

DRAFT Guidelines for Pedestrian Accommodations in Work Areas

The Massachusetts Department of Transportation (MassDOT) is committed to providing safe and adequate accommodation for all road users within the limits of the work area, including pedestrians of all mobility levels. The following guidelines document the requirements for pedestrian accommodations based on the duration and level of activity in the work area.

Pedestrian Accommodation Guidance for Temporary Traffic Control Design

- 1. The following three items should be considered when planning for pedestrians in Temporary Traffic Control (TTC) zones:
 - A. Pedestrians should not be led into conflicts with vehicles, equipment, and operations.
 - B. Pedestrians should not be led into conflicts with vehicles moving through or around the worksite.
 - C. Pedestrians should be provided with a convenient and accessible path that replicates as nearly as practical the most desirable characteristics of the existing sidewalk(s) or footpath(s).
 - D. A pedestrian route should not be severed and/or moved for non-construction activities such as parking for vehicles or equipment.
- 2. Consideration should be made to separate pedestrian movements from both worksite activity and vehicular traffic.
- 3. Unless an acceptable route that does not involve crossing the roadway can be provided, pedestrians should be appropriately directed with advance signing that encourages them to cross to the opposite side of the roadway.
- 4. In urban and suburban areas with high vehicular traffic volumes, these signs should be placed at intersections (rather than midblock locations) so that pedestrians are not confronted with midblock worksites that will encourage them to walk adjacent to the worksite where it is unsafe or make a midblock crossing where no crossing exists.
- 5. To accommodate the needs of mobility challenged pedestrians or persons with disabilities who could otherwise be adversely impacted, the following considerations should be addressed when temporary pedestrian pathways in TTC zones are designed or modified:
 - A. Provisions for continuity of accessible paths for pedestrians should be incorporated into the TTC plan.
 - B. Access to transit stops should be maintained.

- C. Provisions should be made to maintain access to local business where possible.
- 6. For long-term sidewalk closures, a form of speech messaging for pedestrians with visual disabilities shall be provided at locations that currently provide accessible pedestrian signal equipment and should be considered for all other urban or sub-urban locations that experience regular pedestrian traffic.

Duration of Work Activity

Emergency Repair Work or Incident Response – For conditions requiring emergency repair or through an incident response situation that impedes access to an existing pedestrian pathway, the pathway may be closed. Passage of pedestrians shall be accommodated when possible with the aid of a police detail or DOT worker to safely navigate them through the event area.

Planned Activity of Four-Hours or Less – For planned activities of four (4) hours or less in duration affecting existing pedestrian pathways, there are two options for the Contractor/DOT to address pedestrian accessibility. The Contractor/DOT shall have a person available at all times during the closure to assist people with disabilities who require additional assistance to safely navigate around the work area. If no existing appropriate alternative route is available, the pathway shall be closed and detoured to the sidewalk on the opposite side of the street at the nearest intersection upstream and downstream of the location to be closed. Appropriate "Sidewalk Closed" signs with directional arrows shall be provided to alert pedestrians of the closure; however no comprehensive sidewalk detour signage is necessary.

Planned Activity of Eight Hours or Less – For planned activities of eight (8) hours or less in duration affecting existing pedestrian pathways, the pathway shall be closed and detoured to the sidewalk on the opposite side of the street at the nearest intersection upstream and downstream of the location to be closed. To address pedestrian accessibility, the contractor has the option to provide passive audible information devices along the entire alternative route or provide a designated person(s) at all times during the closure to assist people with disabilities requiring additional assistance to safely navigate around the work area.

If no existing appropriate alternative route is available on either the near side or opposite side, the sidewalk shall be closed and the contractor shall provide a Temporary Pedestrian Access Route (TPAR) adjacent to the work area. *See details on the use of a TPAR below.

Planned Activity Greater than Eight-Hours in Duration – For planned activities in excess of eight (8) hours affecting existing pedestrian pathways or if the pedestrian pathway closure is to remain in place during non-working hours, the pathway shall be closed and detoured. A Temporary Pedestrian Access Route (TPAR) compliant with the guidance listed shall be provided for all users.

It is recommended that the Contractor provide passive audible information devices along the entire alternative route to assist people with disabilities requiring additional assistance to safely navigate around the work area.

If the duration of work activities extends beyond the expected/planned duration and the sidewalk closure will be extended overnight, the Contractor/DOT shall then provide an appropriate temporary pedestrian access route as defined below. Use of yellow caution tape and traffic cones or drums shall NOT constitute an acceptable means to guide pedestrians safety around an unattended work area.

Temporary Pedestrian Access Route (TPAR)

For sidewalk, footpath or pedestrian walkway closures an alternative Temporary Pedestrian Access Route (TPAR) shall be provided. The alternative path shall be of the same or greater width and ADAAG/MAAB compliance as the existing pathway being closed

- A smooth, continuous hard surface should be provided throughout the entire length of the temporary pedestrian facility. There should be no curbs or abrupt changes in grade or terrain that could cause tripping or be a barrier to wheelchair use. The geometry and alignment of the facility should meet the applicable requirements of the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)" and Massachusetts Architectural Access Board (MAAB).
- 2. The width of the existing pedestrian facility should be provided for the temporary facility if practical. Traffic control devices and other construction materials and features should not intrude into the usable width of the sidewalk, temporary pathway, or other pedestrian facility. When it is not possible to maintain a minimum clear width of 60 inches throughout the entire length of the pedestrian pathway, a 60 x 60-inch passing space should be provided at least every 200 feet to allow individuals in wheelchairs to pass.
- 3. Blocked routes, alternate crossings, and sign and signal information should be communicated to pedestrians with visual disabilities by providing devices such as audible information devices, accessible pedestrian signals, or barriers and channelizing devices that are detectable to the pedestrians traveling with the aid of a long or white cane, or who have low vision.
- 4. Where pedestrian traffic is detoured to a traffic signal, MassDOT shall determine if existing pedestrian signals and accommodations are acceptable or if accessible pedestrian signals and additional accommodations should be provided for crossings along the alternate route.
- 5. When channelization is used to delineate a pedestrian pathway, a Pedestrian Channelizing Device that provides a continuous detectable edging should be provided throughout the length of the facility such that pedestrians using a long or white cane can follow it.

- 6. For high speed applications, Temporary Barrier may be necessary in areas where pedestrians will be directed onto the existing roadway for long-durations of time.
- 7. All blunt ends of barrier shall be turned away from traffic or protected with approved MassDOT-qualified impact attenuator device at all times.
- 8. Signs and other devices mounted lower than 7 feet shall be reset to provide the minimum clearance for pedestrian traffic in accordance with Part 2 of the MUTCD.

Pedestrian Channelizing Devices:

- 1. Pedestrian channelizing devices shall be crashworthy when exposed to vehicular traffic.
- 2. Devices used to channelize pedestrians shall be detectable to users of long or white canes and visible to persons having low vision.
- 3. When used as a sidewalk closure, the device shall cover the entire width of the sidewalk.
- 4. Pedestrian channelizing devices shall have continuous bottom and top surfaces. The lower edge of the bottom portion shall be no higher than 2 inches above the ground. The top edge of the bottom portion shall measure at least 8 inches above the surface of the walkway. The top of the upper portion shall be no lower than 32 inches above the walkway. The top surface shall be smooth to optimize hand-trailing. Both upper and lower surfaces shall share a common vertical plane.
- 5. When pedestrian channelizing devices are combined to form a longitudinal channelizing device, the gap between devices shall not exceed 1-inch.
- 6. A Hand-Trailing Edge is the upper edge of the upper rail on a pedestrian channelizing device. It is provided to allow pedestrians with limited vision to follow the pedestrian channelizing device with their hand. The Hand-Trailing Edge is not a weight bearing railing.
- 7. A gap not exceeding 2 inches between the bottom rail and the ground surface may be used to facilitate drainage.
- 8. The bottom and top surfaces of the Pedestrian Channelizing Device shall have sheeting complying with Section 6F.71, Line 03 of the 2009 MUTCD.