
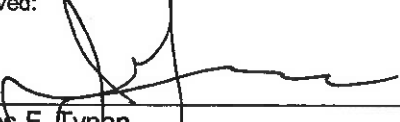


To:		New York State Department of Transportation <b>ENGINEERING</b> <b>BULLETIN</b>	<b>EB</b> 06-007
Expires one year after issue unless replaced sooner			
<b>Title: CORRECTION TO EI 05-030 - SPECIAL SPECIFICATION 619.21XX--14 PORTABLE, VARIABLE-MESSAGE SIGNS (PVMSs)</b>			
Distribution <input checked="" type="checkbox"/> Manufacturers (18) <input checked="" type="checkbox"/> Local Govt. (31) <input checked="" type="checkbox"/> Agencies (32)	<input type="checkbox"/> Surveyors (33) <input checked="" type="checkbox"/> Consultants (34) <input checked="" type="checkbox"/> Contractors (39) <input type="checkbox"/> _____ ( )	Approved:  _____ James F. Tynan, Director, Office of Construction	_____ 2-7-06 Date

**ADMINISTRATIVE INFORMATION:**

- This Engineering Bulletin (EB) is effective upon signature.
- This EB does not supersede any other issuances; it modifies EI 05-030.

**PURPOSE:** The purpose of this EB is to issue a replacement page for the Special Specification 619.21XX--14, Portable, Variable-Message Signs (PVMSs) as issued by EI 05-030.

**TECHNICAL INFORMATION:** On page 1 of 3 of the Special Specification Item 619.21xx--14 – *Portable, Variable-Message Signs (PVMS)* under the Heading *Light-Emitting Diode (LED) Type* the signs shall have a minimum of 3 LEDs per pixel rather than 4 LEDs per pixel.

**IMPLEMENTATION:**

- The change was made to the Special Specification toolbox as of November 10, 2005.
- Engineers-in-Charge of on-going contracts awarded with item 619.21XX--14 should include a copy of this EB with contract documents as documentation of a change in accordance with Contract Administration Manual (CAM) § 104-031.4.

**TRANSMITTED MATERIALS:** This EB transmits a replacement page for page 1 of 3 of Special Specification 619.21XX--14, Portable, Variable-Message Signs (PVMSs) as issued by EI 05-030.

**CONTACT:** Direct questions regarding this issuance to Dawn Arnold [darnold@dot.state.ny.us](mailto:darnold@dot.state.ny.us) at (518) 457-1673 or Chuck Riedel [criedel@dot.state.ny.us](mailto:criedel@dot.state.ny.us) (518) 457-2185 of Transportation Systems Operations.

## ITEM 619.21xx--14 – PORTABLE, VARIABLE-MESSAGE SIGNS (PVMS)

### **DESCRIPTION**

This work shall consist of providing, programming, operating, maintaining, relocating and removing portable, variable-message signs (PVMSs) at locations indicated in the contract documents or as directed by the Engineer. The locations of PVMSs and duration of setup will be specified in the contract documents under special note "Requirements for Portable, Variable-Message Signs (PVMSs)." PVMSs are intended to supplement other traffic control devices by displaying symbolic or word messages, but are not to be used alone to replace conventional traffic control devices.

### **MATERIALS**

PVMSs shall meet the requirements of Sections 201.3 and 294.6 of 17 NYCRR Chapter V a.k.a. the New York State Manual of Uniform Traffic Control Devices. The PVMS shall be trailer-mounted and equipped for use on public highways in accordance with NYS Vehicle and Traffic Law. The trailer shall have four (4) leveling jacks capable of leveling the trailer on grades up to 1 on 6 and stabilizing the trailer in winds up to 130 km/h.

The PVMS shall operate primarily from a solar-powered electrical system and shall be capable of displaying for at least 21 days without auxiliary charge. The electrical system shall consist of batteries and solar array panels and on-board auxiliary charging system to enable the batteries to be recharged via a 110V AC connection.

The PVMS shall have a three-line display with a minimum of eight, 450-mm high characters per line and shall be capable of displaying three (3) separate messages in a cyclical sequence. Messages shall be clearly legible from a distance of 275 m and illumination intensity shall automatically adjust for all daytime and nighttime ambient conditions.

The PVMS shall be equipped with a sign control console mounted in a lockable, weather-resistant compartment. The sign controller shall have a programmable memory capable of storing messages pertinent to planned construction activities, including emergency messages. The controller shall be equipped with 14-day-calendar programming capability, providing the ability to start and stop the display of a minimum of three (3) different messages on a repeating schedule without an operator present. The controller shall have programmable messages, display rate, and display interval settings. The controller shall blank the sign if the output voltage drops below the manufacturer's recommended output level.

The PVMS shall be equipped with a modem and control software using a Microsoft Windows operating system, Windows 98 or later. The Contractor shall supply the Engineer with two (2) copies of operating instructions for the PVMS and the control software. Electronic copies of software instructions are acceptable.

### ***Light-Emitting Diode (LED) Type***

The LED-type PVMS unit shall have light-emitting diodes arrayed in a matrix for each character to be 7 pixels high by 5 pixels wide with 3 LEDs per pixel. The LED display shall have the ability to display characters at a minimum height of 450 mm in double-stroke font. The controller shall provide a means of dimming the pixels.

### ***Hybrid, Flip-Disk Type***

The hybrid, flip-disk type PVMS, shall have pixels consisting of individual electromagnetic disks with a minimum of two (2) high-output amber LEDs. The disk face shall be covered with yellow, prismatic, retroreflective sheeting, or an approved equal. The PVMS shall operate using both flip-disk and light-emitting diode (LED) during nighttime and low-light periods. The hybrid, flip-disk type pixels shall be arranged in a matrix, 7 disks high by 5 disks wide for each character.

### ***Cellular Communications Option***

The PVMSs with cellular communications shall be equipped with a cellular telephone and a modem capable of remotely operating the control software. The phone numbers for PVMSs on a contract shall be sequential, whenever possible, to facilitate remote control of multiple units. The unit shall accept a landline telephone connection without rewiring or modification.