide for outdoor lighting that can give developers suggestions on how to apply outdoor lighting in the County and to use the guide over a trial period to assess how well the guidelines are received and applied.

## MEMORANDUM

**DATE:** February 7, 2011  
**TO:** Policy Committee  
**FROM:** Luke Vinciguerra, Planner  
**SUBJECT:** Development Standards - Parking Ordinance

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### I. Parking

Parking standards can generally be found in sections 24-52 through 61 of the Zoning Ordinance, establishing among other items, minimum off-street parking requirements and design standards. Minimum parking standards are an essential component of a zoning ordinance as it helps ensure adequate parking during periods of high demand. This is not only important from a business perspective, as it helps ensure that customers can find a parking space and are not drawn to another store, it also prevents unauthorized parking on streets and stacking on adjacent roads. Another critical element of the parking ordinance is parking lot design, specifically stall and aisle size. This is regulated to ensure that vehicles can safely pass and avoid collisions within parking lots. Two other main provisions within parking lot design, lighting and landscaping, have been covered in separate staff reports.

Within the category of Development Standards staff has been reviewing the parking ordinance to ensure consistency with State regulations and the American Planning Association Best Management Practices, while including revisions recommended in the 2009 Comprehensive Plan. Given this scope, staff has investigated ways to help reduce the likelihood of excessive parking, alleviate congestion on adjacent roadways, increase consistency with the landscape ordinance, and reduce parking lot visibility in Community Character Areas.

### II. Discussion Items

#### A. Excessive parking

##### 1. Description of Issue

- *The method the County uses to calculate minimum parking standards is still considered “the Golden Rule” for suburban development; however, staff is aware that in some instances the County’s minimum ordinance standards require well more than what actually is necessary for the successful operation of a business.*
- *The Zoning Ordinance generally categorizes retail uses as “High Demand” which staff has found to be excessive in some circumstances. For example, parking for drug stores and fast food restaurants with drive-throughs would require 1 parking spot for every 200 square feet. This is considered excessive since drive-through reduce the number of customers in the store.*
- *A recent example of where minimum ordinance standards were higher than needed was the Tractor Supply case on Richmond Road. An establishment that sells specialized farming goods may not need the same parking requirements as a convenience store. In this circumstance, the ordinance would have required 138 parking spaces while the applicant thought 70 was sufficient.*
- *Many County documents suggest reducing impervious cover to the extent possible. One*

large source of impervious cover is parking lots. A way to reduce impervious cover is by providing pervious pavers on acceptable soils.

2. History

The parking ordinance was created in 1985 and has had more than a dozen updates to date. In 1999 the Board approved significant revisions to the parking ordinance that permitted off street parking, added minimum geometric standards for angular parking, provided an opportunity for shared parking, recognized mass transit, required bicycle facilities for larger development and made some changes to categorical groups.

3. Comprehensive Plan GSAs, public input, Sustainability Audit, and PC and BOS Direction

- Sustainability Audit Recommendation #102 - Some of the retail uses listed as high demand parking, requiring one space per 200 square feet could be considered moderate demand parking where one space per 250 square feet would be sufficient. Certain retail uses such as grocery stores/supermarkets require at least one space per 200 square feet, but many other general retail uses don't require this amount of parking.
- Sustainability Audit Recommendation #103 - There should also be maximum parking limit, with allowances for parking in excess of requirements where demonstrated to be necessary. That maximum parking limit could be set at 120% of minimum parking requirements.

4. Solutions and Policy Options

- Some localities approach this issue by listing nearly every conceivable use and assigning a parking requirement. Staff does not recommend further categorizing uses, as no list would be exhaustive. Rather, staff proposes an administrative waiver process by which applicants can propose an alternative number of spaces less than the ordinance if they can demonstrate to the Planning Director why the ordinance requirements are not applicable and why an alternative number of spaces would be realistic based on data from existing similar establishments. This administrative waiver process would be simpler and quicker for an applicant than the current requirement of going to the DRC.
- Consistent with best management practices, staff also recommends establishing a maximum parking provision, stating that no more than 120% of the minimum parking is acceptable without approval from the Development Review Committee (DRC). The DRC would evaluate the necessity of the extra parking and would need to be convinced of its necessity after reviewing why the applicant cannot:
  - Utilize a shared parking agreement (with a neighboring development) and/or
  - Implement a parking management plan (varying hours, incentives for employees to use transit).

This maximum requirement would be waived if a parking garage is used. The DRC, at its discretion, could approve additional parking and could require pervious pavers for the excess parking should conditions allow it.

- Staff will also review all High Demand, Category A uses (1 parking space per every 200 sq ft) to see if they could be moved to Moderate Demand, Category B (1 space per every 250 sq ft).

**B. Parking lot connectivity**

1. Description of Issue

- Currently, adjacent contiguous parking lots on separate parcels are not required to connect to each other. Should a motorist wish to drive from one store to another on a neighboring parcel, the driver would likely have to re-enter the primary road to make the maneuver. This can be an issue for smaller strip retail establishments in close proximity.

- *Access management and connectivity become more of an issue as a locality develops. The more congested a roadway becomes the more planners look for opportunities to increase connectivity between developments. An example of an opportunity to connect internally is between Jimmy's Pizza and 7-11 on Richmond Road.*
- 2. History
  - *The current ordinance only requires demonstration of functional efficiency within a parking lot, but does not discuss connections.*
- 3. Comprehensive Plan GSAs, public input, Sustainability Audit, and PC and BOS Direction
  - *T.1.2 - Expect new developments to maintain and acceptable level of service on the surrounding roads and intersections consistent with the land use context (rural, suburban, urban) and the function classification of the roadway. Ensure that new developments do not compromise planned transportation enhancements by:
 
    - o *T.1.2.1 - Limiting driveways and other access points and providing shared entrances, side street access and frontage roads.*
    - o *T.1.2.2 – Providing a high degree of inter-connectivity within new developments, adjoining new developments and existing developments using streets, trails, sidewalks, bikeways and multi-use trails.*
    - o *T.1.2.3 - Concentrating commercial development in compact nodes or in Mixed Use areas with internal road systems and interconnected parcel access rather than extending development with multiple access points along existing primary and secondary roads.**
  - *Sustainability Audit recommendation #98: In coordination with the VDOT driveway standards, the zoning ordinance should encourage shared driveways and service drive connections between adjacent land uses.*
  - *There was no specific PC or BOS direction provided regarding this topic.*
- 4. Solutions and Policy Options
  - *Consistent with best management practices, staff proposes that new commercial development where adjacent parcel(s) is/are designated Community Commercial or Neighborhood Commercial on the Comprehensive Plan attempt during a rezoning, special use permit, or site plan to connect parking lots internally using a stub-out. This strategy helps to increase connectivity, reduce dependence on primary roads, and facilitates businesses sharing customers. One problem with requiring internal connections is that it can create disputes between neighbors should there be a blocking of spaces or cut-through traffic. Staff believes that requiring discussions among adjoining property owners would be a positive step and could avoid these problems. During review of a conceptual plan, site plan, or legislative application, staff would ask for verification that an attempt was made to connect to a neighboring parcel (should a stub-out not be proposed). Should stub-outs not be shown on a plan, a written response stating an internal connection was considered and the logic behind its exclusion would be sufficient. Staff is examining ways to incentivize additional follow-through on this concept.*

**C. Consistency with the Landscape Ordinance**

1. Description of Issue
  - *There is a perceived conflict between ordinance section 24-57(a) for parking lot design and section 24-97(b)(4) for parking lot landscape design. Landscape islands are required a minimum of every 150' by the parking lot design standards, while trees are required a minimum of every 75' by parking lot landscape standards. Applicants frequently question what areas are considered within the perimeter of the parking lot*



and feel that a 75' spacing of trees is too close. They feel that the requirement is too stringent and that a potential solution of staggering the trees is often difficult from a design standpoint. Historically, staff has been able to compromise with landscape islands and tree every 90-99'.

2. History

- An ordinance revision in the 1990s required trees to be evenly distributed throughout the interior of the parking lot. Trees were required to be spaced no further than 75' apart. This provision has been criticized as being inconsistent with the maximum parking island spacing requirement. Refer to the Development Standards – Parking Lot Landscaping memo for more detail.

3. Comprehensive Plan GSAs, public input, Sustainability Audit, and PC and BOS Direction

There is no specific GSA, sustainability audit recommendation, PC or BOS direction provided regarding this issue. Refer to the Development Standards – Parking Lot Landscaping memo for more detail.

4. Solutions and Policy Options

- Staff recommends reducing the 150' maximum parking bay requirement to 90' (consistent with staff's recommended parking lot tree placement policy) to avoid confusion between the two ordinance sections. Staff may also recommend referencing the proposed landscape ordinance requirement instead of explicitly restating it.

**D. Parking lot location**

1. Description of Issue

- The current ordinance does not restrict where a parking lot is built on a developing property. In Community Character Areas such as Norge which have building facades immediately adjacent to the street, a new development with parking in the front could be inconsistent with adjacent development and the guidelines for that area. Examples of locations in Community Character Areas have large parking areas in the front include Crosswalk Community Church (formerly the music building) and Fleet Brothers (formerly Basketville).

2. History

The current ordinance only restricts parking to be located on the same lot as the structure or use to which it serves. The Primary Principles for Five Forks Area policy and the design guidelines for the Toano Community Character Area are examples of existing policies that support this concept.

3. Comprehensive Plan GSAs, public input, Sustainability Audit, and PC and BOS Direction

T 4.1 – Guide new developments in designing roadway and parking areas that reduce that visual impact of auto-related infrastructure, specifically in Community Character Areas.

- Sustainability Audit Recommendation #90: The MU (Mixed Use) district should encourage parking to be located to the side or rear of the building. Large front yard parking lots should be discouraged in the LB and B1 districts.
- There was no specific PC or BOS direction provided regarding this topic.

4. Solutions and Policy Options






- Staff recommends incentivizing this concept through reduced parking lot landscaping requirements (as the parking lot would be screened by a building landscaping may not be necessary) or other means.

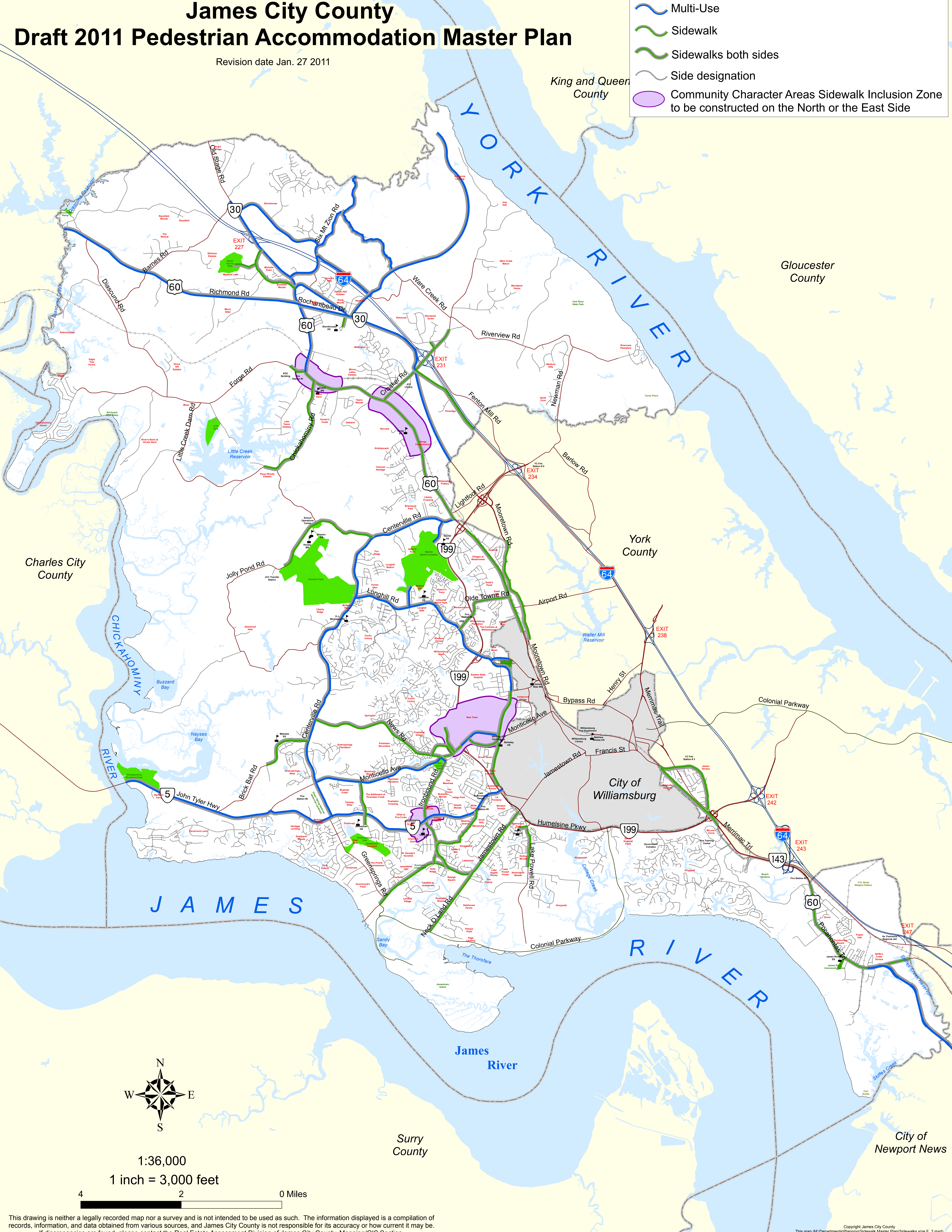
**III. Conclusion**

Staff has been reviewing the parking ordinance to ensure consistency with the American Planning Association Best Management Practices. Given this scope, staff has investigated ways to help alleviate congestion on adjacent roadways, increase consistency with the landscape ordinance, reduce parking lot visibility in Community Character Areas, and reduce excessive parking. The items mentioned above are recommended solutions to specific actions stated in the Comprehensive Plan and the Sustainability Audit. They reflect best management practices and efforts in other staff reports. Staff recommends the Policy Committee support these revisions which will help reduce the impacts of auto related infrastructure and impervious cover.

# James City County Draft 2011 Pedestrian Accommodation Master Plan

Revision date Jan. 27 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



Charles City County

King and Queen County

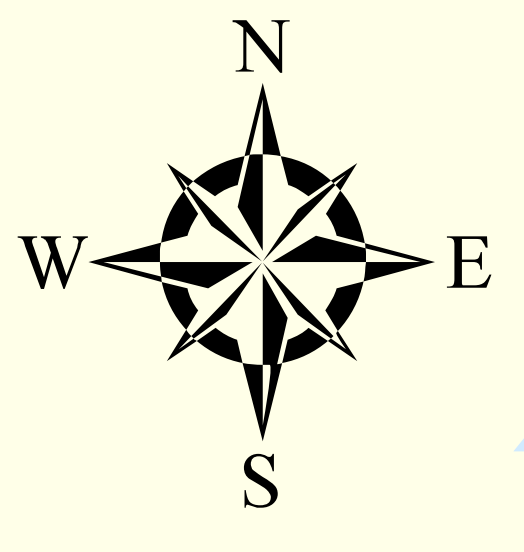
Gloucester County

York County

City of Williamsburg

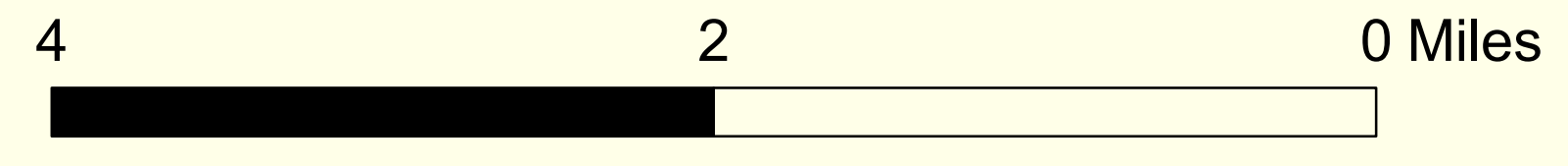
Surry County

City of Newport News



1:36,000

1 inch = 3,000 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.

Attachment 3: Proposed requirements

	Accommodation for Residential Development	Accommodation for High Density Residential Development	Accommodation for Residential Development (private)	Accommodation for High Density Residential Development (private)	Accommodation for a Multi-family Residential	Accommodation for a Multi-family Residential Development (private)	Accommodation for Industrial Complexes	Accommodation for Office Parks
<b>Minimum Facility Requirements</b>								
Sidewalk on one side	SSAR		JCC					
Sidewalk on both sides		SSAR		JCC	SSAR	JCC		
Internal trail system	SSAR(o)	SSAR(o)	JCC(o)	JCC(o)	SSAR(o)	JCC(o)		
Connection to internal activity centers	JCC	JCC	JCC	JCC	JCC	JCC		
Connection to frontage road(s)	JCC	JCC	JCC	JCC	JCC	JCC		
Pedestrian connection to adjacent school, park, rec center	JCC	JCC			JCC			
Connection to parking lots and buildings					JCC	JCC	JCC	JCC
Sidewalk/trail on frontage road as shown on 2011 Pedestrian Accommodation Master Plan	JCC	JCC	JCC	JCC	JCC	JCC	JCC	JCC

Key

SSAR- required by SSAR

SSAR(o)- option under SSAR

JCC(o)- proposed option under County ordinance

JCC- proposed County requirement

# Pedestrian Accommodations

- What is considered a Pedestrian Accommodation?
- How is it related to the legislation & the regulation?
- How will it be implemented?



## Pedestrian Accommodations

1. **Legislative goal: To ensure “the connectivity of road and pedestrian networks with the existing and future transportation network”**
2. **Pedestrian accommodation standards apply only along newly constructed streets and network additions**
3. **VDOT will only maintain compliant facilities within its R-O-W**
4. **All SSAR related pedestrian accommodations within the R-O-W must meet ADA requirements**
5. **If development is within more than one pedestrian facility category, the higher requirement shall apply**
6. **Standards are generally based upon density, proximity to public schools in the Compact & Suburban area types & functional classification of streets**

## Pedestrian Accommodations Based Upon Lot Size & F.A.R.

- **Higher Density Developments** - Defined as those with:
  - Median lot size of one half acre or less (for detached residential developments)
  - Floor area ratio (FAR) of 0.4 or greater
- Pedestrian accommodations must be provided on both sides of the street or alternate provisions that provide equivalent pedestrian mobility
- DA's designee will determine what constitutes "equivalent pedestrian mobility"
- Variables which the designee must evaluate include:
  - Ease of access to lots and properties within the development
  - Ease of access to adjoining properties and existing pedestrian accommodations
  - Square footage of the developer's "equivalent" proposal as compared to the area of providing sidewalks on both sides of the street
  - Pedestrian safety and exposure to vehicle traffic

## Pedestrian Accommodations Based Upon Lot Size

### Medium Density Developments – Defined as lots with:

- Median lot size greater than one half acre but no larger than two acres
- Medium density developments must provide pedestrian accommodations along at least one side of the street or an equivalent pedestrian mobility system

### Low Density Developments – Defined as lots with:

- Median lot sizes greater than two acres
- Are not required to construct pedestrian accommodations unless required by another section of the SSAR



## Pedestrian Accommodations Near Public Schools

1. Requirement applies to developments within one-half centerline mile of a public school (measured by centerline roadway mileage)
2. Only applies to developments located in the Compact and Suburban area types
3. Regardless of lot size or floor area ratio
4. Pedestrian accommodation requirement: Provide facilities along at least one side of the street or provisions made that provide equivalent pedestrian mobility
5. For “high density” developments, pedestrian accommodations must be located on both sides of the street
6. Pedestrian accommodations are not required to be built to the school property unless the development extends to the school

## **Pedestrian Accommodations Collector & Arterial Roads**

### **Requirement for Collector and Arterial Roads with Two Lanes:**

- Sidewalks shall be located on at least one side of newly constructed streets to be maintained by VDOT**
- Sidewalks may be located immediately adjacent to the street only if they are at least eight feet wide**

## **Pedestrian Accommodations Collector & Arterial Roads**

### **Requirement for Collector and Arterial Roads with Three or More Lanes:**

- Sidewalks shall be located on both sides of newly constructed streets**
- Sidewalks may be located immediately adjacent to the street only if they are at least eight feet wide**

## **Pedestrian Accommodations Stub Out Connections**

- **When connecting to an existing stub out, the newly constructed street will be required to provide similar pedestrian accommodations**
- **Developer building new section of stub out will incur cost to connect pedestrian facilities**
- **District Administrator's designee will make the determination as to what will constitute "similar" in these situations**

## **Pedestrian Accommodations Multi-use Trails, Shared Use Path & Agreements**

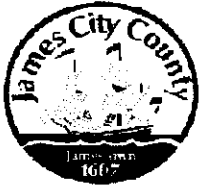
- **Sidewalks will be constructed in accordance with the Subdivision Street Design Guide**
- **Bicycle facilities and shared use paths will be built in accordance with VDOT's Road Design Manual**
- **If pedestrian accommodations are located outside of the VDOT R-O-W:**
  1. **VDOT will not maintain pedestrian accommodations**
  2. **VDOT will enter into an agreement with the locality describing how the locality will maintain the pedestrian accommodations**
  3. **VDOT will only enter into agreements with localities**

## **Pedestrian Accommodations Noncompliant Facilities**

- **Any pedestrian accommodations not built to VDOT standards will be considered noncompliant**
- **These accommodations will not qualify for maintenance unless a design waiver or exception is granted by VDOT**
- **If located in the R-O-W, land use permit must be issued by the DA's designee to the local governing body (unless a design waiver or exception is granted)**
- **Permit will state parties responsible for maintenance**
- **Permit applicant must be an entity that can assure ongoing maintenance (this is commonly the local government)**

## **Pedestrian Accommodations VDOT R-O-W**

- **VDOT will only maintain compliant pedestrian accommodations located within its R-O-W**
- **If developer constructs accommodations outside of the right-of-way, VDOT would enter into an agreement with the locality**
- **Agreement will discuss how the locality will maintain the accommodations**
- **Dedication or easement would be given to the locality for the maintenance of the accommodations on private property**



# Outline of Design and Inspection Procedures for Construction of Private Streets

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1. All private roads shall be designed and constructed in accordance with Virginia Department of Transportation standards and specifications.
2. All roads must be designed based on actual soils testing information. The Developer will employ a geotechnical testing firm to obtain representative CBR (California Bearing Ratio) samples. The location and number of the CBR samples are to be determined by the geotechnical engineer. The geotechnical engineer will then prepare a report which shall include:
  - a. Number and location (including map) of CBR samples and test results of the samples,
  - b. Soils analysis, and
  - c. Final pavement design including any revisions to the preliminary pavement design shown on the construction drawings. A copy of the geotechnical report shall be submitted to the County Engineer for approval prior to the issuance of a land disturbing permit for the project.
3. All backfill of pipes and related structures under the pavement shall be inspected and tested by the geotechnical engineer. Each soil lift is to be a maximum of 6 inches thick and compacted to a minimum of 95% Standard Proctor Density. Every lift shall be tested and compaction results will be certified to the County.
4. Prior to placement of any fill material, the subgrade shall be proof-rolled to identify unsuitable materials. Following certification of the subgrade by the geotechnical engineer, roadway fill can be installed. All fill sections shall be constructed with a maximum lift of 6 inches, compacted to 95% density and tested by the geotechnical engineer at intervals not to exceed 500 linear feet.
5. Once the road is to grade, all subgrade surfaces shall be proof-rolled to refusal prior to placement of any of the pavement aggregate or asphalt. Inspection and certification of the acceptability of the subgrade for paving shall be provided by the geotechnical engineer.
6. All aggregate base material quality, depth and compaction shall be tested and certified by the geotechnical engineer. The stone in all roadways shall achieve 100% compaction. Stone depth shall be measured every 100 feet on alternating sides of the road.
7. Prior to placement of any asphalt, the stone shall be proof-rolled and inspected by the geotechnical engineer for acceptability for paving. Following approval of the stone base, any required tack coat shall be applied and documented by the geotechnical engineer. The asphalt shall be placed following the VDOT roller pattern and control strip procedure. All asphalt surfaces shall achieve at least 98% compaction tested every 100 feet on alternating sides.
8. Documentation shall be provided to the County Engineer throughout the construction process. Prior to the release of any performance surety, certification must be provided to the County Engineer to substantiate the release being requested. Application for final release of the surety shall be accompanied by geotechnical engineering statements and certification the subject private streets have been constructed in accordance with the approved plans and applicable VDOT standards.



## MEMORANDUM

**DATE:** February 7, 2011  
**TO:** Policy Committee  
**FROM:** Luke Vinciguerra, Planner  
**SUBJECT:** Development Standards - Private Streets

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### I. Private Streets

The Development Standards section of the Zoning Ordinance update includes a review of policies and ordinances related to private streets. James City County has a select number of areas with private streets and by policy, does not encourage them in planned unit developments and residential communities as they could become a liability issue. From a planning perspective, private streets can be an excellent tool to satisfy a design or aesthetic need. Additionally, private streets provide developers the option for gated communities as roads that are maintained by the State cannot restrict access. It is also common for industrial and commercial developments to have their own internal private road network. Private roads are often necessary for retail developments due to ambiguity between what is a street and a parking lot, creating situations where VDOT cannot take over maintenance because of the design. Applications for private streets may increase as developers attempt to avoid the connectivity requirements of VDOT's new Subdivision Street Acceptance Requirements (SSAR) regulations.

The Zoning Ordinance permits private streets in the following districts and circumstances:

- Qualifying Industrial Parks (Section 24-62) in the M1-Limited Business/Industrial, M2-General Industrial, RT-Research and Technology, PUD-C-Planned Unit Development Commercial, and MU-Mixed Use districts;
- Manufactured Home Parks (Section 24-181);
- R-4-Residential Planned Community (Section 24-276);
- R-5-Multi-Family Residential (Section 24-314);
- PUD, Planned Unit Development (Section 24-497);
- MU-Mixed Use (Section 24-528); and
- Generally in townhome and condominium development (Section 24-42).

Recent examples of developments with private streets include Colonial Heritage, Liberty Crossing, and Pocahontas Square. Portions of streets in New Town and Weatherly at White Hall are also private for alleys and streets with specific design features, while the majority is public and within the State's maintenance system.

Per discussions with the County Engineer and a review of case history, the private streets policies and ordinances work well, and there are no obvious problems that require Zoning Ordinance revisions; however, Planning Staff has identified a few ordinance inconsistencies that may need updating to clarify where private streets are permitted, how to apply for them, and how modifications to construction standards can be obtained.

## II. Discussion Items

### A. Consolidated Requirements

#### 1. Description of Issues

- *Currently, different zoning districts that permit private streets have their own requirements, including approval processes that sometimes differ. For example, the Mixed Use district requires private streets to be approved by the Board of Supervisors and gives the Planning Commission the authority for any construction standard waiver, while the Planned Unit Development district lacks any method for a construction waiver. As stated earlier, private streets are sometimes necessary to achieve a design goal. Theoretically, there may be the need for a mechanism for a developer to propose an unusual street feature that wouldn't be permitted by VDOT in the PUD district. Without it, the County Engineer enforces the same minimum construction standards as VDOT.*
- *Additionally, Section 19-53 of the Subdivision Ordinance states, "There shall be no private streets permitted in any subdivision except where permitted by the zoning ordinance... however, private streets may be allowed in townhouse and condominium subdivisions if the private streets are approved by the commission..." The R-2 district, which permits attached housing by special use permit, doesn't generally permit private streets, thus creating confusion to someone not familiar with the ordinances.*

#### 2. History

- *The private streets sections have been added to the ordinance over time as the need for ordinance clarifications arose. Most of the private street policies were developed in the late 1980s and early 1990s. The most recent addition was the construction and design waiver process to the Mixed Use District in 2001.*

#### 3. Comprehensive Plan GSAs, Sustainability Audit, public input, and PC and BOS direction

- *There are no GSAs, input, or other direction pertaining to this topic.*

#### 4. Solutions and Policy Options

- *To address the issues mentioned above, staff recommends consolidating the private streets requirements into one section and making them as consistent as possible to provide clear understanding where private streets are permitted and how to proceed with the approval/modification process.*

#### 5. Staff recommendations

- *Staff recommends the Policy Committee endorse consolidating and increasing consistency among the private street requirements.*

## III. Conclusion

As private streets are a needed tool when VDOT approval cannot be obtained, staff is reluctant to recommend further restrictions. As stated earlier, the County's private street policies and ordinances work well; however, there are some inconsistencies that can be addressed during the Zoning Ordinance update to provide clarity. Staff recommends the Policy Committee endorse the changes stated above.

### Attachments:

1. County Engineer's private street requirements

## MEMORANDUM

**DATE:** February 7, 2011  
**TO:** Policy Committee  
**FROM:** W. Scott Whyte, Senior Landscape Planner  
**SUBJECT:** Development Standards -Sound Walls

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### I. Sound Walls

Currently the County has no ordinance requirements or policies regarding sound walls, which are also referred to as noise walls. During the 2009 Comprehensive Plan revision, a Community Character action directed staff to look into drafting a sound wall ordinance or policy through which the County could have input into the placement, height, construction materials, and landscape treatments of sound walls. Previous sound wall applications have been proposed and designed by the Virginia Department of Transportation (VDOT) with construction funded by the federal government and VDOT, or private donors. Per the scope of work for Development Standards, staff has researched the criteria for sound wall placement, how the projects are funded, and the different construction techniques and finish material options to determine the County's role in these decisions.

### II. Discussion items

#### A. **Criteria for sound wall placement**

##### 1. Description of issue /problem

*In 1989 VDOT established a policy to deal with the impact of highway traffic noise on adjacent properties. The policy is called VDOT's Noise Abatement Policy and is based on Federal Highway Administration (FHWA) regulations. To determine when a sound wall is needed on federally funded projects, VDOT will conduct studies on highways built in a new location, existing highways that have significant redesigns, or on highways where the number of through lanes is being increased. With non -federally funded projects, localities can get partial funding from VDOT if the project meets the requirements in the State's Noise Abatement Policy.*

*Using computer models to predict expected noise levels, VDOT can identify noise impacts against VDOT and FHWA criteria. If impacts are identified, then VDOT engineers must investigate noise reduction options, including shifting the road away from the affected properties, reducing the speed limit, restricting heavy truck traffic on the road, designing the road so its surface is lower through the affected area, or creating a natural sound barrier. If designing the road differently will not reduce noise, VDOT engineers then consider noise walls and earth berms. Because of the high number of variables involved, VDOT roadway designers cannot predict if noise walls can be constructed until the road's specific location is determined, o a decision about whether a highway project will include noise walls cannot be made until after final location and design public hearing plans are ready. VDOT holds citizen information meetings periodically as construction plans are developed, in which affected citizens*

can vote on whether they want the walls built, voice concerns, and give input on desired finishes.

2. History

- Sound walls were a hot topic in the County after the Route 199 sound walls were constructed by College Creek. These walls were funded by private donations. Concerned citizens complained that the walls were ugly, blocked a desirable view of the creek, and did not have landscaping or much area to install landscaping.
- The County currently has no policies or zoning ordinance regulations concerning sound walls and staff was unable to find any other localities that have sound wall requirements.

3. Comprehensive Plan GSAs, public input, and PC and BOS direction

- PC members asked staff to research the feasibility of regulating sound wall treatments for height, construction materials, landscape treatments and finishes.
- CC 3.11 – Consider adopting a policy or ordinance in coordination with VDOT that addresses the need for guidelines for sound wall design and landscape treatment.

4. Solutions and policy options

- The location and height of the walls are determined by VDOT; however, the County could give input at the public meetings understanding that the County has less ability to influence the height and placement than aesthetics since changing location or height requires a major redesign.
- A policy could be created that states the County's desired location and height specifications, but it would be difficult to establish specifications on height and placement that could be utilized for every situation that could be encountered.

5. Staff recommendation

- Staff recommends that a policy be drafted that addresses the County's desires regarding maximum height and the minimum amount of planting area expected in front of the wall. The policy could be made available to VDOT before plans are drawn to inform them of the County's preferences. In the end, VDOT would still have final say in the placement and height, but having the County's preference ahead of time will make it more likely that those preferences are applied.

**B. Funding**

1. Description of issue/ problem

- If a project qualifies, the cost to construct sound walls is covered primarily with federal funds. Since federal regulations require that noise mitigation be considered for qualifying construction projects, FHWA pays up to 90 percent of the cost, with VDOT and localities providing the remaining share.
- If it is determined that a sound wall is needed, they must not create a safety or engineering problem, must reduce noise levels by at least 5 decibels, and must cost \$30,000.00 or less per each noise impacted property.
- If the cost is more than \$30,000.00 they can still be built if a third party - someone other than VDOT or FHWA, such as a locality - funds the difference. The neighborhood can also participate as the third party or the affected residents can pursue additional funding sources. Third-party payments must be received before highway construction starts in order to minimize the cost of the walls.

2. History

- See A above.

3. Comprehensive Plan GSAs, public input, and PC and BOS direction
  - *See A above*
4. Solutions and policy options
  - *If a policy is pursued, staff recommends design guidelines and practices that:
 
    - *Continue to work within VDOT's directives with respect to sound walls and strive to make guidelines that will not adversely affect federal and state funding for these projects.*
    - *Continue to work with civic groups and local beautification funds to landscape projects that enhance the aesthetics of the walls.**
5. Staff recommendation
  - *Staff recommends any policy that is drafted be coordinated through VDOT and designed to not exceed or minimally exceed VDOT's projected costs of projects, as to not increase or minimize the County's share of the cost.*

**C. Construction materials and aesthetics**

1. Description of issue/ problem
  - *VDOT uses a specially-designed absorptive concrete material for ground-mounted noise walls and a lightweight material, typically absorptive metal, for structure-mounted walls, such as on bridges. Due to the type of noise environment, sound wall manufacturing capabilities and engineering costs, VDOT uses a standard aesthetic design. VDOT surveys the affected citizens and local governments as to the color and finish during various citizen information meetings.*
  - *VDOT encourages citizens and local government officials to make suggestions about how the noise walls will look within a project. Suggestions about the walls can be submitted during citizen information meetings and public hearings. These meetings are held periodically as construction plans for a corridor are developed.*
  - *If citizens or a locality requests an aesthetic finish that is significantly above the standard cost, VDOT allows these parties to fund the difference.*
2. History
  - *See A above*
3. Comprehensive Plan GSAs, public input, and PS and BOS direction
  - *See A above*
4. Solutions and policy options
  - *James City County currently has the ability to make suggestions on sound wall aesthetics during citizen information meetings and public hearings. In addition, if desired, the County can request and fund an aesthetic finish significantly above the standard cost. Staff recommends the County continue to provide suggestions at these meetings, and if needed, consider funding aesthetic upgrades on a case by case basis with the use of State Transportation source funding. A link that shows the acceptable materials and finishes is provided below: [www.cpsprecast.com](http://www.cpsprecast.com) (Coastal Precast Systems).*
  - *If a more formalized and consistent approach is desire, a policy would be more appropriate than an ordinance. Since the projects are in the VDOT right of way, designed by VDOT, and mostly funded by federal and state sources, the County does not have the authority to require any specifications.*
  - *A policy could be drafted that is coordinated through VDOT that states a range of acceptable finishes, colors, and landscape treatments. Landscape treatments may not*

*always be feasible, but by having the County's preferences beforehand, VDOT is more likely to accommodate our needs.*

- *Staff recommends that part of the policy include a provision that a staff member will attend VDOT public meetings concerning sound walls to ensure that the County's policy is considered in the design process.*

5. Staff recommendation

- *Staff recommends relaying County preferences on sound wall aesthetics on a case-by-case basis through existing mechanisms and drafting a policy coordinated through VDOT that addresses the County's preference for sound wall finishes, color, and landscape treatment.*

### **III Conclusion**

Staff recommends conducting additional research to determine the County's general preferences on maximum sound wall height, minimum planting areas in front of sound walls, sound wall finishes, color, and landscape treatment. Such research would be geared toward working within VDOT's directives to allow continued federal and state funding and would also identify any additional costs associated with aesthetic upgrades. These preferences would be relayed through existing mechanisms and incorporated into a County policy.

## MEMORANDUM

**DATE:** February 7, 2011  
**TO:** Policy Committee  
**FROM:** Leanne Reidenbach, Senior Planner  
**SUBJECT:** Development Standards – Timbering

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### I. **Timbering**

The section of the ordinance that primarily deals with timbering is Section 24-43. While timbering as a use is permitted in every zoning district, these sections outline requirements for buffer and setbacks for timbering activities. These requirements differ by zoning district. Finally, the definitions portion of the ordinance contains definitions for “timbering” and “setback for timbering” used within 24-43. Evaluation of the timbering ordinance was included in the scope of work item identified as Development Standards. No specific research items were identified, so staff approached this review with the intention of addressing changes to State code, best management practices recommended by the Virginia Department of Forestry (VDOF) and clarifying the intent of the section.

### II. **Discussion Items**

#### A. **Best management practices and State Code**

##### 1. Description of Element

- *Staff identified changes to best management practices for timbering and State Code amendments through meeting with the local VDOF representative and the County Attorney’s office.*

##### 2. History/Background

- *The timbering section of the ordinance dealing with buffers and setbacks was created and amended in 1996 to address concerns with timbering along Community Character Corridors both inside and outside the Primary Service Area. Different standards were adopted for the A-1, General Agricultural, district recognizing the State’s “right to timber” policies. Amendments to the tree replacement policies were proposed in 1997 but not adopted due to property owner opposition.*

##### 3. Comprehensive Plan GSAs, public input, and PC and BOS direction

- *Aside from public input calling for protection of rural viewsheds and agricultural and forestal businesses, there was no specific PC or BOS direction provided regarding this topic.*
- *ED 8.1. Support traditional agricultural and forestal uses where they exist through continued and improved ordinances and policies favorable to such uses.*
- *LU 6. Enhance and preserve the agricultural and forestal economy and character of Rural Lands and the predominately wooded, natural, and small-town character of the County.*

##### 4. Solutions and policy options

- Staff proposes the following minor adjustments to the ordinance:*
- *Amend the length of time the Planning Director has to review timbering proposals within a buffer from 14 to 10 days to be in accordance with State Code.*

- Add “or certified horticulturalist” in all instances where the recommendations of a State forester are referenced. This was requested by the local representative of VDOF.
- Amend the definition of “timbering” as follows:

- *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; 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 on file with the County or has received final approval; or
- (2) Removal of tree stumps or conduct of other land disturbing activities; or
- (3) Removal of dead, diseased, dying, or insect damaged trees.

5. Staff recommendation

- Staff recommends the above changes to the timbering section of the ordinance to bring it into conformance with current State Code and best management practices.

B. **Clarification**

1. Description of Element

- Staff examined the ordinance section for areas that may not be clear to applicants and landowners.

2. History/Background

- See A above.

3. Comprehensive Plan GSAs, public input, and PC and BOS direction

- See A above.

4. Solutions and policy options

Staff proposes the following minor adjustments to the ordinance related to timbering:

- Adding “Silviculture” to the general definitions section and referencing users to the definition for “timbering” proposed above. Silviculture is listed as a permitted use within the A-1 district but is currently not defined.
- Since the County does not have a standard application for timbering within a buffer, staff proposes replacing this text with “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 submit a written request...”
- Currently, the timbering buffer and setback requirements for the A-1 district are located in the A-1 district section of the ordinance in Section 24-215. Staff proposes moving this language and incorporating it into Section 24-43 so that all timbering buffer and setback regulations are located in the same place.

~~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.~~



*Staff also proposes the following language change:*

- (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 that are 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).~~

5. Staff recommendation

- *Staff recommends these minor changes to the timbering buffer and setback section of the ordinance to provide clarification for users.*

**III. Conclusion**

Staff recommends that the Policy Committee support the minor changes to sections of the ordinance that pertain to timbering to increase compliance with State Code and current practices and to improve the clarity of the requirements.