

ITEM 694

DOWN LIGHTS FOR TRAFFIC SIGNALS

- 694.1 Description. This specification covers the minimum requirements for a traffic signal sign and sign light and mounting brackets to be used with horizontal and vertical traffic signals.

The signs and sign lights shall be as herein specified.

- 694.2 Horizontal Sign Light Housing. The housing of the sign light shall be of 1/16" aluminum rolled and crimped on the backside under edge of the housing, crimped and bent upward on the forward edge to allow a drip drain. This crimp is to be approximately 45 degrees with the front portion of the housing. Approximately 3 inches from the top, the housing shall be crimped forward so as to give the proper reflector surface to throw light passing forward from the lamp back onto the sign hanging below.

The end plates of the structures shall be 1/8" or larger sheet aluminum for rigidity. These end plates shall be drilled or knockouts placed in them for 1/2" grommet type connectors.

At each end of the housing there shall be a bracket for mounting the lamp sockets so as to place the center of the lamp socket approximately 3-3/4" below the top of the housing. Exact positioning of the lamp socket to depend on the front angle of the housing for the proper reflective angles to place the maximum amount of light on the sign hanging below. These brackets shall be so constructed that the wiring from the signal cable to the sign may be made up on a terminal block.

- 694.3 Finish. The outside of the sign light shall be finished with two coats of Federal Yellow gloss and the inside with two coats of white gloss.

- 694.4 Sign Light Dimensions. The horizontal sign light shall be approximately 48-inches long so as to mount under a three section 12-inch signal without extending beyond the mounting hardware of the signal assembly.

Four holes shall be drilled in the rear wall of the housing approximately 26" apart, plus or minus 1/4 of an inch in the horizontal dimension and 3-1/2 inches apart in the vertical dimension. This will allow it to be used with an 8 or 12-inch signal type assembly. These holes shall be of sufficient size to accommodate 1/4 inch bolts.

The vertical sign light shall be approximately 12" long so as to mount on top of the proposed sign.

- 694.5 Brackets. Each horizontal sign light shall come equipped with two brackets of 1/8" aluminum stock, 1-1/4 inch wide, 24 inches long, with a pipe bend on one end for a 1-1/2 inch pipe so that the bracket may be

placed around the pipe and a 1/4 inch bolt and nut placed through corresponding holes and tightened down so as to give a tight fit. Besides the two holes for tightening to the assembly, there shall be the two holes for mounting a 12 inch maximum dimension sign.

The holes shall be located at the following dimensions from the bottom of the bracket: 1-1/4, 10-1/4 inches, 12 inches and the remaining hole depending on the holes drilled in the rear of the sign light, but approximately 3-3/4 inches from the third hole. These brackets shall be furnished with two coats of Federal Yellow gloss. The purpose of the brackets will be to hang from the top crossbar of the horizontal signal down the back of the signal and thus place the sign light approximately underneath the signal when it is mounted on the brackets. These brackets shall be malleable enough to allow bending around any manufacturer's signal.

694.6 Ballast. The ballast shall be of the instant start type 120 volt, 60 cycles in the lamp and ballast area.

694.7 Lamp. The sign lamp shall be fluorescent for horizontal type. Lamp is to be furnished with this sign light and shall be of the F36 T12 type. Lamp shall be a 60 watt incandescent lamp for the vertical type.

694.8 Signs. "One Way" sign shall be according to TMUTCD (R6-1), and shall be a white arrow, (right or left as specified), on a black horizontal rectangle with the words "One Way" centered in the arrow, made out of reflective material.

"Left Turn Signal" sign shall be a 36" x 12" sign, and shall be white with black letters with the words "Left Turn Signal" as shown in drawings, made out of reflective material.

Other signs such as "No Turns" etc., shall be made of same material and size as specified above, and in accordance with the drawings and special specifications as called for.

694.9 Photoelectric Control. All down lights shall be connected to one photoelectric cell. Location of the photoelectric cell shall be on the service pole or as shown on drawings.

694.10 Guarantee. It is normal trade practice for the manufacturer to furnish a guarantee for the work provided herein. The Contractor shall turn this guarantee over to the Engineer for potential dealing with the guarantor. The extent of such guarantee will not be a factor in selecting the successful bidder.

694.11 Measurement and Payment. Downlights shall not be paid for directly, but shall be considered subsidiary to Item 690, "Traffic Signal Heads," and Item 691, "Twelve-Inch Signal Head with Programmable Visibility of Signal

Faces," except when included in an equipment procurement contract by the County.

There are line code(s), description(s), and unit(s) for this item (equipment procurement contracts only).

NOTE: This specification requires drawings, that shall be incorporated into the proposed standard construction drawings.

END OF ITEM 694