



**OFFICE OF OPERATIONS
TRANSPORTATION, TRAFFIC & PARKING**

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City of Stamford Transportation, Traffic & Parking Bureau Maintenance and Protection of Traffic Guidelines.

Effective 8/2/2021

These guidelines are meant to give anyone working on City of Stamford roadways a clear understanding of how to develop and implement safe, efficient, and effective Maintenance and Protection of Traffic plans. By using these guidelines, Transportation, Traffic & Parking (TTP) can review submitted plans and permits more efficiently, allowing for work to start faster. Plans that do not adhere to these guidelines will be rejected and will not be signed off on until the plans meet the below guidelines. These guidelines are not all-inclusive and TTP reserves the right to add any comments or conditions to submitted plans that it deems will best ensure the safety of the traveling public regardless if they are included in the below guidelines.

Important information:

For questions please contact the City Traffic Engineers on our website or visit our FAQs page:

To appear before the Traffic Advisory Committee (TAC), please contact:

- Crystal Mitchell at CMitchell@StamfordCT.gov or at (203) 977-5466

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Guiding Principles

- a. Complete Streets
 - i. The City of Stamford adopted a Complete Streets ordinance in 2014 stipulating that all transportation projects need to consider the needs of all roadway users. Per the Stamford Complete Streets Manual, and the spirit of the Complete Streets Ordinance, all MPT plans need to consider pedestrian, bicycle, transit, and vehicular needs.
- b. Following the MUTCD
 - i. The [Manual on Uniform Traffic Control Devices](#) sets the national standard for traffic control devices in the United States. All signs, sign placements, taper lengths, and other MPT devices shall be MUTCD compliant unless otherwise specified.
- c. Context sensitivity
 - i. Stamford has various types of roads ranging from Local Roads to Major Arterial Roads. MPT plans should be designed to fit the context of the road.
 - ii. Work in the Central Business District (CBD) will require extra attention to consider the needs of pedestrian movements. Ensuring direct pedestrian routes shall be included in any submitted MPT plan in the CBD.

Traffic Advisory Committee

- a. The Traffic Engineer you are working with might deem it necessary that you appear before the [Stamford Traffic Advisory Committee](#) (TAC).
- b. The Traffic Advisory Committee (TAC) ensures that the appropriate management and protection of traffic is adhered to regarding the use of city streets and sidewalks for events, construction, and road and sidewalk closures.
- c. The Committee is comprised of representatives from various City departments that oversee all aspects of traffic and parking: police, highways department, signs and lines, parking enforcement, citizen services, traffic signals, and fire.
- d. To appear before TAC, please contact Crystal Mitchell at CMitchell@StamfordCT.gov or at (203) 977-5644

Pedestrian Considerations

- a. Pedestrians are the most vulnerable road users. Every effort shall be made to ensure a safe and convenient pedestrian environment around work zones. When existing pedestrian facilities are disrupted, closed, or relocated in a work zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.
- b. The method for providing safe accommodations for pedestrians should be prioritized as:

- i. Keep all pedestrian paths open→if available install a pedestrian bridge in the parking lane→ if available install a pedestrian bridge in the travel lane→ pedestrian detour route
- c. ADA/PROWAG requirements
 - ii. All Pedestrian routes shall be fully ADA/PROWAG compliant
 - 1. Examples include: Maintaining a minimum 48” wide pedestrian walkway, temporary pedestrian ramps with a max grade of 8.3%, access to existing pedestrian ramps if possible, signs shall not block pedestrian walkways.
- d. Pedestrian push buttons shall remain accessible at signalized intersections
- e. If sidewalks and crosswalks or any other pedestrian walkway is plated, then an anti-slip material will need to be installed on the plate.
- f. For sidewalk closures lasting beyond the work day with a pedestrian bridge, said bridge shall be constructed out of water filled barriers or ADA compliant pedestrian barricade.
 - iii. Pedestrian bridges coming off of the sidewalk will require the construction of ADA compliant ramps.
 - iv. Individual channelizing devices, tape, or rope use to connect individual devices, other discontinuous barriers and devices, and pavement markings are not detectable by persons with visual disabilities and are incapable of providing detectable path guidance.
 - v. When channelization is used to delineate a pedestrian pathway, a continuous detectable edging should be provided throughout the length of the facility such that pedestrians using a cane can follow it.

Sign Requirements

- a. All signs shall be MUTCD compliant
- b. MPT plan designers should reference the various scenarios in the MUTCD and the signs associated with those scenarios.
- c. Signs should be spaced 100’ apart starting at the beginning of the roadwork taper
- d. Signs types are located in the appendix
- e. Signs shall not block pedestrian walkways or bike lanes.
- f. Care shall be taken to ensure signs do not cause a sight distance hazard on corners.
- g. Signs shall be covered if not applicable to roadway conditions or if work is not occurring.
- h. Signs shall be marked with contractor name
- i. All applicable signage and detours shall be installed before commencement of work and removed once work has ceased

Taper Lengths

a. Taper length determination

Table 6C-3. Taper Length Criteria for Temporary Traffic Control Zones

Type of Taper	Taper Length
Merging Taper	at least L
Shifting Taper	at least 0.5 L
Shoulder Taper	at least 0.33 L
One-Lane, Two-Way Traffic Taper	50 feet minimum, 100 feet maximum
Downstream Taper	100 feet per lane

Note: Use [Table 6C-4](#) to calculate L

Table 6C-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = WS^2 / 60$
45 mph or more	$L = WS$

Where:

- L = taper length in feet
- W = width of offset in feet
- S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

- See appendix for different types of tapers
- If tapers are near multi-lane intersections, then the taper should start before the intersection.

Traffic Requirements

- Altering traffic patterns and closing travel lanes should be avoided.
- The method for altering travel lanes should be prioritized as follows:
 - Keep all travel lanes open → alternating one-way traffic should be used → a detour route should be implemented.
- One-way alternating traffic should be avoided at signalized intersections.
- All roadway plates shall be cold patched around the lips even with the road and pinned in place.
- Travel lanes shall be a minimum 11 feet wide. (see emergency vehicles considerations for further information)
- Where Concrete Jersey Style barriers are used, no blunt faces shall face traffic and Crash Attenuation Devices shall be installed after being designed by a Connecticut Professional Engineer in line with CTDOT standards.
- MPT plans shall leave gaps open to driveways and access ways when possible.
- Traffic from Arterial Roadways shall not be detoured onto Local Roads without prior approval.

Emergency No Parking Requirements

- If work requires access to the parking lane, then the Traffic Maintenance Department shall be contacted 72 hours in advance of work for the posting of Emergency No Parking Signage.

- b. If work impacts parking lanes with metered parking, then Meter Bags shall be purchased from the Cashiering and Permitting Department in the lobby of the Stamford Government Center.
- c. All Emergency No Parking Signage must be taken down after the completion of the project by the contractor.

Bicycle Considerations

- a. When an existing bicycle lane or path is disrupted or closed, a temporary bicycle facility should include the features and characteristics present in the existing facility. For example, if a bike lane will be closed, a temporary bike lane should be created to guide bikes past the work zone, rather than closing the bike lane.
- b. The method for providing safe accommodations for bicyclists should be prioritized as follows:
 - i. Provide a temporary bike lane on the same roadway past the work zone by shifting and narrowing the adjacent traffic lanes→Provide a temporary bike lane in an existing traffic lane on multilane streets→ Merging bicyclists and adjacent traffic into a shared travel lane (except on high-speed streets)→Directing bicyclists onto a shared path with pedestrians where they will have to dismount→Provide a bicycle detour route.
- c. Bicyclists shall not be merged into traffic on high speed roads (greater than or equal to 35 MPH) or around bends and corners.

Transit Considerations

- a. Transit stops shall remain open and accessible during work.
- b. If work effects the access to a transit stop for either the transit vehicle or passengers, then the transit stop shall be moved in coordination with the transit agency.
- c. The City reserves the right to require the contractor to provide a temporary City Spec. bus shelter if the location of work impacts access to an existing bus shelter.

Police Requirements

- a. Any closures of travel lanes or sidewalks will require [hiring a police officer](#)
- b. TTP recommends police officers be stationed at the beginning of the activity zone, intersections, sidewalk closures, or any other areas where drivers or pedestrians require assistance navigating through the work zone
 - i. Locations of police officers shall be included on plans.
- c. The police have final authority for altering and setting a MPT plan in the field to ensure the highest level of safety.

Emergency Vehicle Considerations

- a. Hardened travel lanes need to be a minimum of 14 feet in width. This means there can be travel lanes delineated with cones or other movable objects under 14 feet, but there needs to be the ability to quickly open a travel lane to 14 feet in width.
- b. If work occurs within a 1000' radius of a Fire/Police/EMS station, that station shall be alerted of dates and scope of work.

Overnight Work

- a. If work is planned on arterial roadways (or any other road with high volumes of traffic), it may be determined that night work will be necessary
- b. Night work increases safety of the work crews and limits impacts on traffic
- c. If occurring overnight, then a [noise waiver](#) will need to be obtained from the Stamford Health Department and submitted with permit.
- d. Work crews shall wear Level III safety gear when working
- e. Traffic barriers and pylons should have flashing amber work zone lights activated while the MPT plan is in place.
- f. Night work may be required in CBD due to lower traffic volumes.

Advanced Notice of Work

- a. If large amounts of parking are anticipated to be eliminated as part of work, flyers in English and Spanish shall be delivered to each resident and business at a minimum of 72 hours in advance.
- b. If work will impact City arterial roads, Variable Message Signs (VMS) shall be included in MPT plans and shall be installed a week prior to commencement of work with the messaging approved by TTP.
 - ii. Applicants should utilize the [CTDOT VMS Operations Guide](#)
- c. If work occurs within a 1000' radius of a Fire/Police/EMS station, that station shall be alerted of dates and scope of work.
- d. If work directly impacts driveways and other access points, the tenant of those buildings shall be notified 3 business days in advance.
- e. Contact Transportation, Traffic & Parking Department five (5) business days in advance of work.
- f. If there will be any road closure, then all residents on detour route shall be notified two (2) weeks in advance of work. Proof of receipt of delivery shall be given to TTP before permit sign-off.
- g. If there will be any road closures, then VMS signage shall be installed two (2) weeks in advance of work. Locations and messaging shall be approved by TTP.
- h. If work is planned within 100' of a traffic signal, the applicant shall contact Stephen Frycz, Traffic Signal Supervisor, at least three (3) days in advance of work commencing at (203) 223-3246 and at SFrycz1@Stamfordct.gov to mark out traffic signal infrastructure and/or for detection alterations.

Winter Weather Requirements

- a. All trenches shall be paved not less than 12 hours in advance of the winter weather event or a declared snow emergency
 - i. Permission from the Engineering Bureau is required for the plating of trenches in advance of winter weather
 - ii. If plates remain in the roadway, then signs stating STEEL PLATE IN ROADWAY shall be installed on a channel a minimum 7' above the curb
- b. All temporary signage, MPT Appurtenances, and work vehicles are to be removed from the roadway and ROW a minimum of 12 hours before the winter weather event.
- c. Other than specified in their permit, applicants with pre-cast barriers will be responsible for removing snow within their work area.
- d. Silt Sacks shall be removed from all catch basins.
- e. If water filled barriers are placed in City ROW as part of an approved MPT Plan, no anti-freeze, deicing fluid, salt, or any other similar material may be added to the water in the water filled barrier

Permit Requirements

- a. All aspects of [City of Stamford Engineering Bureau Permit](#) Requirements shall be followed
- b. If working on State roads, a [permit from CONNDOT](#) is required *in addition* to a City of Stamford permit
- c. Failure to obtain a permit will result in the immediate shut down of work and fines levied against the offending company.
- d. Failure to follow the conditions an approved plans of a permit will result in the immediate shut down of work.

Legibility

- a. MPT plans should be clear and concise showing all required aspects of the plan
- b. MPT plans that are not legible will be rejected

Submission Requirements

- a. Along with the actual MPT plan, the following should be included:
 - iii. Project scope
A scope of work shall be submitted as part of the MPT plan detailing the work being done
 - iv. Project Narrative
A narrative describing what work will occur during each work day and what lanes will be impacted
 - v. Dates/times
Work dates and times shall be included in plans

- vi. A sign legend showing all sign sizes and colors with MUTCD and CTDOT numbers.
- vii. The work and staging zone shall be demarcated with dimensions.

When will MPT plans be required?

- a. MPT plans are always required. Depending on the size and scope of the project, some plans may need to be more in-depth than others.
- b. Work with the Engineering Bureau and the Transportation, Traffic & Parking Department on developing your plan

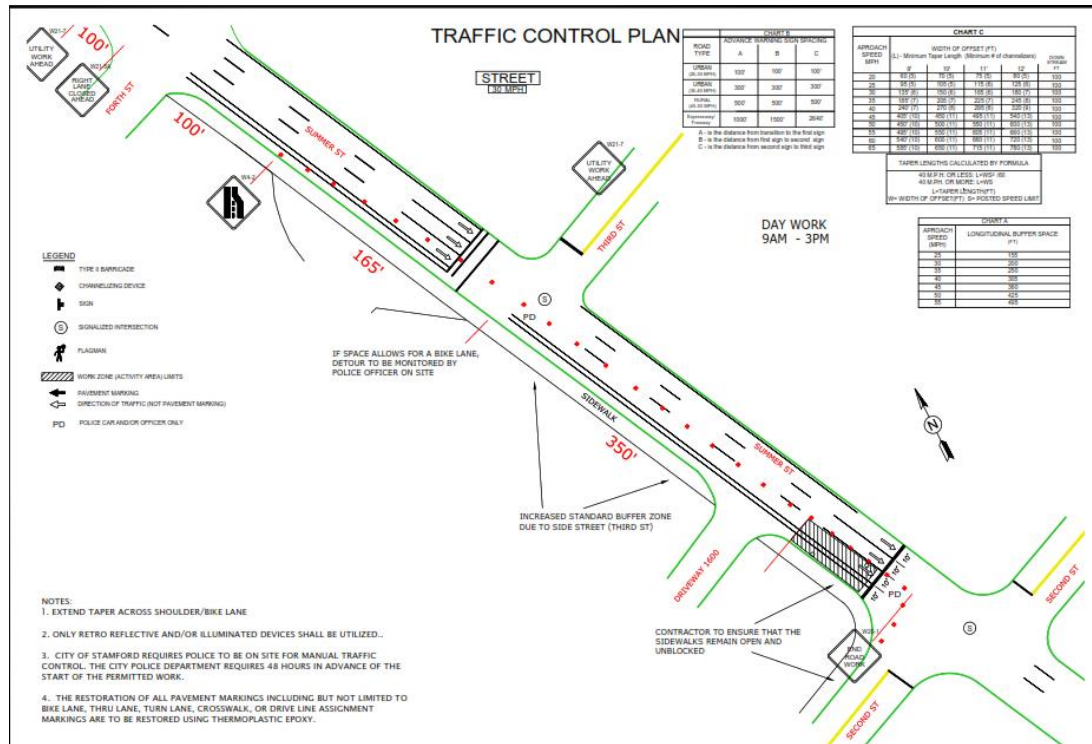
MPT Plan Checklist

Does my MPT plan include a project scope and narrative?	Y	N
Does my MPT plan include the dates and times of work?	Y	N
Is my MPT plan clear and legible?	Y	N
Does my MPT plan impact any pedestrian walkways?	Y	N
If it does impact pedestrian walkways, does my MPT plan adequately consider pedestrians?	Y	N
Does my MPT plan have the proper MUTCD taper lengths	Y	N
Does my MPT plan follow MUTCD guidelines for signs?	Y	N
Does my MPT plan show the work space with dimensions	Y	N
Have I submitted my plan to the Traffic Advisory Committee?	Y	N
Have I worked with a Stamford Traffic Engineer?	Y	N

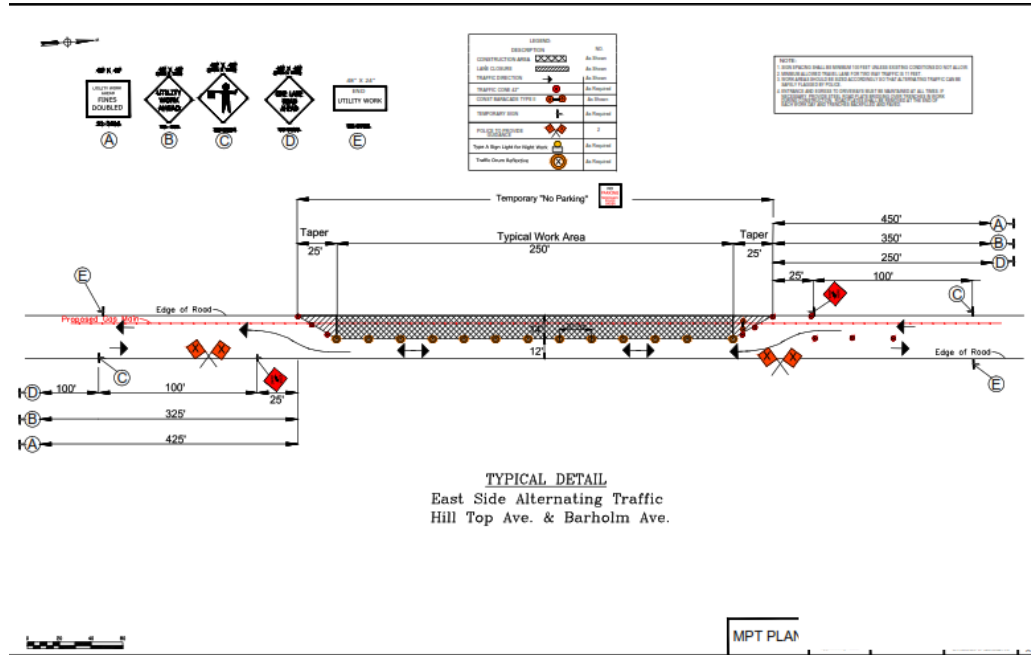
Acceptable and Unacceptable MPT Plans

- a. **Acceptable Plan:** This plan provides proper taper lengths, sign placements, and locations of police officers. Furthermore, the plan makes call outs for pedestrian and bicycle facility

needs.

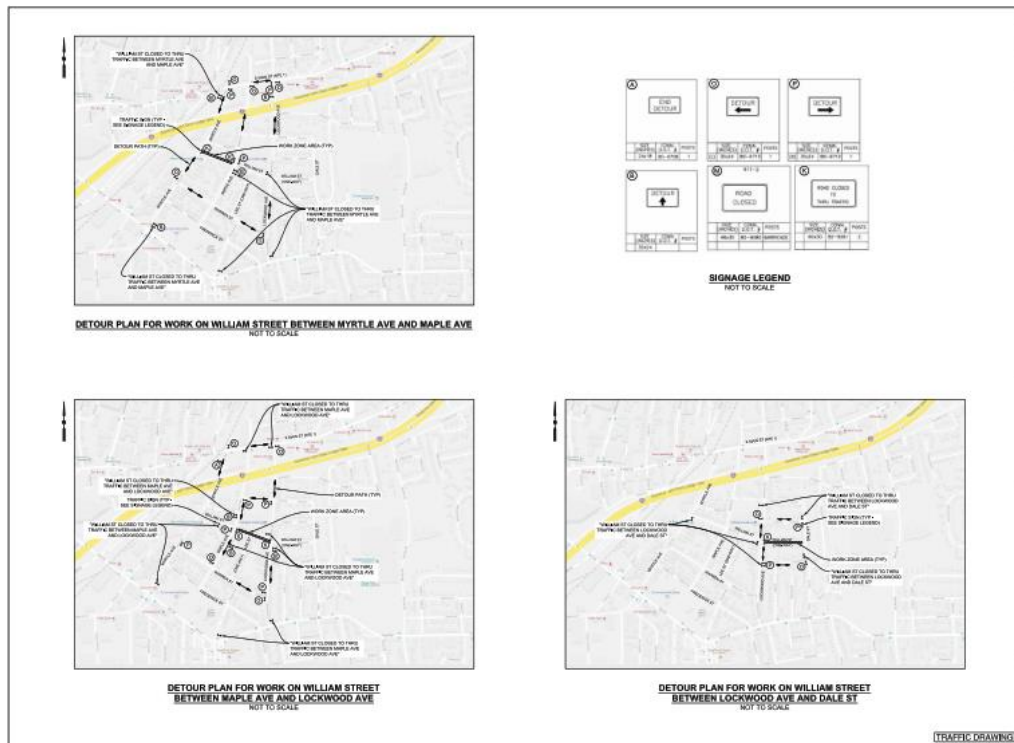


b. **Acceptable Plan:** This plan is clear and concise showing all needed aspects of an MPT Plan. However, work times and hours should be included.

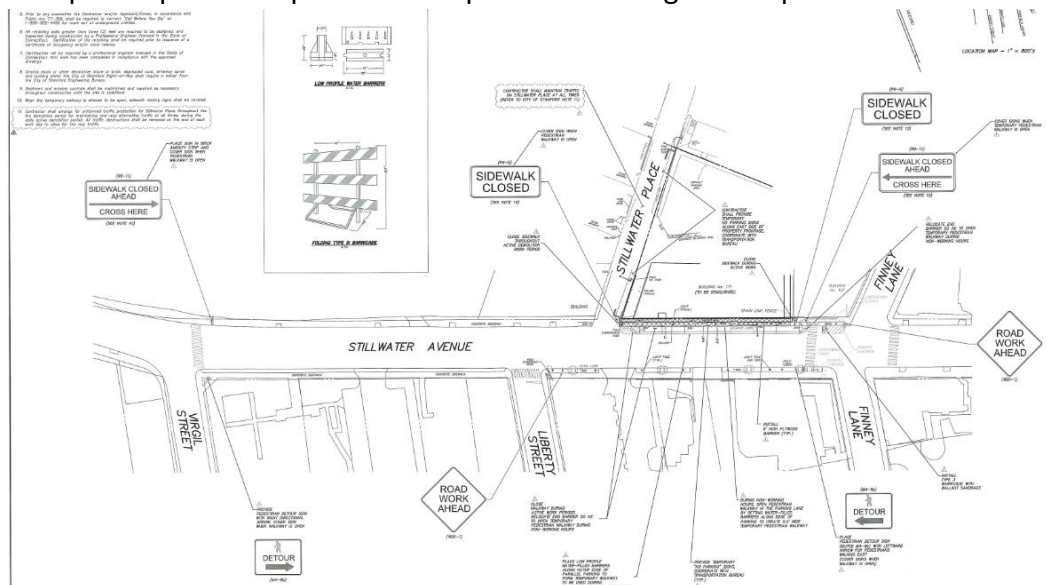


c. **Acceptable Plan:** This plan depicts detour roads for a utility project. This plan provides clear signage locations and sign types. Since sidewalks were not closed due

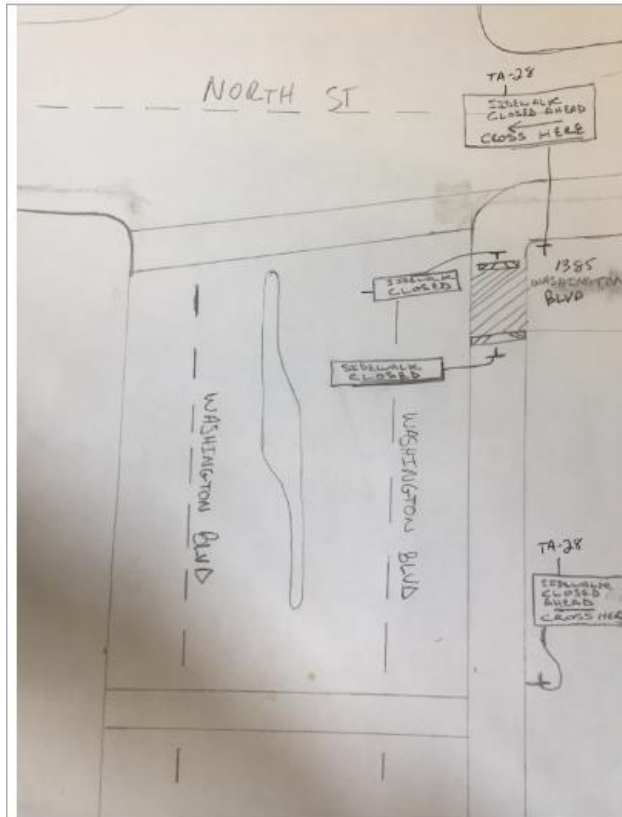
to this project, pedestrian detour signage was not included.



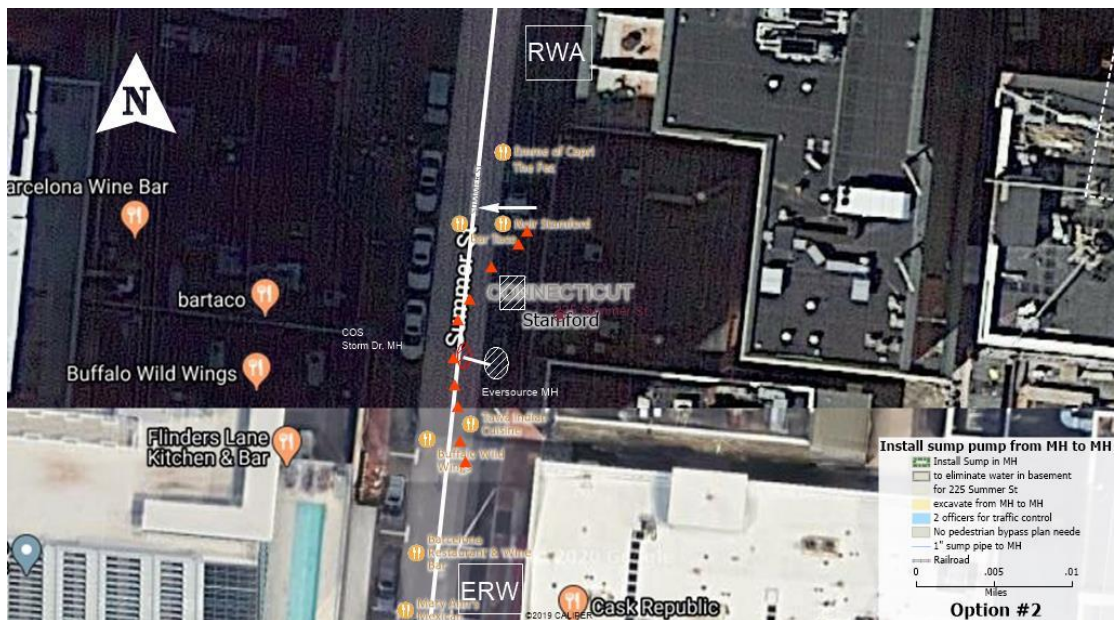
d. Acceptable plan: This plan shows a pedestrian bridge and a pedestrian detour.



e. Acceptable Plan: Plans can be hand drawn, as long as the plans are clear and follow the requirements of the guidelines. However, there should be pedestrian detour signage located at the crosswalks.



- f. Unacceptable Plan: This plan is difficult to understand. Is the sidewalk being closed in this scenario? How far into the travel lane are the cones? There are no measurements for tapers or sign placements. Plans with aerials that have shadows should be avoided.



Appendix

Figure 6C-1. Component Parts of a Temporary Traffic Control Zone

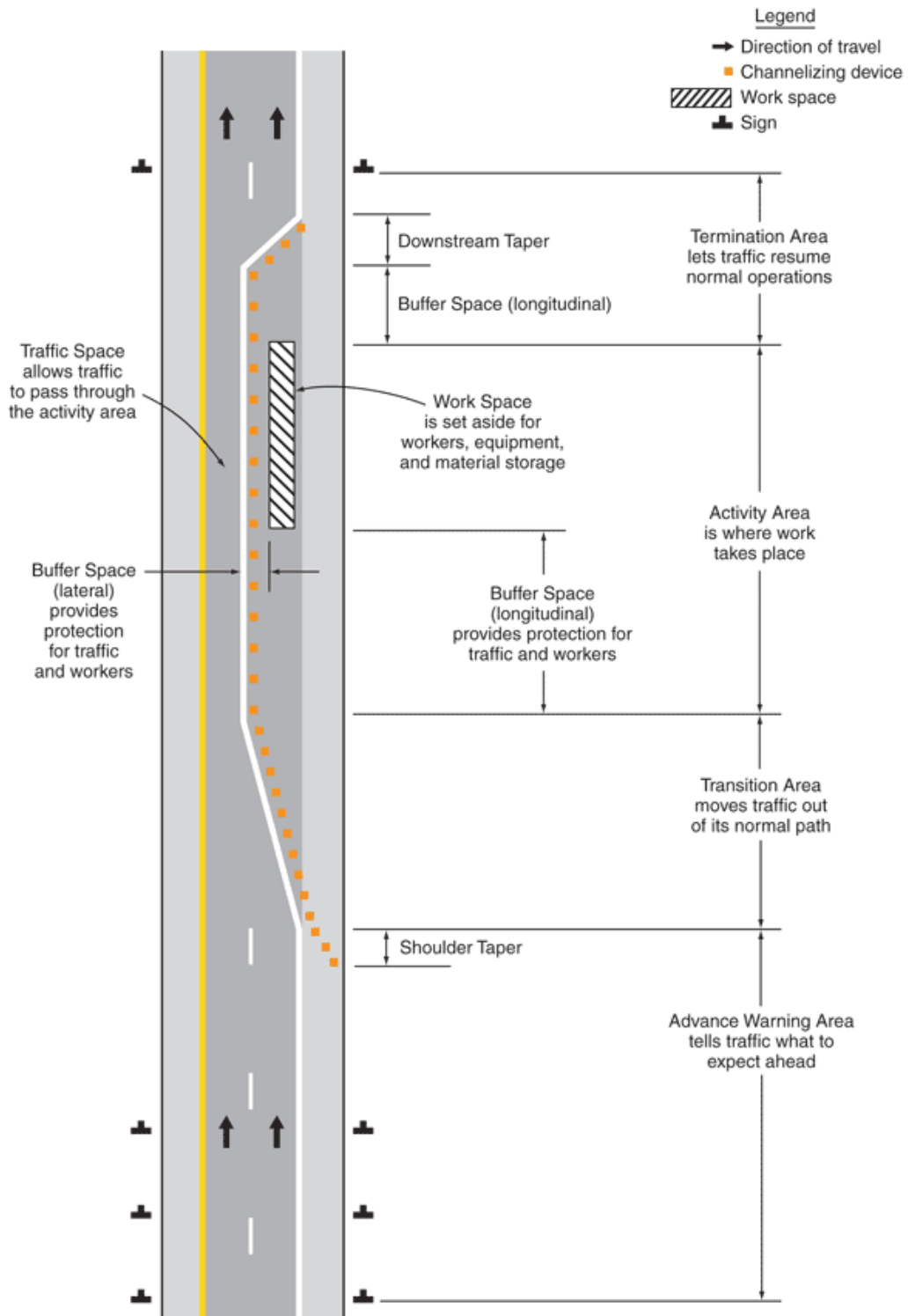
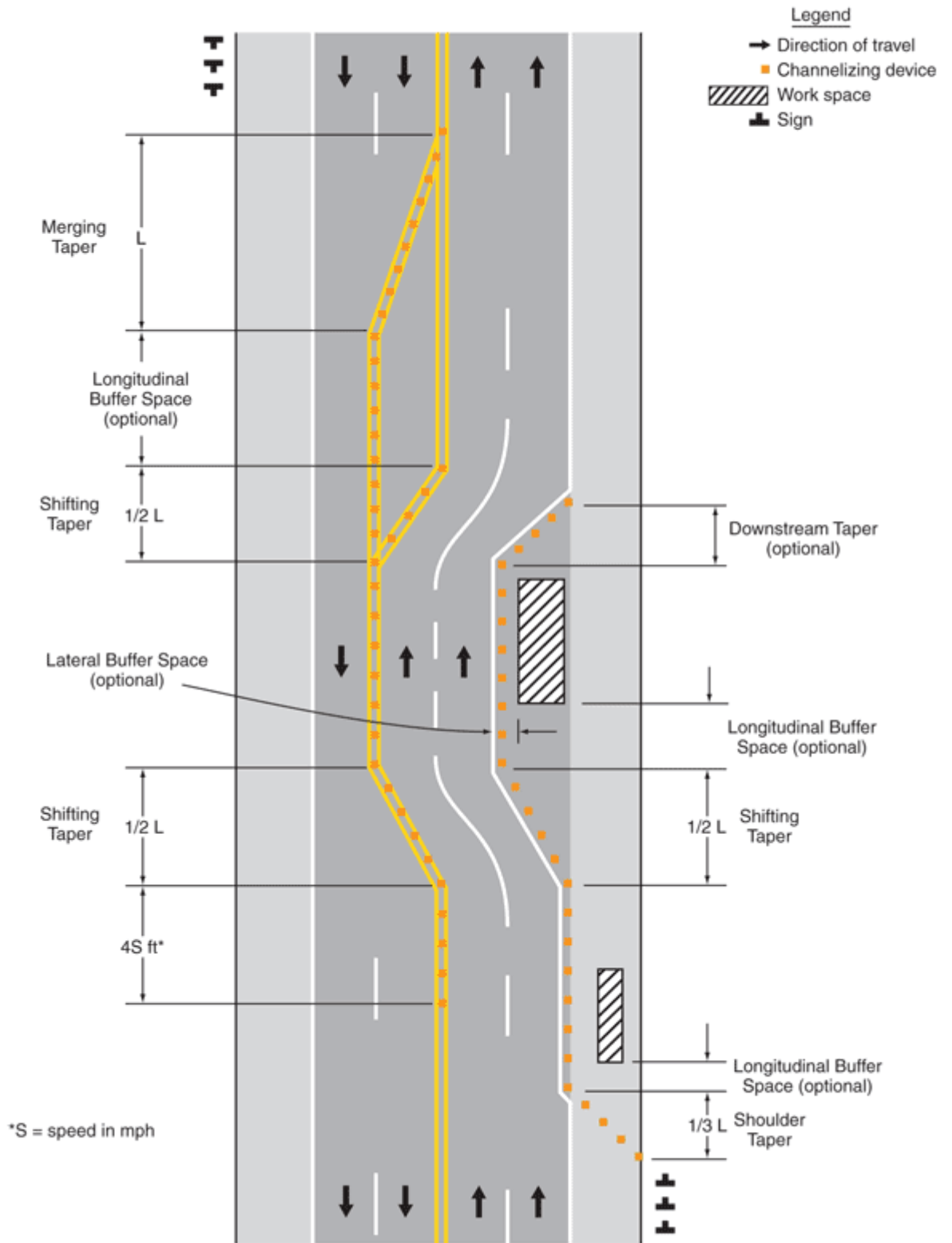
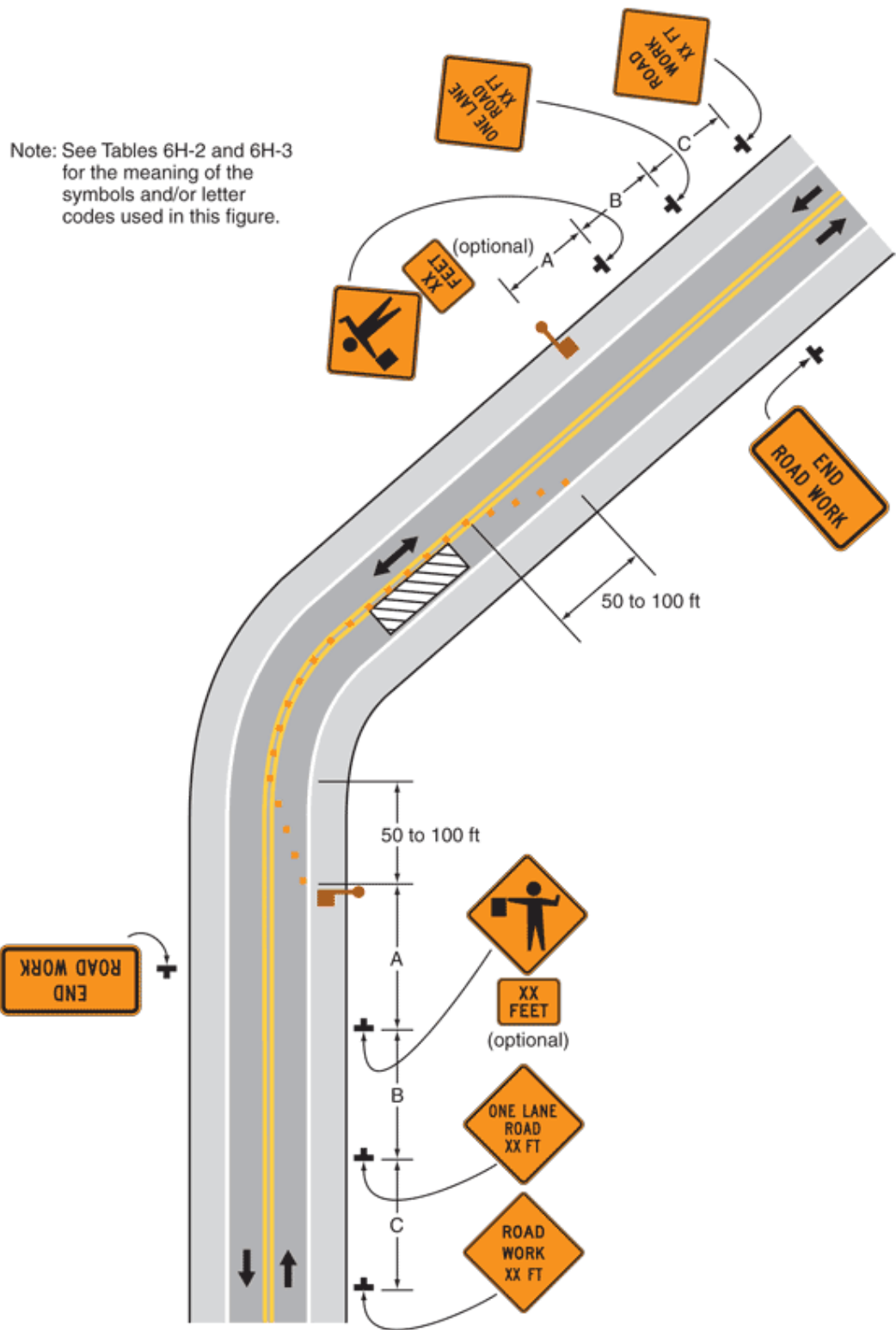


Figure 6C-2. Types of Tapers and Buffer Spaces



b.

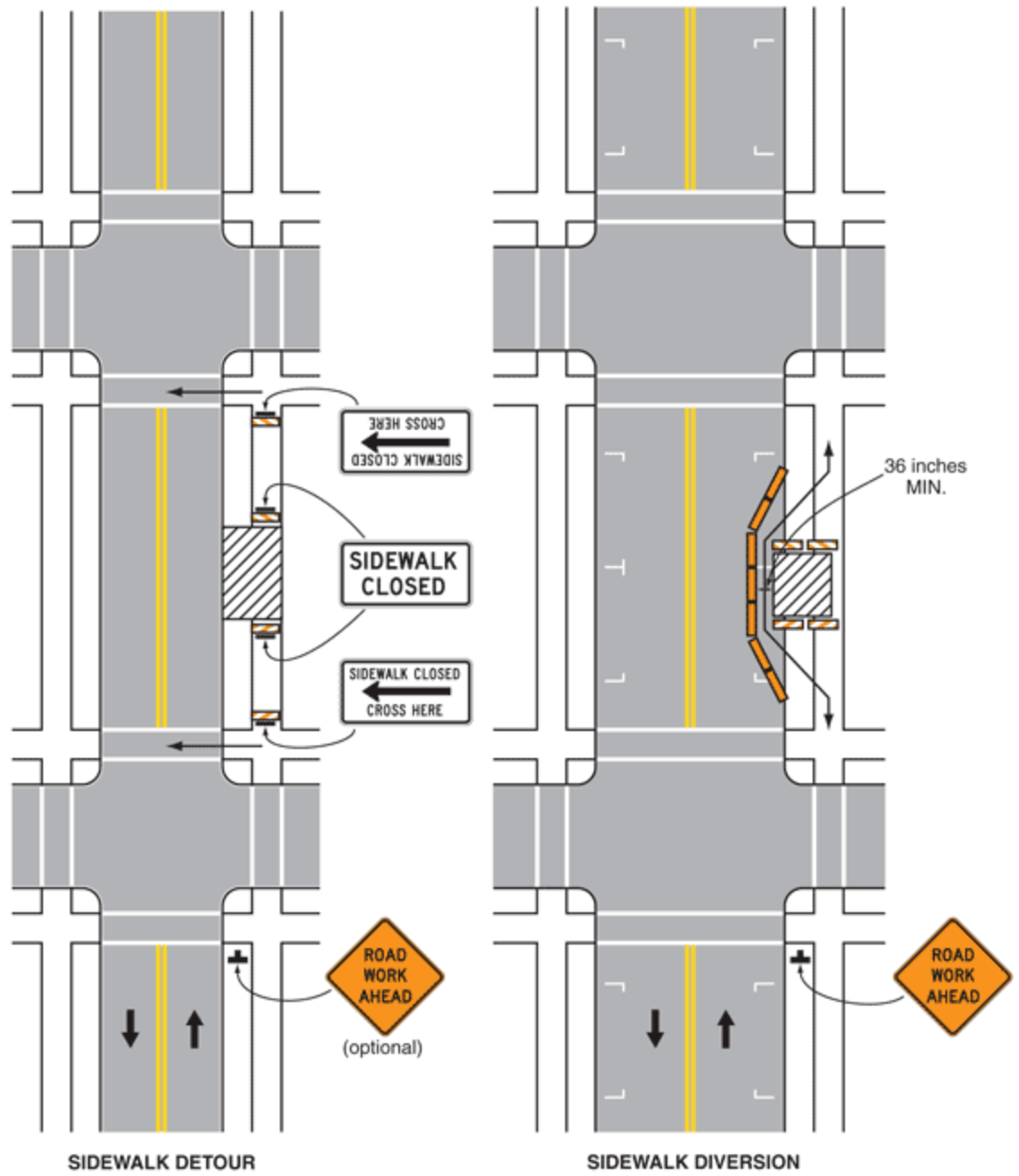
Figure 6H-10. Lane Closure on a Two-Lane Road Using Flaggers (TA-10)



Typical Application 10

c.

Figure 6H-28. Sidewalk Detour or Diversion (TA-28)



Typical Application 28

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

d.

e. Work Zone Signs

Figure 6F-4. Warning Signs and Plaques in Temporary Traffic Control Zones
(Sheet 1 of 3)



Figure 6F-4. Warning Signs and Plaques in Temporary Traffic Control Zones
(Sheet 2 of 3)

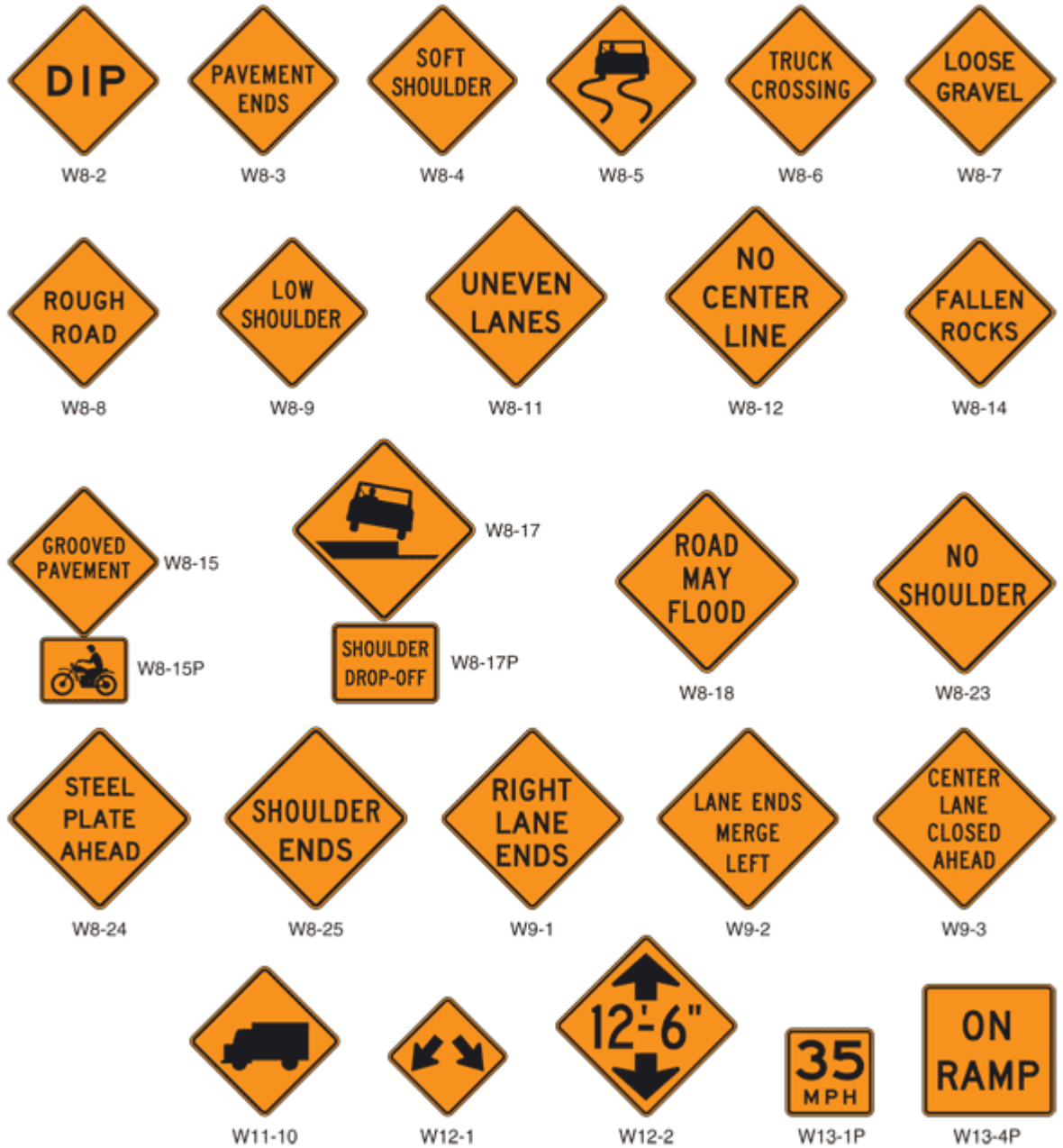


Figure 6F-4. Warning Signs and Plaques in Temporary Traffic Control Zones (Sheet 3 of 3)



* An optional STREET WORK word message sign is shown in the "Standard Highway Signs and Markings" book.
 ** An optional STREET CLOSED word message sign is shown in the "Standard Highway Signs and Markings" book.
 *** An optional FLAGGER (W20-7a) word message sign is shown in the "Standard Highway Signs and Markings" book.
 **** An optional FRESH TAR word message sign is shown in the "Standard Highway Signs and Markings" book.

Figure 6F-3. Regulatory Signs and Plaques in Temporary Traffic Control Zones
(Sheet 1 of 2)



Figure 6F-3. Regulatory Signs and Plaques in Temporary Traffic Control Zones
(Sheet 2 of 2)

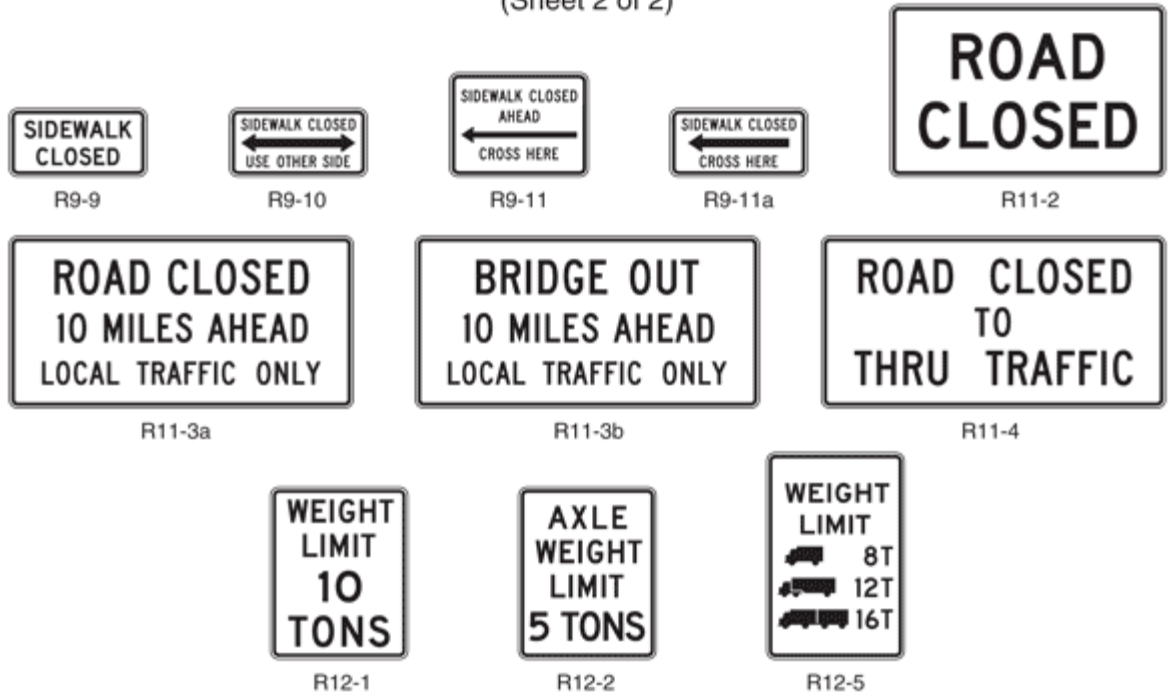


Figure 6F-5. Exit Open and Closed and Detour Signs

