**ITEM #0406314A – 80 MIL PAVEMENT MARKING GROOVE 5” WIDE**

**ITEM #0406315A – 80 MIL PAVEMENT MARKING GROOVE 7” WIDE**

**ITEM #0406316A – 80 MIL PAVEMENT MARKING GROOVE 9” WIDE**

**ITEM #0406317A – 80 MIL PAVEMENT MARKING GROOVE 13” WIDE**

**Description:**

Work under this item shall consist of grooving the pavement surface in continuous or intermittent intervals for the placement of recessed pavement markings. Unless otherwise noted, the groove shall be 1 inch wider than the anticipated pavement marking. The groove for double-yellow centerline markings shall consist of two grooves, each 5 inches wide.

**Groove Width:**  5 inches wide for 4-inch markings

7 inches wide for 6-inch markings

9 inches wide for 8-inch markings

13 inches wide for 12-inch markings

**Groove Depth:** 0.080 inches ± 0.010 inches

The groove shall not be installed continuously for intermittent (Dotted Lines and Broken Lane Lines) pavement markings, but only where markings are to be applied.

The groove shall not be installed on metal bridge decks, on bridge joints, at drainage structures, at loop detector sawcut locations, or in other areas identified by the Engineer.

**Construction Methods:**

Equipment:

The grooving equipment shall be equipped with a free-floating, depth-controlled head which provides a consistent groove depth over irregular pavement surfaces. The grooving head shall only be equipped with diamond saw blades. Any ridges in the bottom of the groove shall have a maximum height of 0.015 inches. The grooving equipment shall be capable of installing a groove 6 inches away from any vertical or horizontal obstruction.

Installation: The pavement marking groove shall be installed in accordance with the current CTDOT pavement marking standard drawings.

The Contractor shall establish control points for measuring offsets and pre-marks along the entire distance of pavement being grooved. Prior to installation of the groove, the Contractor shall verify that the equipment is capable of installing the correct width and spacing of the groove. The control points, pre-marks, and equipment will be reviewed by the Engineer prior to commencement of the work.

The groove will be considered defective if any edge of the groove varies more than 0.25 inch in a 10-foot length, or if the alignment of the groove visibly deviates from the normal alignment of the road.

Final Cleaning: The Contractor shall immediately collect all debris and dust resulting from the grooving operation by vacuuming the pavement groove and adjacent pavement surface. Collected debris and any waste material shall be properly disposed of by the Contractor.

The work area shall be returned to a debris-free state prior to re-opening to traffic.

Repair of Unacceptable Groove:

The Contractor shall repair any defective groove(s) to the satisfaction of the Engineer. All work in conjunction with this repair shall be performed at no additional cost to the State.

Pavement Marking Requirements:

The Contractor is required to install permanent pavement markings in the grooves before the lane or roadway is opened to live traffic. If the permanent pavement markings cannot be installed before the lane or roadway is opened to live traffic, the Contractor will need to obtain approval from the Engineer to open the lane or roadway. Liquidated Damages based on Limitation of Operations restrictions will be enforced. If approved by the Engineer, the Contractor will be allowed to open the lane or roadway to live traffic and the Contractor will be required to install temporary hot-applied waterborne pavement markings without glass beads, at their own expense, within 24 hours of opening the lane or roadway. Temporary hot-applied waterborne pavement markings shall be applied at a 5 mil thickness. Within 5 calendar days after the installation of the groove, permanent pavement markings shall be applied in the groove over the temporary hot-applied waterborne pavement markings.

Groove Depth Gauge:

The Contractor shall supply the Engineer with two accurate, easily readable gauges with which to verify groove depth for the duration of the Project. The gauges shall be delivered at least one week prior to the anticipated beginning of grooving operations. Gauges shall be accompanied by the manufacturer’s instructions for their use. The gauges will be returned to the Contractor at the conclusion of the Project.

**Method of Measurement:**

This work will be measured for payment by the number of linear feet of grooves installed in the pavement as ordered and accepted by the Engineer.

**Basis of Payment:**

This work will be paid for at the Contract unit price per linear foot of “Pavement Marking Groove” installed in the pavement and accepted. This price shall include cleaning of the pavement, all materials, equipment, tools, depth gauges, and labor incidental thereto, and disposal of any waste material resulting from the grooving operation.

 Pay ItemPay Unit

80 Mil Pavement Marking Groove 5” Wide l.f.

80 Mil Pavement Marking Groove 7” Wide l.f.

80 Mil Pavement Marking Groove 9” Wide l.f.

80 Mil Pavement Marking Groove 13” Wide l.f.