# PAINT PAVEMENT MARKING

Updated: 1/17/2024

**Installation requirements:** The installation ***(including layout)*** of all paint pavement markings shall be in accordance with Section 780of the Standard Specifications.

Layout of paint pavement marking lines and symbols will be incidental to the PAINT PAVEMENT MARKING pay items. Layout and application of pavement markings, especially “hand-work”, shall be done concurrently, to the best of the contractor’s effort, in order to be efficient and to minimize disruption of traffic on busy roads. After the Contractor has laid out the pavement markings, approval must be given from the Engineer prior to the start of permanent striping. ***24 hour notice must be given to the Engineer, for review of layout, prior to the start of placement.***

***For locations/routes/roads longer than 200 feet, a truck mounted spraying device, operated from the same truck that the equipment is mounted from, is required for application. The use of a hand truck for main line pavement markings is to be avoided.***

1. All materials used in the installation of paint pavement markings shall be accordance with Section 1095of the Standard Specifications.
2. On all existing roadway surfaces, prior to the application of paint pavement marking, the Contractor shall make certain that the pavement surface is dry and free of dirt, grease and loose paint or any other pavement marking. The surface shall be cleaned by water blasting or by other means to the satisfaction of the Engineer and/or his authorized representative.
3. The paint pavement marking shall be applied at a minimum thickness of 0.41 mm (16 mils +/- 0.1 mil) before the glass beads are applied. Glass beads shall be uniformly applied by means of a double drop pressurized bead applicator system. The system shall apply both the first drop glass beads and the second drop glass beads at a rate of 720 g per L (6 pounds per gallon) for all roadways.
4. Paint pavement marking shall not be applied at air temperatures below 10º C (50º F), unless otherwise directed by the Engineer and/or his authorized representative.
5. For further details on pavement markings refer to the District One pavement marking standards, IDOT *Bureau of Operations Traffic Policies and Procedures Manual*, Part 3 "Markings" in the *Manual on Uniform Traffic Control Devices,* the *Standard Specifications for Road and Bridge Construction* and the Kane County D.O.T. Engineer.
6. The two-line system of centerline marking will be used for all two (2) lane sections of roadway specified in the schedule of quantities.
7. The paint unit shall be equipped with measuring devices to measure actual number of lineal meters (feet) of marking.
8. In areas of sharp curves, as specified in the schedule of quantities and as directed by the Engineer, the Contractor shall be required to place an eight inch (8") white edge line.
9. The placement of paint pavement marking on areas of raised medians and median curb faces shall be as specified in the schedule of quantities and as designated by the Engineer and/or his representatives. The Contractor shall make certain that the surface to be marked is dry and free of dirt, grease, or any other marking. The surface shall be cleaned by sand blasting or by other means to the satisfaction of the Engineer and/or his representatives.
10. The Contractor shall be required to maintain a minimum initial retro-reflectivity for all paint pavement markings that he/she applies, as follows:

|  |  |  |
| --- | --- | --- |
| **Material** | **Color** | **Retro-reflectivity**(millicandelas/m2/lux) |
| Paint | White | **200** |
| Paint | Yellow | **175** |

The Engineer and/or his representatives will measure the retro-reflectivity a minimum of twelve (12) hours after and within fourteen (14) days of the application. The Engineer will take a minimum of ten (10) readings per color line, evenly spaced, on a 1,000 meter (0.6 mile) roadway section on all roadways specified in the schedule of quantities for paint pavement marking or as determined by the Engineer and/or his representatives. The Engineer and/or his representatives will average all of the readings for each color line within the 1,000 meter section of roadway to determine the retro-reflectivity. The Contractor shall be required to replace all paint pavement markings not meeting the minimum retro-reflectivity requirements at no additional expense to this contract.

**Equipment:** All equipment used for installing paint pavement markings shall be accordance with Section 1100of the Standard Specifications and the following requirements:

1. The Contractor shall abide by all local ordinances governing the use of this type of equipment.
2. Subsequent to the award of the contract the Contractor shall furnish evidence, satisfactory to the Engineer and/or his representatives, that the equipment to be used on this contract meets the requirements as state herein ***and has been recently serviced and calibrated per manufacture specifications.***
3. Water blasting equipment shall be truck mounted with a minimum carrying capacity of 6435 liters (1,700 gallons). It shall have at least one (1) high pressure pump capable of producing at least 68.95 megapascals (10,000 p s.i.) with a flow rate of 75.7 liters (20 gallons).
4. A minimum of 5,678 liters (1,500 gallons) water supply truck shall accompany the water blasting unit to insure continuous cleaning without impeding normal traffic movement.
5. All equipment shall be in good working order prior to start of work.

***For locations/routes/roads longer than 200 feet, a truck mounted spraying device, operated from the same truck that the equipment is mounted from, is required for application. The use of a hand truck for main line pavement markings is to be avoided.***

***Contractor should have well maintained, clean, serviceable equipment on site in order to start the day. Equipment breakdowns should be limited to emergency situations only.***

***A deficiency deduction of $1,000.00 per incident, for excessive breakdowns of equipment, will be applied to monies due to the Contractor, as determined by the Engineer.***

**Basis of Payment:** Paint pavement marking lane lines, centerlines, and edge lines shall be paid for at the contract unit price per foot for PAINT PAVEMENT MARKING – LINE of the width specified, which price shall be payment in full for all labor, materials, and equipment necessary to complete the work described above.

Paint pavement markings for medians and curbs shall be paid for at the contract unit price per square foot for PAINT PAVEMENT MARKING – MEDIANS, which price shall be payment in full for all labor, materials, and equipment necessary to complete the work described above.

Paint pavement markings for letters and symbols shall be paid for at the contract unit price per square foot for PAINT PAVEMENT MARKING LETTERS – LETTERS AND SYMBOLS, which price shall be payment in full for all labor, materials, and equipment necessary to complete the work described above.