ITEM 675

TRAFFIC PAINT STRIPING (WATER BASED)

675.1 Description. This Item shall govern for the installation of water based reflectorized traffic paint striping on pavement, where the color and width of line shall be as specified on the drawings.

675.2 Material. Materials shall consist of paint and glass beads. Paint for striping shall conform to the requirements of Item 676 "Traffic Paint (Water Based)".

675.3 Equipment. Equipment used for applying traffic paint shall:

A. Be maintained in satisfactory operating condition

B. Paint striping equipment used to place 4 inch solid or broken lines shall have a capability of an average hourly placement rate of 7,000 linear feet of 4 inch line in any five consecutive working days of seven hours or more. The equipment shall be capable of applying one 4 inch broken line and either one or two solid lines simultaneously.

C. Have production capabilities similar to 4 inch marking equipment and shall be capable of placing linear markings up to 8 inches in width in a single pass when used for placing markings in widths other than 4 inches.

D. Have production capabilities considered satisfactory by the Engineer when used to place markings other than solid or broken lines.

E. Be capable of placing centerline and no-passing barrier line configuration consisting of one broken line and two solid lines at the same time, to the alignment and spacing shown on the drawings.

F. Be capable of placing edge lines and broken lines simultaneously.

G. Be capable of placing lines with clean edges and of uniform cross-section. All lines shall have a tolerance of ±1/8 inch per 4 inch width.

H. The equipment shall be equipped with an automatic cut-off device (with manual operating capabilities) to provide clean square marking ends and to provide a method of applying a broken line with a stripe gap ratio of 15 to 25. The equipment shall be capable
of placing lines of all widths with clean edges and of uniform cross-section. Four inch lines shall be 4 inch \( \pm 1/8 \) inch in width. Eight inch lines shall be 8 inches minimum and 8-1/4 inches maximum in width.

I. The equipment shall provide mixing and agitation of the pavement marking material. The use of pans, aprons, or similar appliances which cause overruns will not be permitted for longitudinal striping applications.

J. The beads shall be applied by means of automatic bead dispenser attached to the pavement marking equipment in such a manner that the beads are dispensed uniformly and almost instantly upon the marking as the marking is being applied to the road surface. The bead dispenser shall have an automatic cut-off control, synchronized with the cut-off of the pavement marking equipment.

675.4 Construction Methods. The Contractor shall use a crew experienced in the work of installing paint striping and in the necessary traffic control for such operations on the roadway surface and shall supply all of the equipment, personnel, traffic control and materials necessary for the placement of paint striping as shown on the drawings, or as directed by the Engineer. All work shall be in accordance with the Latest Edition of the Texas Department of Transportation's "Manual on Uniform Traffic Control Devices".

Paint shall be applied with a minimum thickness of 10 mils, measured in the dry condition, prior to adding any glass reflective spheres, as per Item 676 "Traffic Paint (Water Based)".

Markings may be placed on roadways either free of traffic or open to traffic. On roadways already open to traffic, the markings shall be placed under traffic conditions that exist with a minimum of interference to the operation of the facility. All markings placed under open traffic conditions shall be protected from traffic damage and disfigurement.

The pavement surface to receive the striping shall be thoroughly cleaned of all dirt, organic growth, oil, grease, or other materials that will prevent adhesion of the paint to the roadway surface.

Guides to mark the lateral location of pavement markings shall be established by the Contractor. The Engineer shall verify the location.

Materials used for pilot markings and equipment used to place such markings shall be approved by the Engineer.
The striping shall be placed in the proper alignment with the guides established on the roadway. The deviation rate in alignment shall not exceed 1 inch per 200 feet of roadway. The maximum deviation shall not exceed 2 inches, nor shall any deviation be abrupt.

Markings shall essentially have a uniform cross-section. The density and quality of markings shall be uniform throughout their thickness.

The applied markings shall have no more than five percent, by area, of holes or voids and shall be free of blisters.

Glass beads shall be applied by an automatic bead dispenser attached to the pavement marking equipment in such a manner that the beads are dispensed uniformly and almost instantly upon the marking as the marking is being applied to the road surface. Where two coats of traffic paint is used to achieve the required dry mil thickness, beads shall only be applied to the second coat.

Glass reflective spheres for traffic paint shall be applied in accordance with Item 662 "Glass Reflective Spheres for Traffic Paint". Under no circumstances shall the bead application rate be less than 7 1/2 pounds of beads per gallon of paint applied to the last coat.

Removal. When construction operations require the alteration of any pavement marking, the Contractor shall provide for the complete removal of any markings to the satisfaction of the Engineer. Removal of the markings shall leave no discernible evidence of the marking having ever been in place. Removal of existing pavement striping and markings shall be in accordance with Item 674 "Removing Pavement Striping and Markings".

Measurement and Payment. The installation of water-based paint striping shall be paid for under Item 665 “Work Zone Pavement Markings”.

There are no line codes for this Item.

NOTE: This Item requires other Standard Specifications:

Item 662 “Glass Reflective Spheres for Traffic Paint”
Item 665 “Work Zone Pavement Markings”
Item 674 “Removing Pavement Striping and Markings”
Item 676 “Traffic Paint (Water Based)”

END OF ITEM 675