

Exhibit A- 1
Extract from VDOT R&B
Section 704 Pavement Markings & Markers

SECTION 704—PAVEMENT MARKINGS AND MARKERS

704.01—Description

704.02—Materials

704.03—Procedures

The Contractor shall have a certified Pavement Marking Technician present during pavement marking operations.

Pavement markings shall be installed on new roadways prior to opening the roadway to traffic. Pavement marking installation shall be completed within the time limits herein on roadways where the pavement markings have been removed or obscured and the roadway is open to traffic unless otherwise directed by the Engineer. Installation of Type B, Class VI, pavement markings on asphalt roadways are not applicable to these requirements if they are inlaid with the last pass of the asphalt roller or directly after the asphalt roller using a separate roller. Installation of edge lines on roadways where the existing pavement markings have been removed or obscured are also required within these time limits unless otherwise indicated by the Engineer. Exceptions to the below time limits will be granted only for weather restrictions, and installation of epoxy resin pavement markings on new pavement shall not commence until after 24 hours of final surface placement.

Pavement marking installation on roads having traffic volumes of 10,000 ADT or more shall be completed within 24 hours after the end of the workday where the pavement markings were removed or obscured.

Pavement marking installation on roads having traffic volumes between 3,000 and 10,000 ADT shall be completed within 48 hours after the end of the workday where the pavement markings were removed or obscured.

Pavement marking installation on roads having traffic volumes of less than 3,000 ADT shall be completed within 72 hours after the end of the workday where the pavement markings were removed or obscured.

If the Contractor will not have pavement markings installed within the time limits specified, the Contractor shall install Type D construction pavement markings within the same time limits and maintain such until the final pavement markings can be installed. **The cost of installing, maintaining, and removing the Type D construction pavement markings shall be borne by the Contractor at no cost to the Department.**

Exhibit B-1
New Special Provision for Transitional Pavement Markers (TPM)
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VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
TRANSITORY PAVEMENT MARKERS (TPM)

October 21, 2008cc

I. DESCRIPTION

- * This work shall consist of furnishing, installing and removing transitory pavement markers (TPM) in lieu of temporary pavement line marking at locations specified in the Schedules and as directed by the Engineer.

II. MATERIALS

Transitory pavement markers (TPM) shall consist of products from the Department's current approved list found in the Materials Division's Manual of Instructions (See Temporary Pavement Markers) or web site <http://www.virginiadot.org/business/materials-download-docs.asp>. Such TPM shall not be markers used for any purpose previous to this installation. The color of TPM shall simulate the color of the markings for which they are being used in substitution.

TPM shall be suitable for use one year after the date of receipt when stored in accordance with the manufacturer's recommendations.

III. INSTALLATION

Prior to beginning the installation of pavement markings the Contractor shall determine if there is sufficient time to install pavement markings within the time limits specified in Section 704 of the Specifications. If the Contractor determines that there is insufficient time to install pavement markings within the time limits specified in Section 704 of the Specifications, the Contractor shall install either Type D construction pavement markings or submit a plan to the Engineer for approval for substituting TPM for temporary pavement markings within the same time limits. The Contractor's plan for such shall be in accordance with the requirements of the drawings herein.

Prior to installing TPM, the pavement surface shall be dry and air blown or thoroughly brushed to remove debris, dirt and dust.

Installation, maintenance and removal of TPM shall be accomplished on a continuous basis in accordance with the manufacturer's recommendations, the drawings herein and as directed by the Engineer.

- * Damaged or missing TPM shall be replaced with new TPM of the same manufacturing type and model. No more than one TPM may be damaged or missing out of every broken line simulated segment. No two consecutive TPM may be damaged or missing on a simulated solid line, and no more than 30 percent of the TPM may be damaged or missing on any measured 100-foot segment of simulated solid line.

Where TPM are to be used in substitution for lane division lines, either broken (skip) line segments or for solid line segments, no edgeline marking will be required.

- * TPM shall not be in place for more than ten consecutive days.

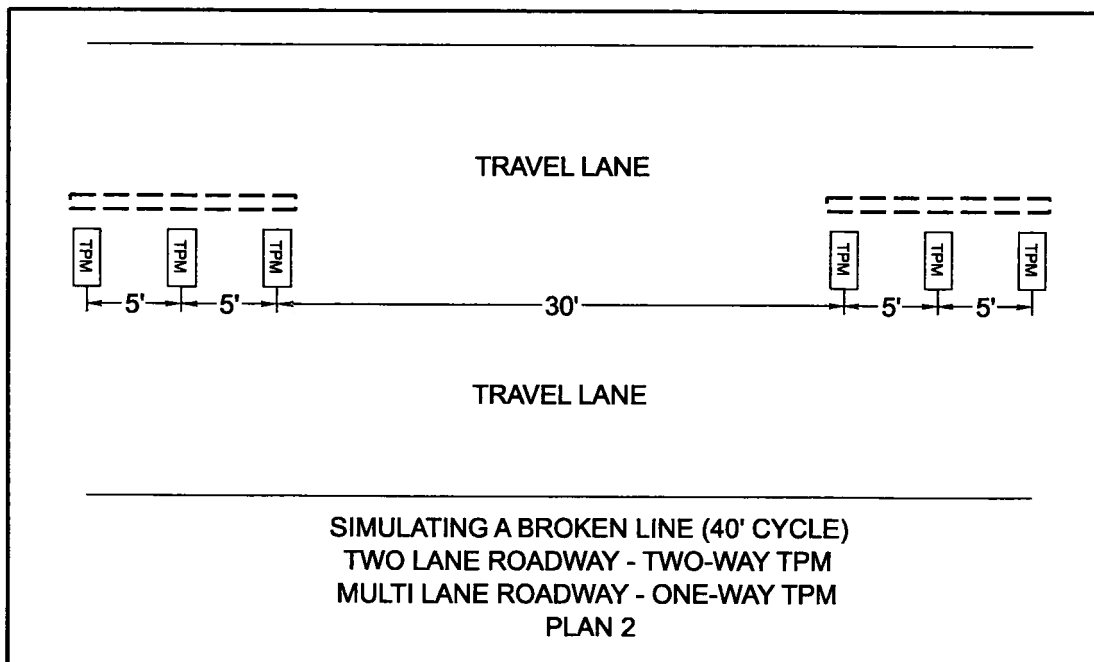
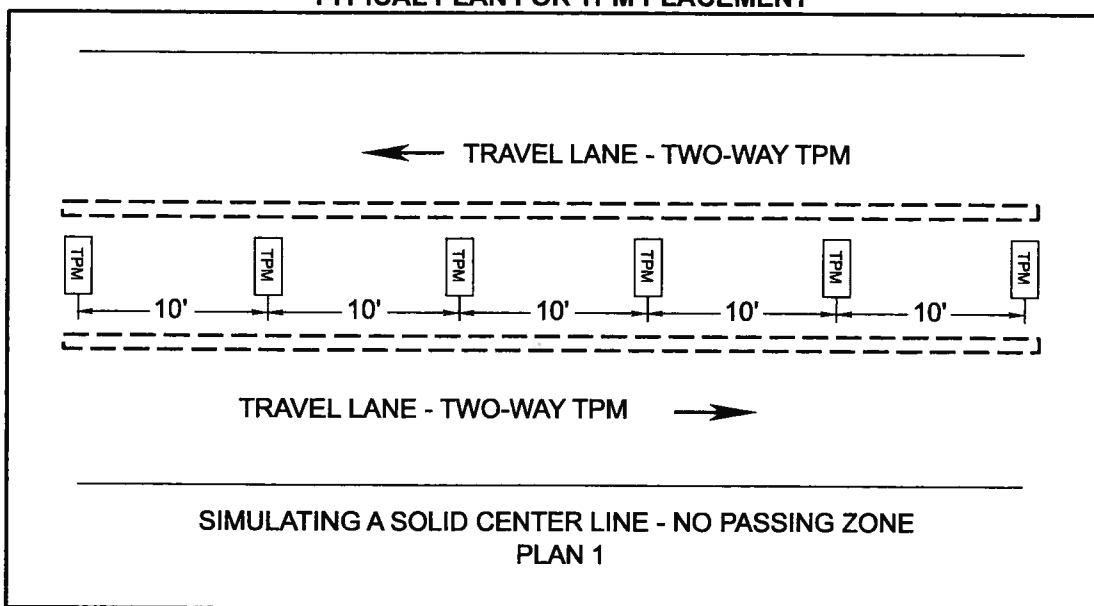
The Contractor shall maintain transitory pavement markers until the final pavement markings can be installed.

The Contractor shall remove from the work site all containers, packaging, unused markers, damaged markers and markers removed from the pavement after use and properly dispose of such.

IV. MEASUREMENT AND PAYMENT

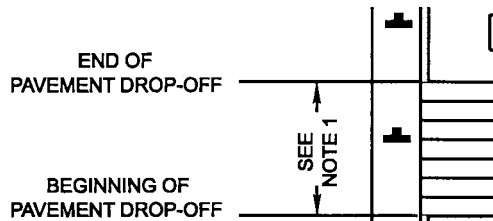
Transitory pavement markers (TPM) will not be measured for separate payment, the cost of which, shall be included in the price bid for pavement line making. Such price shall be full compensation for furnishing and installing pavement markers, surface preparation, adhesive, maintaining and replacing lost or damaged markers, and removing the pavement markers and adhesive when no longer required.

TYPICAL PLAN FOR TPM PLACEMENT



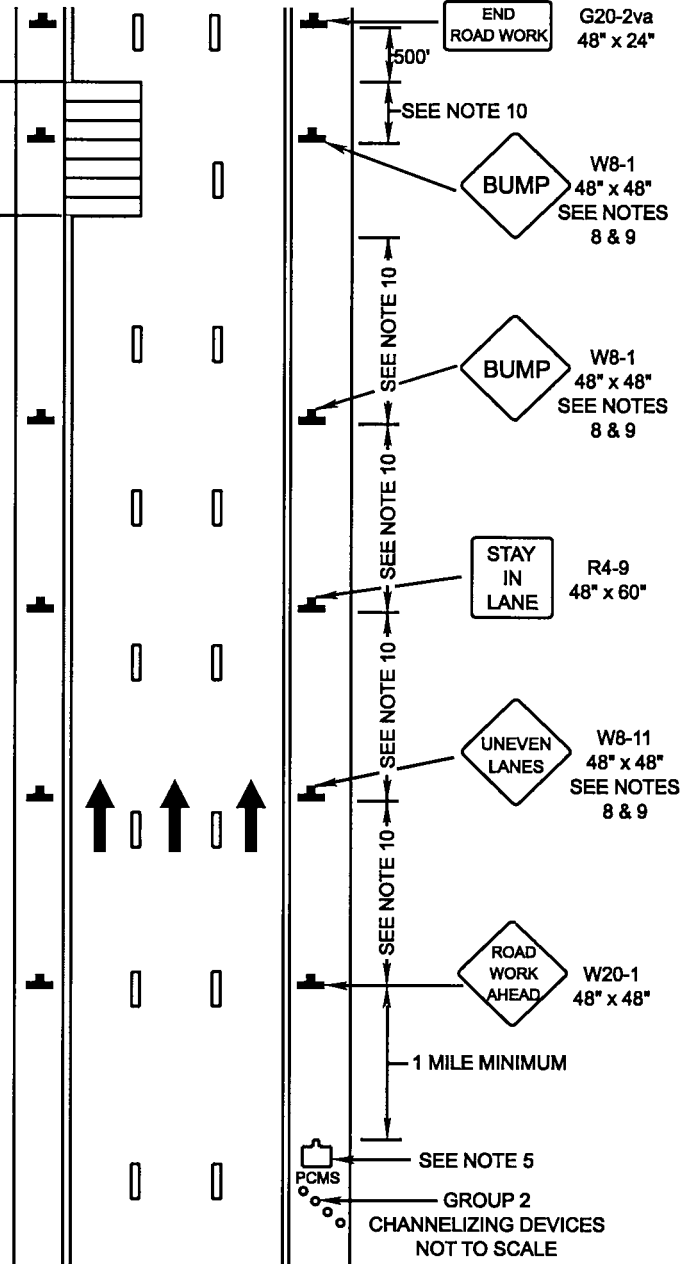
*** SIMULATES PAVEMENT MARKINGS

**Signing for
End of Daily Paving Operation
Applies To All Multi-Lane Highways**



NOTES:

- * 1. Open travel lane(s) shall not be exposed to more than 2 to 3 mile sections of milled or uneven surface.
- 2. On roadways having a median wider than 8', left and right sign assemblies shall be required.
- 3. Speed limits shall be determined by the Regional Traffic Engineer.
- 4. Pavement edge drop-off between traffic lanes shall be 2 inches or less.
- 5. Portable changeable message sign (PCMS) with ROUGH ROAD and other appropriate messages shall be used.
- 6. In the vicinity of entrance ramps ROUGH ROAD and BUMP signs shall be installed. In the vicinity of exit ramps BUMP signs shall be installed.
- 7. Conformational warning signs shall be installed every 2 miles and at entrance ramps.
- * 8. The UNEVEN LANE and BUMP signs shall be adjusted daily with the work operation and their sign stand shall be weighted with a 25 ± pound sand bag on each leg.
- * 9. Signs shall be post mounted at locations after 72 consecutive hours of non-work activities.
- 10. Sign spacing distance should be:
 - * 1300' - 1500' for Limited Access Highway
 - * 500' - 800' where the posted speed limit is greater than 45 mph
 - * 350' - 500' where posted speed limits is 45 mph or less
- 11. The LOW SHOULDER sign may be used to warn of a shoulder condition where there is an elevation difference of less than 2 inches between the shoulder and the travel lane. Where the condition extends over a distance in excess of 1 mile, the sign shall be repeated at 1 mile intervals.



GROUP 2
CHANNELIZING DEVICES
NOT TO SCALE

**Signing for
End of Daily Paving Operation
Applies To All Multi-lane Highways**

