- 4.16 A BUMP sign should be placed when there is a temporary pavement wedge along a transverse joint, a transverse construction trench with temporary backfill, or a similar transverse disturbance. Signs should be placed according to Shoulder Work Typical Applications for the appropriate prevailing speed and work duration, with BUMP signs replacing the SHOULDER WORK signs.
- 4.17 TRUCK CROSSING signs (W11-(10)1) shall be used as specified in 11.0, Strategies for Safe Entry/Exit of Work Zone Vehicles to/from the Work Area

5.0 PORTABLE VARIABLE MESSAGE SIGNS (PVMS)

- 5.1 The PVMS shall not replace standard traffic control devices, but is to supplement these devices.
- 5.2 PVMS shall be used where a new traffic signal has been installed along State routes having a prevailing speed of 50 mph or greater.
- 5.3 PVMS shall display a message regarding new traffic signal installation up to 3 days prior to signal turn-on. PVMS shall be removed no later than 7 days after the signal is operational.
- 5.4 When PVMS are used to advise/warn motorists regarding a new traffic signal installation, they shall be installed along all the major approaches to the intersection, and shall be used in such a way as to supplement the standard traffic control devices required for a new traffic signal installation.
- 5.5 No more than two displays shall be used within any message cycle unless approved by the District Engineer or ADE-T.
- 5.6 For a list of standard messages/abbreviations, contact appropriate District Engineer or ADE-T. All customized messages shall be approved by the ADE-T.
- 5.7 A single message shall be displayed for 2–3 seconds with an "off" interval of 0.5 to 1.0 second. When two messages comprise a message cycle, neither message shall exceed 2 seconds duration. The second message shall follow the first message immediately without any "off" interval. If an off-interval is used between the first and second messages, it shall not exceed 0.5 second.
- 5.8 The text of the message shall not scroll or travel (horizontally or vertically) across the face of the sign.
- 5.9 A PVMS should not be used for more than 14 continuous days as part of the same application. A PVMS should be used 3 to 5 days in advance of planned roadwork, if needed.

SPECIFICATION CATEGORY CODE ITEMS Maryland Department of Transportation STATE HIGHWAY ADMINISTRATION APPROVED STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES DIRECTOR - OFFICE OF TRAFFIC AND SAFETY APPROVAL • SHA APPROVAL • FEDERAL REVISIONS HIGHWAY ADMINISTRATION **GENERAL NOTES** APPROVAL 7-1-09 APPROVAL 7-27-09 7-29-10 REVISED 8-11-10 ateHighway STANDARD NO. MD 104.00-08 REVISED