

APPENDIX F: TYPICAL LANE CLOSURE PLANS



The following Lane Closure Plans and accompanying Tables are examples taken or adapted from the California MUTCD issued by Caltrans. They are included here for demonstrative purposes only. Prior to the implementation of any closure the Contractor shall consult these references for details and additional information regarding use, placement and policy. In addition, all closures are subject to the review and approval of the SFMTA and may require a Special Traffic Permit.

Table 6H-2. Meaning of Symbols on Typical Application Diagrams






















Arrow panel	
Arrow panel support or trailer (shown facing down)	
Changeable message sign or support trailer	
Channelizing device	
Crash Cushion	
Direction of temporary traffic detour	
Direction of traffic	
Flagger	
High level warning device (Flag tree)	
Luminaire	
Pavement markings that should be removed for a long term project	
Sign (shown facing left)	
Surveyor	
Temporary barrier	
Temporary barrier with warning lights	
Traffic or Pedestrian signal	
Truck mounted attenuator	
Type III Barricade	
Warning lights	
Work space	
Work vehicle	

Table 6B-1: Recommended Advance Warning Sign Spacing

Road Type	Distance Between Signs**		
	A	B	C
Urban – 25 mph or less***	100 feet	100 feet	100 feet
Urban – 30 mph***	150 feet	150 feet	150 feet
Urban – 35 mph***	200 feet	200 feet	200 feet
Urban – 40 mph***	250 feet	250 feet	250 feet
Urban – 45 mph***	300 feet	300 feet	300 feet
Urban – 50 mph or more***	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

** The column headings A, B, and C are the dimensions shown in Figures 6P-1 through 6P-54. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The “first sign” is the sign in a three-sign series that is closest to the TTC zone. The “third sign” is the sign that is furthest upstream from the TTC zone.)

*** Posted speed limit, off-peak 85th – percentile speed prior to work starting, or other anticipated operating speed in mph.

Figure 6P-33. Stationary Lane Closure on a Divided Highway (TA-33)

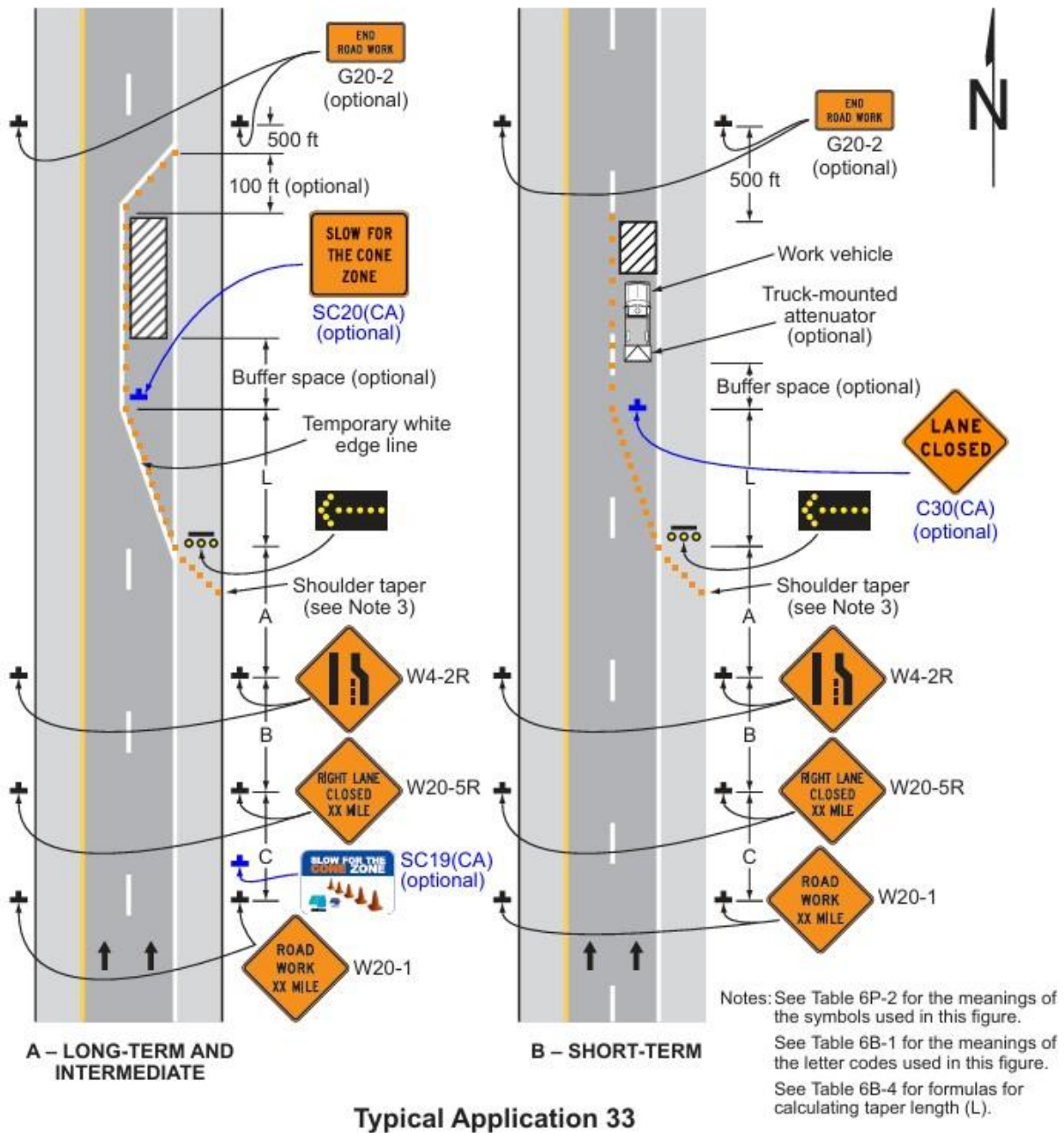
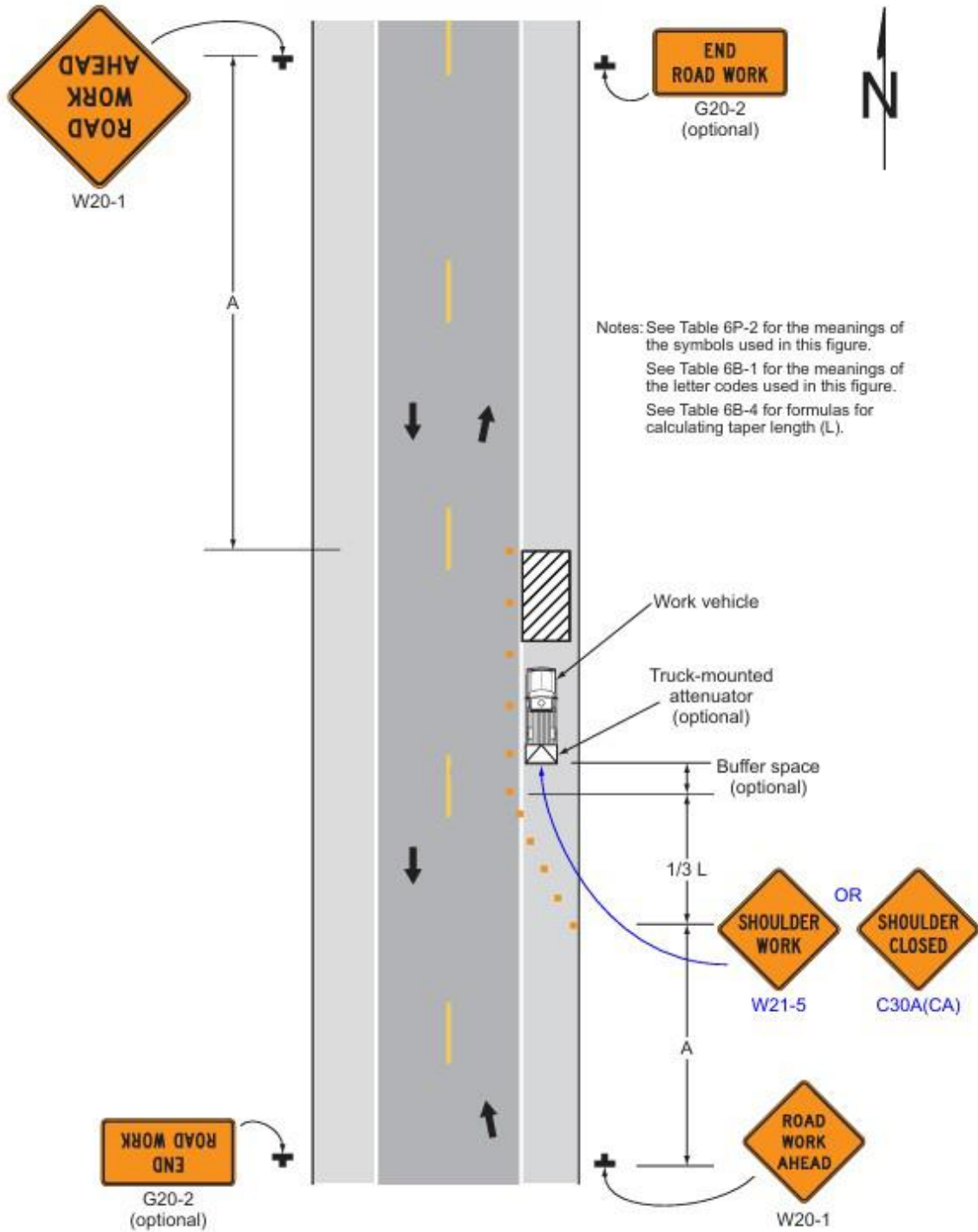


Figure 6P-6. Shoulder Work with Minor Encroachment (TA-6)



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

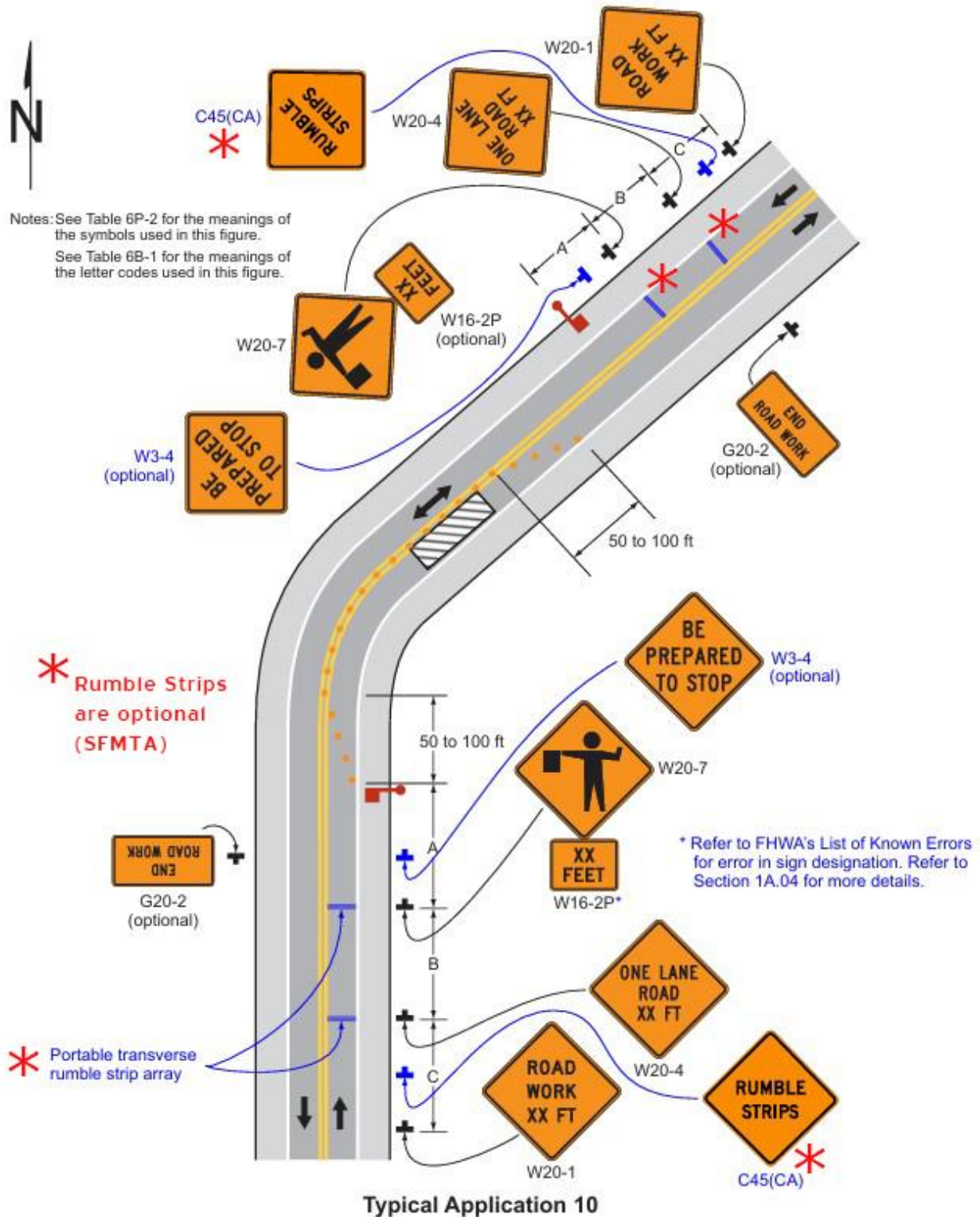
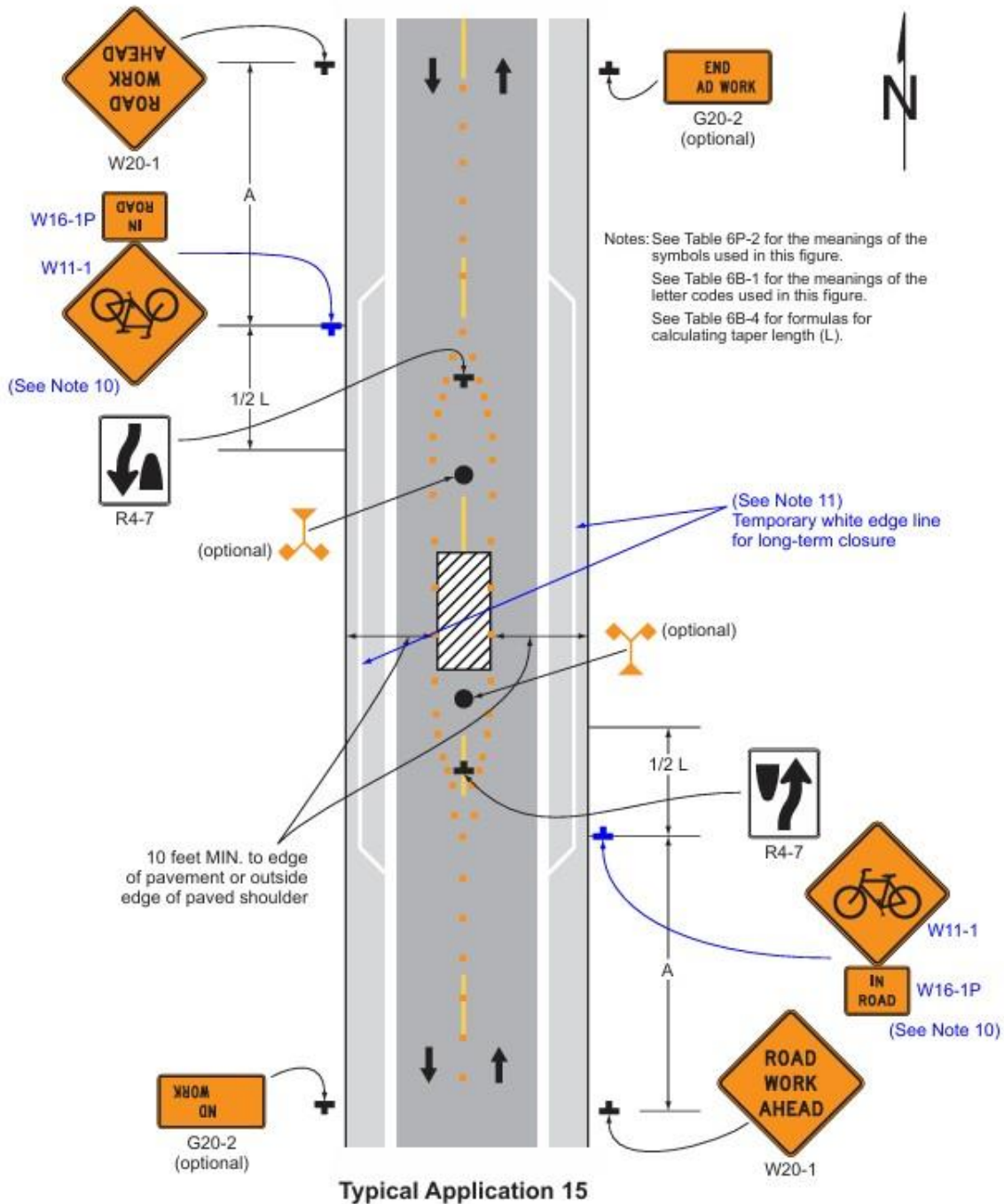


Figure 6P-15. Work in the Center of a Road with Low Traffic Volumes (TA-15)



Notes:

10. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (refer to Section 6N.01) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, the Bicycle Crossing (W11-1) sign and the IN ROAD (W16-1P) plaque should be used to advise motorists of the presence of bicyclists in the travel way lanes.

11. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (refer to Section 6N.01), the temporary white edge line should be used on the shoulder to indicate the use of a portion of the shoulder as a traveled way lane.

Figure 6P-21. Lane Closure on the Near Side of an Intersection (TA-21)

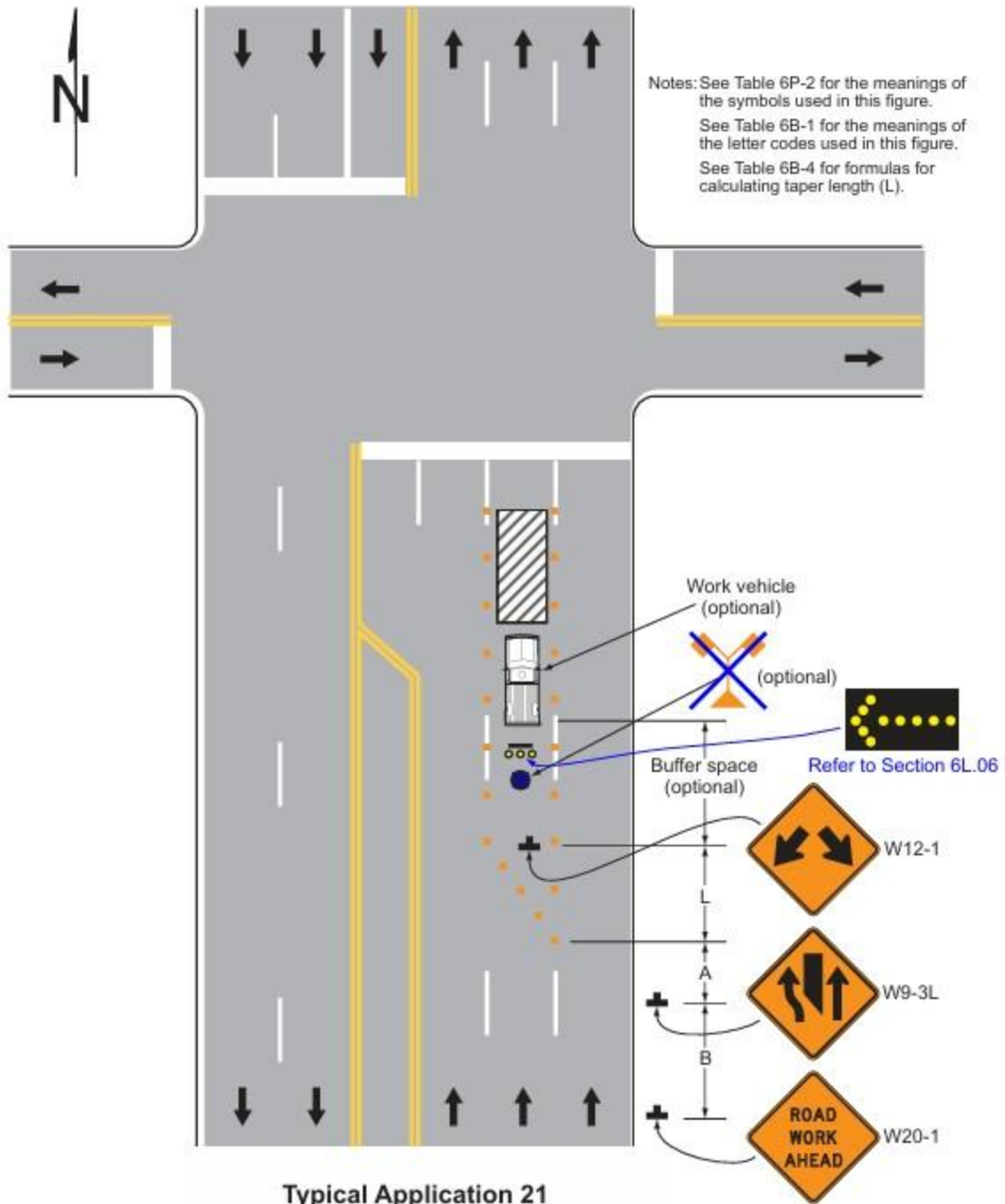


Figure 6P-22. Right-Hand Lane Closure on the Far Side of an Intersection (TA-22)

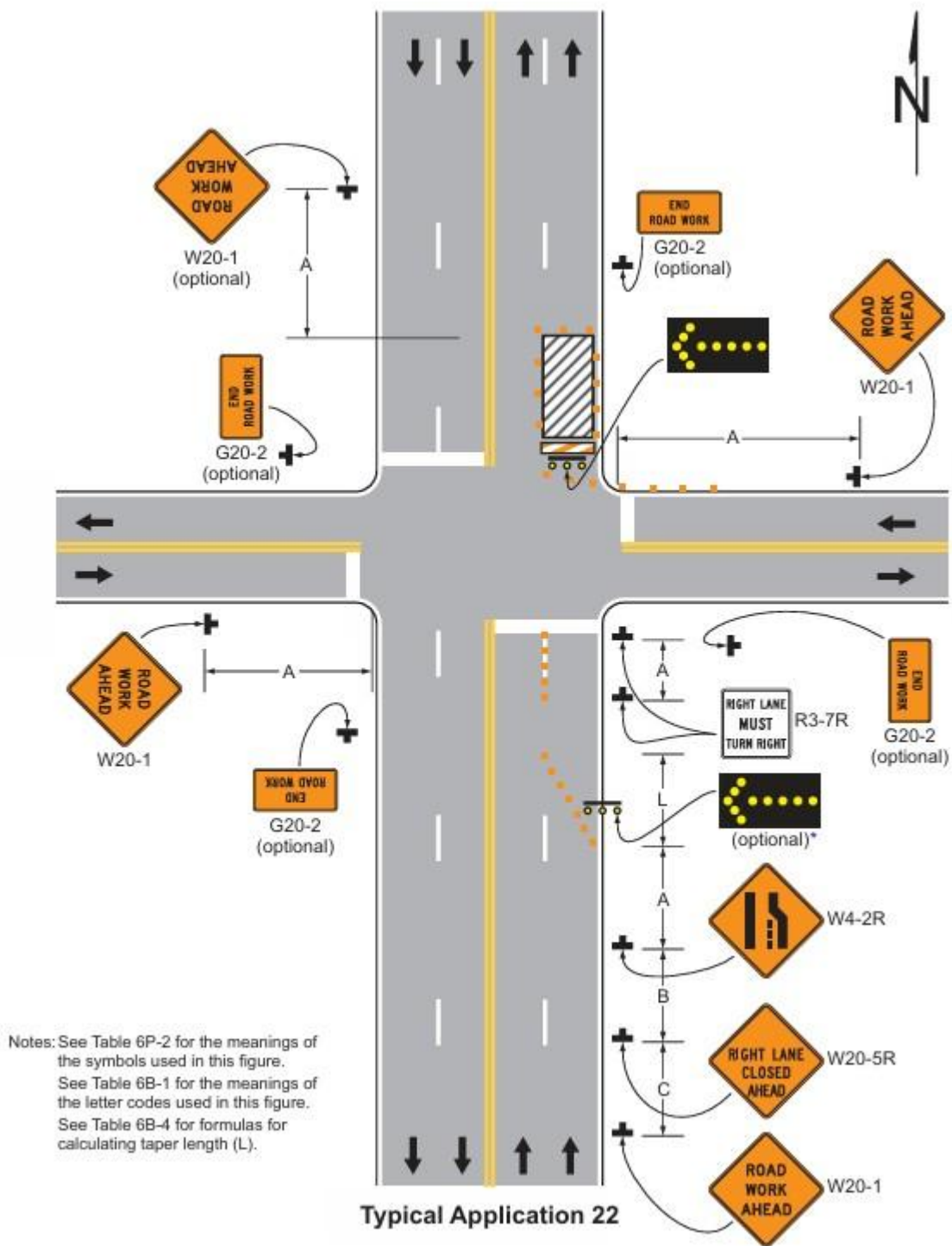


Figure 6P-23. Left-Hand Lane Closure on the Far Side of an Intersection (TA-23)

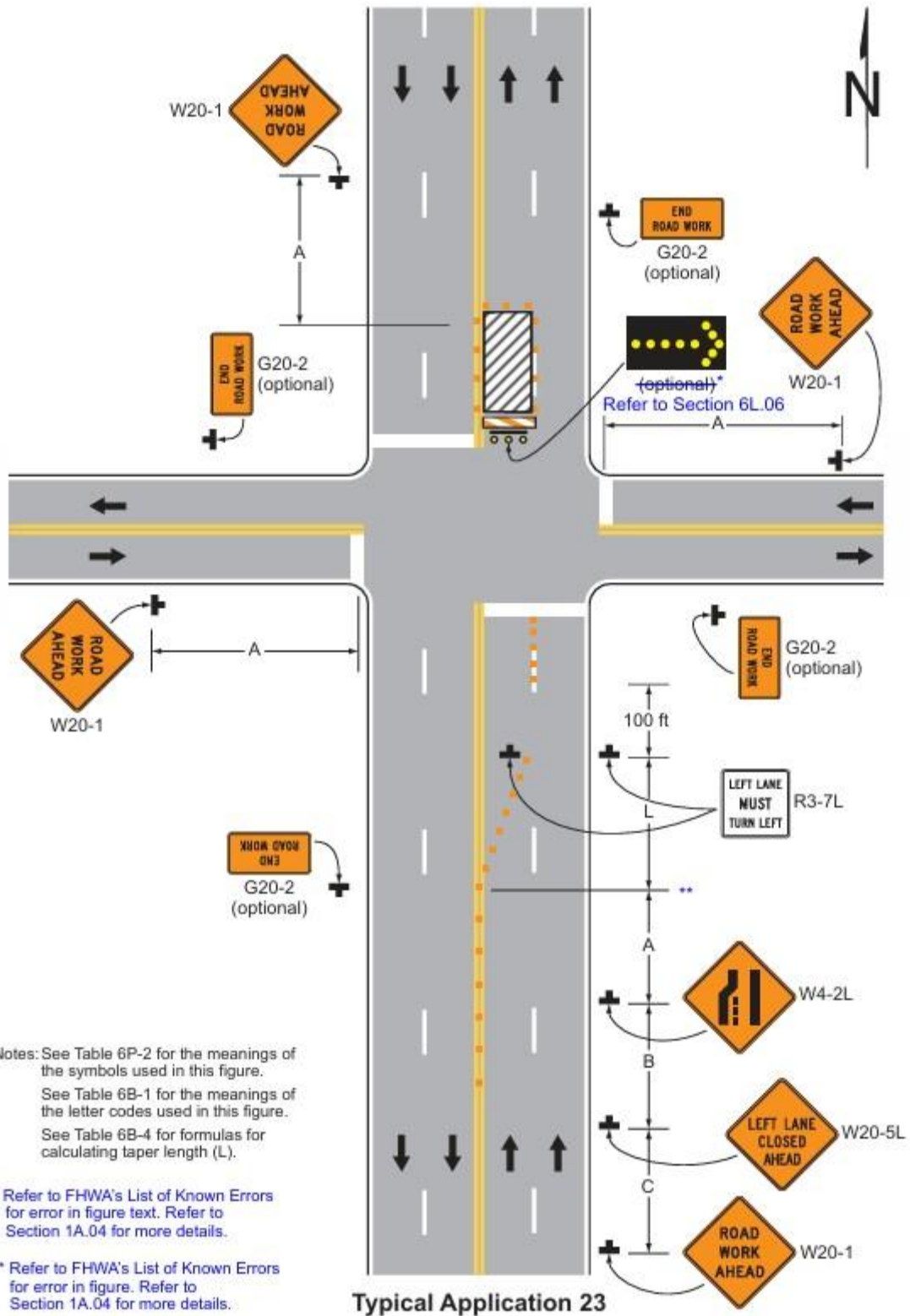


Figure 6P-24. Half Road Closure on the Far Side of an Intersection (TA-24)

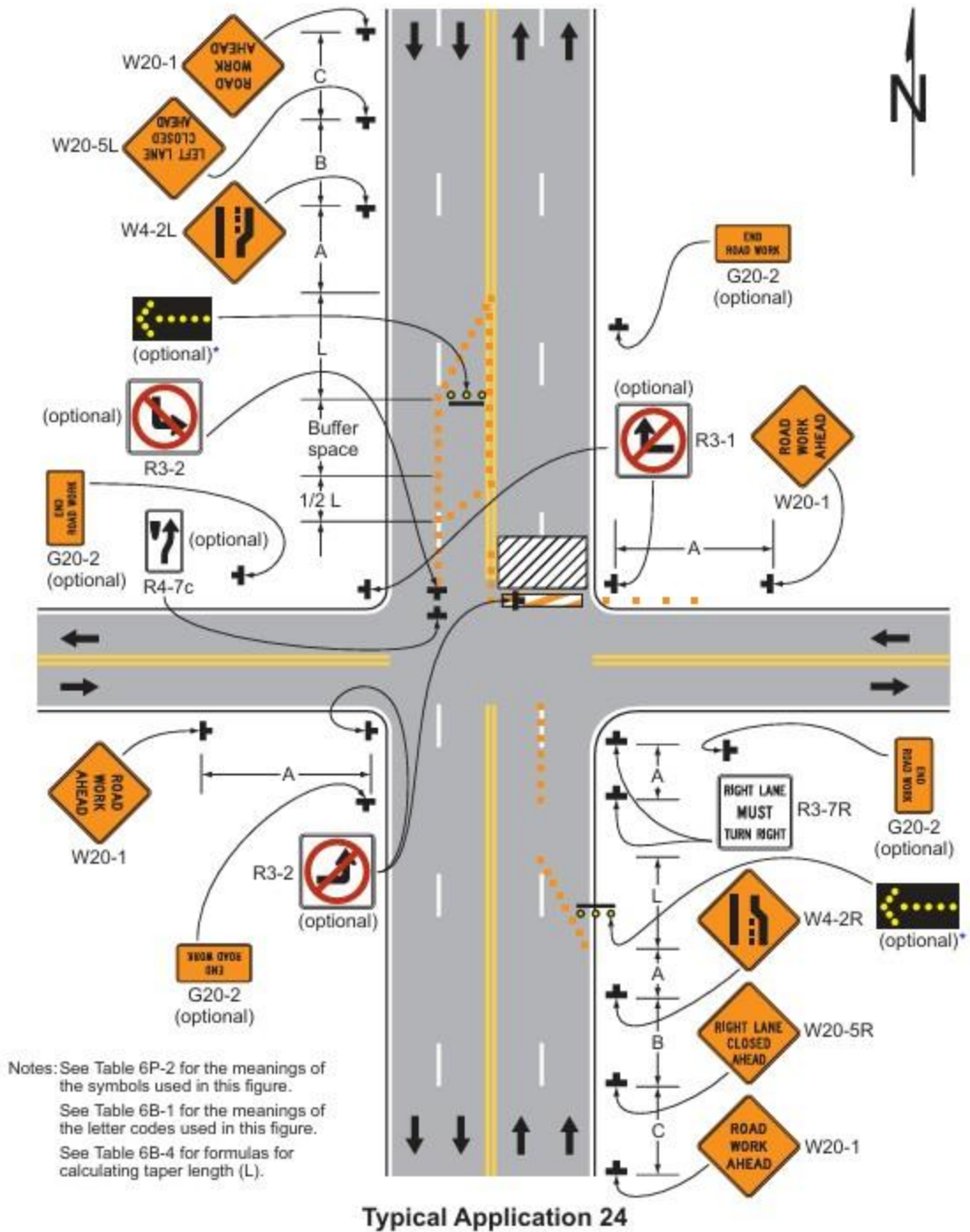
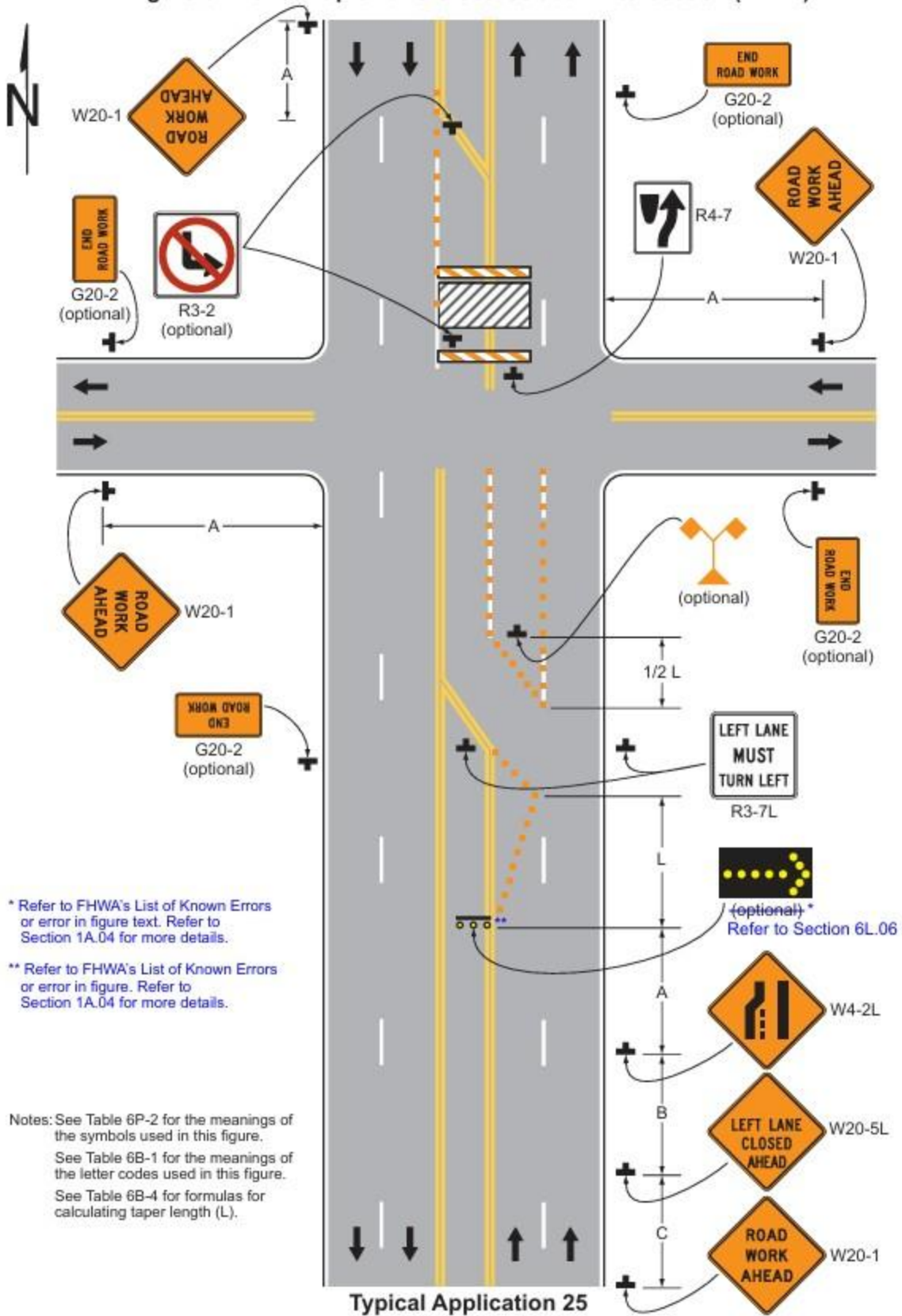


Figure 6P-25. Multiple Lane Closures at an Intersection (TA-25)



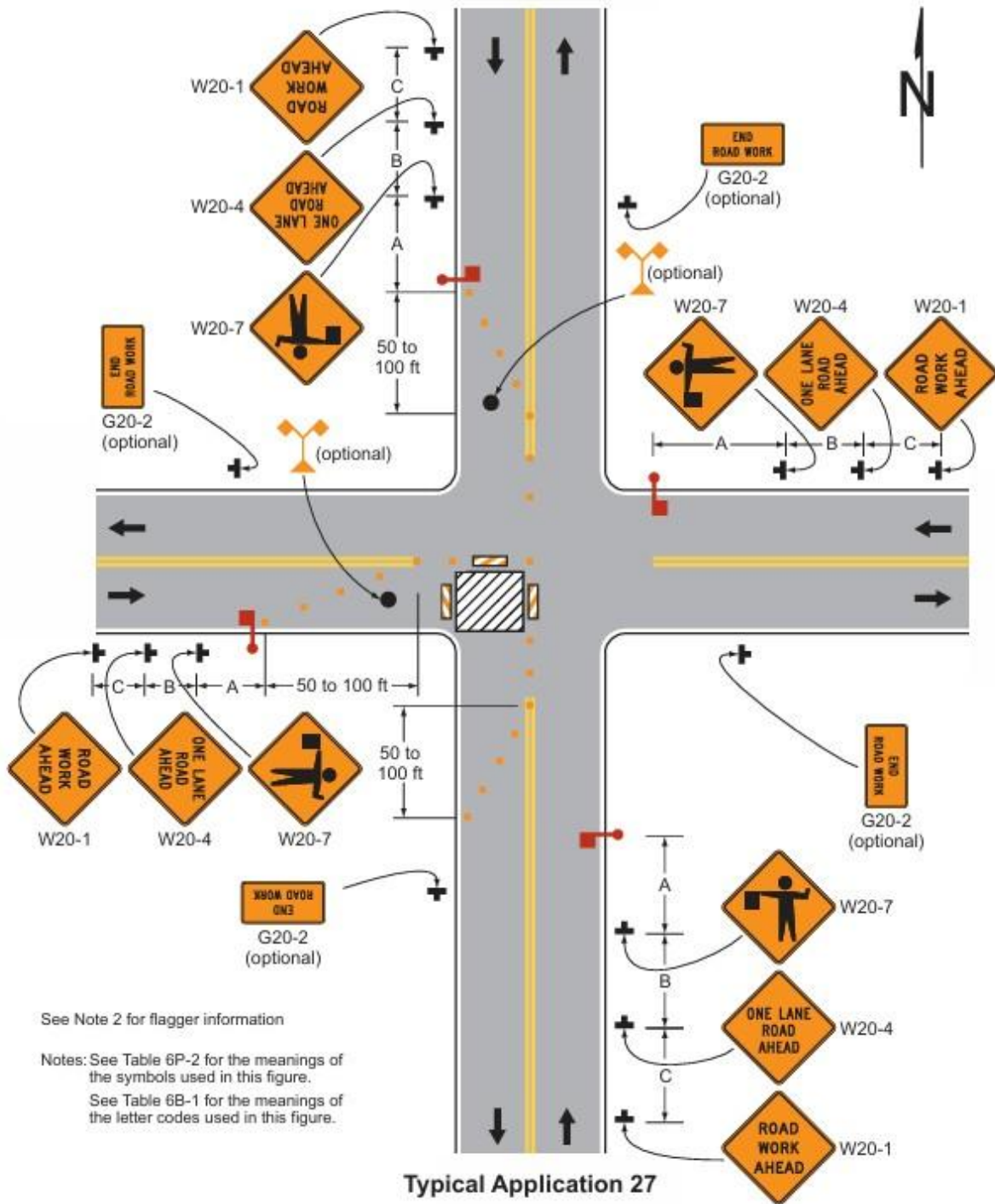
* Refer to FHWA's List of Known Errors or error in figure text. Refer to Section 1A.04 for more details.

** Refer to FHWA's List of Known Errors or error in figure. Refer to Section 1A.04 for more details.

Notes: See Table 6P-2 for the meanings of the symbols used in this figure.
 See Table 6B-1 for the meanings of the letter codes used in this figure.
 See Table 6B-4 for formulas for calculating taper length (L).

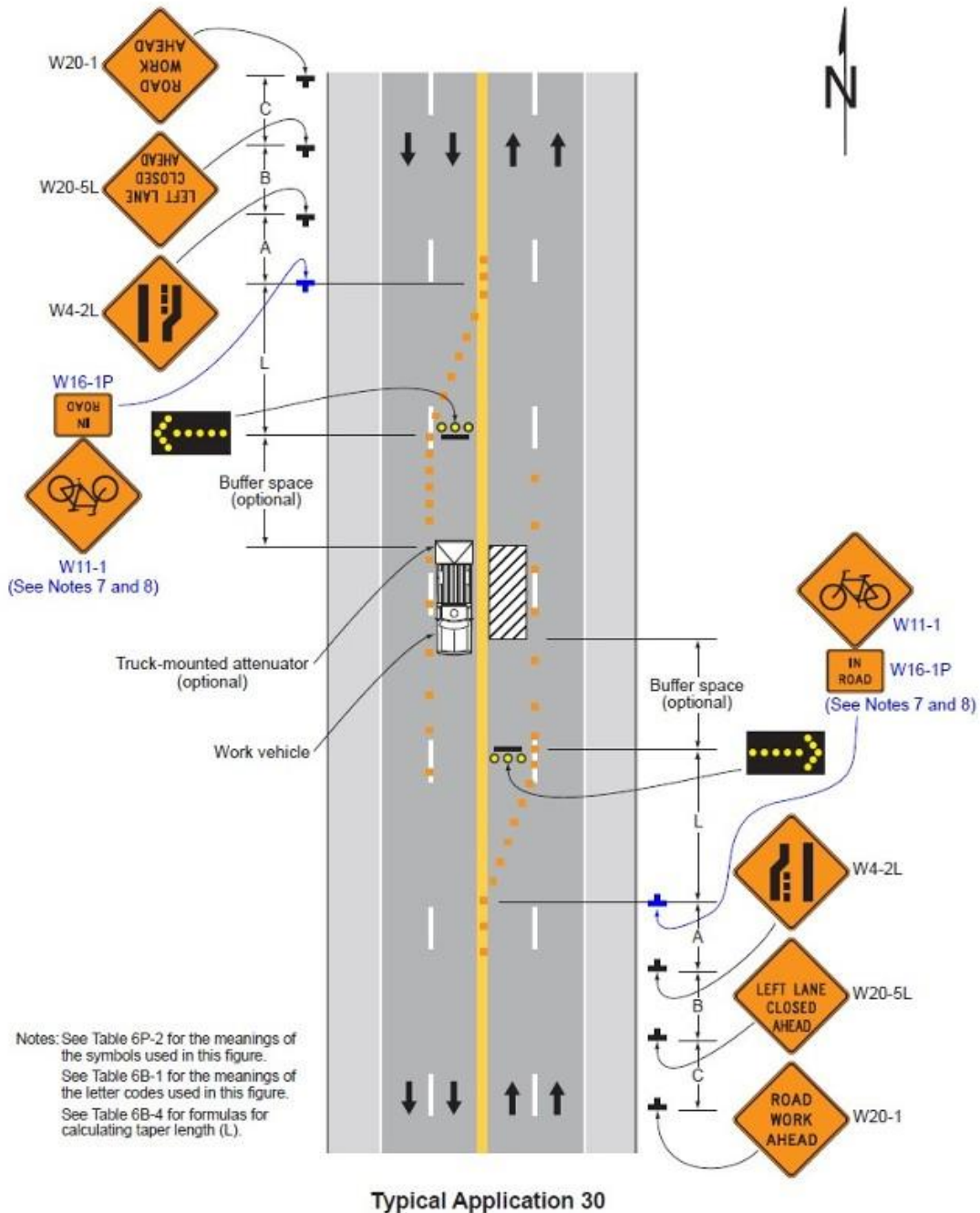
SFMTA: Closing lanes may require a Special Traffic Permit (STP)

Figure 6P-27. Closure at the Side of an Intersection (TA-27)



SFMTA: This plan requires a Special Traffic Permit (STP)

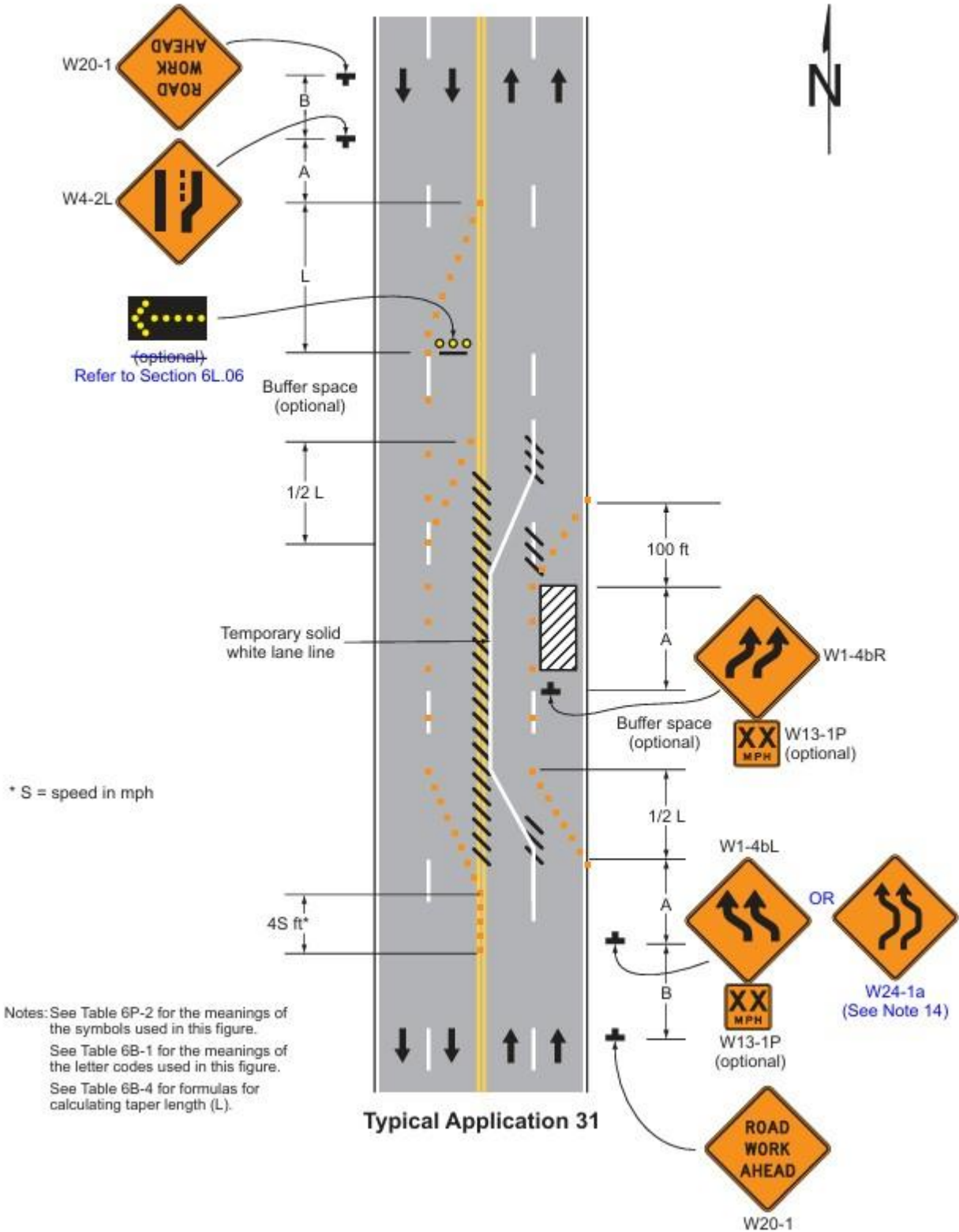
Figure 6P-30. Interior Lane Closure on a Multi-Lane Street (TA-30)



Guidance:

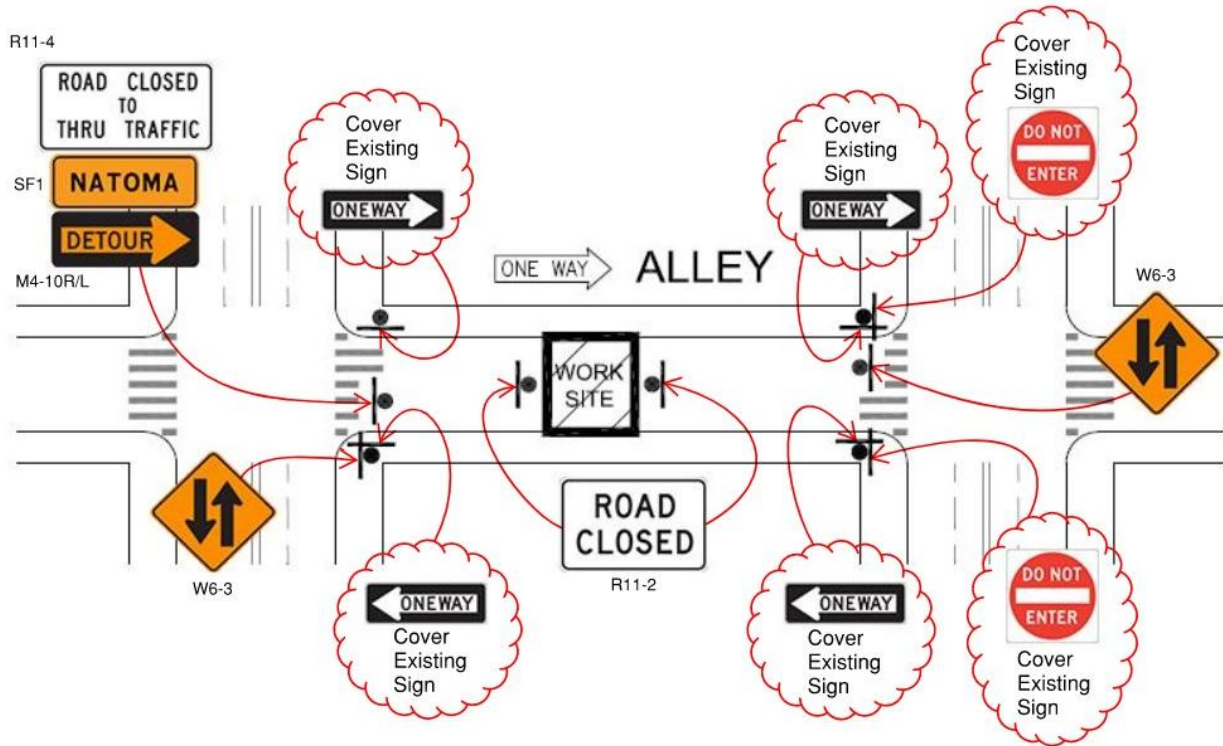
6. All advance warning signs should be placed so that the path of travel for bicycles is not blocked, while maintaining visibility for road users.
7. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (refer to Section 6N.01) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, the Bicycle Crossing (W11-1) sign and the IN ROAD (W16-1P) plaque or the IN STREET (W16-1aP) plaque should be used to advise motorists of the presence of bicyclists in the travel way lanes.
8. If bicyclists are able to use the shoulder throughout the TTC zone, the Bicycle Crossing (W11-1) sign and the IN ROAD (W16-1P) plaque or the IN STREET (W16-1aP) plaque should be omitted.

Figure 6P-31. Lane Closure on a Street with Uneven Directional Volumes (TA-31)



SFMTA: See Section 3.4 and figures 3.4a, 3.4b and 3.4c for more guidance.

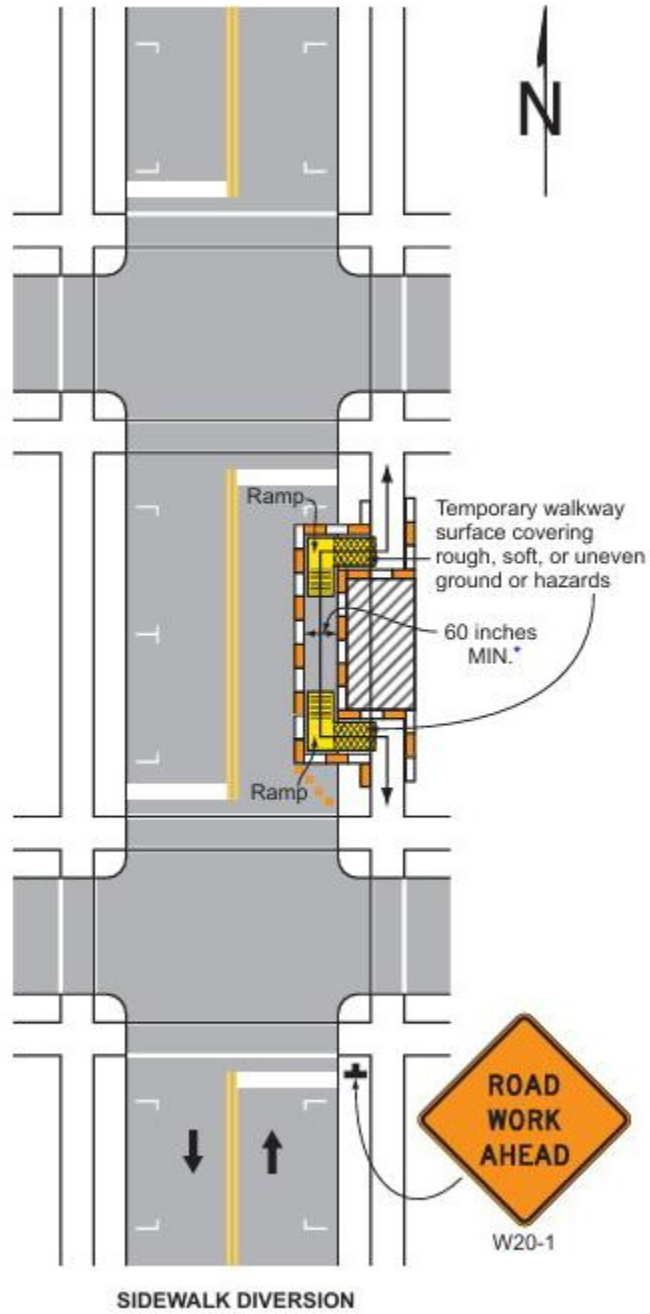
Figure F-1. Closures on One-Way Alleys



SFMTA Notes:

1. Special Traffic Permits (STP) are required for all alley and street closures
2. To accommodate a midblock alley closure, this plan shows how to convert a One-Way Alley into a temporary Two-Way Alley with two open dead-ended segments.
3. Maintain Local Access At All Times
4. Sidewalks should remain open to pedestrians
5. A Flag-Person should be posted at each end of the block
6. For Two-Way Alleys, W6-3 (Two-Way Traffic) signs are not required
7. See Appendix E, Uniform Sign Chart for sign designs

Figure 6P-28. Sidewalk Diversion (TA-28)



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SFMTA: Refer to SF Public Works Department (SFPW) for walkway width standards