

April 9, 2021

Re: Project P 016A(08)59, PCN 04FU – US16A Keystone Wye Pre-Bid Meeting

To Whom It May Concern,

A pre-bid meeting for the Keystone Wye Bridge Rehabilitation project is being held on April 22<sup>nd</sup>, 2021 at 3:00 PM CST via Microsoft Teams. Interested contracting parties are invited to attend virtually via the Microsoft Teams Meeting Link provided below.

This meeting will include a presentation of the project covering topics such as the overall scope of work, design aspects, traffic control, and contract time. There will be an opportunity for contractors to present questions to Department staff, consultants, and project stakeholders.

Attendance is not a requirement, but all interested contracting parties are strongly encouraged to attend.

If attending the meeting you must join the meeting via the link provided. In order to reduce sound feedback please mute the microphone on your computer. Due to the meeting being virtual we are requesting that you please enter the name of your company followed by the individuals from your company attending the meeting into the chat feature of Microsoft Teams.

### [Join Pre-Bid Meeting](#)

Date: April 22, 2021

Time: 3:00 – 4:30 (CST)

Video Conference ID: 118 401 985 2

Additional instructions regarding the meeting format will be provided at the beginning of the meeting.

Sincerely,

SD DOT

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 016A(08)59	C1	C 12

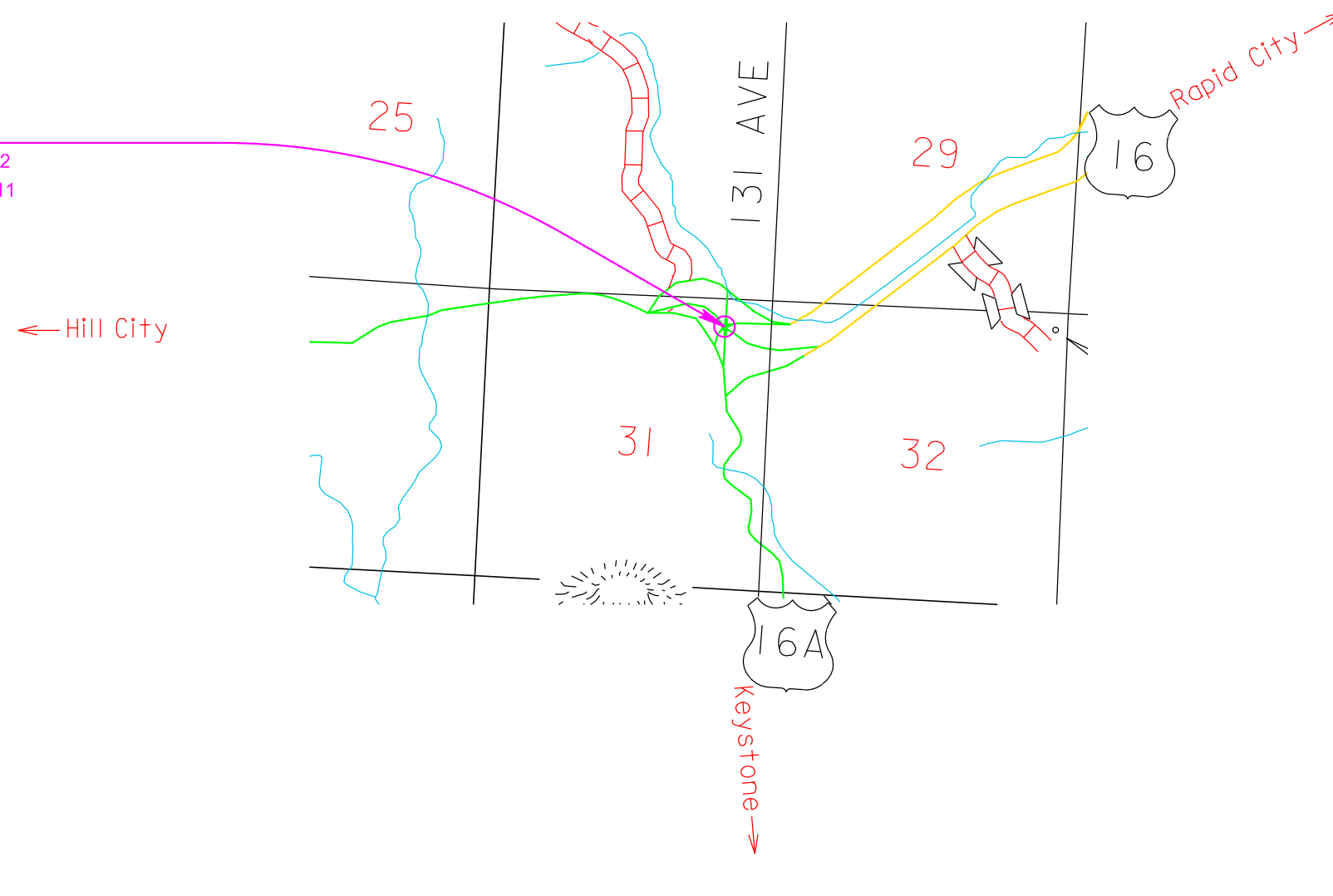
# Section C: Traffic Control Plans

## INDEX OF SHEETS

C1	General Layout W/Index
C2	Estimate With General Notes & Tables
C3	Traffic Diversion Special Signing Detail
C4-C7	Traffic Control Plan Sheets
C8-C12	Standard Plates

### PROJECT 016A(08)59

16A EB, MRM 59.44, Str. No. 52-308-412  
16A WB, MRM 59.46, Str. No. 52-308-411



SECTION C ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1120	Remove Concrete Median Pavement	111.1	SqYd
110E7150	Remove Sign for Reset	1	Each
110E7152	Remove Delineator for Reset	8	Each
120E0600	Contractor Furnished Borrow Excavation	647	CuYd
260E1010	Base Course	452.0	Ton
320E1200	Asphalt Concrete Composite	242.6	Ton
380E2558	8" Barrier Type Median PCC Pavement	111.1	SqYd
632E2100	Reset Delineator	8	Each
632E3500	Reset Sign	1	Each
634E0010	Flagging	100.0	Hour
634E0110	Traffic Control Signs	528.4	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	6	Each
634E0420	Type C Advance Warning Arrow Board	2	Each
634E1215	Contractor Furnished Portable Changeable Message Sign	3	Each

SEQUENCE OF OPERATIONS

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. Approval of an alternate 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. An alternate sequence will be submitted for review a minimum of one week prior to potential implementation.

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.

All temporary speed limit signs will have a minimum mounting height of 5 feet in rural locations, even when mounted on portable supports.

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.

Unless otherwise stated in these plans, work will not be allowed during hours of darkness.

Traffic Control Signs, as shown in the Estimate of Quantities, are estimates. Contractor's operation may require adjustments in quantities, either more or less. Payment will be for those signs actually ordered by the Engineer and used.

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.

INVENTORY OF TRAFFIC CONTROL DEVICES

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS					
EXPRESSWAY / INTERSTATE					
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-2	YIELD	2	36"	3.9	7.8
R2-1	SPEED LIMIT 50	6	36" x 48"	12.0	72.0
R2-6aP	FINES DOUBLE (plaque)	3	36" x 24"	6.0	18.0
R3-2	LEFT TURN PROHIBITION (symbol)	2	36" x 36"	9.0	18.0
R11-2	ROAD CLOSED	3	48" x 30"	10.0	30.0
W3-5	SPEED REDUCTION AHEAD (50 MPH)	3	48" x 48"	16.0	48.0
W4-2	LEFT or RIGHT LANE ENDS (symbol)	2	48" x 48"	16.0	32.0
W20-1	ROAD WORK AHEAD	5	48" x 48"	16.0	80.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	3	48" x 24"	8.0	24.0
SPECIAL	TRAFFIC DIVERSION SPECIAL SIGNING	1	72" x 48"	24.0	24.0
SPECIAL	TRAFFIC DIVERSION SPECIAL SIGNING	2	90" x 42"	26.3	52.6
SPECIAL	TRAFFIC DIVERSION SPECIAL SIGNING	1	78" x 48"	26.0	26.0
		EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT 528.4			

WORK ZONE SPEED REDUCTION

The Department is required to obtain a speed reduction resolution prior to the installation of any SPEED LIMIT (R2-1) signs shown on standard plate 634.63. To provide adequate time for the resolution to be enacted, the Contractor will inform the Engineer a minimum of 3 weeks prior to the scheduled installation of any work zone speed reduction signs on the project. The information provided by the Contractor will include the anticipated date of sign installation, the newly reduced speed limit, the location of the work zone, and the anticipated completion date of work requiring the speed reduction.

CONTACTOR FURNISHED PORTABLE CHANGEABLE MESSAGE SIGN

One week prior to starting work affecting the traveling public, portable changeable message signs (PCMS) will be installed at locations detailed in the plans to notify drivers of the upcoming construction. The Contractor will program the portable changeable message signs with the following message:

ROAD WORK  
STARTS (Date)

When work begins that will affect traffic patterns, the Contractor will re-program the PCMS with the messages as detailed in the plans.

PRESS RELEASE ANNOUNCEMENTS

The SDDOT will prepare a press release to be released 5 days prior to any phase change or any other major change that affects traffic flow. The SDDOT will be responsible to keep law enforcement, emergency services, and the traveling public notified of changes in project access. The Contractor will provide the Engineer with pertinent information 7 days prior to any phase change or any other major change that affects traffic flow.

TRAFFIC DIVERSION TURNING LOCATIONS

Table of Material Quantities			
	Contractor Furnished Borrow, Excavation	Base Course	Asphalt Concrete Composite
	(CuYd)	(Ton)	(Ton)
North East Turning Location	374.3	202.3	108.5
South Turning Location	272.3	214.7	115.1
Total	646.6	417	223.6

The Contractor will need to build the additional Asphalt Diversion Turning Locations shown in the plans prior to closing the ramp locations to complete contract work. The Contractor will remove the delineators at these locations to accommodate the turning traffic. The delineators will be reset after the completion of the Contract Work. The Contractor will also remove the existing route sign at the South Turning Location to be reset after the completion of the Contract Work.

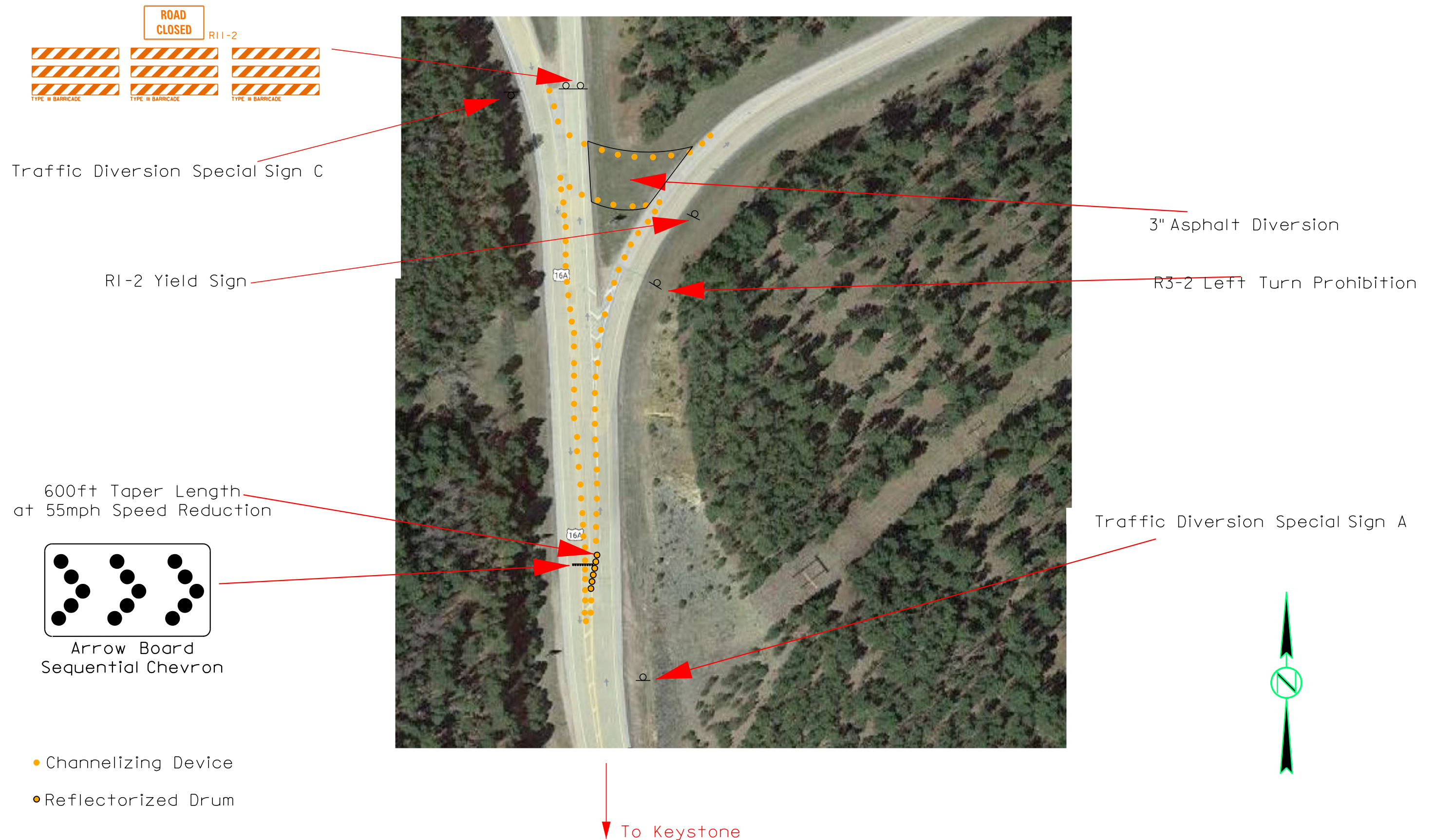
The South Turning Location has 125' x 8' of raised concrete median that will be removed to allow traffic to continue West on US 16. The median location will be temporarily paved with 3" of asphalt composite while the traffic diversion turning locations are being utilized. 19.0 ton of asphalt composite and 35.0 ton of Base Course has been provided to temporarily pave this location. All other work associated with the raised median work will be incidental to the SqYd contract bid item prices for Remove Concrete Median Pavement and 8" Barrier Type Median PCC Pavement.

The Contractor will reference Standard Plate 380.22 for the replacement of the raised median. The Contractor will utilize M6 Concrete to reconstruct the raised median. The Contractor will transition from the barrier type median pavement referenced in Standard Plate 380.22 to the in place raised concrete median outside of the removal limits.





# US 16 / US 16 A South Intersection Traffic Control





# US 16 / US 16 A North East Intersection Traffic Control

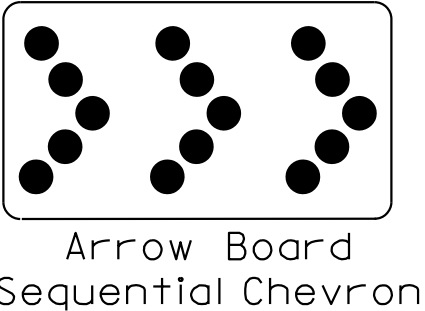
R3-2 Left Turn Prohibition

600ft+ Taper Length  
at 55mph Speed Reduction

3" Asphalt Diversion

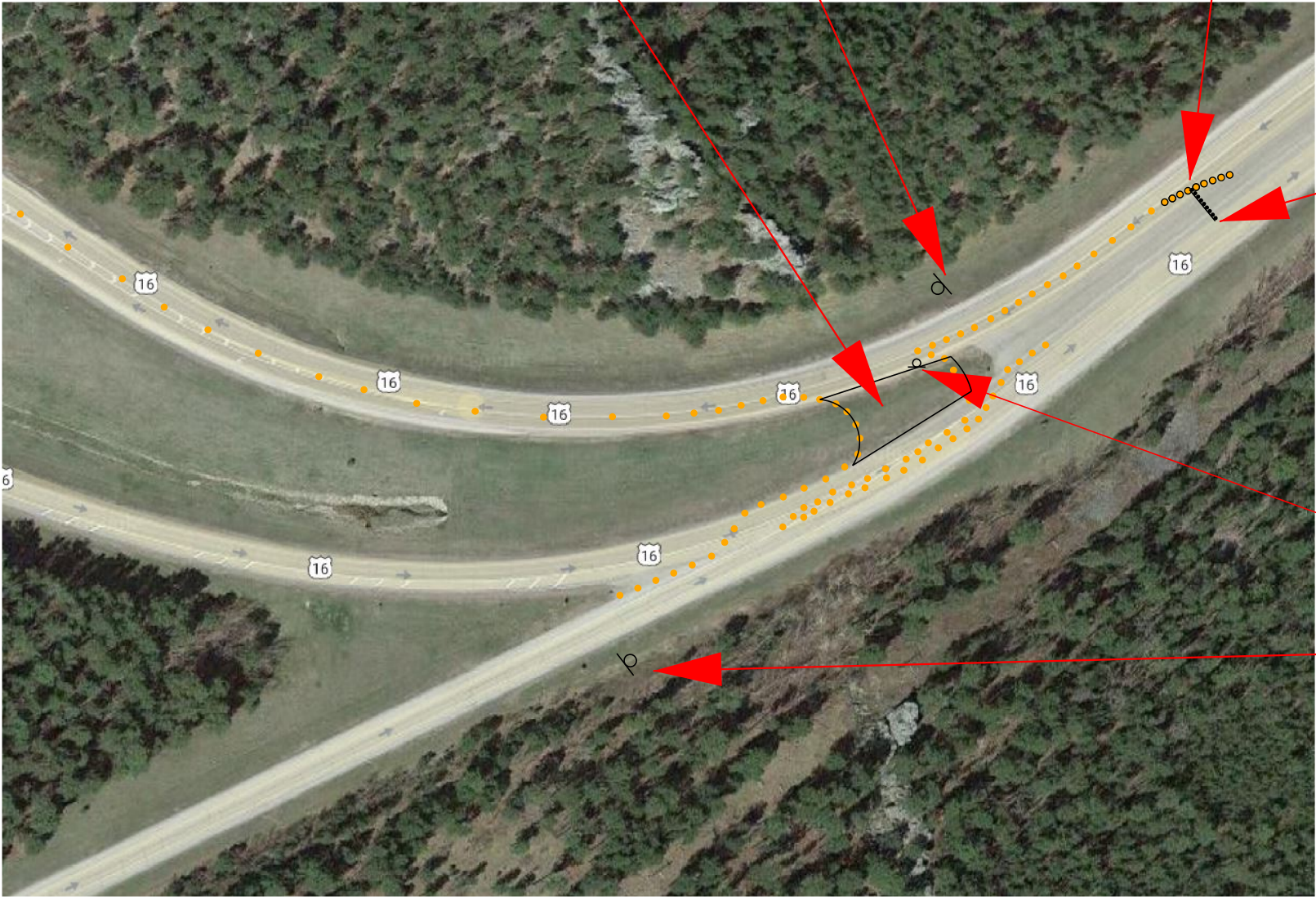
To Rapid City

- Channelizing Device
- Reflectorized Drum



RI-2 Yield Sign

Traffic Diversion  
Special Sign B





US 16 / US 16 A North West Intersection Traffic Control

 To Hill City

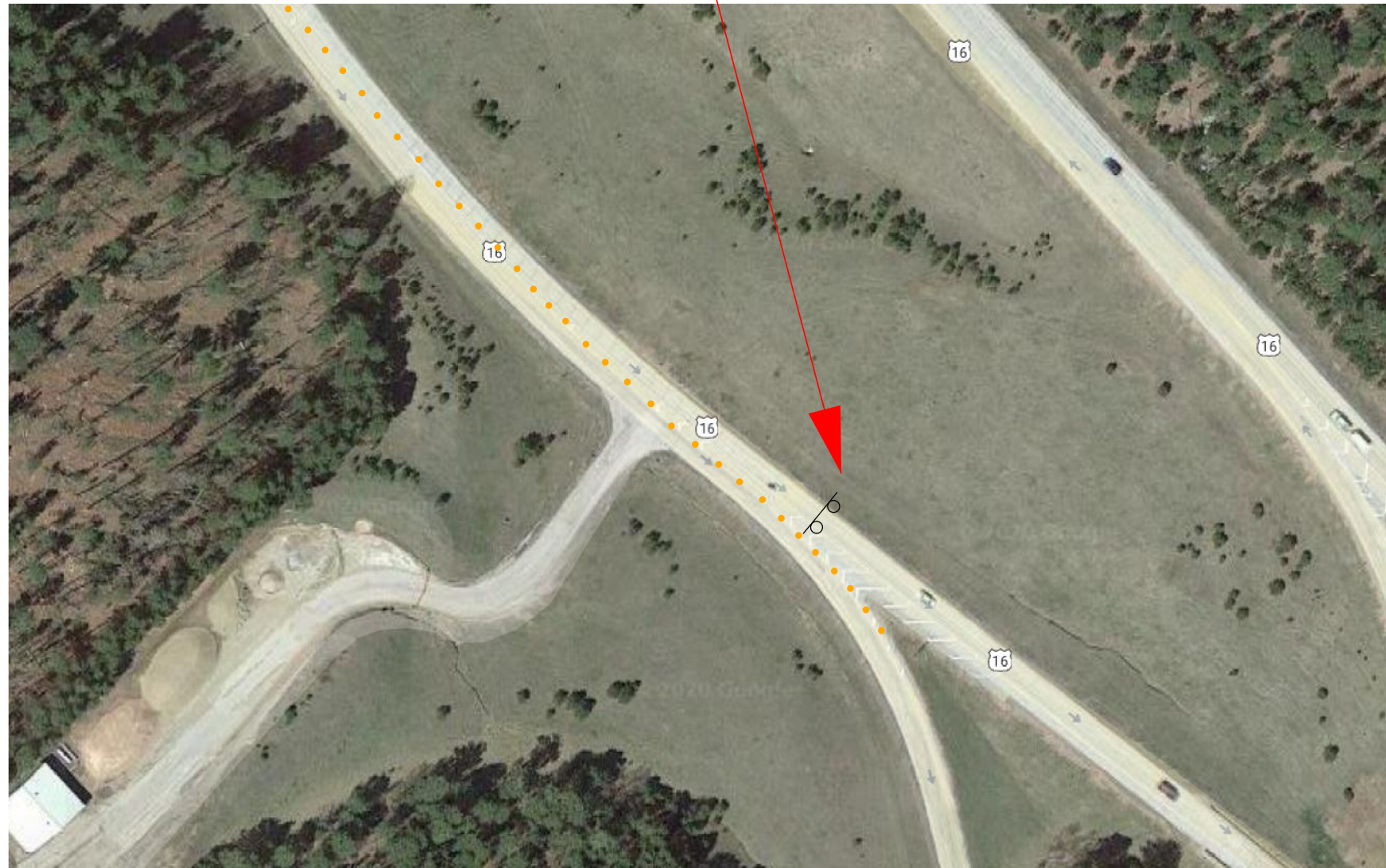
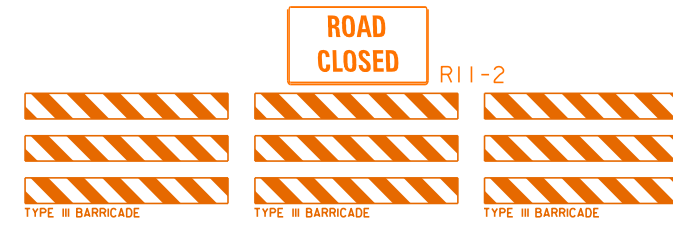


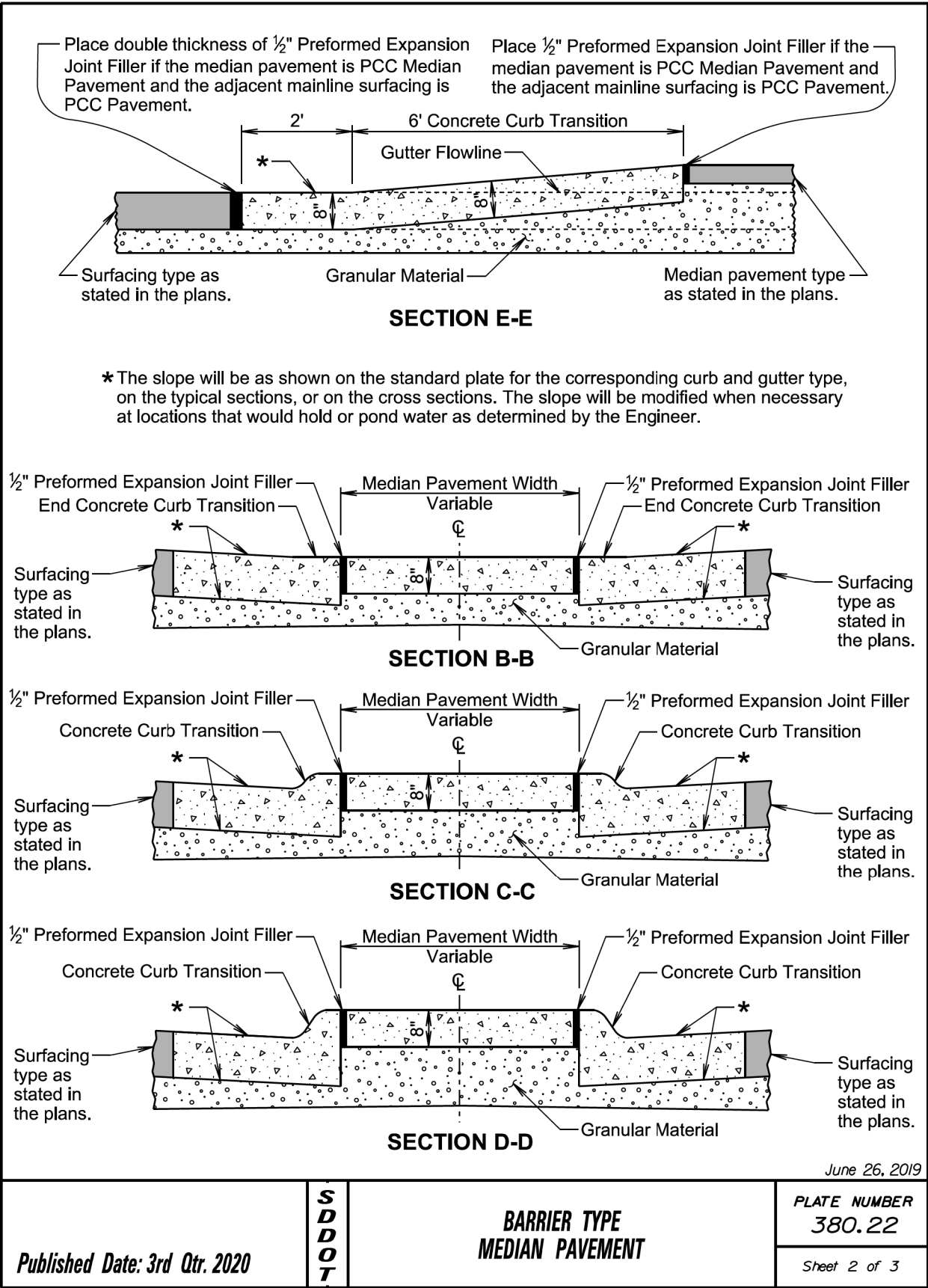
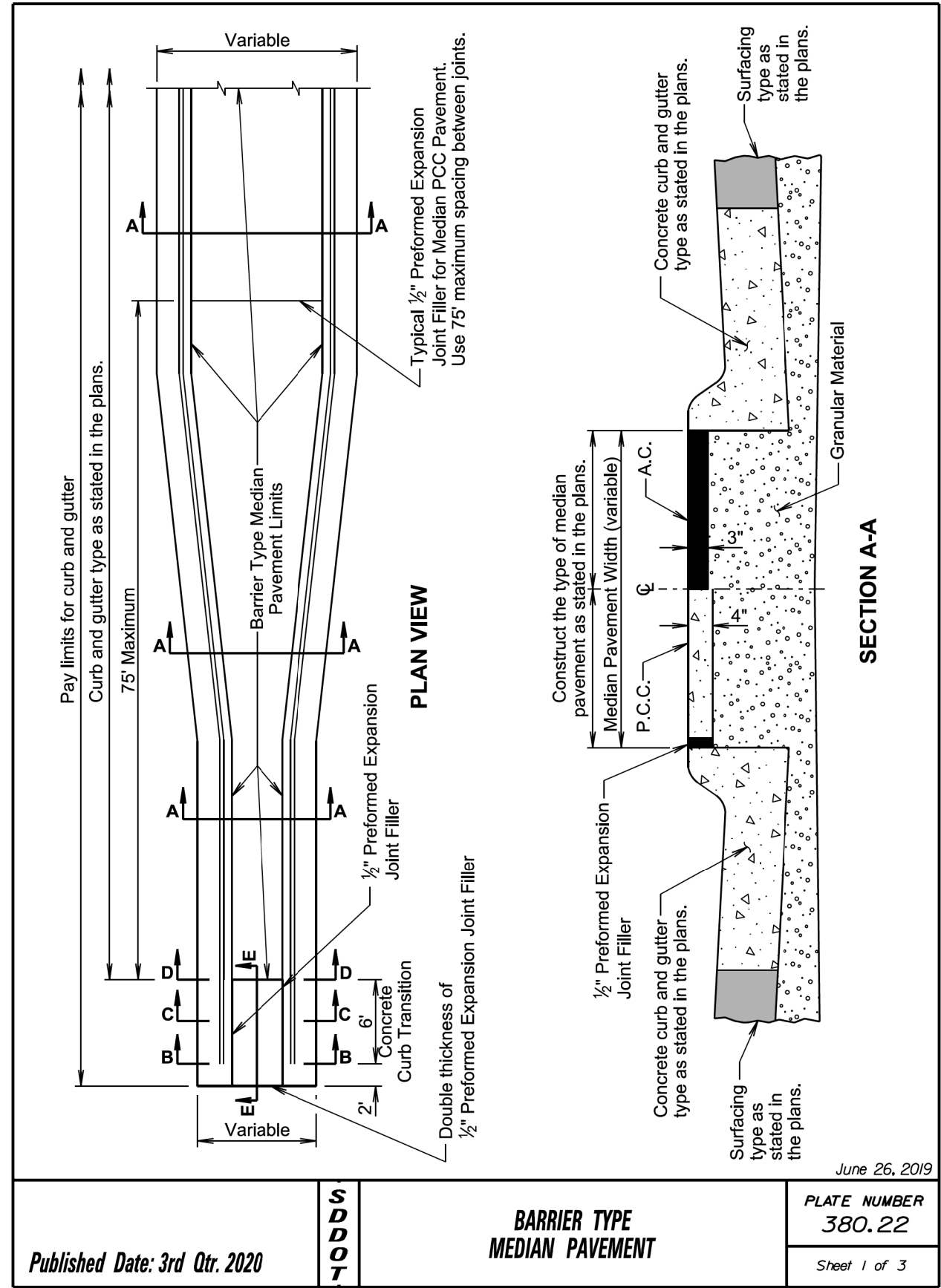
Traffic Diversion  
Special Sign D





# US 16 / US 16 A North West Intersection Traffic Control









Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	25
35 - 40	350	25
45	500	25
50	500	50
55	750	50
60 - 65	1000	50

- Flagger
- Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) shall be displayed in advance of the liquid asphalt areas.

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

The channelizing devices shall be drums or 42" cones.

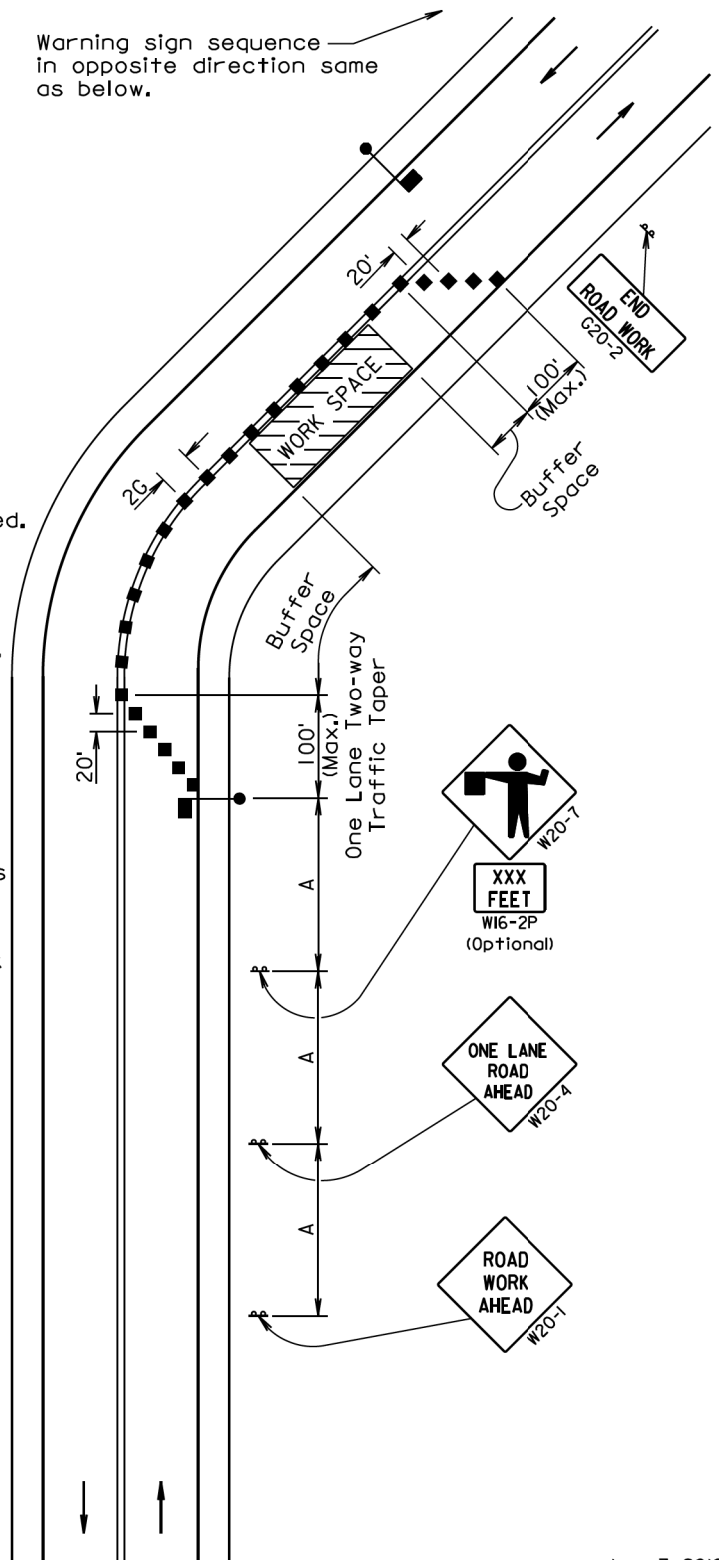
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.

Channelizing devices and flaggers shall be used at intersecting roads to control intersecting road traffic as required.

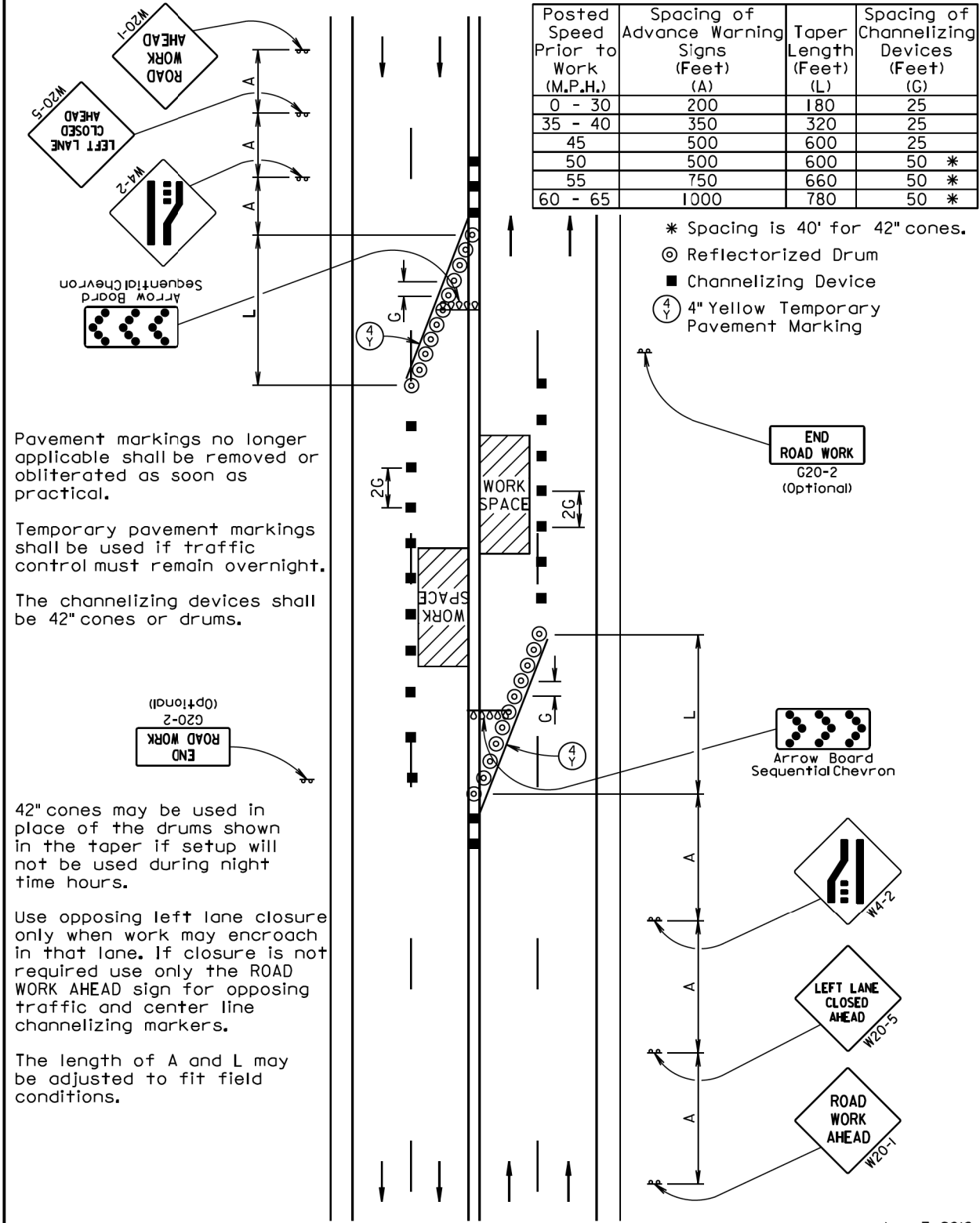
The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

The length of A may be adjusted to fit field conditions.

Warning sign sequence in opposite direction same as below.



June 3, 2016



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	180	25
35 - 40	350	320	25
45	500	600	25
50	500	600	50 *
55	750	660	50 *
60 - 65	1000	780	50 *

- \* Spacing is 40' for 42" cones.
- Reflectorized Drum
- Channelizing Device
- 4" Yellow Temporary Pavement Marking

Pavement markings no longer applicable shall be removed or obliterated as soon as practical.

Temporary pavement markings shall be used if traffic control must remain overnight.

The channelizing devices shall be 42" cones or drums.

42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours.

Use opposing left lane closure only when work may encroach in that lane. If closure is not required use only the ROAD WORK AHEAD sign for opposing traffic and center line channelizing markers.

The length of A and L may be adjusted to fit field conditions.

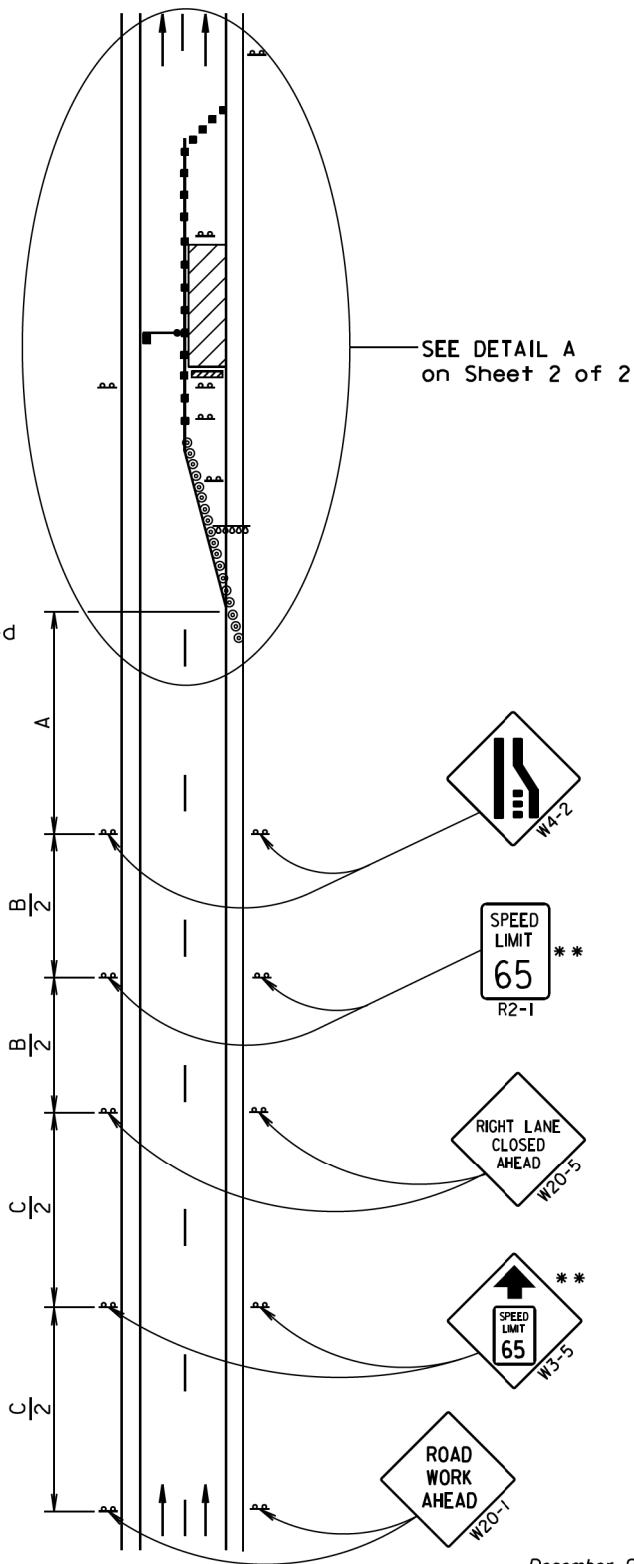
June 3, 2016

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)		
	(A)	(B)	(C)
0 - 30	200		
35 - 40	350		
45 - 50	500		
55	750		
60 - 65	1000		
	(A)	(B)	(C)
70 - 80	1000	1500	2640

- \*\* Speed appropriate for location.
- Reflectorized Drum
  - Channelizing Device

ROAD WORK AHEAD sign is only required in advance of the first lane closure.

High speed is defined as having a posted speed limit greater than 45 mph.



December 23, 2019

Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)	Taper Length (Feet) (L)
0 - 30	25	180
35 - 40	25	320
45	25	600
50	50 *	600
55	50 *	660
60 - 65	50 *	780
70 - 80	50 *	960

- \* Spacing is 40' for 42" cones.
- \*\* Speed appropriate for location.
- \*\*\* Use speed limit designated for the condition when workers are present in the work space. Signs will be covered or removed when workers are not present.

- Flagger (As Necessary)
- Reflectorized Drum
- Channelizing Device

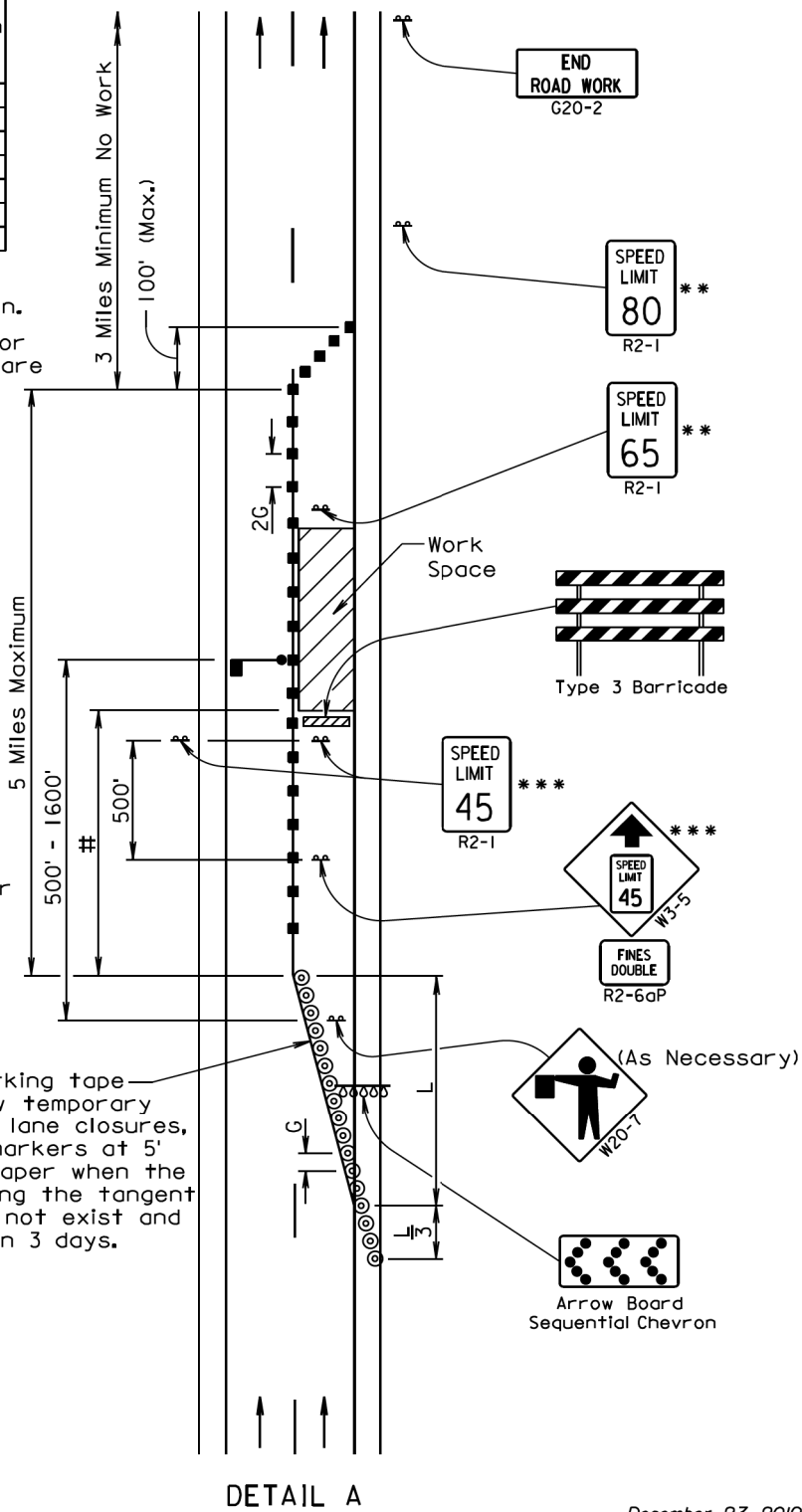
# The Work Space will be a minimum of 500' from the end of the taper.

The FLAGGER sign will be used whenever there is a Flagger present.

The channelizing devices will be 42" cones or drums.

42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours.

4" white temporary pavement marking tape for right lane closures, 4" yellow temporary pavement marking tape for left lane closures, or temporary raised pavement markers at 5' spacing will be installed in the taper when the lane is closed overnight, and along the tangent section where the skip lines do not exist and the lane is closed for more than 3 days.



December 23, 2019

