To: Boothbay Planning Board
From: Mark Eyerman
Subject: Calculation of the Area of a Sign
Date: August 27, 2019

At the last workshop when we reviewed the sign provisions, there was a suggestion that we add a provision for how the area of a sign is measured or calculated. I pulled the following provisions out of the City of Gardiner's sign provisions to allow the Board to discuss this issue before I incorporate any language into the draft. The Gardiner provisions are based on the concept of what you might think of as the virtual sign face – or the size of a sign board that would be needed to accommodate the components of a sign. This concept becomes important for a sign using channel letters or for irregular signs like the script sign in the examples below.

10.24.5.1 Calculation of the Sign Area: The area of each sign shall be determined based on the following procedures depending on the type of sign (see Section 10.25 for examples of how sign area is calculated).

10.24.5.1.1 General Standard: The area of a sign shall include the effective sign area of the sign including all lettering, wording, and accompanying design symbols, together with the background whether open or enclosed, on which they are displayed, including sections between paneled signs. Minimal supporting bracing or framework shall be excluded from the calculation of the area of a sign, but any decorative structure shall be included in the area.

10.24.5.1.2 Two-Sided Signs: Only one side of a two-sided sign shall be counted when determining the sign area of such a sign.

10.24.5.1.3 Signs with a Sign Board: When a sign consists of a sign board in which the lettering, wording, graphics and similar features are on a separate sign board such as a wall sign attached to a building, a projecting sign, or a ground-mounted sign, the entire area of the sign board shall be counted in the area of the sign.

10.24.5.1.4 Applied Signs: When the lettering, wording, graphics and similar features are applied directly to a surface such as in an awning sign, canopy sign, channel letter sign, or a wall sign painted/applied directly on the wall surface and there is a distinctive background behind the features that sets it apart from the rest of the surface, the entire area within the distinctive background shall be counted in the area of the sign. When there is no distinctive background behind the features such as in a channel letter sign, the area of the sign shall be calculated by the area of the smallest square, rectangle, circle, ellipse, or triangle that can enclose the effective sign area of the sign.

10.24.5.1.5 Complex Signs: When the lettering, wording, graphics and similar features are located on a larger surface such as in a pylon sign, only the area including the effective sign area that encompasses lettering, wording, graphics and similar features shall be included in the area of the sign. If these features are not located on a distinctive background that creates an identifiable sign face, the area of the sign shall be calculated by the area of the smallest square, rectangle, circle, ellipse, or triangle that can enclose the effective sign area of the sign.

10.24.5.1.6 Changeable Copy Signs: When a sign incorporates a changeable copy sign, the entire area of the area that can display changeable copy shall be included in the area of the sign together with any border or framing.

10.25 Calculation of Sign Area

Section 10.24.5.1 sets out the procedures for calculating the area of a sign to determine compliance with the maximum sign size and maximum sign area requirements. The following examples demonstrate how those procedures apply to a sample of sign types. These examples are intended to provide guidance as to how the requirements of 10.24.5.1 should be applied.

10.25.1. Channel Letter Signs

When channel letters and logos are attached directly to the wall without a distinctive background that creates a virtual signboard, the area of the sign is the area of the basic geometric shape that encloses the informational elements of the sign.

10.25.1.1. Single Sign – In this example, a rectangle encloses all of the informational elements of the sign.

10.25.1.2. Multiple Signs – In this example, two geometric shapes, a rectangle for the name and a square for the logo, enclose all of the informational elements of the sign. The area of each sign is the area of the shape enclosing the informational elements. In this example, this method of calculating the sign area would result in this being counted as two signs.

10.25.2 Pylon Signs

The area of the sign is the area of the basic geometric shape that encloses the informational elements of the sign. The blank area of a pylon sign is not counted as part of the sign area unless it is a distinct background for the informational element so that it creates a virtual sign board.

10.25.2.1. Single Sign – In this example the logo and lettering are placed on a blue background creating a virtual sign board. The area of the sign would be the area of the smallest geometric shape that can encompass the entire blue background – in this example that would be a rectangle.

10.25.2.2. Multiple Signs -- In this example, two shapes, a rectangle for the text and a circle for the logo, enclose all of the informational elements of the sign. The area of each sign is the area of the shape enclosing the informational elements. Measuring the sign area in this way counts as two signs for purposes of the ordinance.

10.25.3. Complex or Irregularly Shaped Signs

The basic principle in calculating the area of a sign is that the area of the sign is the area of the smallest simple geometric shape (square, rectangle, circle, oval, or triangle) that can encompass all of the informational elements of the sign. The following example shows how this principle applies to a simple script sign using a rectangle. The area of this sign would be the area of the rectangle. In other situations, another shape or combination of shapes may be the better solution.