2011 VA Work Area Protection Manual
Frequently Asked Questions
(Latest change shown in Yellow Highlight)

1. Beginning July 1, 2012, the High-Visibility Safety Apparel requirements went into effect regardless of the contracts' Work Area Protection Manual date:
    - Daytime - All workers and flaggers shall wear high-visibility safety apparel that meets Performance Class 3 requirements of the ANSI/ISEA 107–2010 or equivalent revisions.
    - Nighttime, emergency situations and inclement weather (fog, rain, sleet, snow, etc.) - All flaggers as well as workers installing, maintaining and removing TTC devices in nighttime work zones shall wear Class E trousers in addition to the standard Performance Class 3 risk requirements of the ANSI/ISEA 107–2010 publication.
        i. Class E trouser must have a waist band; overalls and bibs are acceptable.
            1. The label shall identify the High-Visibility Safety Apparel as Class E and include ANSI/ISEA 107-2010.
            2. The Class E trouser comes in variable lengths but the company shall determine if the trouser satisfies their long pant requirement.
        ii. Nighttime high-visibility safety apparel that meets Performance Class 3 requirements of the ANSI/ISEA 107–2010 or equivalent revisions.
        iii. Hard Hat visibility – VDOT employees shall display 16 sq. inches of retro-reflectivity material, non-VDOT personnel are recommended to display at least 10 sq. inches but not required to do so.

2. Definition correction for Limited Access Highway based on the VA Supplement — change right of "way" to right of "light".

3. Figure 6E-4, Flagger Requirement (Sheet 2 of 2) table is upgraded to reflect the distance from the flagger station to the work area and should be as shown:

Posted Speed	25	≤20	30	35	40	45	50	55	60
Distance (Feet)	115 - 120	155 - 160	200 - 210	250 – 260	305 - 320	360 - 380	425 - 445	500 - 520	570 - 590

4. Beginning with the January 1, 2012 advertisement and the implementation of the WAPM, Contractors and VDOT should have transition to new signs and sign panels found in the WAPM. These signs and sign panels can be identified by "V" or "v" (R11-V1, W21-V2, W21-V3, G20-V1, etc.) in their sign designation or their row is highlighted orange or pink in Table 6F.1. Also, some sign and sign panels sizes are larger. Some of the new signs are also shown in the WAPM Figures; TTC-4.0, TTC-9.0, TTC-24.0, Figure 6I-1 etc.

5. The following signs or sign panels are shown in the WAPM with a July 1, 2012 requirement date. We are extending that date to July 1, 2014. At that time all signs regardless of the contract date shall be upgraded as shown in the required column.

Acceptable until June 30, 2014	Required July 1, 2014
 W20-5 W20-5a	 W9-3 or W20-5 W20-5a CENTER, RIGHT, LEFT
 W20-5a	 W9-3 CENTER, RIGHT, LEFT
 W16-2	 W16-VP3 for 36" sign - 48" x 12" W16-VP3 for 48" sign - 60" x 18"
 W21-6	 W21-V8
 W8-17 (2009 MUTCD)	 W8-V5
 W8-12 (2003 MUTCD)	 W8-12 (2009 MUTCD)\
 W13-1 24" x 24"	 W13-1 24" x 24" on 36" x 36" signs W13-1 30" x 30" on 48" x 48" signs

Acceptable until June 30, 2014 **Required July 1, 2014**

W7-3p for 36" or 48" sign - 24" x 18"

W16-VP1 for 36" sign - 48 x 12
W16-VP1 for 48" sign - 60 x 18

6. The Work Vehicle Do Not Follow sign, G20-V1 shall be mounted on the rear of a vehicle that is required to slow down considerably to enter and exit the work zone; such as water trucks and dump trucks hauling/delivering material (borrow or fill, asphalt, aggregate, etc.) to and from the work space. If the tailgate has been removed or lowered for work operations (such as with an Athey Loader), the vehicle would be exempt from having to display the sign. The sign is not required on one-way, two-lane operations since flaggers normally control the ingress and egress of work vehicles, however it may be used as an option. The sign may be covered or removed from view during normal operations other than those listed above. The sign is not required to be placed on the back of pickup trucks, SUV's, vans or other vehicles such as safety service patrol, which can enter or exit the work zone at higher speeds.

7. Figure 6F-5, delete the following long-term stationary detour assembly sign: 

8. Figure 6F-7, Advanced Warning Arrow Board Display Specifications – a light bulb is missing from the stem in the Move/Merge Right display. A total of 15 elements are needed as a minimum for a Type C Board.

9. Channelizing devices used to delineate an Arrow Board shall match the channelizing devices used in the taper; cones or drums.

10. All trailer mounted devices (PCMS, ITS cameras and speed trailers, AFAD, light tower, etc.) except arrow boards left inside the clear zone shall be delineated by four drums.

11. Figure 6F-9, Channelizing Devices - For the Vertical panel, where the height of the retroreflective material on the vertical panel is 36 inches or more, a stripe width of 6 inches shall be used. Where the height of the retroreflective material on the vertical panel is less than 36 inches, a stripe width of 4 inches may be used.

12. Section 6F.21 Road (Street) Work Ahead Sign (W20-1) and Road Work Next 2 Miles (W21-V2) and Emergency Work Ahead Signs (W20-V27)
Support:
Work caused by an unexpected or natural event that must be dealt with urgently but is not part of daily operations or planned work can be classified as a traffic incident. Temporary traffic control for incident management can be found in Chapter 6I.

Option:

The Emergency Work Ahead (W20-V27) sign may be used in lieu of the Road Work Ahead sign when an unexpected or natural event must be dealt with urgently and the event is not part of daily operations or planned work.

Other supporting advance warning signs may be fluorescent orange background with a black legend.

Guidance:

The EMERGENCY WORK AHEAD sign should be the first advance warning sign encountered by road users in a temporary traffic incident management control (TIMC) zone.

Standard:

The EMERGENCY WORK AHEAD sign used for TIMC zone shall have a black legend and border on a fluorescent pink background.

13. Group 2 Channelizing Devices (Drums) – may be left on the shoulder between work operations but must not interfere with the road user's use of the shoulder or travel lanes.

14. Type 3 Barricade rail heights can be 8" to 12" instead of the 12" only as shown due to industry practices.

15. For Type 3 Barricades used to close a turn lane; stripes should slope down toward the side which you wish traffic to travel. Right turn lane closed should display the following:  , left turn lane closed should display:  , traffic flows both sides of a closed lane should display:  and a road closed should display:  .

16. Section 6G.02 Work Duration (02) – E. Mobile is work that moves intermittently (1-15 minutes) or continuously.

17. Although Section 6G.25, Installing/Removing Temporary Traffic Control states in paragraph 05 that "A shadow vehicle with a TMA shall be used to protect the workers and their work vehicle installing and removing TTC devices on a multi-lane roadway with a posted speed of 45 mph or greater." It is not the intention to require a TMA behind all operations placing warning signs. For activities where a TMA will not be required in the operation, such as work beyond the shoulder (TTC-1.0), litter removal or mowing (non-Limited Access) off of the travelway and shoulder, surveying operations (TTC-49.0), or logging operation (TTC-63.) as examples, a shadow vehicle with a TMA will not be required since the placement of warning signs for these operations can be performed quickly with no further use of the TMA vehicle needed. However, for these types of operations that do encroach upon the roadway, since a TMA will be required in the operation, it should also be used when installing and removing the advanced warning signs and other TCD's.

18. TTC-3 (Mobile or Short Duration Shoulder Operations):
    a. Note 8 - When the work operation is on the shoulder with a posted speed limit of 45 mph or greater, a shadow vehicle with a TMA shall be used.
    b. When the work operation is off the shoulder:
        - Work duration 1–15 minutes, vehicle warning lights may be used on a work vehicle parked on the shoulder.
        - Work duration 15–60 minutes, vehicle warning lights and a truck mounted sign, (W20-V3, W20-V6, W20-1, etc.) or a sign on a portable sign support should be placed directly behind the work operations vehicle.

19. TTC-4 (Stationary Operation on a Shoulder Closure) – note 8:
    a. Regardless of the work duration a shadow vehicle shall be used whenever a person is required to operate equipment mounted on or in the work vehicle such as buckets, augers, post drivers, etc.
    b. For work duration (workers are present) on the shoulder that are greater than 1 hour a shadow vehicle shall be used.
    c. A TMA shall be used on the shadow vehicles when closing a shoulder on Limited Access highway and multi-lane roadway with a posted speed of 45 mph or greater.

20. TTC-5 (Shoulder Operation with Minor Encroachment) – to clarify the use of right and left sign assemblies; on divided highways having a median wider than 8', right and left sign assemblies shall be required. "See Note 1, TTC-4 for additional sign information".

21. TTC-6 (Shoulder Closure with Barrier Operation) – note 4 correction based on standard statement, shoulder taper formula and divisible by 40 feet - The minimum length for a shoulder taper "shall be 320'" on Limited Access highways, and ⅓ L for all other roadways (see Note 7 of TTC-5 for values of L).

22. TTC-14 (Moving/Mobile Operation on a Two-Lane Roadway) – note 12 clarification, an arrow board would display the caution mode, not an arrow …*When using a CMS to replace the static sign and arrow board, each word message phase should be followed by the Type B arrow board's caution mode*.

23. TTC-22 (Right Lane Closure Operation on a Three-Lane Roadway) – a problem was encountered in the field and we recommend adding four (4) channelizing devices to extend the lane closure for the south direction as shown in the TTC-42 or the 2012 Pocket Guide "Lane Shift on a Three-lane, Two-way Road" page 45.

24. When closing a ramp on the right side of traffic as shown in Figures TTC-46, TTC-47 and TIMC-7, the Type 3 Barricade's stripes should be sloping downward to the left,  .

25. TTC-48, Road Closure Operation with a Detour:
    - Where barricades are placed in the roadway, the barricade stripes should direct the turning movement. The first barricade as shown in the roadway directs traffic to drive to the left of the barricade,  . The second directs traffic to drive to the right of the barricade,  .
    - The "M4-V4L" 90° left turn arrow should be renumbered to "M4-V3L".
    - The M4-V5a plaque should be "WEST" instead of "NORTH".

26. TIMC-7 (Incident Closure on a Highway) – note 6 should match TTC-45's note 6 "*When detour signing has been installed along the detour route (see Figures TTC-46 or TTC-47), a DETOUR with directional arrow or Detour with a Route Assembly sign should be placed halfway up the ramp or loop. Additionally, a third message should be added to the one mile Portable Changeable Message Sign advising "DETOUR AHEAD."*