

GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLAN PREPARATION

These guidelines are for preparing Temporary Traffic Control Plans (TTCP) in Montgomery County. Closely following these guidelines will result in a more expeditious approval of a TTCP. Our experience indicates that these guidelines help develop an acceptable TTCP that minimizes inconvenience to the public while assuring safe conditions for workers and all road users including pedestrians and bicyclists.

The purpose of Temporary Traffic Control Devices (TTCD) is to ensure roadway safety by providing for the orderly and predictable movement of traffic and provide the guidance and warning necessary for road users to get through the work zone safely.

Roadway users and workers safety and accessibility in work zones should be integral and high priority element of every project from planning through design and construction. Similarly, maintenance and utility work should be planned and conducted with safety and accessibility of all motorists, bicyclists, pedestrian (including those with disabilities), and personnel of work zone being considered at all times. However, if a temporary traffic control zone includes a railroad grade crossing, early coordination with the railroad company should be considered.

The involvement of the County's Traffic Control and Lighting Engineering Team in the development of a TTCP is limited to *review and approval*. The *preparation* of a TTCP is the full responsibility of the preparer. A TTCP requires considerable engineering both in the field and office. A TTCP will be returned unapproved with only general comments if the TTCP cannot be implemented and is not professionally prepared.

1. The preparation and concepts of the TTCP shall follow those stipulated in the most recent edition of the Manual on Union Traffic Control Devices for Streets and Highways (MUTCD) and any supplements.
2. The determination of a suitable sequence of construction is the most difficult aspect of preparing a TTCP. It is expected that a logical, practical sequence be articulated based on realistic and up to date construction practices and methods. This may require consultation with experienced construction personnel as to the feasibility of a particular sequence of construction. Impacts of utility relocation, pedestrian movements, traffic delays, detours, roadway stability, capacity restrictions, minimum lane widths and safety must be considered. For roadway improvement projects, a proposed sequence of construction should be submitted and approved prior to fully developing a TTCP.
3. Field checks of the construction site are mandatory prior to and during the preparation of a TTCP. It is our experience that inadequate TTCP's are prepared in the office without a field investigation by the TTCP preparer. In addition, it must be recognized that many of the necessary traffic control devices are located in advance of the construction limits of a project.

4. Specific drawing scales are required to adequately show the locations of advance construction signs, the dimensions for the placement of channelizing devices and pavement markings, or other phases of construction as required. Acceptable scales are 1" = 20', 1" = 30', 1" = 40', and 1" = 50'.
5. Any considerations for the closure of a road or sidewalk must be carefully reviewed and justified with respect to both the necessity as well as the impact of the closure to the public. Justification for closure, including a detailed analysis of alternatives considered, must be submitted in writing to the Traffic Control and Lighting Engineering Team for review. If acceptable, the recommendation will be forwarded to the Chief, Traffic Engineering and Operations for approval. The Chief must concur (in concept) with the proposed roadway and or sidewalk closure prior to the submittal of a TTCP that contains the details of how such a closure would be implemented.

The contractor shall arrange and host a pre-phase traffic switch meeting at least two weeks prior to switching traffic. The following offices shall be notified of this meeting and of the impending traffic switch:

- Montgomery County, Traffic Engineering and Operations section, Ms. Stella O. Igbinedion(240-777-2190)
- Montgomery County, Transportation Systems Management Section (240-777-2190)
- Montgomery County, Transit Services, Mr. Phil McLaughlin (240-777-5800)
- Montgomery County Public Schools, Local Depot Manager
- Montgomery County Fire and Rescue, Local Fire Department Captain
- Montgomery County Police, Local Traffic Sergeant
- Montgomery County Department of Permitting Services, Permit Inspection Section (240-777-6308)

Prior to any approved road closures, the Contractor shall notify the following a minimum of seventy-two (72) hours in advance:

- Montgomery County, Traffic Engineering and Operations Section, (240-777-2190)
 - Montgomery County, Transportation Management Center (240-777-2100)
 - Montgomery County Public Schools, Local Depot Manager
 - Montgomery County, Fire and Rescue, Local Fire Department Captain
 - Montgomery County Police, Local Traffic Sergeant
 - Montgomery County, Emergency Operations Center (240-777-0751)
6. References to typical drawings, taper tables and illustrations in the MUTCD are usually insufficient for use on a specific project. Specific sign messages, sign sizes, taper lengths, barricade or traffic drum spacing, types of barricades, typicals for barrier connections, etc., must be site specific and shown on the TTCP drawings. Special coding of signs (other than MUTCD numbers R1-1, etc.) will not be accepted. *Typical* urban situations are difficult to find in the "real world." Closely spaced intersections, auxiliary turn lanes, restricted turn lanes, turn prohibitions, short road lengths, short block lengths, traffic signals, the presence of high volume commercial driveways, parking meters, and variable road widths are never illustrated on *typical* drawings. These urban conditions require the careful attention to site specific construction sequence phasing and traffic control device application.

7. All special traffic signs (non-standard MUTCD signs) must be designed. Design details required are typical of those shown in the MUTCD supplement Standard Highway Signs. If you are not intimately familiar with the MUTCD, the MUTCD Standard Highway Signs supplement and the MUTCD Standard Alphabets for Highway Signs, it is assumed that you will obtain the services of those who are qualified to do this type of work.
8. Pavement marking changes must be specific with respect to crosswalks, lane widths, edge line widths, stop line widths, lane line widths and locations, color of lines, lengths of solid lines, taper lengths, length of line removals, placement of arrows and ONLY's, and other dimensions necessary to assure the proper installation of the pavement markings. In addition, if temporary pavement markings are to be removed rather than paved over, the use of "removable detour grade pavement marking tape" must be specified on the drawings. The TTCP must specify that the contractor shall be responsible for all pavement marking removal and installation. Any work that is expected from Montgomery County crews must be requested and approved in writing in advance of being shown on the TTCP.
9. The Temporary Traffic Control Requirements in the Montgomery County Work Zone Temporary Traffic Control Standards Book is required for permit work and should be shown on the TTCP drawings. These requirements may be modified as necessary by the Traffic Control and Lighting Engineering Team.
10. Special provisions (additions and/or deletions to the Maryland Department of Transportation, State Highway Administration's Standard Specifications for Construction and Materials, January 2001) are required for all Montgomery County Capital Improvement Project contracts. These special provisions must contain any working restrictions such as days contractor may not work, days detours may not be implemented, hours that lane restrictions are allowed or not allowed, or other restraints that must be considered based on the volume of peak or off peak hours of traffic. A method of measurement and basis of payment must be established for various items of maintenance of traffic.
11. Modifications to traffic signals during construction must be specific with respect to the work to be done and as to who will be doing the work. Any work that is expected from Montgomery County crews must be requested and approved in writing in advance of being shown on the TTCP.
12. It is expected that the required engineering will be completed for a successful TTCP prior to the submittal for review by Montgomery County. For a submittal of a TTCP to be reviewed by Montgomery County DOT, Division Traffic Engineering and Operations, it must include a complete set of construction plans, TTCP special provisions or temporary traffic control requirements and two (2) sets of appropriate TTCP drawings with a Professional Engineer's stamp and signature.