TYPICAL PLACEMENT OF VMS

**SYMBOLS**

- Portable Variable Message Sign (VMS)
- Lane Displacement Vehicle with Flashing Red and Blue Lights
- Direction of Travel
- Channeling Device for Type of Device to be Used, See Schedule of Traffic Control Devices Included in the Plans
- Work Area
- Length of Rolling Roadblock Operation
  - To be placed on day 1 of the Rolling Roadblock Operation
  - To be placed one week prior to Rolling Roadblock Operation
  - To be placed during Rolling Roadblock Operation

**GENERAL NOTES**

1. Rolling roadblock is a traffic control technique to allow crew or needed traffic to proceed short duration work operations without an elaborate and expensive rolling traffic control lane equipment. Place or slow the traffic to a speed that provides approximately 20-30 minutes to complete the specific construction.

2. On the day of the rolling roadblock operation the variable message signs shall be removed to prevent the accident zone from being blocked. The working crew shall set up on the day before the rolling roadblock operation begins with a traffic control device at the work site indicating the work operation in accordance with Rules Rules shown on Sheet 5. The intent is to keep traffic moving, unless there is an emergency.

3. Traffic-Related Measures (VMS) shall be used to protect construction workers and/or equipment positioned in a traffic lane at the work area during the rolling roadblock operation from an impact vehicle if no workers and/or equipment are positioned in a traffic lane at the work area. Traffic-Related Measures shall not be used.

4. When more than one rolling roadblock operation is required in one work zone, the contractor shall allow sufficient time between rolling roadblock operations to permit traffic to return to normal speeds and flow. Additional time may be required between rolling roadblock operations to allow traffic to return to normal speeds and flow. Timing of the work area is determined by the frequency of the design traffic.
### DESIGN NOTES:

1. The design shall evaluate the actual distance required for the rolling roadblock operation based on the following factors: length of emergency vehicles, spacing between emergency vehicles, scheduling of emergency vehicle, availability of low-emission vehicles, adverse weather conditions.

2. The stopping point of a rolling roadblock operation shall consider the following factors: the speed of the rolling roadblock vehicle, the location of emergency vehicles, horizontal and vertical alignment of the facility.

3. In some instances, it may be necessary to close a lane at the work site to position a barrier and the materials to be lifted.

4. All materials to be installed shall be complete before the rolling roadblock operation begins.

5. It may be necessary to install temporary barrier walls to protect pre-positioned and assembled materials in the work area.

6. The uniform speed allowed for a pacing operation is 10 mph.

### PACING DISTANCES, L (MILES)

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- \( L = \frac{M}{S} \) where:
  - \( M \) = total pacing distance, miles
  - \( S \) = pacing speed, mph

- \( L = \frac{M}{S} \) where:
  - \( M \) = total pacing distance, miles
  - \( S \) = speed, mph

### PACING DISTANCES NOTES:

- To be the total time allowed for any activity is advised. The time starts for the last vehicle traveling at the maximum regulatory speed after the rolling roadblock vehicle; the time required to clean the roadway of equipment, materials, and traffic.

- Volume may not exceed 1,250 cubic yards per hour. If the emergency vehicle is used, the following equation must be used to calculate the volume.

- \( V = \frac{1,250 \times \text{length}}{\text{speed}} \) where:
  - \( V \) = volume
  - \( \text{length} \) = length of work zone
  - \( \text{speed} \) = speed of rolling roadblock vehicle

### FORMULA:

- \( F = \frac{V}{L} \) where:
  - \( F \) = SFF
  - \( V \) = volume
  - \( L \) = length of work zone

### ROLLING ROADBLOCKS FOR TRAFFIC CONTROL

- Issued by: Traffic Engineering Branch July 4, 2022
- Sheet No. 3 of 3

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