

CITY OF VIRGINIA BEACH AMENDMENT TO ZONING ORDINANCE: ELECTRONIC DISPLAY SIGNS

STAFF PLANNER: Stephen J. White

REQUEST:

An Ordinance to amend Section 111 and add new Section 217 to the City Zoning Ordinance, defining monument signs and electronic display signs and establishing requirements for such signs.

This item was deferred on September 9 and October 14, 2009 to provide time for additional input from the public and stakeholders. On November 9, 2009, the Planning Commission held a public comment and workshop session. Since that time, a subcommittee of the Commission has been working with staff and the City Attorney's Office to develop an alternative set of amendments based on received comments.

BACKGROUND

Signs, of every size and type, have been used throughout history to capture the attention of those passing the sign for the primary purpose of promoting an event, product, business, or attraction, as well as providing directions. Before the 20th century, one characteristic that most all signs shared was that they were 'static.' The signs had no moving parts controlled by mechanical devices and the only means of changing the message was to replace the sign or repaint it. With the advent of readably-available devices powered by electricity, the character of signs began to change. Signs became more 'dynamic' in an attempt to use whatever means possible to attract attention, particularly when the sign was promoting something similar to what was being promoted by other signs in close proximity. Moreover, as the speed at which the various modes of transportation increased, the need to 'grab' the attention of those passing by became even more critical to those advertising; thus, the desire for increasingly more complex dynamic sign elements became a hallmark of signage throughout the 20th century.

The earliest of the dynamic elements on signage consisted of flashing light bulbs or alternating tubes of neon. Some signs used mechanical elements, such as a waving arm attached to a static image of a person or steam billowing from a static image of a coffee cup. During the last quarter of the 20th century, with the introduction of computers, light-emitting diodes (LEDs), and miniaturization of mechanical and electronic devices, the dynamic nature of signs became more sophisticated, ranging from the use of bulbs and LEDs to provide static and dynamic messages as part of a sign (such as time and temperature) to 'trivision' billboards and freestanding signs that possess multiple message faces created by numerous multi-sided vertical strips built into the sign case, which, when rotated in unison, produce a single image.



The increasing sophistication of computers, digital technology, materials, and the Internet, as well as the reduction in cost of LED displays have resulted in the proliferation LED signage as an increasingly popular method of attracting attention and conveying desired messages. Current LED technology allows for a wide range of colors, messages, and images depending on the level of technology. Other technologies include “digital ink” signs that offer a changeable medium on a surface that looks like a normal vinyl sign face. These signs manipulate ‘ink’ on the surface, allowing for a dynamic presentation of images without being internally illuminated.

The City of Virginia Beach currently has no regulations specific to signs that utilize these technologies. Digital billboards are not permitted in the City of Virginia Beach, as billboards of any type are not permitted and structural changes to existing, nonconforming billboards are not allowed. The Zoning Ordinance, however, is silent on the use of electronic display elements as part of a sign. As a result, electronic display elements, as part of a sign or as an entire sign face, have made a steady advance across the city when new signs have been installed. As noted above, with the increased sophistication of digital sign technology, the slowly decreasing costs, and the plethora of advertising alternatives electronic display signs offer, such signs are becoming, if not are, the standard for signage. The near future could see the replacement of standard plastic-based sign faces that are internally illuminated with electronic display faces consisting of images that can be easily manipulated.

The opportunity provided to advertisers and businesses by electronic displays presents the City with a challenge of regulating these new types of signs to ensure the public health, safety, and welfare are not adversely impacted due to the ability of the technology to produce on the sign face rapid movement, intense color, and excessive brightness. These signs can be, and many are, a distraction to vehicle drivers. Dynamic electronic display signs have the capability of operating in many different modes, ranging from static messages to scrolling text to full motion video.

There is currently no definitive proof of a causal connection between dynamic electronic display signs and highway accidents, primarily because, at present, it is not possible to conduct controlled roadway driving studies where controlled roadways are filled with hundreds of cars operating under normal driving conditions. There have been studies, however, that indicate such signs do not cause a distraction significant enough to result in a vehicle collision; there are also studies that indicate the opposite. None of the studies can be considered to be ‘definitive’ regarding the issue. However, some level of regulation of this quickly proliferating sign technology may be necessary to protect the public health, safety, and welfare.

SUMMARY OF AMENDMENTS

The following section of this report summarizes two distinct sets of proposed amendments, one being the amendments sent to the Planning Commission from the City Council (the “Referred Version”) and the other being the amendments developed by the Planning Commission subcommittee (the “Alternative Version”). Both sets of the proposed amendments are the result of extensive research by the Planning staff and the City Attorney’s Office pertaining to the technology used in electronic display signs, the available research literature regarding the potential distraction effect of signs with moving images, and other ordinances across the United States that regulate these signs.

Summary of ‘Referred Version’

Section 111 – Definitions

The amendments in Lines 33-39 define the term "electronic display sign." Specifically excluded from the definition are ordinary time/temperature signs that do not alternate cycles more



frequently than every five seconds. The remaining amendments to the section refine the definition of the term "monument sign."

Section 217

This is a new section for the Zoning Ordinance. The proposed amendments in this section allow electronic display signs only in the following zoning districts or special situations:

- In conjunction with schools and other public uses in all zoning districts;
- In public parks (with the approval of the City Council); and
- In the B-1A through B-4C Business Districts, which encompasses all Business Districts except the B-1 Neighborhood Business District and B-4K Historic Kempsville Area Mixed Use District; however, since all freestanding signs in the B-3A and B-4C Districts require the approval of the City Council under the current provisions of Section 905 (d) (4) of the Zoning Ordinance, electronic display signs in those two districts would require City Council approval.

The amendments also provide that electronic display signs (1) are not permitted within any Historic and Cultural District, (2) cannot be located within 150 feet of a Residential or Apartment zoning district, and (3) are allowed by conditional use permit in conjunction with assembly uses (churches) located in any Residential or Apartment zoning district.

The amendments further note that electronic display signs must, in addition to the provisions of this proposed section, conform to the City's general sign regulations contained in Part B of Article 2 of the City Zoning Ordinance. Only one electronic display sign is allowed per zoning lot.

In addition, there are a number of requirements specific to electronic display signs that address the special characteristics of such signs:

- Only one electronic display sign is allowed on any zoning lot;
- Cannot exceed a height of eight feet, must be monument style, and the area of the sign face devoted to the electronic display cannot exceed 32 square feet;
- No portion of the material displayed by any sign, including backgrounds, colors, pictures, lettering, pictures or other graphics, can be changed more frequently than once every five seconds;
- All wiring to the sign must be installed underground;
- Video displays or audio speakers on, or electronically connected to, the signs are not permitted;
- The signs cannot exceed a maximum illumination of five thousand (5,000) candelas per square meter from sunrise to sunset or five hundred (500) candelas per square meter between sunset and sunrise, as measured from the sign face at maximum brightness;
- Signs must be equipped with a working dimmer control device capable of automatically reducing the illumination to the required sunset-to-sunrise level; and
- No electronic display sign can advertise or direct the attention of the general public to an establishment, business, or service that is located on a separate site from the zoning lot on which the sign is located. This provision is consistent with the City's prohibition of billboards.

Summary of 'Alternative Version'

The 'Alternative Version' developed by the Planning Commission's subcommittee is equivalent to the 'Referred Version' except for the following:



- The definition of an electronic display sign adds “motor vehicle fuel prices displayed continuously,” which effectively exempts gas station fuel price signs that use electronic display technology (line 39);
- Hotels in the RT-1 Resort Tourist District are added to the list of allowable uses where electronic display signs are allowed (line 84);
- Changes the process of approval for the use of an electronic display sign in the B-3A and B-4C Business Districts from a Conditional Use Permit to action by the City Council, which is consistent with the existing method of approval in those districts for a freestanding sign (lines 91-93);
- Clarifies that no use or establishment is allowed to have an electronic display sign unless the use or establishment is allowed to have a freestanding sign under the applicable district sign regulations (lines 98-101);
- Further refines the limit on the maximum area of a sign encompassed by an electronic display, noting that the display cannot exceed 32 square feet or 50 percent of the total area of the sign face, whichever is less (lines 109-111);
- Instead of the full-color electronic display allowable under the Referred Version, this Alternative Version limits the display by not allowing “any pictures, other graphic elements, or any matter other than text of a single color, without background illumination” (lines 124-126); and
- The Referred Version specifies that display messages cannot change more quickly than every five seconds. This Alternative Version specifies that display messages cannot change more quickly than one every minute. The amendments further require that the method of change be instantaneous rather than through scrolling, flashing, blinking, or any type of similar intermittent illumination (lines 128-132).

RECOMMENDATION

Staff recommends approval of the ‘Alternate Version’ developed by the Planning Commission’s subcommittee. As opposed to the Referred Version, the Alternative Version provides a level of regulation that is more consistent with the quality of visual environment envisioned by the Comprehensive Plan while still providing property owners the opportunity to convey messages regarding their goods and services.



1 REQUESTED BY COUNCILMEMBER RON A. VILLANUEVA
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4 AN ORDINANCE TO AMEND SECTION 111 AND ADD
5 NEW SECTION 217 TO THE CITY ZONING ORDINANCE,
6 DEFINING MONUMENT SIGNS AND ELECTRONIC
7 DISPLAY SIGNS AND ESTABLISHING REQUIREMENTS
8 FOR SUCH SIGNS
9

10 Section Amended: City Zoning Ordinance Section 111
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12 Section Added: City Zoning Ordinance Sections 217

13 WHEREAS, the public necessity, convenience, general welfare and good zoning
14 practice so require;
15

16 BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VIRGINIA
17 BEACH, VIRGINIA:
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19 That Section 111 of the City Zoning Ordinance is hereby amended and
20 reordained, and a new Section 217, pertaining to electronic display signs, is hereby
21 added, to read as follows:
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23 **Sec. 111. Definitions.**

24 For the purpose of this ordinance, words used in the present tense shall include
25 the future; words used in the singular number include the plural and the plural the
26 singular; the use of any gender shall be applicable to all genders; the word "shall" is
27 mandatory; the word "may" is permissive; the word "land" includes only the area
28 described as being above mean sea level; and the word "person" includes an individual,
29 a partnership, association, or corporation.
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31 In addition, the following terms shall be defined as herein indicated:
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33 Sign, electronic display. A sign containing light emitting diodes (LEDs), fiber
34 optics, light bulbs, plasma display screens or other illumination devices, or a series of
35 vertical or horizontal slats or cylinders that are capable of being rotated at intervals, that
36 are used to change the messages, intensity of light or colors displayed by such sign.
37 The term shall not include signs on which lights or other illumination devices display
38 only the temperature or time of day in alternating cycles of not less than five (5)
39 seconds.
40

41 *Sign, monument.* A freestanding sign supported primarily by internal structural
42 framework or integrated into landscaping or other solid structural features other than
43 support poles, and the base of which is at least seventy-five (75) percent of the total
44 width of the sign. Monument signs have the following additional characteristics:

45
46 (a) The width of the base does not exceed twice the height of the total sign
47 structure and does not extend more than one (1) foot beyond either outside edge of the
48 face of the sign;

49
50 (b) The height of the base is between eighteen (18) inches and four (4) feet;
51 and

52
53 (c) The maximum height of the sign, as measured from ground level, does not
54 exceed eight (8) feet.

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56 **COMMENT**

57 The amendments in Lines 33-39 define the term "electronic display sign." Specifically
58 excluded from the definition are ordinary time/temperature signs that do not alternate cycles more
59 frequently than every five seconds. The remaining amendments to the section refine the definition
60 of the term "monument sign."

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65 **ARTICLE 2. GENERAL REQUIREMENTS AND PROCEDURES APPLICABLE**
66 **TO ALL DISTRICTS**

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70 **B. SIGN REGULATIONS**

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74 **Sec. 217. Electronic display signs.**

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76 (a) Electronic display signs shall be allowed:

77
78 (1) By right in the B-1A, B-2, B-3 and B-4 Business Districts and in
79 conjunction with schools or other public uses in any zoning district;
80 provided, however, that no such sign shall be allowed in any
81 Historic and Cultural District or within one hundred fifty (150) feet of
82 a Residential or Apartment District and provided further, that
83 electronic display signs in public parks shall require the approval of
84 the City Council;
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86 (2) By conditional use permit in the B-3A Pembroke Central Business
87 Core District and the B-4C Central Business Mixed Use District; and
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89 (3) By conditional use permit in conjunction with assembly uses
90 located in a Residential or Apartment District.
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92 (b) Electronic display signs shall conform to the provisions of this section and
93 to all applicable general sign regulations set forth in Part B of Article 2.
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95 (c) Electronic display signs shall conform to the following requirements:
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97 (1) No more than one such sign shall be permitted on any zoning lot.
98 No such sign shall be located within 150 feet of any Residential or
99 Apartment District or use
100

101 (2) No such sign shall exceed a height of eight (8) feet and the area
102 devoted to an electronic display shall not exceed thirty-two (32)
103 square feet per face;
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105 (3) Such signs shall be monument - style, as set forth in Section 111,
106 provided, however, that in the B-3A Pembroke Central Business
107 Core District and B-4C Central Business Mixed Use District, the
108 City Council may allow an establishment to have one (1) electronic
109 display sign in lieu of a building identification sign;
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111 (4) No such sign shall advertise or direct the attention of the general
112 public to an establishment, business or service that is located on a
113 separate site from the zoning lot on which the sign is located;
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115 (5) No portion of the material displayed by any such sign, including
116 backgrounds, colors, pictures, lettering, pictures or other graphics,
117 shall be changed more frequently than once every five (5) seconds;
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119 (6) Video displays or audio speakers on, or electronically connected to,
120 such signs shall not be permitted;
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122 (7) Such signs shall not exceed a maximum illumination of five
123 thousand (5,000) candelas per square meter from sunrise to sunset
124 or five hundred (500) candelas per square meter between sunset
125 and sunrise, as measured from the sign face at maximum
126 brightness, and shall be equipped with a working dimmer control
127 device capable of automatically reducing the illumination to the
128 required sunset-to-sunrise level.
129

130 (8) The electrical service lines providing power to such signs shall be
131 underground.

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134 **COMMENT**
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136 **The amendments allow electronic display signs only in conjunction with schools and other**
137 **public uses in all zoning districts and in the B-1A through B-4C Business Districts (i.e., all Business**
138 **Districts except the B-1 Neighborhood Business District and B-4K Historic Kempsville Area Mixed**
139 **Use District), and not within any Historic and Cultural District or within 150 feet of a Residential**
140 **or Apartment District. Inasmuch as all freestanding signs in the B-3A and B-4C Districts require**
141 **the approval of the City Council under existing CZO Section 905 (d) (4), electronic display signs in**
142 **those two districts would require City Council approval. City Council approval would also**
143 **required for electronic display signs in public parks. In addition, electronic display signs for**
144 **assembly uses in Residential or Apartment Districts are allowed with a conditional use permit**
145

146 **The amendments also provide that electronic display signs must, in addition to the**
147 **provisions of this section, conform to the City's general sign regulations contained in Part B of**
148 **Article 2 of the City Zoning Ordinance.**
149

150 **In addition, there are a number of requirements specific to electronic display signs that**
151 **address the special characteristics of such signs. These requirements pertain to size, height,**
152 **frequency of message changes, wiring, sound and illumination. In addition, subdivision (c) (4)**
153 **prohibits electronic display signs from advertising or directing the attention of the general public to**
154 **an establishment, business or service that is located on a separate site from the sign. This provision**
155 **is consistent with the City's prohibition of billboards.**
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159 Adopted by the Council of the City of Virginia Beach, Virginia, on the ____ day of

160 _____, 2009.

APPROVED AS TO LEGAL
SUFFICIENCY:

City Attorney's Office

CA10718
R-11
October 12, 2009

1 ALTERNATE VERSION

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5 NEW SECTION 217 TO THE CITY ZONING ORDINANCE,
6 DEFINING MONUMENT SIGNS AND ELECTRONIC
7 DISPLAY SIGNS AND ESTABLISHING REQUIREMENTS
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10 Section Amended: City Zoning Ordinance Section 111

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12 Section Added: City Zoning Ordinance Sections 217

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14 practice so require;

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20 reordained, and a new Section 217, pertaining to electronic display signs, is hereby
21 added, to read as follows:

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23 **Sec. 111. Definitions.**

24 For the purpose of this ordinance, words used in the present tense shall include
25 the future; words used in the singular number include the plural and the plural the
26 singular; the use of any gender shall be applicable to all genders; the word "shall" is
27 mandatory; the word "may" is permissive; the word "land" includes only the area
28 described as being above mean sea level; and the word "person" includes an individual,
29 a partnership, association, or corporation.

30
31 In addition, the following terms shall be defined as herein indicated:

32

33 Sign, electronic display. A sign containing light emitting diodes (LEDs), fiber
34 optics, light bulbs, plasma display screens or other illumination devices, or a series of
35 vertical or horizontal slats or cylinders that are capable of being rotated at intervals, that
36 are used to change the messages, intensity of light or colors displayed by such sign.
37 The term shall not include signs on which lights or other illumination devices display
38 only the temperature or time of day in alternating cycles of not less than five (5) seconds
39 or only motor vehicle fuel prices displayed continuously.
40

41 *Sign, monument.* A freestanding sign supported primarily by internal structural
42 framework or integrated into landscaping or other solid structural features other than
43 support poles, and the base of which is at least seventy-five (75) percent of the total
44 width of the sign. Monument signs have the following additional characteristics:

45
46 (a) The width of the base does not exceed twice the height of the total sign
47 structure and does not extend more than one (1) foot beyond either outside edge of the
48 face of the sign;

49
50 (b) The height of the base is between eighteen (18) inches and four (4) feet;
51 and

52
53 (c) The maximum height of the sign, as measured from ground level, does not
54 exceed eight (8) feet.

55
56 **COMMENT**

57 The amendments in Lines 33-39 define the term "electronic display sign." Specifically
58 excluded from the definition are ordinary time/temperature signs that do not alternate cycles more
59 frequently than every five seconds and signs continuously displaying only gasoline prices. The
60 remaining amendments to the section refine the definition of the term "monument sign."

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65 **ARTICLE 2. GENERAL REQUIREMENTS AND PROCEDURES APPLICABLE**
66 **TO ALL DISTRICTS**

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70 **B. SIGN REGULATIONS**

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74 **Sec. 217. Electronic display signs.**

75
76 (a) Electronic display signs shall conform to the provisions of this section, all
77 applicable general sign regulations set forth in Part B of Article 2 and all applicable sign
78 regulations of the district in which an electronic display sign is located.

79
80 (b) Electronic display signs shall be allowed:

81
82 (1) In the B-1A, B-2, B-3 and B-4 Business Districts;

83
84 (2) In conjunction with hotels in the RT-1 Resort Tourist District;

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86 (3) In conjunction with schools or other public uses in any zoning
87 district; provided that electronic display signs in conjunction with
88 public parks shall be allowed only with the approval of the City
89 Council

90
91 (4) In the B-3A Pembroke Central Business Core District and the B-4C
92 Central Business Mixed Use District, with the approval of the City Council;
93 and

94
95 (5) By conditional use permit, in conjunction with assembly uses
96 located in a Residential or Apartment District.

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98 (c) No electronic display sign shall be erected in conjunction with any use or
99 establishment unless such use or establishment is allowed to have a freestanding sign
100 under applicable district sign regulations, and no such sign shall be allowed in any
101 Historic and Cultural District.

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103 (d) Electronic display signs shall conform to the following requirements:

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105 (1) No more than one such sign shall be permitted on any zoning lot;

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107 (2) No such sign shall exceed a height of eight (8) feet;

108
109 (3) The area encompassed by an electronic display shall not exceed
110 fifty per cent (50%) of the total area of the sign face or thirty-two
111 (32) square feet per face, whichever is less;

112
113 (4) Such signs shall be monument - style, in accordance with Section
114 111, provided, however, that in the B-3A Pembroke Central
115 Business Core District and B-4C Central Business Mixed Use
116 District, the City Council may allow an establishment to have one
117 wall-mounted (1) electronic display sign in lieu of a building
118 identification sign;

119
120 (5) No such sign shall advertise or direct the attention of the general
121 public to an establishment, business or service that is located on a
122 separate site from the zoning lot on which the sign is located;

123
124 (6) The electronic display portion of such signs may not display any
125 pictures, other graphic elements or any matter other than text of a
126 single color, without background illumination;

127
128 (7) All electronic displays shall remain static for a period of at least one
129 (1) minute, and change sequences shall be accomplished by
130 means of instantaneous re-pixelization. Scrolling, flashing, blinking

131 or any other type of intermittent illumination of elements of the
132 display shall be prohibited;

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134 (8) Audio speakers on, or electronically connected to, such signs shall
135 not be permitted;

136
137 (9) Such signs shall not exceed a maximum illumination of five
138 thousand (5,000) candelas per square meter from sunrise to sunset
139 or five hundred (500) candelas per square meter between sunset
140 and sunrise, as measured from the sign face at maximum
141 brightness, and shall be equipped with a working dimmer control
142 device capable of automatically reducing the illumination to the
143 required sunset-to-sunrise level.

144
145 (10) The electrical service lines providing power to such signs shall be
146 underground.

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149 **COMMENT**

150
151 **The amendments allow electronic display signs by right only in certain zoning districts or in**
152 **conjunction with certain uses, such as schools and other public uses, with the exception of public**
153 **parks. In other places, such as public parks and assembly uses in Residential and Apartment**
154 **Districts, electronic display signs are allowed with a City Council approval.**

155
156 **The amendments also provide that electronic display signs must, in addition to the**
157 **provisions of this section, conform to the City's general sign regulations contained in Part B of**
158 **Article 2 of the City Zoning Ordinance and to the applicable sign regulations of the district in**
159 **which the sign is located. In particular, the ordinance makes it clear that an electronic display sign**
160 **is permitted only if a freestanding sign is allowed by the district regulations applicable to the site.**

161
162 **In addition, there are a number of requirements specific to electronic display signs that**
163 **address the special characteristics of such signs. These requirements pertain to size, height,**
164 **frequency of message changes, wiring, sound and illumination. In addition, the ordinance prohibits**
165 **electronic display signs from advertising or directing the attention of the general public to an**
166 **establishment, business or service that is located on a separate site from the sign. This provision is**
167 **consistent with the City's prohibition of billboards.**

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171 **Adopted by the Council of the City of Virginia Beach, Virginia, on the**
172 **_____ day of _____, 2010.**

173

Approved as to Content:

Approved as to Legal Sufficiency:

Planning Department

City Attorney's Office

CA10718
R-13
December 4, 2009