



## ARLINGTON COUNTY, VIRGINIA

### County Board Agenda Item Meeting of April 16, 2011

**DATE:** April 6, 2011

**SUBJECT:** ZOA-FBC-12 Zoning Ordinance amendment to Section 20. (Appendix A), "CP-FBC" Columbia Pike Form Based Code Districts, Section IV. Building Envelope Standards, subsections B. Main Street Sites, C. Avenue Sites, and D. Local Sites, to modify building height permitted in transitional areas between different Form Based Code Building Envelope Standards and between Form Based Code developments and existing single-family dwellings to 1) permit no more than 4 stories on any part of a Main Street or Avenue site within 40 feet of a Local or Local Live/Work site, unless that portion is no more than 70 feet from an RBL, in which case no more than 6 stories or 5 stories, respectively; 2) permit up to 6 stories or 5 stories, respectively, between a Main Street or Avenue site and a Local Live/Work\* site; 3) permit no more than 3 stories on any part of a Main Street or Avenue site within 40 feet of a Neighborhood site; and 4) permit no more than 3 stories and a maximum height of 32 feet on any part of a Main Street, Avenue or Local site within 40 feet of an existing single-family lot.

#### **C. M. RECOMMENDATION:**

Adopt the attached ordinance to amend, reenact, and recodify the Arlington County Zoning Ordinance, Section 20. (Appendix A), "CP-FBC" Columbia Pike Form Based Code Districts, subsection IV, Building Envelope Standards to increase building height permitted in areas between different Form Based Code frontage types and to decrease building height permitted in areas between Form Based Code developments and existing single-family dwellings.

**ISSUES:** The proposed amendments to the Columbia Pike Special Revitalization District Form Based Code ("FBC" or "Code") would increase building height permitted in areas between different Form Based Code frontage types and decrease building height in areas between Form Based Code developments and existing single-family dwellings. This proposal has been discussed extensively with the Form Based Code Advisory Working Group and the Zoning Committee of the Planning Commission, and no issues have been identified.

County Manager: *BMD/GA*

County Attorney: *[Signature]* *[Signature]*

Staff: Deborah Albert, DCPHD, Planning Division

PLA-5855

20.

**SUMMARY:** The FBC establishes Building Envelope Standards for all building sites within the Columbia Pike Special Revitalization District. The Building Envelope Standards set the basic parameters governing building construction, including height, depth, and placement of buildings, as well as other required elements, such as balconies, stoops and street walls. Within each Building Envelope Standard, height is generally limited to 32 feet where any part of the site is within 40 feet of a Building Envelope Standard lower in the hierarchy, or an existing single-family house. The proposed amendment would modify the 32-foot height limit to allow additional height in such areas between Form Based Code developments of different frontage types, and would reduce the height where new development is within 40 feet of an existing single-family house. The intent of the proposed amendments is to ensure an appropriate transition up in height from single-family houses; to establish transitions between different FBC frontage types that balance urban design goals established in the FBC with the goal of providing increased light and air; and to avoid unintended design impacts resulting from modification of architectural elements.

The following table summarizes the specific changes in the proposed amendment:

Description	Current Requirement	Proposed Requirement
Where any portion of a Main Street site or an Avenue site is within 40 feet of:	The maximum height for that portion is (unless a lower height is specified in the Regulating Plan):	
A Local or Live/Work site (excluding Live/Work* <sup>1</sup> sites)	32' to eaves or parapet	No more than 4 stories, unless that portion of the site is also no more than 70 feet from an RBL, in which case, no more than 6 stories on a Main Street site, and no more than 5 stories on an Avenue site.
A Neighborhood site		No more than 3 stories
An existing single-family house		32' to the eaves or parapet, and no more than 3 stories
Where any portion of a Local site is within 40 feet of:	The maximum height for that portion is:	
An existing single-family house	32' to eaves or parapet	32' to the eaves or parapet, and no more than 3 stories

**BACKGROUND:** The FBC establishes Building Envelope Standards for all building sites within the Columbia Pike Special Revitalization District. The BES set the basic parameters governing building construction, including height, depth, and placement of buildings, as well as other required elements, such as balconies, stoops, and street walls. The Building Envelope Standards (which are defined for each of the frontage types) establish different parameters for each of four different types which, hierarchically, in descending order, are Main Street, Avenue, Local (three categories including Live/Work\*, Live/Work and Local) and Neighborhood, and each of which provides a maximum, and sometimes a minimum, permitted number of stories. In

<sup>1</sup> The Live/Work and Live/Work\* forms are permitted on designated Local sites and are indicated on the Regulating Plan with “L/W” and “L/W\*,” respectively. Live/Work\* is an alternate form of Live/Work development that allows an additional story.

addition, a maximum height limit of 32 feet is established on Main Street, Avenue and Local sites for the portion of a site that is within 40 feet of a lesser BES or existing single-family house. The 32 feet is roughly equivalent in height to the maximum permitted height of a single-family house under conventional 'R' district zoning in Arlington County.

In the Form Based Code, height of a building with a pitched roof is measured at the bottom of the overhang of the eave at its outermost point from the building wall. Through the use of dormers, an additional story may be possible above the height at which the measurement is taken. This encourages the use of a pitched roof in proximity to existing neighborhoods, which is similar in character to existing single-family houses. Alternatively, a building with a flat roof is measured at the top of the parapet, placing the building measurement height at the top of the uppermost floor of the building, which does not allow an additional story.

At the time of adoption of the Form Based Code, the 32-foot height limit was intended to result in no more than two to three stories in order to provide transition up in height from an adjacent single-family home. This taper in height ensures sensitivity to adjacent single-family houses at the edges of the Columbia Pike Special Revitalization District. In addition, a difference in measurement for buildings with pitched roofs and buildings with flat roofs encourages the use of pitched roofs adjacent to lower density development or single-family houses. A pitched roof can reduce the scale of the portion of the building closest to the single-family house, and provides a character similar to houses typical of neighborhoods adjacent to areas eligible for Form Based Code development. Recently approved FBC developments have demonstrated that it is possible to achieve more than the intended two to three stories on portions of FBC sites where height is restricted.

The 32-foot height limit is also applied between different FBC frontage types (i.e. between a Main Street and a Local site development). In these instances, the height limit creates a "dip" in height. While 32 feet could result in an appropriate transition from an existing single-family house, the 32-foot height provides a less compatible transition between different FBC frontage types. This study was initiated in order to study the impact of the 32-foot height limit.

**DISCUSSION:** Staff proposes to amend the Form Based Code to provide a height transition related to the property adjacent to the new development, rather than applying the same height restriction to all transition areas. The intent of the proposed modifications to the 32-foot height limit is as follows:

- To maintain a taper up in height from existing single-family detached houses to FBC developments that is sensitive to the existing neighborhood.
- To establish a taper in height between different FBC frontage types that balances urban design goals established in the FBC with the goal of providing light and air within developments of lower heights.
- To avoid unintended design impacts resulting from modification of architectural elements.

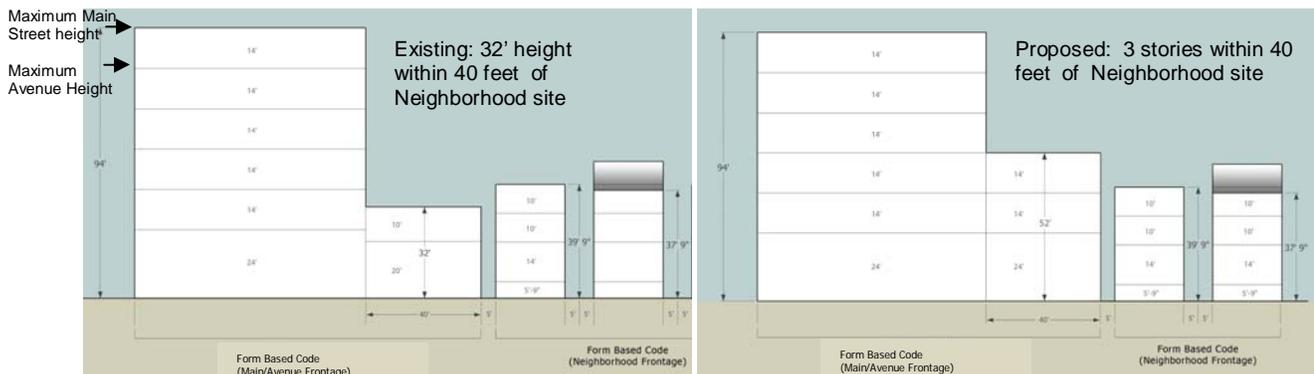
While many traditional zoning districts in Arlington do not codify transitions in height, the site plan process is typically used to analyze and address situations where a transition is needed. Within form-based zoning like the Form Based Code, the transition is codified in order to ensure

the desired form is predictable and can be achieved within an administratively approved development or within a special exception process with limited opportunity for modifications. Staff’s proposal is summarized in the table on page 1 and further described below.

**Main Street and Avenue Site Development:** The Form Based Code permits three to six stories on Main Street sites and two to five stories on Avenue sites. Currently height is limited to 32 feet in the area within 40 linear feet of a Local site, Neighborhood site or a single-family house. This area of reduced height helps to increase the amount of light and air in the yards and windows of the lower density development. The 32-foot height limit, however, both results in a significant step-down on a Main Street or Avenue site building and results in a dip in height when the adjacent development is also a Form Based Code development. Typically, a step-down is designed to provide a gradual transition in height between two different forms, rather than a dip in height.

Main Street and Avenue Development Adjacent to Existing Single-Family Houses: The 32-foot height restriction, on Main Street and Avenue development that is within 40 feet of an existing single-family house, is appropriate and compatible with a single-family zoning district that permits up to 35 feet in height, and therefore, staff does not propose to change it. However, staff proposes an additional restriction of no more than three stories on this portion of the site in order to avoid unintended architectural impacts of accommodating more than three stories within 32 feet. Both FBC Advisory Working Group and Zoning Committee of the Planning Commission (ZOCO) members have expressed a preference for maintaining a transitional height equivalent to that permitted in single-family districts when adjacent to an existing single-family house.

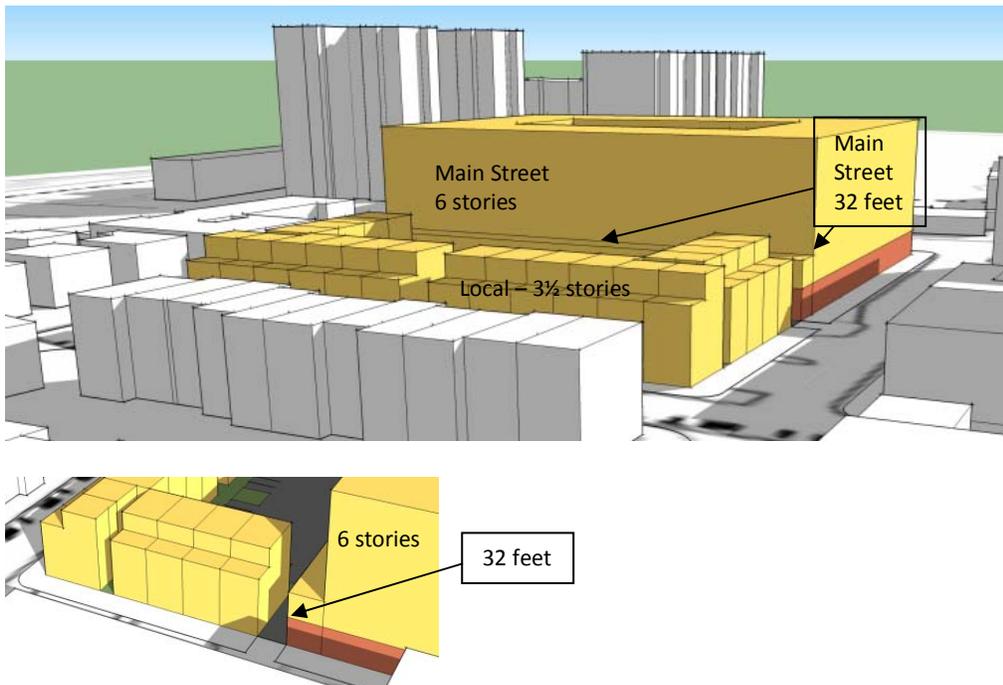
Main Street and Avenue Development Adjacent to Neighborhood FBC Sites: Staff proposes to increase the 32-foot height limit to permit up to three stories when adjacent to Neighborhood development. The current and proposed forms for transition adjacent to Neighborhood developments are shown in Figure 1. The proposed height limit maintains a transition up in height from the Neighborhood houses, while providing a reasonable transition down in height from the Main Street or Avenue building.



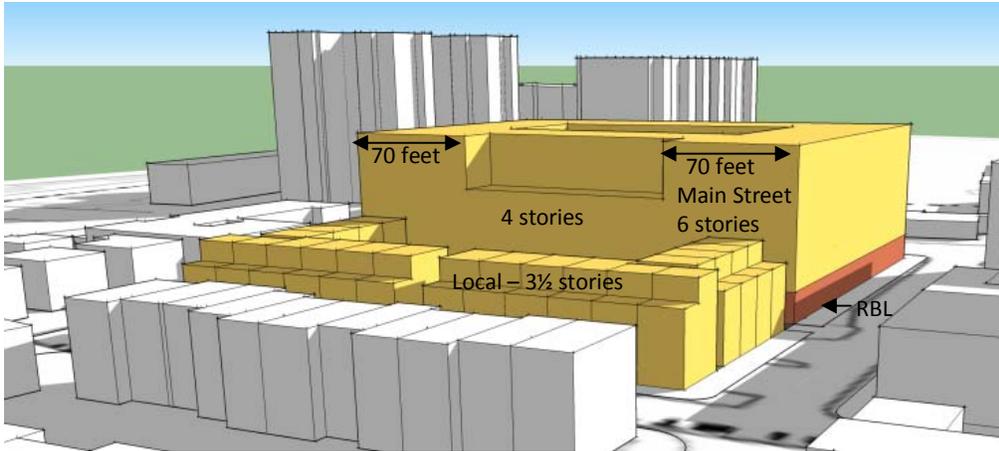
**Figure 1: Current and proposed height limit shown between a Main Street development and a Neighborhood development, showing the current 32’ height limit (left), and the proposed 3-story limit (right).**

Main Street and Avenue Development Adjacent to Local, Local Live/Work or Local Live/Work\* Development: Transition between Main Street or Avenue sites and Local sites was the subject of much discussion with the Form Based Code Advisory Working Group. The dip in height created

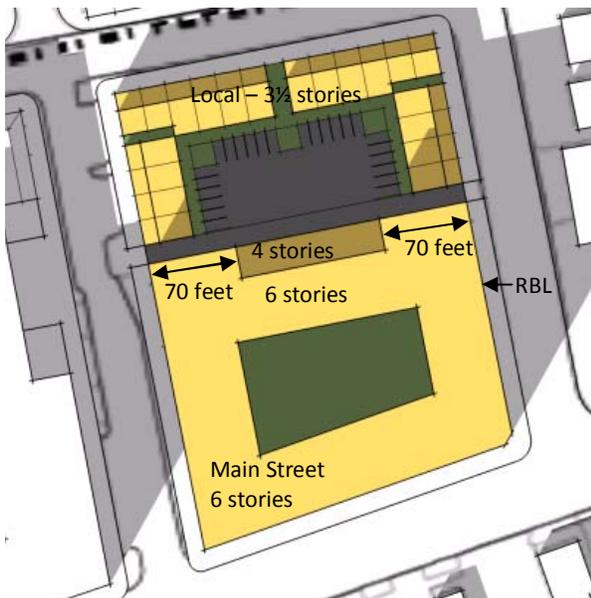
by the 32' height limit was not desirable. A more gradual step-down in height was discussed, similar to that proposed for Neighborhood sites, which would result in a more gradual transition while still allowing for increased light and air in adjacent Local site developments. However, there was lingering concern about the form created where the Regulating Plan designates Main Street or Avenue development. Where the Regulating Plan changes in the middle of the block, as shown below, or at a block corner, that street edge should emphasize the form articulated in the Regulating Plan, rather than transitioning away from it. Therefore, staff proposes a height transition that balances the goals of achieving the desired form articulated in the FBC, with the goal of providing height transition between developments of different scale. Staff proposes that full height is permitted on Main Street (six stories) and Avenue (five stories) developments at the Required Building Line (the street edge) and up to 70 feet from the street edge, in order to accommodate a reasonable mixed-use form. Seventy feet is a typical width for a residential building with a double-loaded corridor. When more than 70 feet away from the Required Building Line, but still within 40 feet of a Local development, height would be limited to no more than four stories in order to increase light and air around lower scale development in the block interior where space may be naturally more private. This will ensure no more than a 2½ story step up between a Local street town house and its adjacent Main Street or Avenue development, even where additional stories are awarded for historic preservation. Figures 2, 3 and 4 show hypothetical development on sites that transition from Main Street to Local development under current and proposed requirements, respectively.



**Figure 2: Existing requirement - conceptual model of a hypothetical site that transitions from Main Street to Local development. Existing transition show 32' height within 40 feet of the Local site.**



**Figure 3: Proposed requirement - conceptual model of a hypothetical site that transitions from Main Street to Local development. The proposed transition shows the full six stories within 70 feet of the RBL, and a step down to four stories at the block interior.**



**Figure 4: Proposed requirement – aerial view.**

While Live/Work development is similar in height to standard Local development, portions of the Town Center Regulating Plan, on the north side of 11<sup>th</sup> Street South and a portion of the south side of 9<sup>th</sup> Street South and a small portion of the west side of Highland Street at 9<sup>th</sup> Street South, allow an additional story where the Live/Work form is designated. These areas are denoted on the Regulating Plan with a note and an asterisk (\*) next to the Live/Work designation (see Figure 5). Because the Live/Work\* form already allows a maximum height of 4½ stories, just 1½ stories less than that permitted on Main Street sites, a gradual transition in height is already provided, and therefore, staff proposes that no transition be required adjacent to Live/Work\* sites. Figure 6 shows Live/Work\* town houses adjacent to a Main Street building.



Figure 5: A portion of the Town Center Regulating Plan, showing areas where Live/Work\* development (designated with LW\*) is permitted on Local sites.

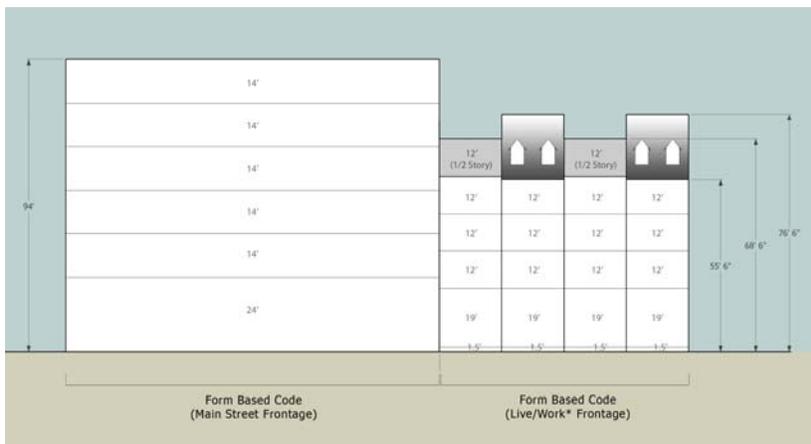
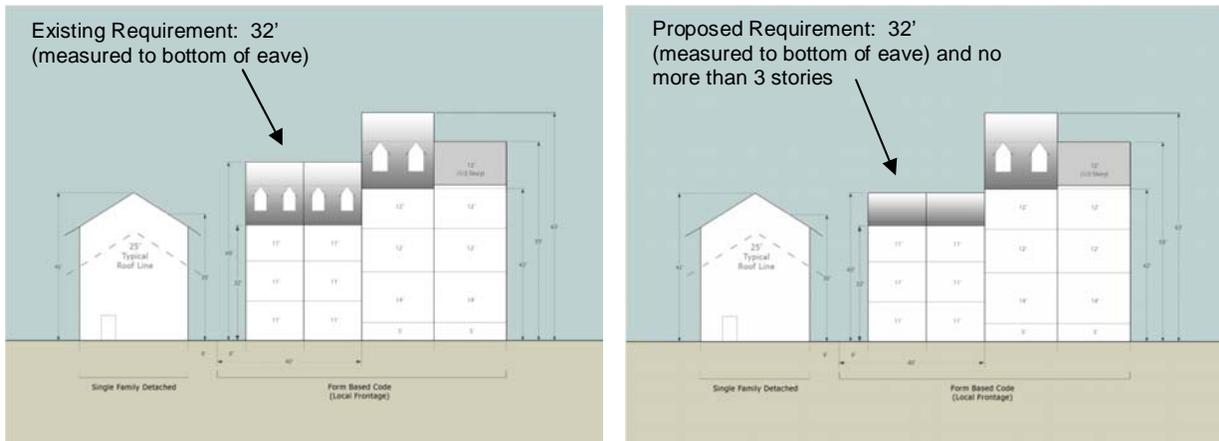


Figure 6: Live/Work\* development is shown at its maximum height next to a Main Street development at its maximum height.

**Local Site Development:** The Form Based Code permits two to 3½ stories in a town house form on Local and Local Live/Work sites. Recent Local developments have shown that a full 3½ stories can be achieved within the 32-foot measurement, rather than the two or three story height that was originally intended. The full 3½ stories, with a tall pitched roof to accommodate occupiable space on the uppermost story through the use of dormers, measures at 32 feet, as the height measurement is taken at the bottom of the eave overhang. However, it does not provide the intended transition adjacent to an existing single-family house. Therefore, staff proposes to further limit height adjacent to an existing single-family house to 32 feet *and* no more than three stories, thereby ensuring a reduced scale in FBC town houses closest to an existing single-family house. The story limit will also discourage modification of architectural elements for the purpose of achieving an additional story under a fixed height limit (i.e., extending the eave to reduce the measured height of the building; compressing story heights; or shifting window placement in order to meet other required criteria while maintaining viable living space on the uppermost story). Figure 7 shows the current and proposed outcomes of this requirement.



**Figure 7: Town houses shown with current requirements (left) allow 32' to the eaves, allowing a tall pitched roof with dormers, and as shown with proposed requirements (right), limited to no more than 3 stories, resulting in a shorter roof.**

**Community Process:** The proposed amendment was discussed with the Form Based Code Advisory Working Group at six meetings in June, July, September, October and December 2010, and February 2011, and with the Zoning Committee of the Planning Commission (ZOCO) at three meetings in July and September 2010 and February 2011. Modifications to the proposal were made in order to address concerns raised by each group.

The proposed amendment was heard by the Planning Commission at their April 4, 2011 meeting, where they voted 7-3 to recommend that the County Board adopt the amendment as proposed in the staff report. Some Commissioners who did not support the proposed amendment raised concerns that the proposed amendment continues to encourage a Main Street or Avenue building to utilize a pitched roof in the section adjacent to a single-family house, which results in a poor transition in height, depth and character. Staff confirmed that a developer may still choose to build a flat roof in this section, and in the two approved developments where the 32-foot height was required, one (Siena Park) opted to build a two-story section with a flat roof, and the other (Columbia Place) chose to build the pitched roof.

Additionally, there was a concern that the 32-foot height requirement, which the proposal retains when adjacent to an existing single-family house, is restrictive for an architect designing a building, and to another Commissioner, seemed to be arbitrary. The 32-foot height was designed to be sensitive to existing neighborhoods, and throughout the community process, strong sentiment was expressed to maintain this sensitivity, and therefore the existing height limit was retained in areas adjacent to single-family homes, but increased in areas within Form Based Code developments. Through the extensive community process for this proposal, staff explored a variety of solutions, including several of those suggested during the Planning Commission hearing. The recommended amendment is reflective of the discussions throughout that process. Several Commissioners who supported the proposed amendment expressed an appreciation for the balance of goals achieved with the proposed amendment as well as for how the proposal reflects the community discussion.

**CONCLUSION:** Staff concludes that the proposed amendments will promote a better form than that achieved by applying the current 32-foot requirement to all frontage types. Where

height is limited to 32 feet adjacent to existing single-family dwellings, the transition achieves a sensitivity to existing single-family neighborhoods. Where transitional heights are proposed to be increased between Form Based Code frontage types, the form promotes a better balance of the form-based goals of the FBC, including framing the street and achieving an urban form, with the provision of light and air in the yards and windows of smaller scale developments within the Columbia Pike Form Based Code Special Revitalization District.

Therefore, staff recommends that the County Board adopt the attached ordinance to amend the Arlington County Zoning Ordinance, Section 20. "CP-FBC" Columbia Pike Form Based Code Districts, subsection IV. Building Envelope Standards, subsections B. Main Street Sites, C. Avenue Sites and D. Local Sites to modify building height permitted in transitional areas between Form Based Code frontage types and between Form Based Code frontage types and existing single-family dwellings.

**FORM BASED CODE AMENDMENT ORDINANCE**

**ZOA-FBC-12**

**AN ORDINANCE TO AMEND, REENACT AND RECODIFY THE ARLINGTON COUNTY ZONING ORDINANCE, SECTION 20. (APPENDIX A), “CP-FBC” COLUMBIA PIKE FORM BASED CODE DISTRICTS, SECTION IV. BUILDING ENVELOPE STANDARDS, SUBSECTIONS B. MAIN STREET SITES, C. AVENUE SITES, AND D. LOCAL SITES, TO MODIFY BUILDING HEIGHT PERMITTED IN TRANSITIONAL AREAS BETWEEN TWO DIFFERENT FORM BASED CODE BUILDING ENVELOPE STANDARDS AND BETWEEN FORM BASED CODE DEVELOPMENTS AND EXISTING SINGLE-FAMILY DWELLINGS TO 1) PERMIT NO MORE THAN 4 STORIES ON ANY PART OF A MAIN STREET OR AVENUE SITE WITHIN 40 FEET OF A LOCAL SITE, UNLESS THAT PORTION IS NO MORE THAN 70 FEET FROM AN RBL, IN WHICH CASE NO MORE THAN 6 OR 5 STORIES, RESPECTIVELY; 2) PERMIT UP TO 6 OR 5 STORIES, RESPECTIVELY, BETWEEN A MAIN STREET OR AVENUE SITE AND A LOCAL LIVE/WORK\* SITE; 3) PERMIT NO MORE THAN 3 STORIES ON ANY PART OF A MAIN STREET OR AVENUE SITE WITHIN 40 FEET OF A NEIGHBORHOOD SITE; AND 4) PERMIT NO MORE THAN 3 STORIES AND A MAXIMUM HEIGHT OF 32 FEET ON ANY PART OF A MAIN STREET, AVENUE OR LOCAL SITE WITHIN 40 FEET OF AN EXISTING SINGLE-FAMILY LOT; AND TO FACILITATE THE CREATION OF A CONVENIENT, ATTRACTIVE AND HARMONIOUS COMMUNITY; TO ENCOURAGE ECONOMIC DEVELOPMENT; AND FOR OTHER REASONS REQUIRED BY THE PUBLIC NECESSITY, CONVENIENCE AND GENERAL WELFARE, AND GOOD ZONING PRACTICE.**

Be it ordained that the Arlington County Zoning Ordinance provisions in Section 20. (Appendix A), “CP-FBC” Columbia Pike Form Based Code Districts, Section IV. Building Envelope Standards, subsections B. Main Street Sites, C. Avenue Sites, and D. Local Sites, is hereby amended, reenacted and recodified as follows, in order to modify building height permitted in transitional areas between two different Form Based Code Building Envelope Standards and between Form Based Code developments and existing single-family dwellings to 1) permit no more than 4 stories on any part of a Main Street or Avenue site within 40 feet of a local site, unless that portion is no more than 70 feet from an RBL, in which case no more than 6 or 5 stories, respectively; 2) permit up to 6 or 5 stories, respectively, between a Main Street or Avenue site and a Local Live/Work\* site; 3) permit no more than 3 stories on any part of a Main Street or Avenue site within 40 feet of a Neighborhood site; and 4) permit no more than 3 stories and a maximum height of 32 feet on any part of a Main Street, Avenue or Local site within 40 feet of an existing single-family lot; and to facilitate the creation of a convenient, attractive and harmonious community; to encourage economic development; and for other reasons required by the public necessity, convenience and general welfare, and good zoning practice:

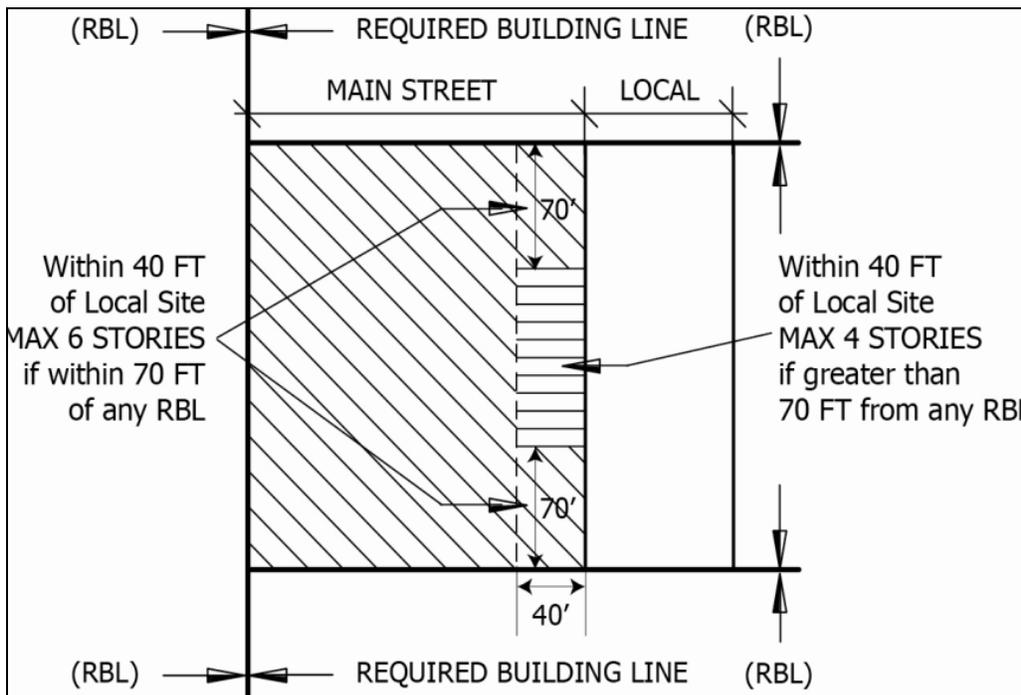
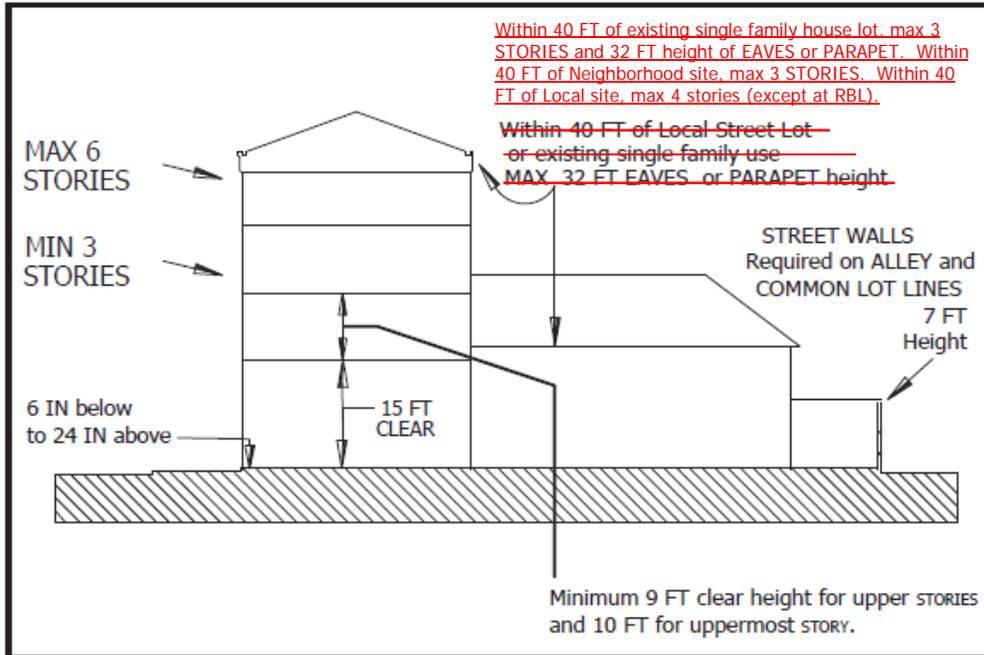
\* \* \*

1 **Columbia Pike Form Based Code Proposed Zoning Ordinance Amendment**  
 2 **32' Height Limit**

3  
 4 **IV. Building Envelope Standards**

5 \* \* \*

6  
 7 **B. BUILDING ENVELOPE STANDARDS: MAIN STREET SITES**  
 8 **Height Specifications**



13 **Building Height**

- 14 1. Principal building height is measured in STORIES. These parameters preserve appropriate STREET-  
15 space and allow for greater variety in building height.  
16 2. Each building shall be between 3 and 6 STORIES in height, except where otherwise noted here or in  
17 the REGULATING PLAN.

18 \* \* \*

19 **Other**

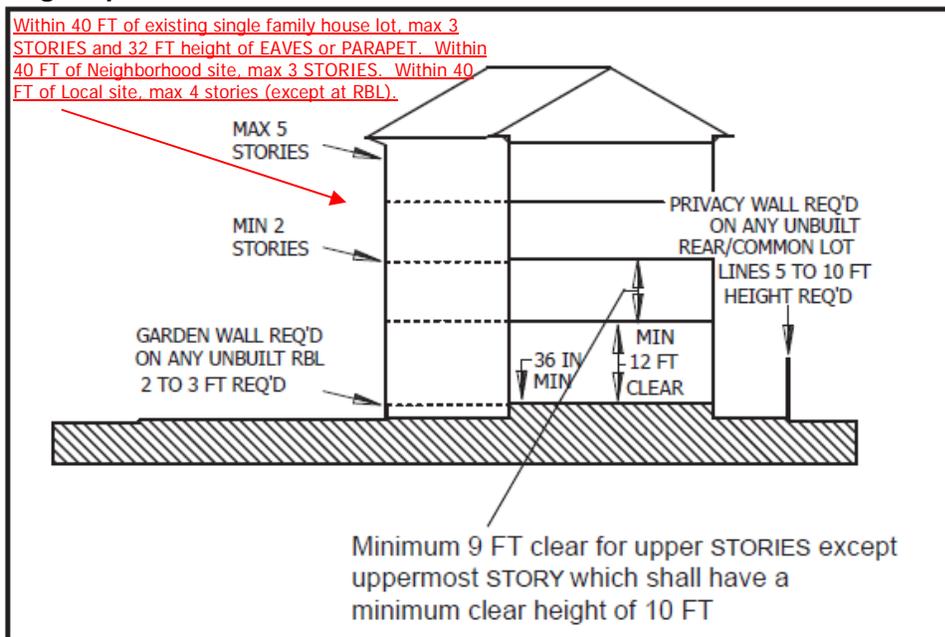
20 ~~Where a MAIN STREET site is within 40 feet of a LOCAL site, NEIGHBORHOOD site or a single-family~~  
21 ~~home, the maximum height for that portion is 32 feet to the EAVES or PARAPET.~~

22  
23  
24 Notwithstanding the provisions in Section III.A.6.1, except where a lower height is required by the  
25 Regulating Plan, where any portion of a Main Street site is within 40 feet of:

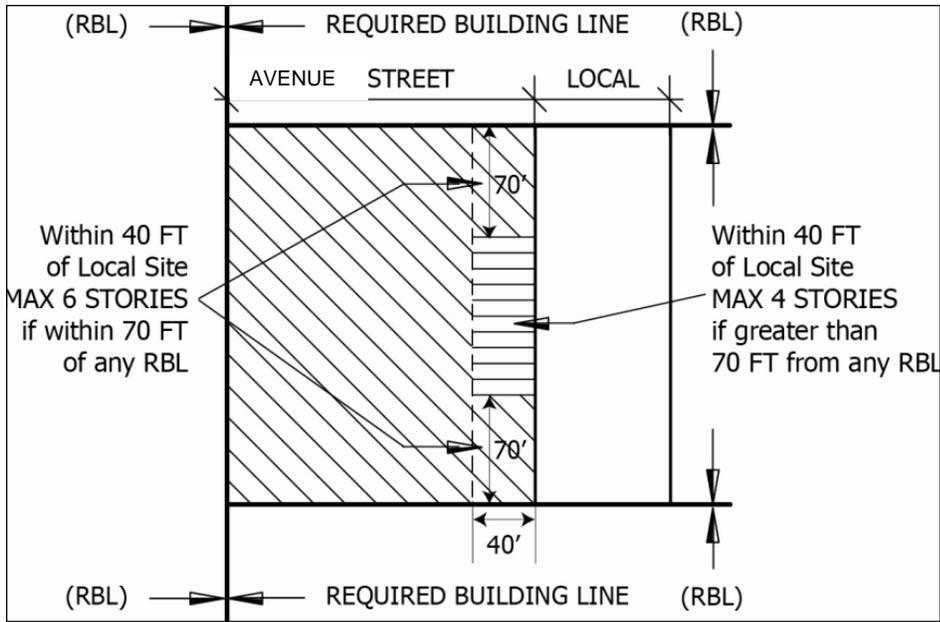
- 26 1. A Local or Live/Work site (excluding Live/Work\* sites), the maximum height for that portion is no  
27 more than 4 STORIES, unless that portion is also no more than 70 feet from an RBL, in which  
28 case the maximum height is no more than 6 STORIES.  
29 2. A Neighborhood site, the maximum height for that portion is no more than 3 STORIES.  
30 3. An existing single-family lot, the maximum height for that portion is 32 feet to the EAVES or  
31 PARAPET, and no more than 3 STORIES.

32 \* \* \*

33  
34 **C. BUILDING ENVELOPE STANDARDS: AVENUE SITES**  
35 **Height Specifications**



36



37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62

**Building Height**

1. Principal building height is measured in STORIES.
2. Buildings shall be between 2 and 5 STORIES in height, except where otherwise noted here or in the REGULATING PLAN.

\* \* \*

**Other**

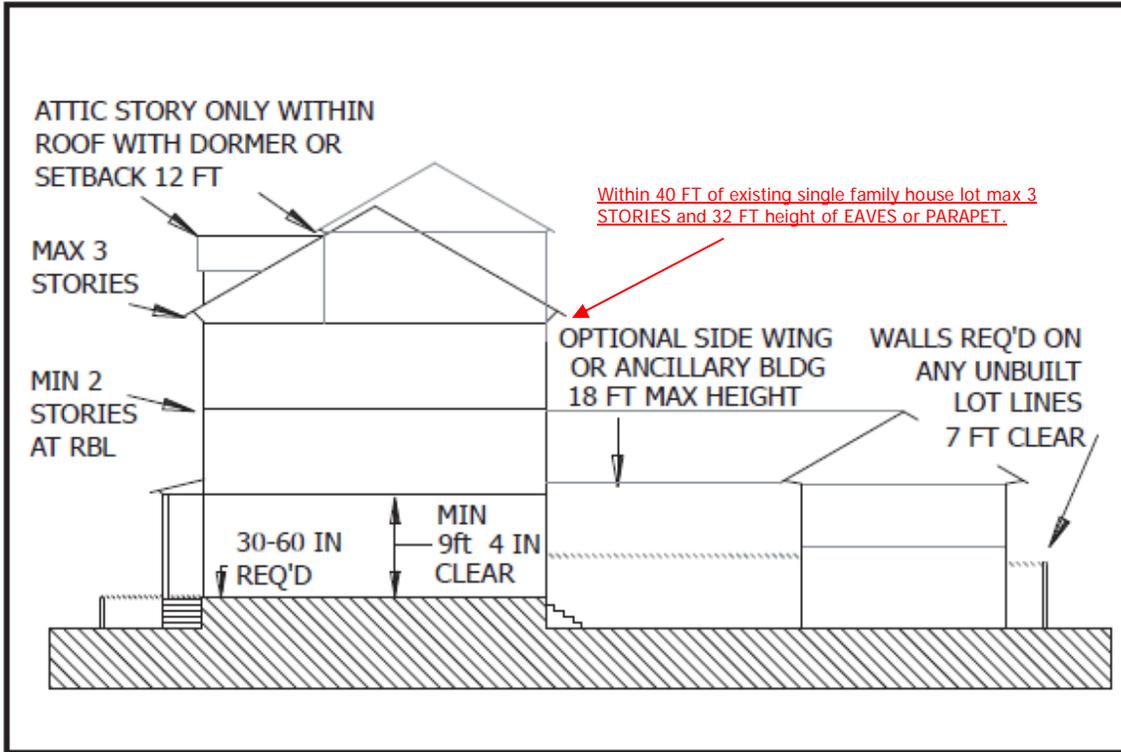
Where any part of an AVENUE site is within 40 feet of a LOCAL STREET (or lesser) site or an existing single-family use dwelling, the maximum height for that portion is 32 feet to the EAVES or PARAPET.

Notwithstanding the provisions in Section III.A.6.1, except where a lower height is required by the Regulating Plan, where any portion of an AVENUE site is within 40 feet of:

1. A Local or Live/Work site (excluding Live/Work\* sites), the maximum height for that portion is no more than 4 STORIES, unless that portion is also no more than 70 feet from an RBL, in which case the maximum height is no more than 5 STORIES
2. A Neighborhood site, the maximum height for that portion is no more than 3 STORIES.
3. An existing single-family lot, the maximum height for that portion is 32 feet as measured to the EAVES or PARAPET, and no more than 3 STORIES

\* \* \*

**D. BUILDING ENVELOPE STANDARDS: LOCAL SITES  
Height Specifications**



63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78

**Building Height**

1. Principal building height is measured in STORIES.
2. Buildings shall be between 2 and 3 STORIES in height. Additionally, an attic STORY may be built. An attic or half STORY is any top STORY which achieves its minimum clear height between 8 and 12 feet behind the RBL. An attic or half-STORY may have DORMER windows which face the street.

\* \* \*

**Other**

~~Where a part of a LOCAL site is within 40 feet of a NEIGHBORHOOD site existing single family use dwelling, the maximum height for any structure on that portion of the site is 32 feet to the EAVES or PARAPET.~~

Notwithstanding the provisions in Section III.A.6.1, where any portion of a Local site is within 40 feet of an existing single-family house lot, the maximum height for that portion is 32 feet and no more than 3 stories to the EAVES or PARAPET