616.8.12 (TA-12) Lane Closure on Two-Lane Highways Using Traffic Control Signals

Notes:

Temporary traffic control signals shall be installed and operated in accordance with the provisions of the 902 Signals. Temporary traffic control signals shall meet the physical display and operational requirements of conventional traffic control signals.

Trailer mounted signals may be used in lieu of span wire signals.

For portable traffic signal, temporary traffic signal, typical actuated phasing and temporary barrier use, see page 3 and 4 Portable Traffic Signal, Temporary Traffic Signal and Concrete Barrier Details and Estimated Average Peak Hour Signal Delay for Signal Control One-lane Two-way Operation.

Temporary traffic control signal timing shall be established by authorized officials.

Durations of red clearance intervals shall be adequate to clear the one-lane section of conflicting vehicles.

When the temporary traffic control signal is changed to the flashing mode, either manually or automatically, red signal indications shall be flashed to both approaches.

Safeguards shall be incorporated to avoid the possibility of conflicting signal indications at each end of the TTC zone.

A Type B warning light may be placed on the ROAD WORK AHEAD and the ONE LANE ROAD AHEAD signs whenever a night lane closure is necessary.

If side roads or driveways occur within the limits of the stop bars, additional indications and phasing are required. Furthermore, right turns shall be prohibited from these access points during the red interval.

If work zone is in place for more than 3 days, a 12-inch wide stop bar shall be installed. Existing conflicting pavement markings and raised pavement marker reflectors between the activity area and the stop bar should be removed and temporary pavement markings installed. After the temporary traffic control is removed, the stop bar and other temporary pavement markings shall be removed and the permanent pavement markings restored within 14 days.

Protective Vehicle:

Protective vehicle shall be used while work is in progress.

Protective vehicle shall be equipped with a TMA when speeds are posted at 50 mph and above and shall be equipped with a flashing arrow panel.

Protective vehicle should be positioned 150 ft. in advanced of the work space.

Vehicle hazard warning signals shall not be used instead of the vehicle's rotating lights or strobe lights.

For advance warning rail system, review EPG 616.6.2.2 Flags and Advance Warning Rail System.

For temporary rumble strip guidance, review EPG 616.6.87 Rumble Strips.

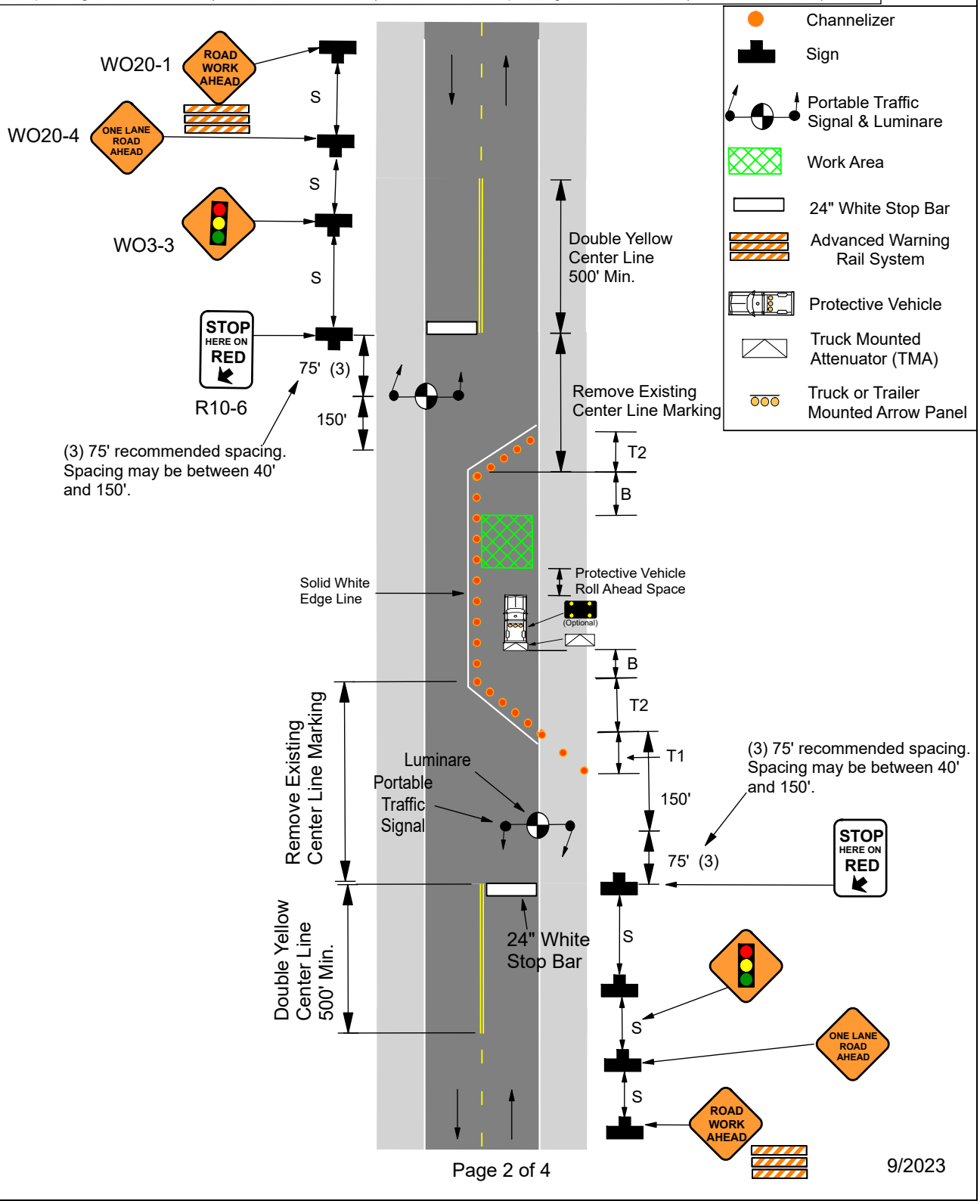
For work zone speed limit guidance, review EPG 616.12 Work Zone Speed Limits for Speed Limit Guidelines.

For work zone located in the vicinity of a railroad grade crossing, refer to EPG 616.8.46 (TA-46) Work in the Vicinity of a Grade Crossing.

616.8.12 (TA-12) Lane Closure on Two-Lane Highways Using Traffic Control Signals

SPEED	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL	CHANNELIZER SPACING (ft.)	
Permanent Posted (mph)	Undivided (S)	Divided (S)	Shoulder (1) (T1)	Lane (2) (T2)	BUFFER LENGTH (ft.) (B)	Tapers	Buffer/ Work Areas
0-35	200	-	35	100	280	25	40
40-45	350	-	35	100	400	25	80
50-55	500	-	35	100	560	25	80
60-70	1000	-	35	100	840	25	120

1 Shoulder taper length based on 10 ft. (standard shoulder width) offset. 2. Lane taper length ba sed on 12 ft. (standard lane width) offset.



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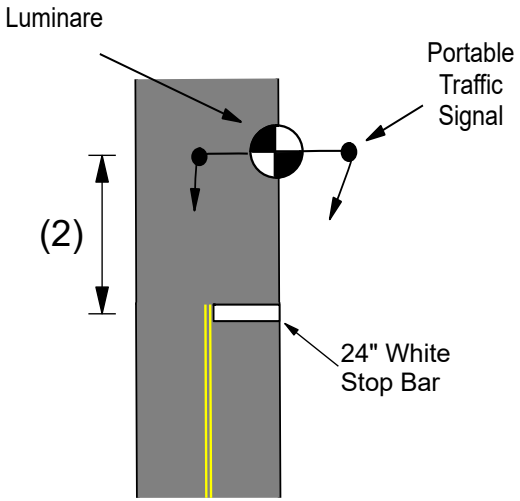
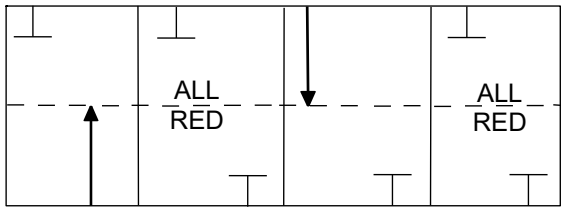
616.8.12 (TA-12) Lane Closure on Two-Lane Highways Using Traffic Control Signals

Portable Traffic Signal, Temporary Traffic Sign, and Concrete Barrier Details



Portable Traffic Signal Detail (1)



Phase A and phase B shall always be followed by an all red phase or interval.

Signals shall rest in all red when there are no vehicle calls.

Notes:

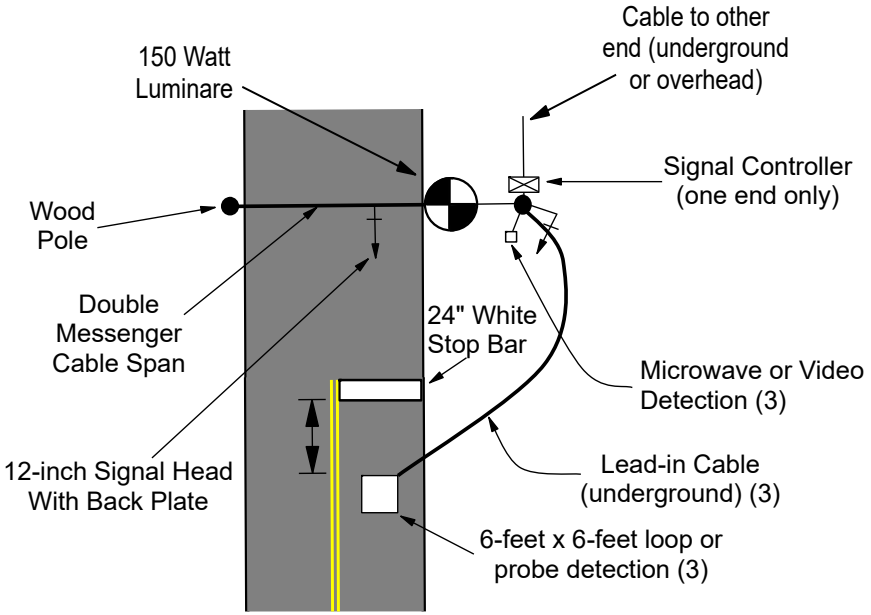
(1) Signing and pavement marking indentical on both approaches.

(2) 75-feet recommended spacing. Spacing may be between 40-feet and 150-feet.

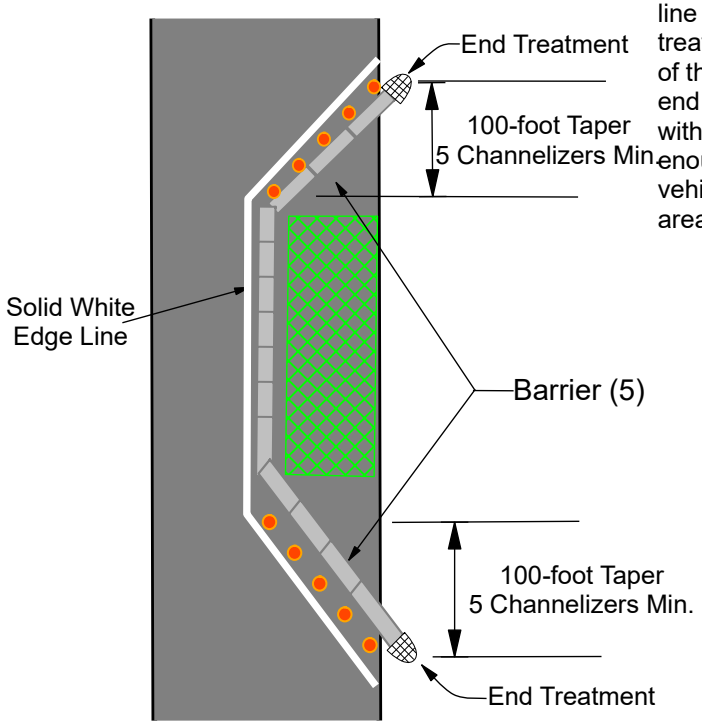
(3) Non-intrusive detection is preferred. However, if other vehicle interference is present (i.e. parking lots or side road activity), then other detection methods may be used.

(4) If side roads or driveways occur within the limits of the stop bars, additional indications and phasing are required. Furthermore, right turns shall be prohibited from these access points during the red interval.

(5) Flare barrier to extend beyond clear zone or flare barrier to edge line and use approved end treatment. Upon the discretion of the supervisor or engineer, the end treatment may be located within the roadway if there is not enough width to get equipment or vehicles into the work area. Barrier flare rate is 8:1.



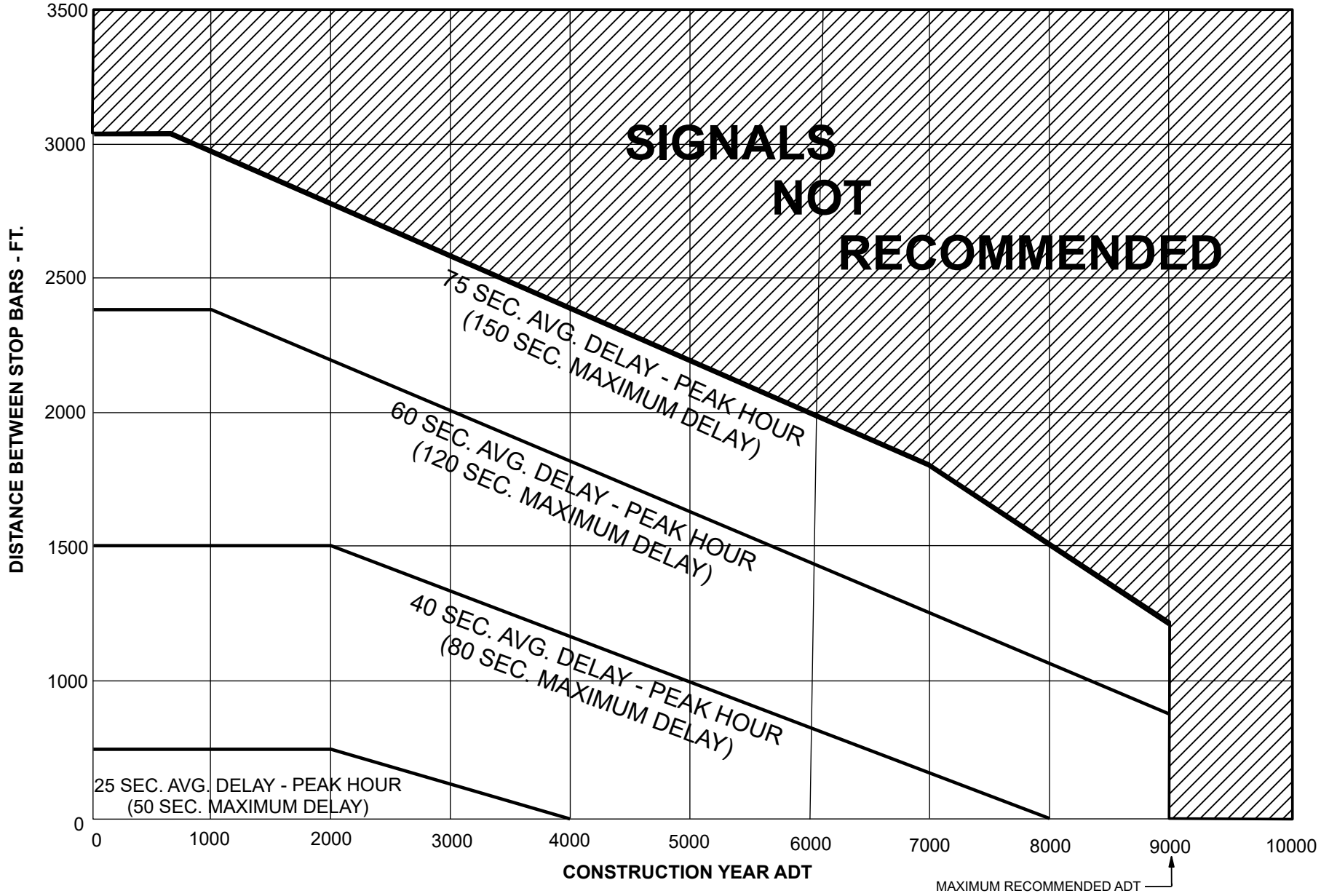
Temporary Traffic Signal Detail (1)



Temporary Traffic Signal Detail with Barrier (1)

616.8.12 (TA-12) Lane Closure on Two-Lane Highways Using Traffic Control Signals

Estimated Average Peak Hour Signal Delay for Signal Control One-Lane Two-Way Operation



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