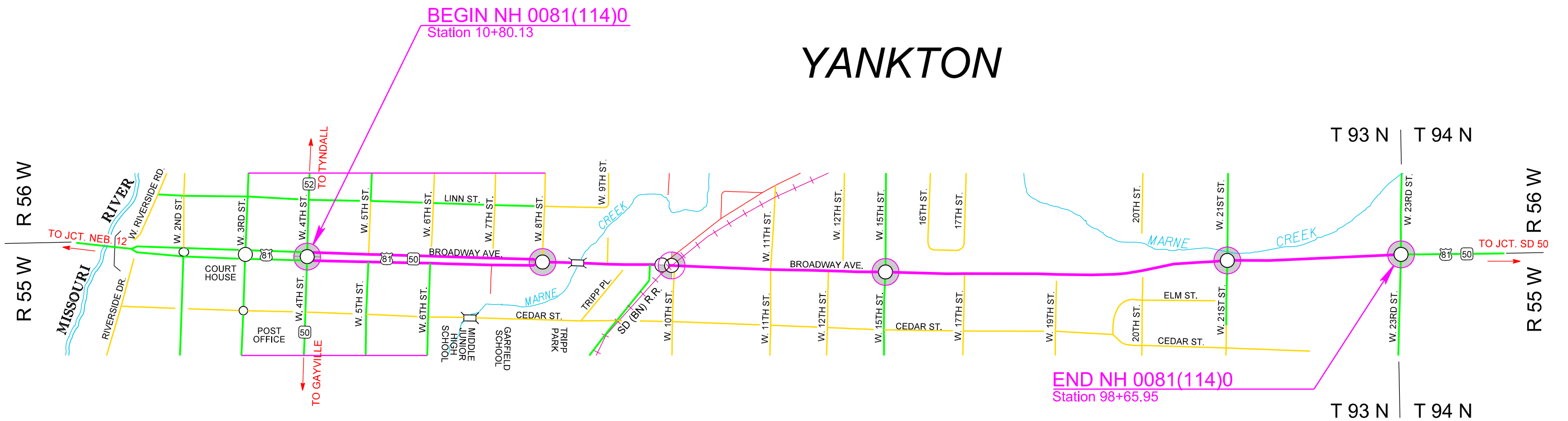


STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	C1	C11

Section C: Traffic Control

INDEX OF SECTIONS

- C1: General Layout W/Index
- C2: Estimate W/General Notes
- C3 to C5: Traffic Control Layouts
- C6: Sign Table
- C7 to C11: Standard Plates



SECTION C ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	50.0	Hour
634E0110	Traffic Control Signs	1,075.2	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	6	Each
634E0330	Temporary Raised Pavement Markers	9,240	Ft
634E0420	Type C Advance Warning Arrow Board	2	Each

SEQUENCE OF OPERATIONS

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work.

GENERAL TRAFFIC CONTROL

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

All construction operations will be conducted in the general direction of traffic movement.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

All haul trucks will be equipped with an additional flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights will be incidental to the various related contract items.

The Contractor will notify businesses/homeowners a minimum of two weeks prior to construction to inform them of upcoming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

TRAFFIC CONTROL SIGNS

Sufficient traffic control devices have been included in these plans to sign two lane closures to complete work at four intersection corners. If the Contractor elects to work on additional locations simultaneously, the cost for additional traffic control devices will be incidental to the contract unit price per square foot for "Traffic Control Signs".

Traffic control devices have been included in these plans to sign one additional left turn lane closure at the intersection of Broadway Ave. and 4th St. The Contractor will not be allowed to simultaneously work on the left turn lane and close the adjacent shoulders at the intersection of Broadway Ave. and 4th St.

TEMPORARY RAISED PAVEMENT MARKERS

Temporary raised pavement markers will be used for marking edge lines, lane lines, and centerlines. Temporary raised pavement markers will be used on all new permanent surfacing sections of roadway and on existing surfacing where temporary marking locations are different than existing marking locations, unless noted or as directed by the Engineer.

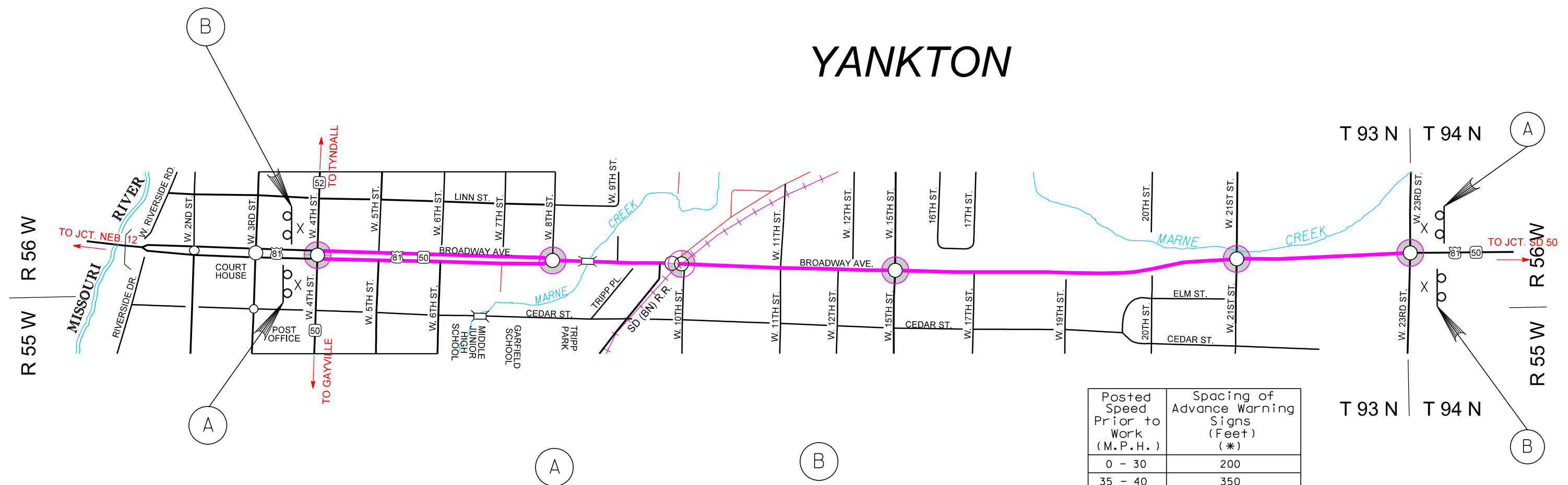
Temporary raised pavement markers will be attached to the roadway surface with a flexible non-permanent bituminous adhesive capable of being removed from the roadway surface or with an adhesive approved by the Engineer.

All costs to furnish, install, replace if necessary, and remove the markers will be incidental to the contract unit price per foot for "Temporary Raised Pavement Markers".

FIXED LOCATION SIGNS GROUND MOUNTED, BREAKAWAY SUPPORTS



YANKTON



(A)

**ROAD WORK
NEXT 2 MILES
G20-1**

(B)

**END
ROAD WORK
G20-2**

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (*)
0 - 30	200
35 - 40	350
45 - 50	500
55	750
60 - 65	1000

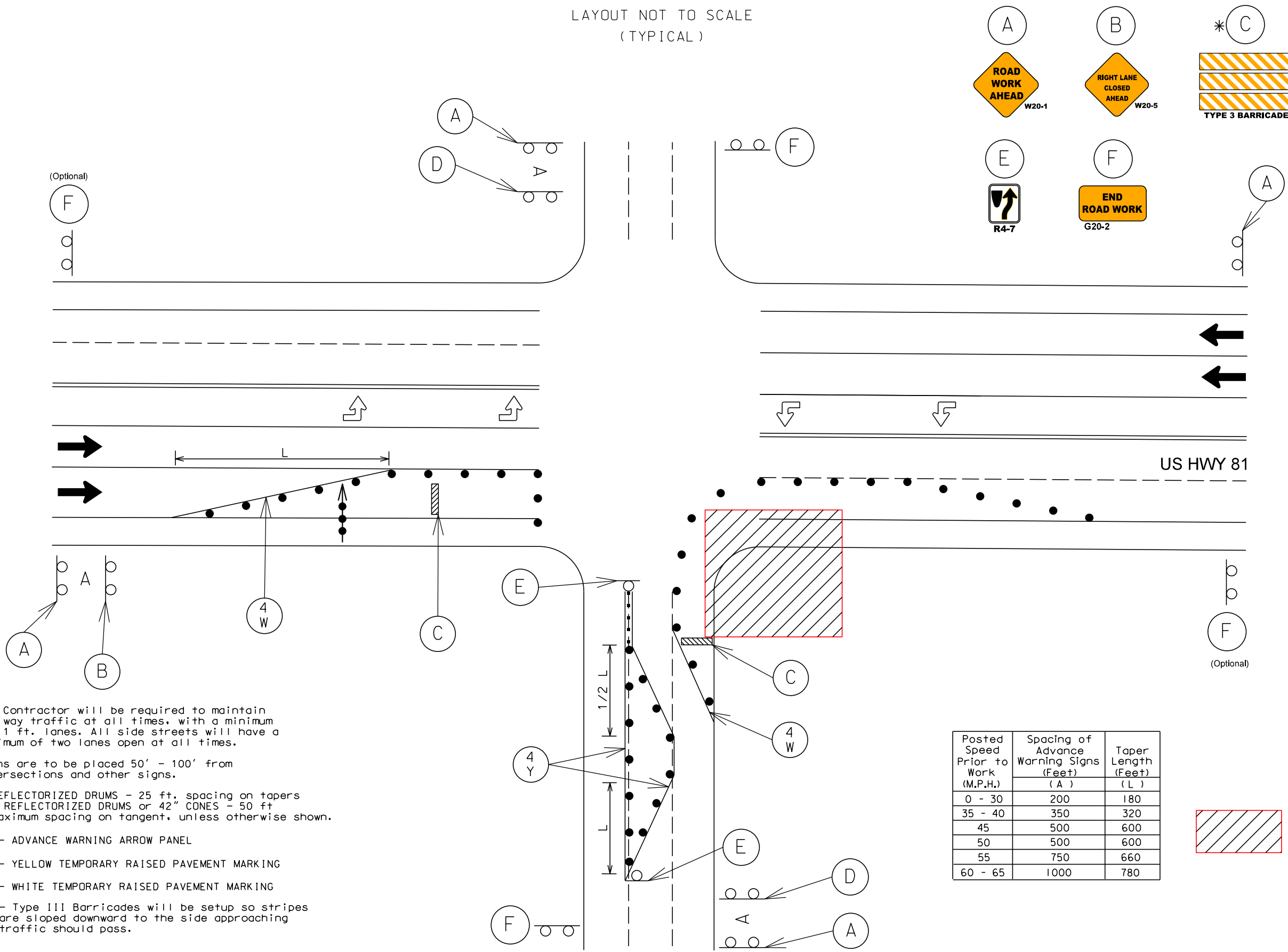
NOTES:

- All fixed location signs will remain in place until pavement marking is complete.
- X- Signs will be placed 50' to 150' from Intersection. Exact location to be approved by the Engineer.
- Construction signs will not obscure existing signs and must be located a minimum of 100' from an existing sign.

— Project Location

5 LANE HIGHWAY TRAFFIC CONTROL SIDE STREET LANE CLOSURE

LAYOUT NOT TO SCALE
(TYPICAL)



NOTES:

- The Contractor will be required to maintain two way traffic at all times, with a minimum of 11 ft. lanes. All side streets will have a minimum of two lanes open at all times.
- Signs are to be placed 50' - 100' from intersections and other signs.
- REFLECTORIZED DRUMS - 25 ft. spacing on tapers & REFLECTORIZED DRUMS or 42" CONES - 50 ft maximum spacing on tangent, unless otherwise shown.
- ←←← - ADVANCE WARNING ARROW PANEL
- ⓪ - YELLOW TEMPORARY RAISED PAVEMENT MARKING
- ⓪ - WHITE TEMPORARY RAISED PAVEMENT MARKING
- * - Type III Barricades will be setup so stripes are sloped downward to the side approaching traffic should pass.

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Taper Length (Feet) (L)
0 - 30	200	180
35 - 40	350	320
45	500	600
50	500	600
55	750	660
60 - 65	1000	780



US HWY 81 & 4TH STREET TRAFFIC CONTROL LEFT TURN LANE MODIFICATION

LAYOUT NOT TO SCALE

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	C5	C11



NOTES:

Remove existing pavement markings in all tapers and in other areas designated by the Engineer where they conflict with the temporary traffic control plan.

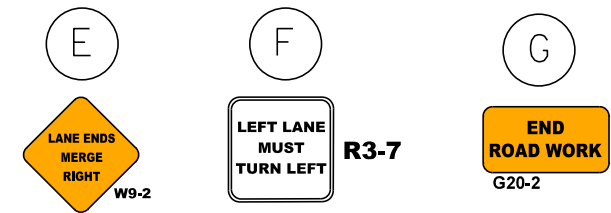
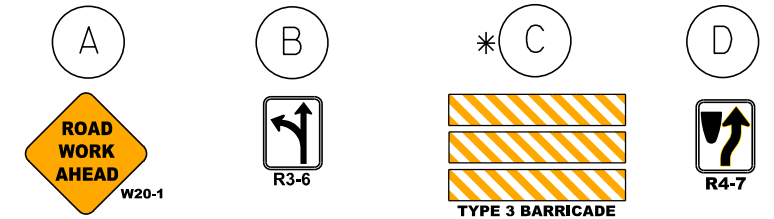
The Contractor will be required to maintain two way traffic at all times, with a minimum of 11 ft. lanes.

Signs are to be placed 50' - 100' from intersections and other signs.

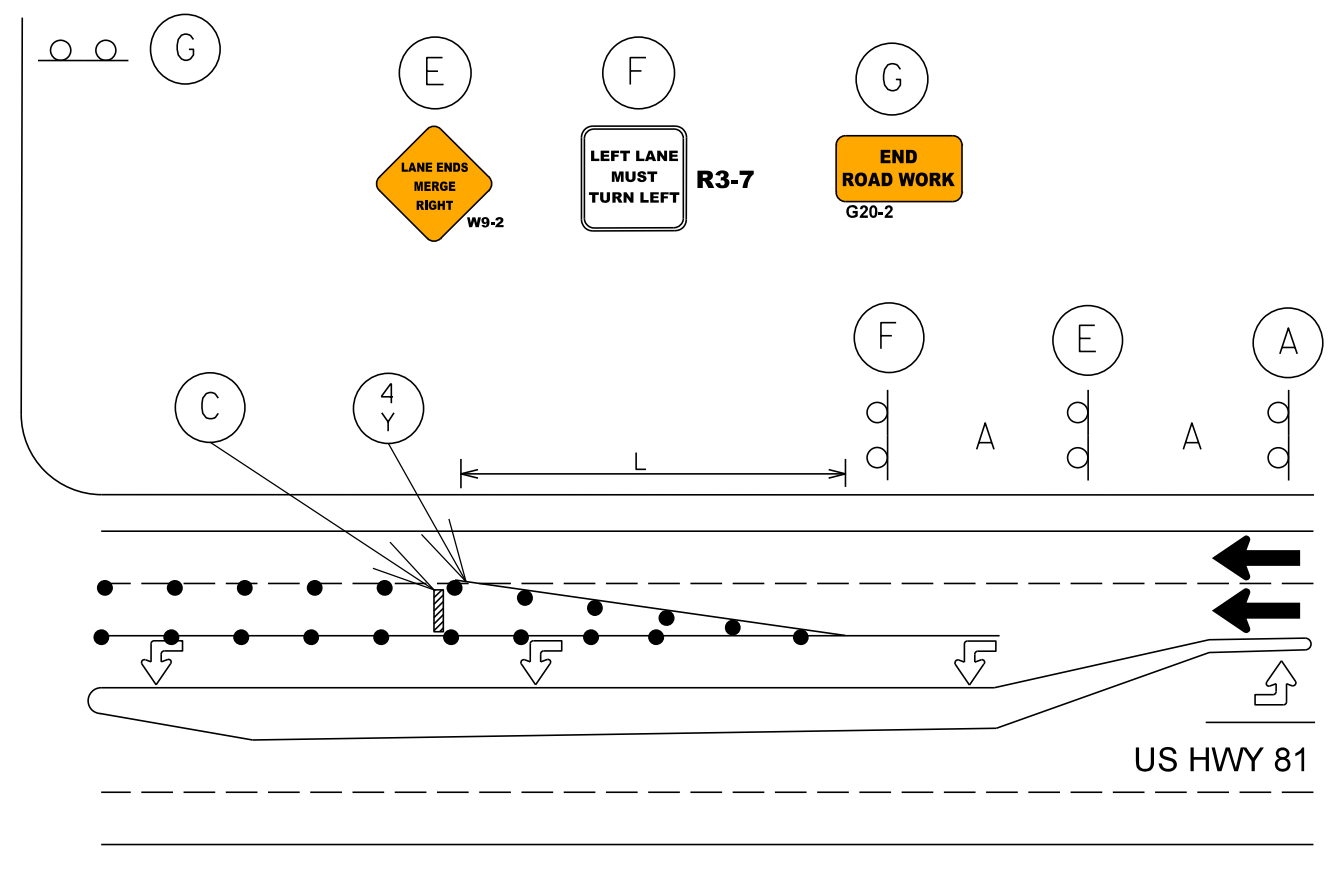
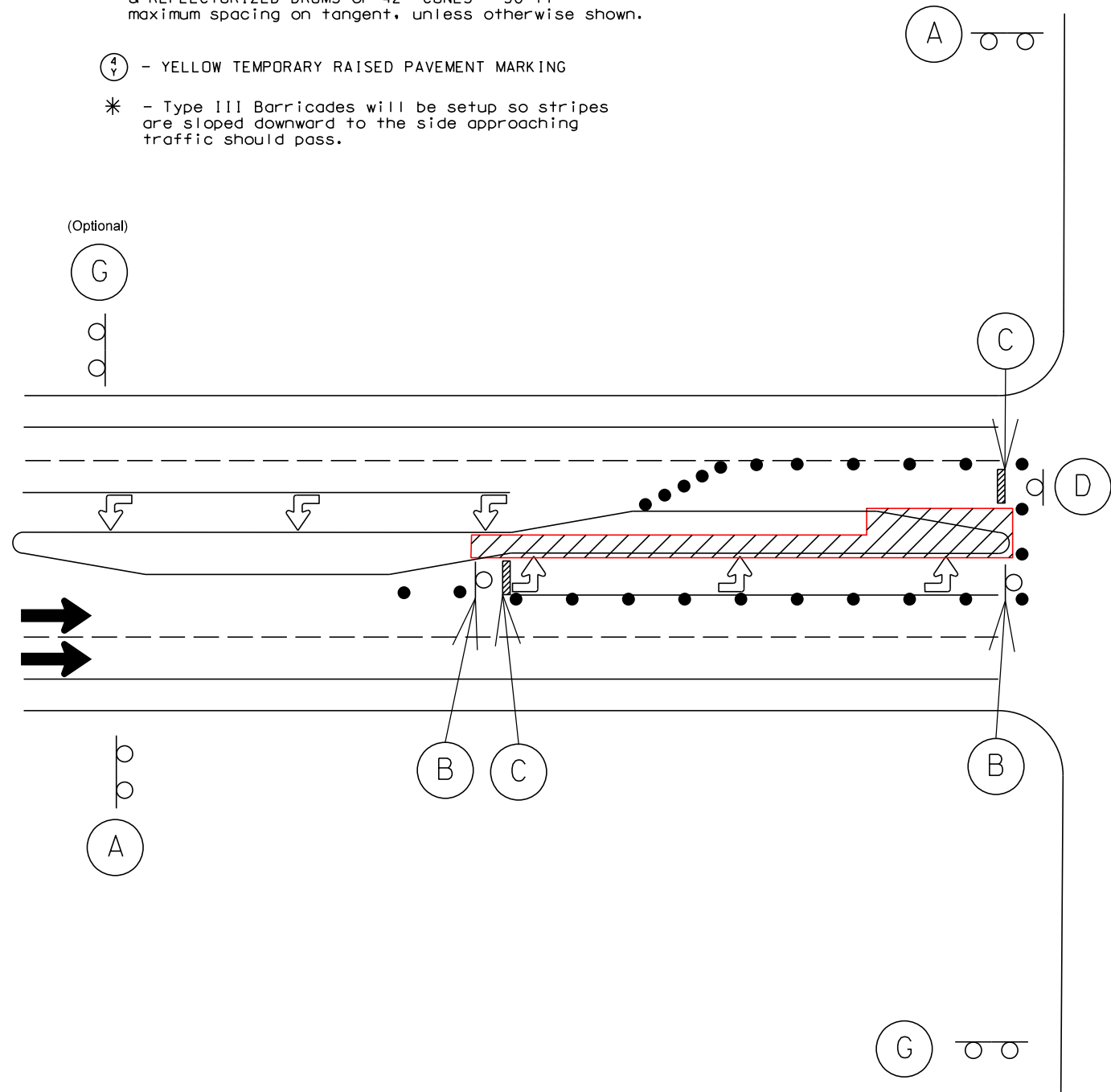
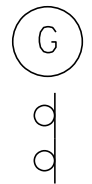
- REFLECTORIZED DRUMS - 25 ft. spacing on tapers & REFLECTORIZED DRUMS or 42" CONES - 50 ft maximum spacing on tangent, unless otherwise shown.

Ⓞ - YELLOW TEMPORARY RAISED PAVEMENT MARKING

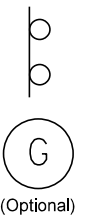
* - Type III Barricades will be setup so stripes are sloped downward to the side approaching traffic should pass.



(Optional)



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Taper Length (Feet) (L)
0 - 30	200	180
35 - 40	350	320
45	500	600
50	500	600
55	750	660
60 - 65	1000	780



NH 0081(114)0

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-1	STOP	1	30"	5.2	5.2
R3-2	LEFT TURN PROHIBITION (symbol)	2	24" x 24"	4.0	8.0
R3-6	STRAIGHT AND LEFT	2	24" x 30"	5.0	10.0
R3-7R	RIGHT LANE MUST TURN RIGHT	2	30" x 30"	6.3	12.6
R3-7L	LEFT LANE MUST TURN LEFT	2	30" x 30"	6.3	12.6
R4-7	KEEP RIGHT (symbol)	5	24" x 30"	5.0	25.0
R9-8	PEDESTRIAN CROSSWALK	4	36" x 18"	4.5	18.0
R9-9	SIDEWALK CLOSED	2	24" x 12"	2.0	4.0
R9-10	SIDEWALK CLOSED (ARROW L or R) USE OTHER SIDE	4	24" x 12"	2.0	8.0
R9-11	SIDEWALK CLOSED AHEAD (ARROW L or R) CROSS HERE	2	24" x 18"	3.0	6.0
R9-11a	SIDEWALK CLOSED (ARROW L or R) CROSS HERE	2	24" x 12"	2.0	4.0
W1-4	REVERSE CURVE (L or R)	4	48" x 48"	16.0	64.0
W4-2	LEFT or RIGHT LANE ENDS (symbol)	4	48" x 48"	16.0	64.0
W9-2	LANE ENDS MERGE LEFT or RIGHT	2	48" x 48"	16.0	32.0
W9-3	CENTER LANE CLOSED AHEAD	4	48" x 48"	16.0	64.0
W11-2	PEDESTRIAN (symbol)	8	36" x 36"	9.0	72.0
W13-1P	ADVISORY SPEED (plaque)	2	30" x 30"	6.3	12.6
W16-7P	DOWNWARD DIAGONAL ARROW (plaque)	4	24" x 12"	2.0	8.0
W16-9P	AHEAD (plaque)	4	30" x 18"	3.8	15.2
W20-1	ROAD WORK AHEAD	12	48" x 48"	16.0	192.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	4	48" x 48"	16.0	64.0
W20-7	FLAGGER (symbol)	12	48" x 48"	16.0	192.0
W21-5	SHOULDER WORK	8	48" x 48"	16.0	128.0
G20-1	ROAD WORK NEXT XX MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	10	36" x 18"	4.5	45.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT 1075.2			

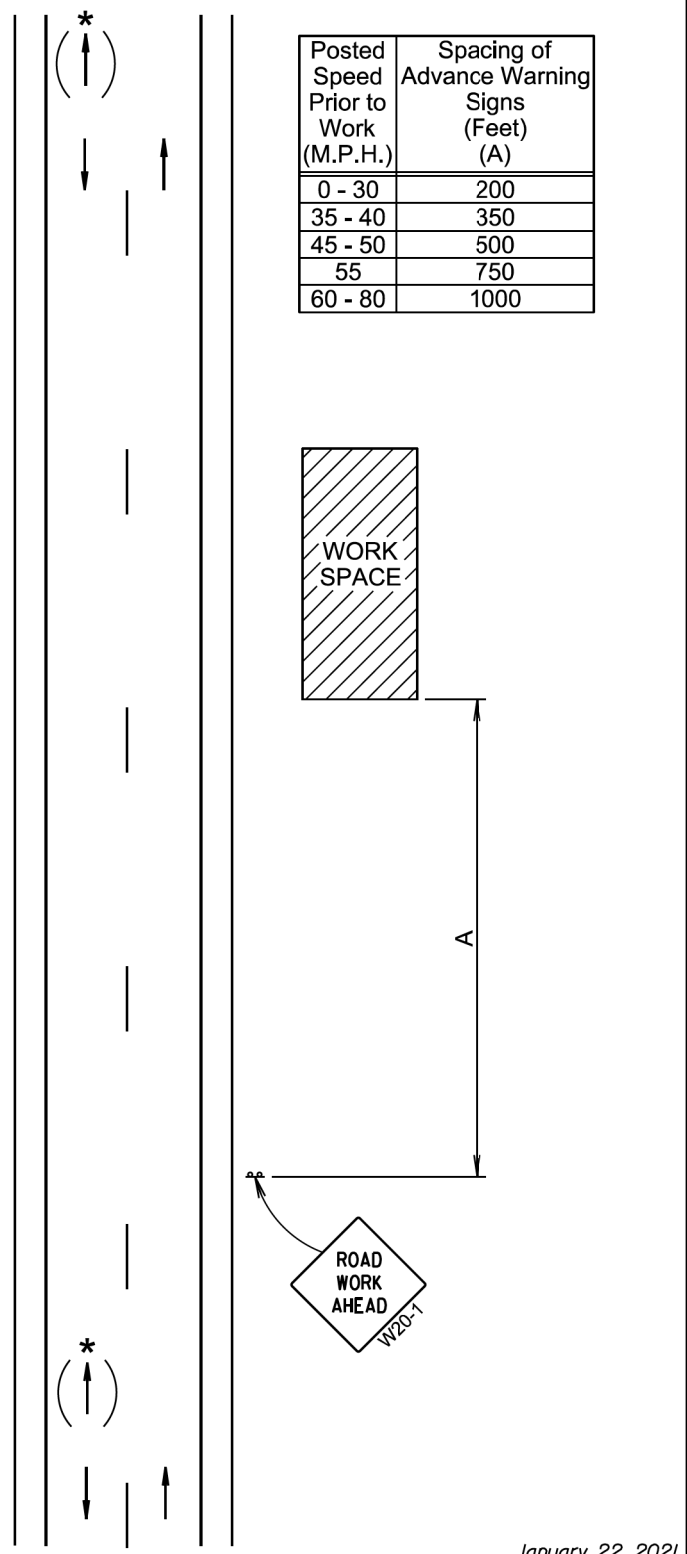
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated will be used where there are distracting situations; such as: vehicles parked on shoulder, vehicles accessing the work site via the highway, and equipment traveling on or crossing the roadway to perform work operations.

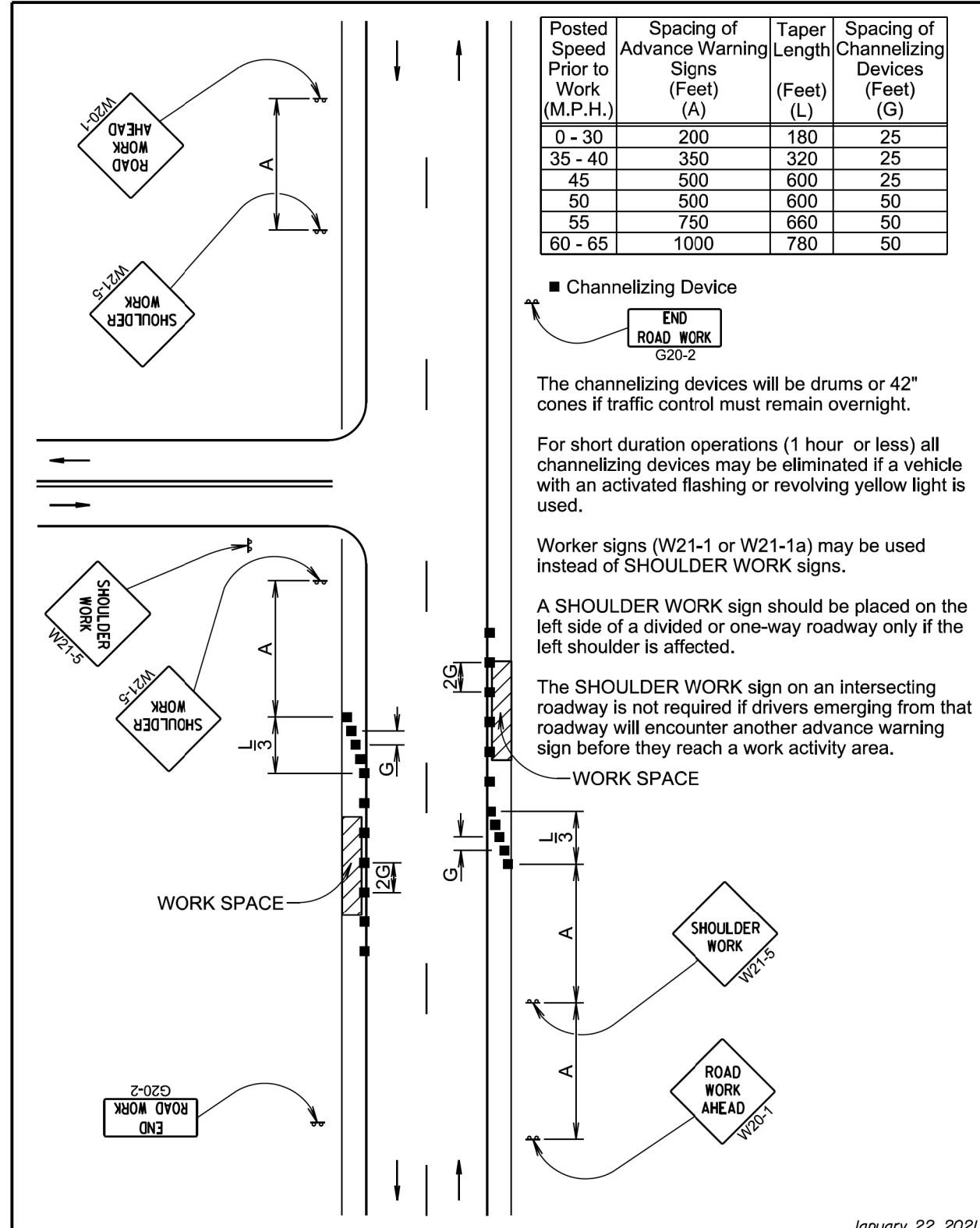
The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



January 22, 2021



■ Channelizing Device
END ROAD WORK G20-2

The channelizing devices will be drums or 42" cones if traffic control must remain overnight.

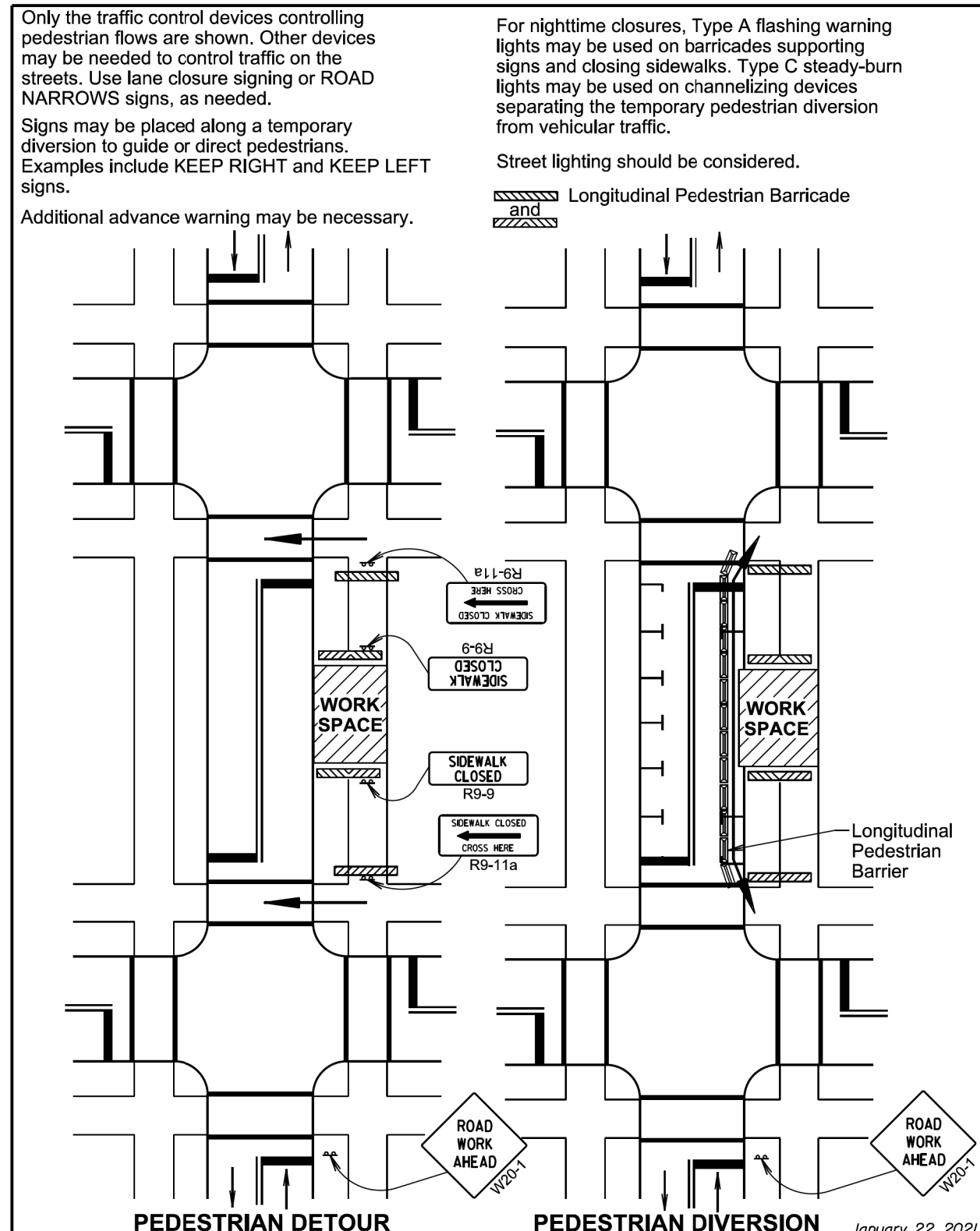
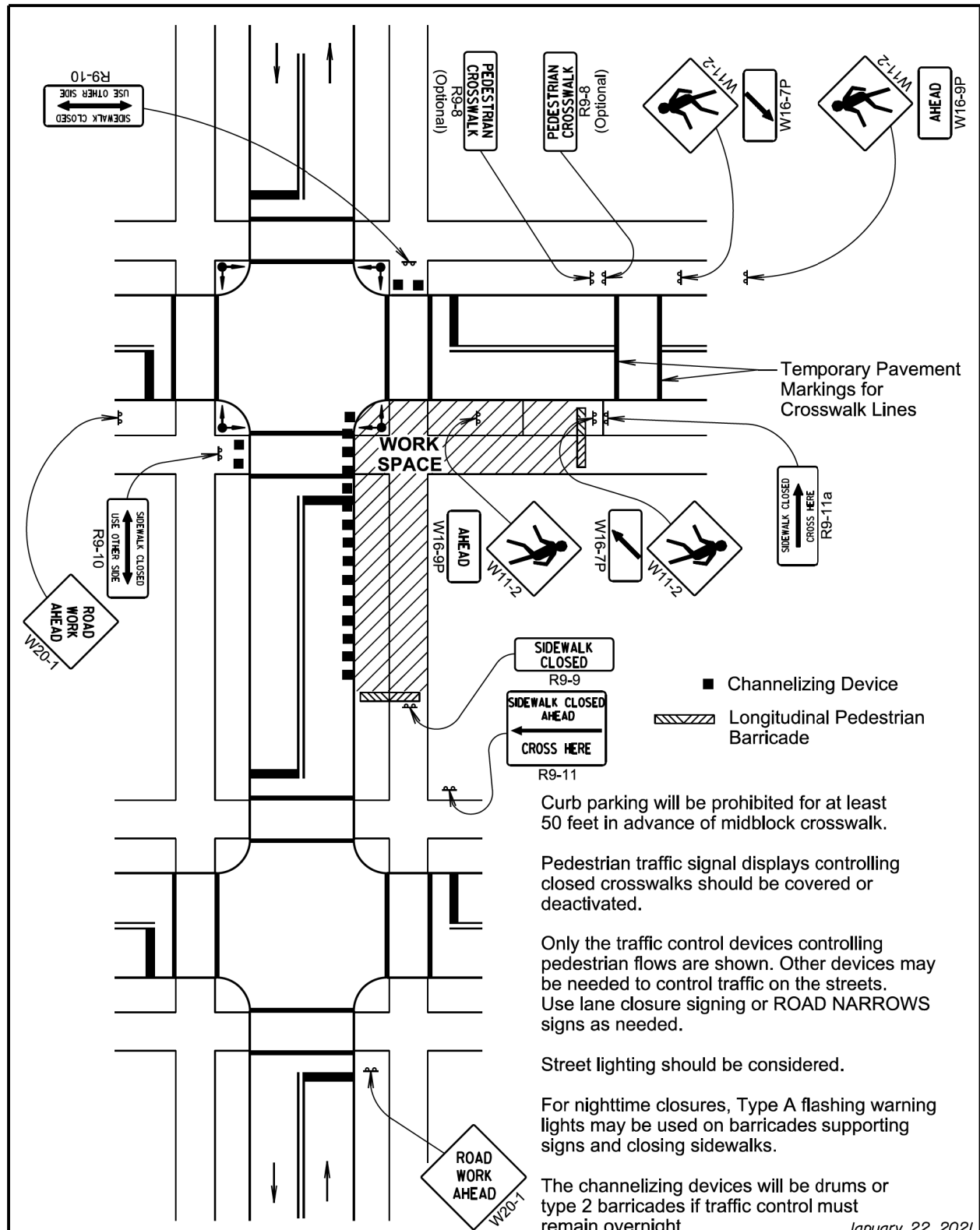
For short duration operations (1 hour or less) all channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

Worker signs (W21-1 or W21-1a) may be used instead of SHOULDER WORK signs.

A SHOULDER WORK sign should be placed on the left side of a divided or one-way roadway only if the left shoulder is affected.

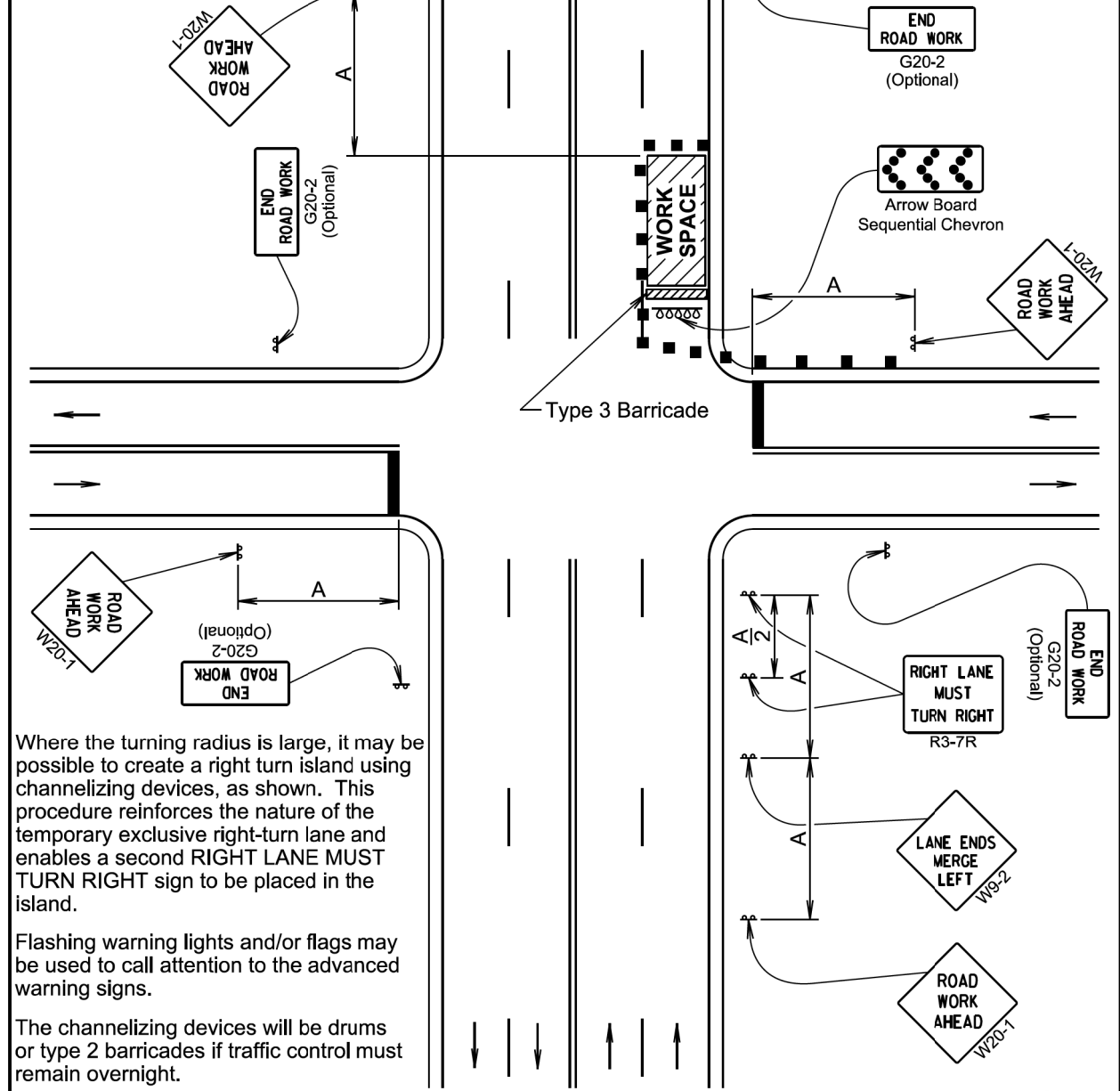
The SHOULDER WORK sign on an intersecting roadway is not required if drivers emerging from that roadway will encounter another advance warning sign before they reach a work activity area.

January 22, 2021



For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through traffic.

The standard procedure is to close on near side of the intersection any lane that is not carried through the intersection. However, when this results in the closing of a right lane having significant right-turning movements, then the right lane may be restricted to right turns only, as shown.



Where the turning radius is large, it may be possible to create a right turn island using channelizing devices, as shown. This procedure reinforces the nature of the temporary exclusive right-turn lane and enables a second RIGHT LANE MUST TURN RIGHT sign to be placed in the island.

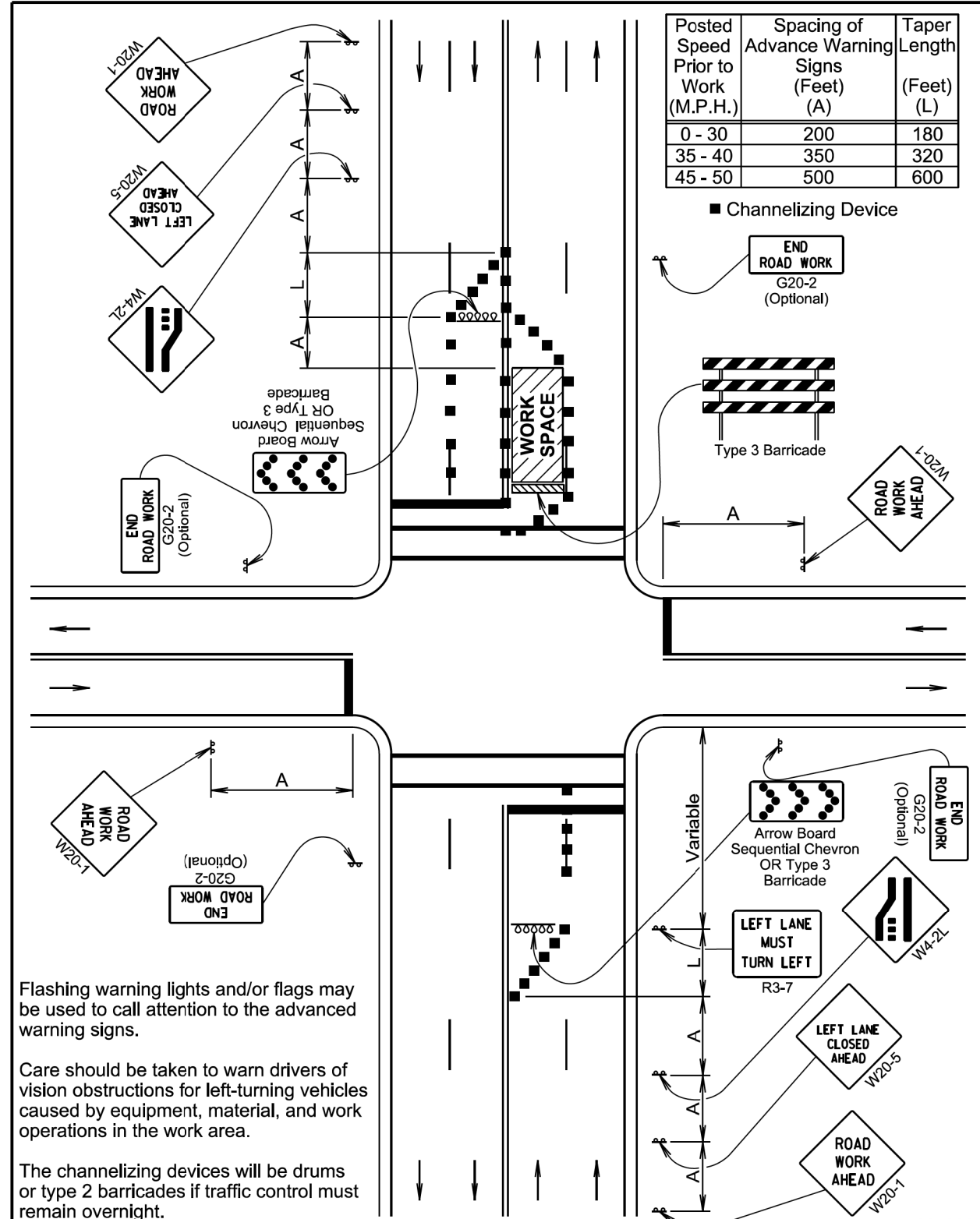
Flashing warning lights and/or flags may be used to call attention to the advanced warning signs.

The channelizing devices will be drums or type 2 barricades if traffic control must remain overnight.

January 22, 2021

S D D O T	RIGHT LANE CLOSURE FAR SIDE OF INTERSECTION	PLATE NUMBER 634.42
		Sheet 1 of 1

Published Date: 2024



Flashing warning lights and/or flags may be used to call attention to the advanced warning signs.

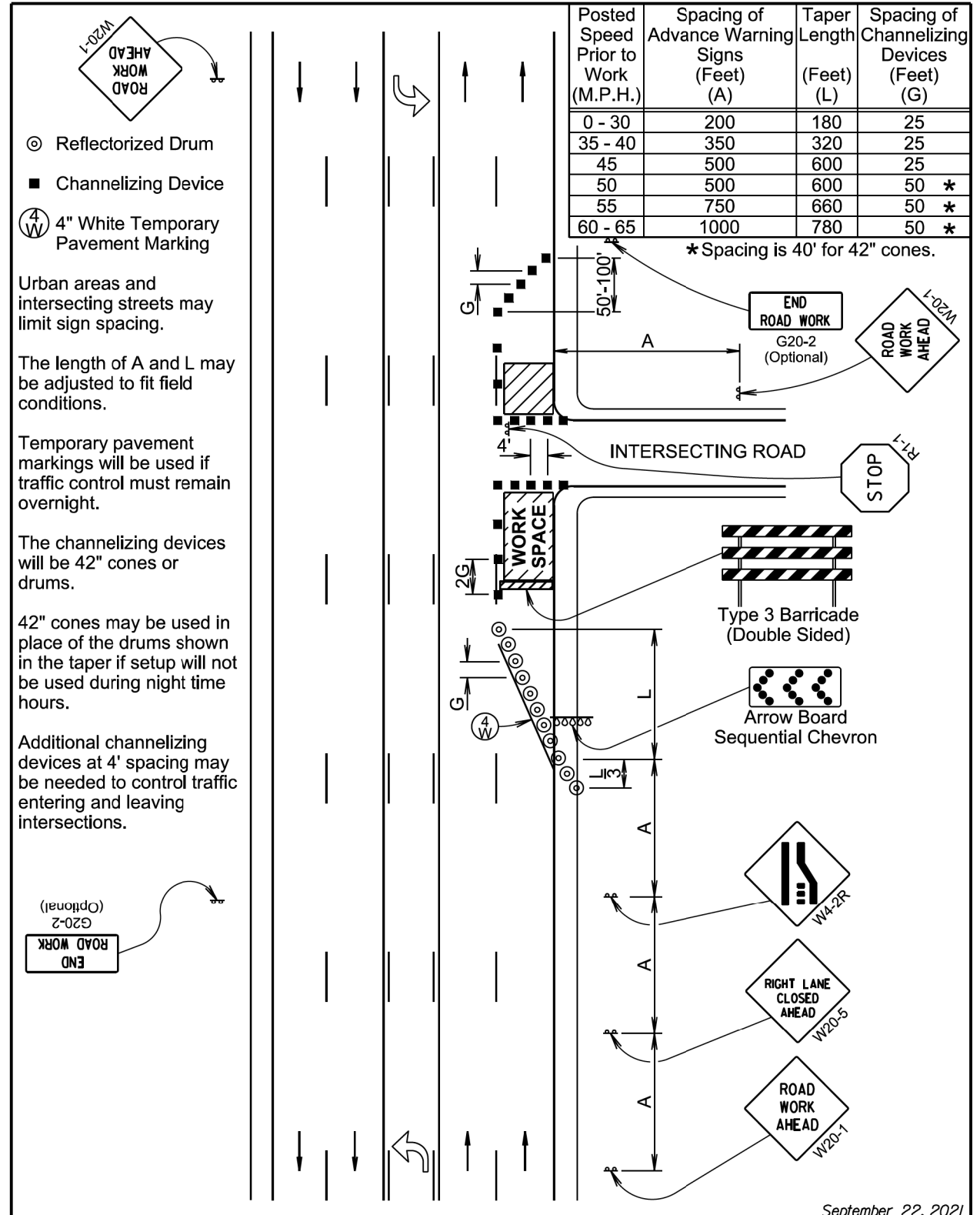
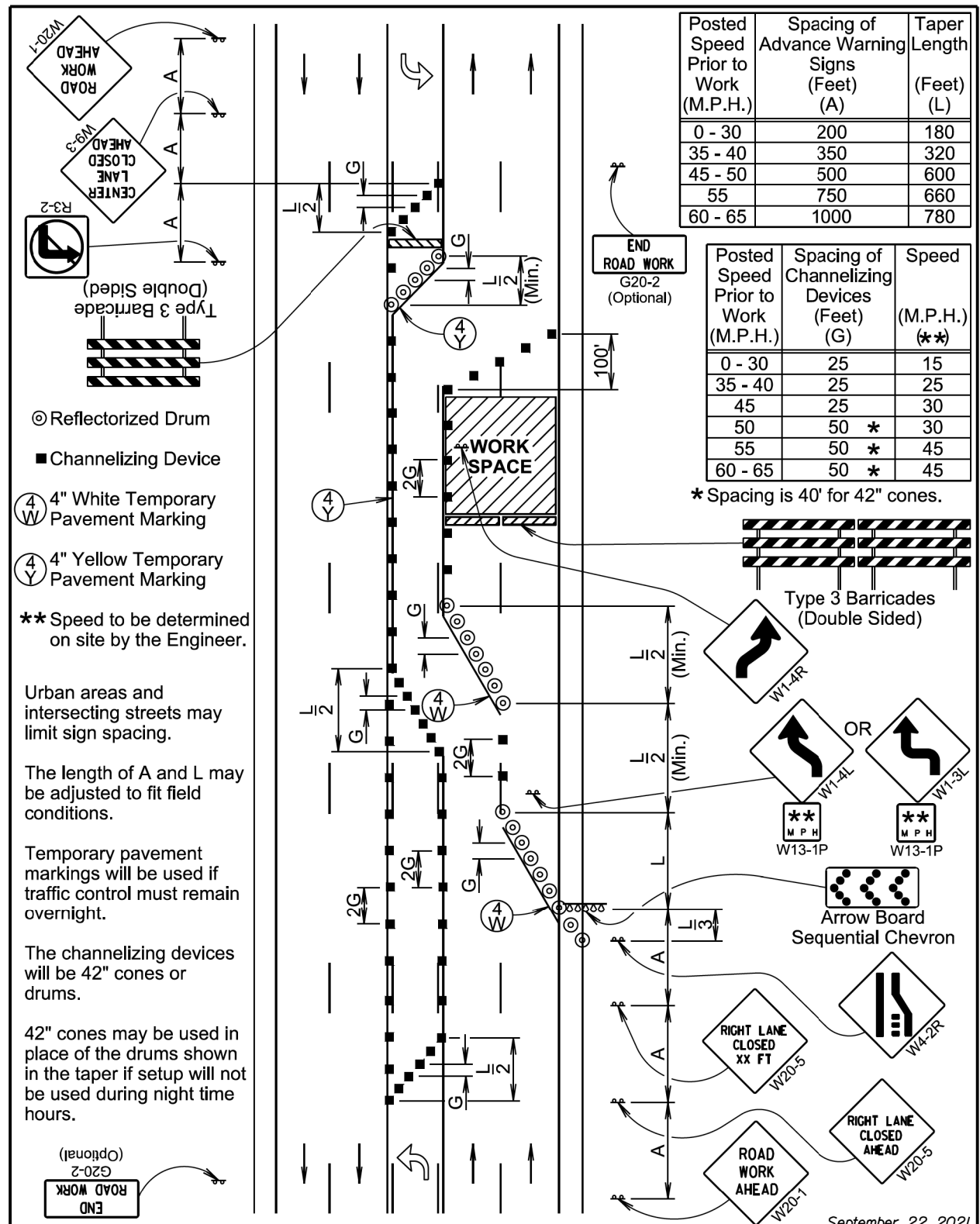
Care should be taken to warn drivers of vision obstructions for left-turning vehicles caused by equipment, material, and work operations in the work area.

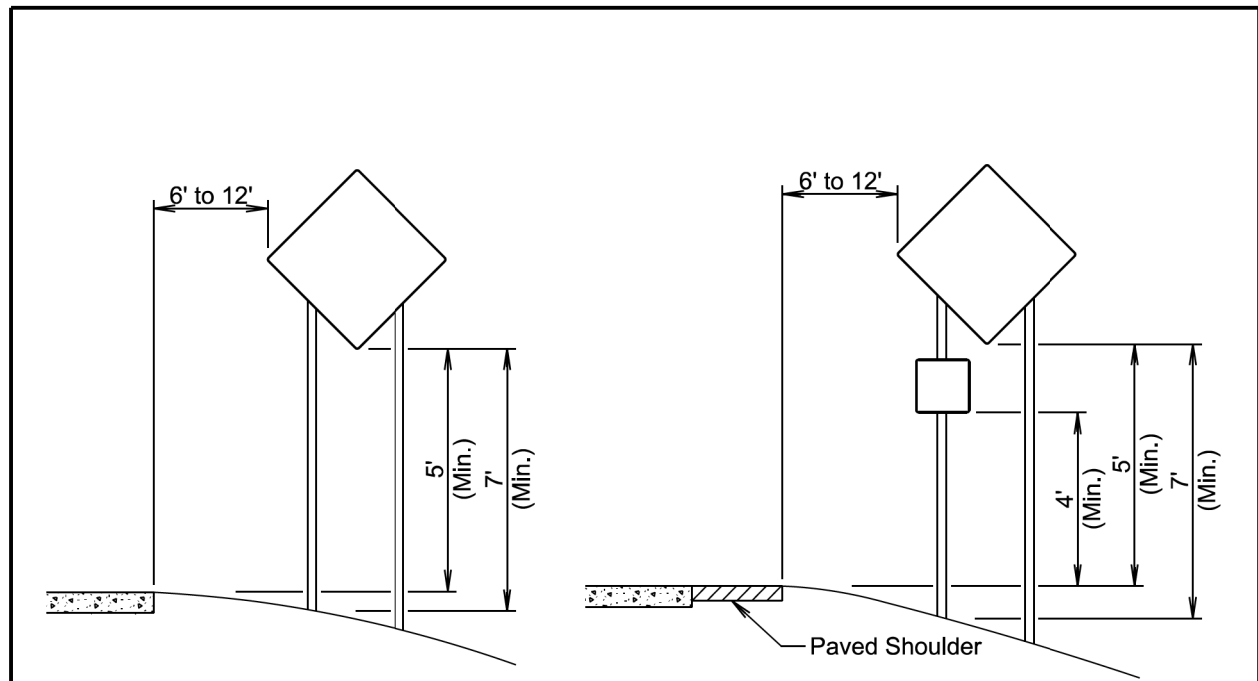
The channelizing devices will be drums or type 2 barricades if traffic control must remain overnight.

September 22, 2021

S D D O T	LEFT LANE CLOSURE FAR SIDE OF INTERSECTION	PLATE NUMBER 634.43
		Sheet 1 of 1

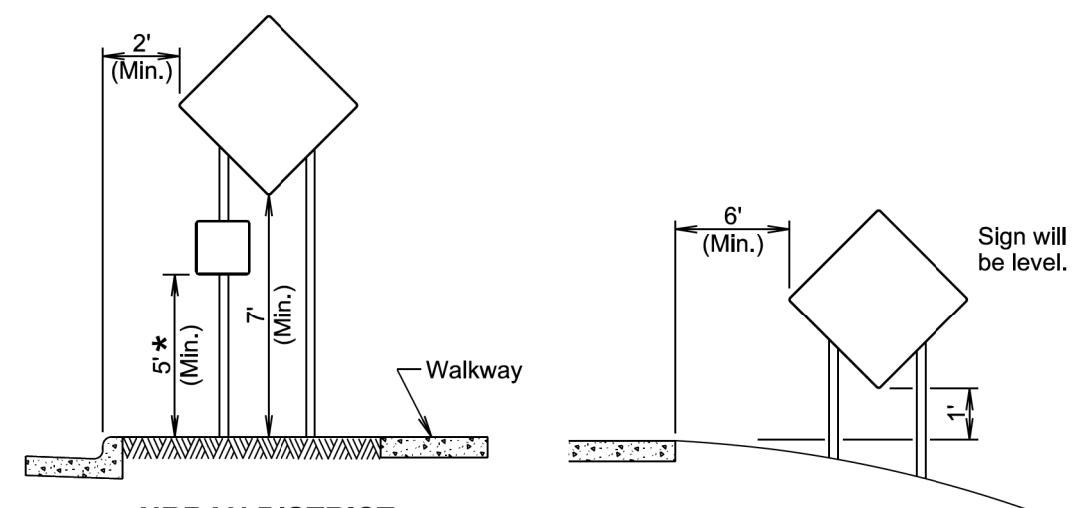
Published Date: 2024





RURAL DISTRICT

RURAL DISTRICT WITH SUPPLEMENTAL PLATE



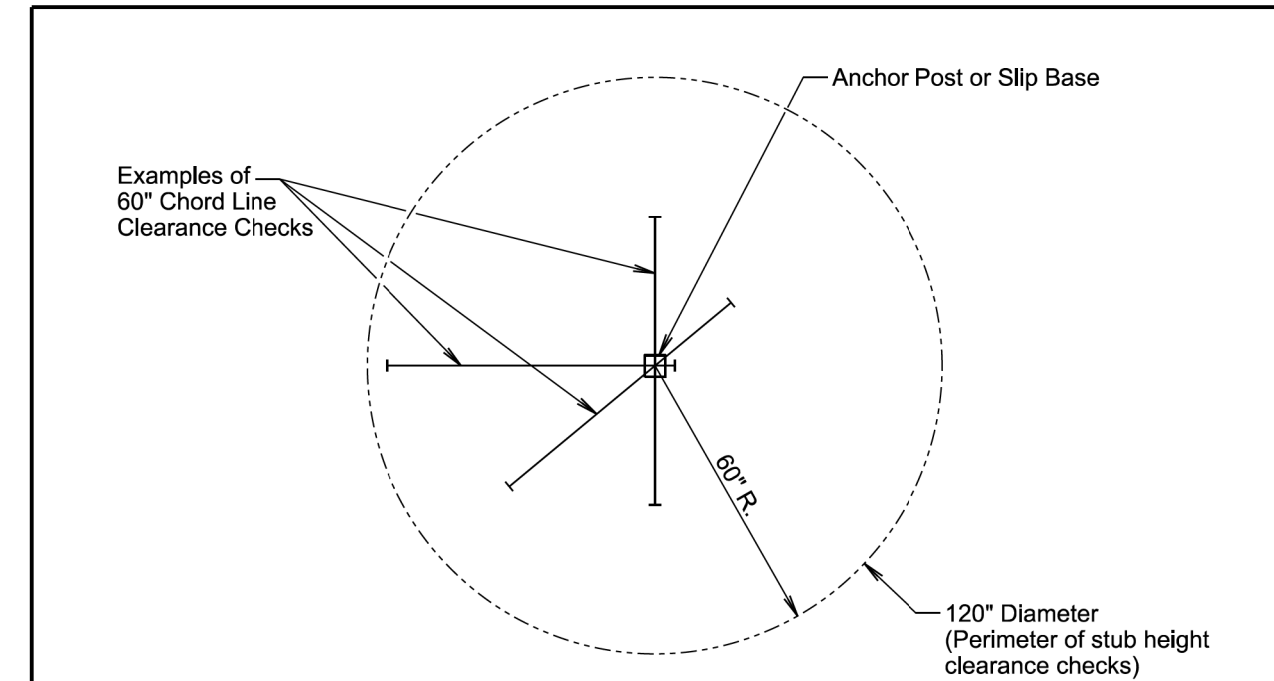
URBAN DISTRICT

RURAL DISTRICT 3 DAY MAXIMUM
(Not applicable to regulatory signs)

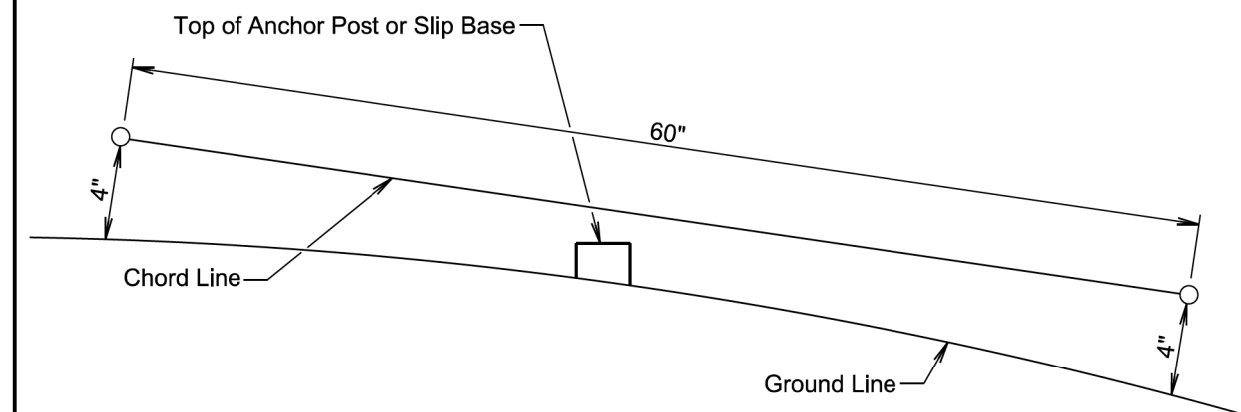
* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

January 22, 2021

Published Date: 2024	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

The top of anchor posts and slip bases WILL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

January 22, 2021

Published Date: 2024	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1