Figure 3.

4. Develop spacing that will be proportionally scalable and based upon a upper case letter height of 4" (100 mm). This will eradicate the need for complicated spacing charts and codes which are based upon discreet letter heights.

5. Standardize the inter-character spacing by applying space to both the right and left side of each letter. The objective is to create an industry standard specification that will make the Standard Alphabets For Traffic Control Devices adaptable to a broad range of software applications commonly used in engineering departments and sign shops for standard highway sign design and production.

6. Add drawings of lowercase letters to all Standard Alphabets.

In order to proceed, first a departure from the code based spacing system is necessary. A careful redistribution of white space must be applied with emphasis on maintaining the existing spacial relationships of the 1966 and 1977 Alphabets.

For each letter there are basically three classes of relationships with respect to spacing. These classes are determined largely by the simple geometric form that best describes their shape. For example; first, the letters B, D, E, F, H, I, K, L, M, N, P, R and to a great extent U all share one common characteristic. They have one or more straight vertical stems that makes up their design. Also, they can be thought of as rectangular in shape. Second; the letters C, G, O and Q are obviously round and third, the letters A, V, T, W, Y are triangular in nature.

The goal in letter spacing is to develop an ideal negative (white) space for each class of letter. When these letters are then juxtaposed, the white space between them balances with the white within them to create an optically even (balanced) tone or flow. This produces optimum readability and good legibility.

The spacing tables listed in the Series E(M) 1966 Standard Alphabet specification shows the distance from the uppercase H to other similar letters (B, D, E, F, H, I, K, L, M, N, P, R, U) in its class to be 1.025" (at a letter height of 4"). In order to obtain a proper left and right margin, or white space, it is necessary to first optically establish the "ideal" stem to stem relationship. In this case a slight adjustment was made resulting in a value of 1.12". This measure is then divided in half and applied to every character that has a straight vertical stem. This will ensure that the distance between these letter combinations will remain consistent.

The round letters are treated basically the same way. The Series E(M) 1966 Standard Alphabet specification shows the distance from the uppercase O to other similar letters (C, G, O, Q) in its class to be .825" (at a letter height of 4"). To keep the conversion simple and orderly the value is ad-