

1081 - INTERIM PAVEMENT MARKINGS

1081.1 DESCRIPTION

The Contractor shall furnish and install interim white and/or yellow, longitudinal and/or transverse, pavement markings, and white legend/symbol (“ARROW” and “ONLY”) markings, as shown in the plans, details, specifications and Part VI of the Manual on Uniform Traffic Control Devices (latest revision) and shall maintain them until the permanent pavement markings are installed, according to the plans and permanent pavement marking specifications.

Interim pavement markings shall be defined as markings that may be used until the earliest date when it is practical and possible to install permanent pavement markings that meet the full MUTCD standards for pavement markings. The contractor shall make every possible effort to remove the interim pavement markings and install permanent pavement markings within 48 hours. Only under extreme circumstances and at the approval of the pavement marking inspector or the engineer, will the duration of the interim pavement markings be extended. Under no circumstance should the interim pavement markings be in place for more than 2 weeks. If permanent markings cannot be installed within the specified time, then temporary pavement markings shall be installed following the guide lines as set forth in the MUTCD Part VI, Sections 6F and 6G. The interim markings shall be removed prior to installation of the permanent markings.

1081.2 MATERIALS

The material for interim pavement markings shall be in accordance with this specification.

a. Approved Materials List

All material for interim pavement markings used by the Contractor shall be from the City’s approved list of vendors. It is important that users be completely knowledgeable of all application requirements and procedures prior to product application. It is the responsibility of the installer to contact the supplier of all interim pavement marking materials if questions regarding application procedures or conditions arise

b. Paint

The interim pavement marking paint shall be a rapid dry. The traffic paint shall provide optimum adhesion for glass spheres when both binder and glass spheres are applied in the recommended quantities.

(1) Drying Time

When applied at a wet film thickness of 15 mils with a top dressing of 6-10 pounds of glass spheres per gallon of paint and when the pavement temperature is between 50 degrees F and 120 degrees F and the relative humidity doesn't exceed 80%, the binder shall dry to a no-tracking condition in a minimum of 20 seconds and a maximum of 60 seconds.

These dry times shall not be exceeded when the paint is applied with specialized equipment so as to have the pigmented binder at a temperature of 150 degrees F to 170 degrees F at the spray gun.

The no-tracking condition shall be determined by passing over the applied line in a simulated passing maneuver with a passenger car traveling 35 MPH. There shall be no visual deposition of the paint to the pavement surface when viewed from a distance of 50 feet. Furthermore, the pigmented binder, without glass spheres, shall dry to no-tracking condition in 180 seconds or less when tested in accordance with ASTM D-711-67

(2) Directional Reflectance

The daylight directional reflectance of white pigmented binder (without glass spheres) shall be not less than 85% relative to magnesium oxide when tested in accordance with Federal Test Method Standard No. 141a, Method 6121. If yellow, after drying shall suitably match color 33538 of Federal Standard 595.

(3) Glass Beads

The glass spheres shall meet the requirements of AASHTO Specification M 247-81, Type I with flotation and moisture resistance properties.

c. Temporary Tape

Interim pavement marking tape shall be in accordance with the Standard Specifications for State Road and Bridge Construction of the Kansas Department of Transportation (latest version), Subsection 2210 for "Removable" Type I tape.

1081.3 CONSTRUCTION REQUIREMENTS

a. Method of Installation

The interim pavement markings shall be installed true to line according to the plans, details, Manual on Uniform Traffic Control Devices (latest edition) and this specification.

Interim pavement markings shall be installed the same day that the existing pavement markings are damaged, removed or covered up prior to lane opening.

The interim pavement markings shall be installed using the same cycle length as the permanent markings and be at least 2 ft long. This equates to a line 2 ft long with a 22 ft gap. Double yellow markings shall be used for centerline and single white markings shall be used for lane lines on four lane roadways, crosswalks, and stop bars. Single yellow markings shall be used for centerline on two lane roadways as directed by the engineer.

Half-cycle lengths with a minimum of 2 ft stripe and 10 ft gap should be used on roadways with severe curvature.

Interim pavement markings should be used for centerlines, lane lines, channelization lines, edge lines, stop bars, crosswalks, and lane reduction transitions

(1) Paint

Paint shall be used on all milled asphalt surfaces that are scheduled to be overlaid.

(2) Glass Beads

The glass beads should be applied at the rate of 6-10 pounds per gallon of paint. The glass beads shall be sprayed into the wet traffic paint through a pressurized glass gun set 1" to 4" behind the paint spray gun.

(3) Tape

Interim reflective tape shall be used on newly overlaid surfaces, existing surfaces that are not scheduled for milling and overlay and concrete surfaces.

b. Method of Removal

Interim pavement markings on milled surfaces scheduled to be overlaid do not have to be removed prior to performing the overlay unless temporary tape is used. Interim pavement markings installed on new asphalt surfaces shall be removed without structurally damaging the pavement or scarring the surface. The method of pavement marking tape removal shall be by a high pressure water blast method, a low pressure water and sand blast method, a steel shot blast method, peel-off method or burning method. Grinding or black paint coverings or asphalt oil covering shall not be allowed on new, existing or milled pavement surfaces

1081.4 MEASUREMENT AND PAYMENT

Measurement for interim pavement markings installed or removed in accordance with the plans and specifications will be by lump sum for all work necessary.

Payment for "Interim Pavement Markings" at the contract lump sum price bid is full compensation for the specified work, including symbols and legends, and all labor, materials, tools and equipment necessary to complete the item.

No payment shall be made for the "Removal of Interim Pavement Markings". Any work required to remove the interim pavement markings shall be considered subsidiary to the bid item "Interim Pavement Markings".

All traffic control necessary for installation and removal of the interim pavement markings shall be subsidiary to the bid item "Interim Pavement Markings"