

# Section C: Traffic Control Plans

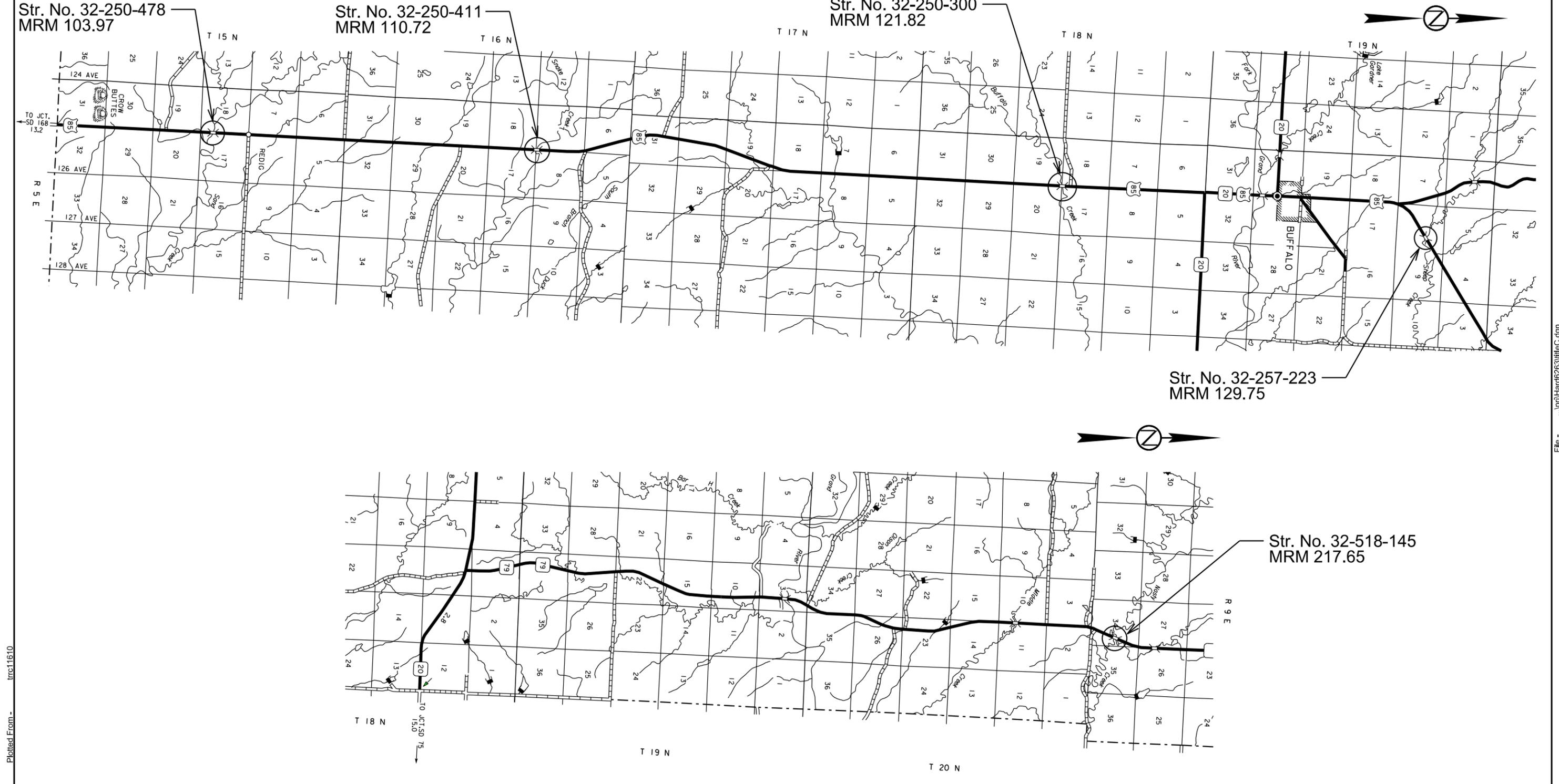
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0085(71)103 & P 0079(69)217	C1	C10

Plotting Date: 01/31/2014

## INDEX OF SHEETS

- C1 General Layout W/Index
- C2-C4 Estimate With General Notes & Tables
- C5 Detour Signing
- C6-C7 Temporary Barrier Layout
- C8-C10 Standard Plates

Plot Scale - 1:200



Plotted From - irrc11610

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**SECTION C ESTIMATE OF QUANTITIES – PCN 6263**

Bid Item Number	Item	Quantity	Unit
633E1400	Pavement Marking Paint, 4" White	16,250	Ft
633E1405	Pavement Marking Paint, 4" Yellow	2,030	Ft
634E0010	Flagging	800	Hour
634E0100	Traffic Control	2,184	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0525	Linear Delineation System Panel, Barrier Mounted	163	Each
634E0700	Traffic Control Movable Concrete Barrier	163	Each
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	144	Each
634E0750	Temporary Concrete Barrier End Protection	4	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	4	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	Each
634E0896	Portable Temporary Traffic Signal System	4	Each
634E1002	Detour Signing	376.0	SqFt

**SECTION C ESTIMATE OF QUANTITIES – PCN 02RQ**

Bid Item Number	Item	Quantity	Unit
633E1400	Pavement Marking Paint, 4" White	3,944	Ft
633E1405	Pavement Marking Paint, 4" Yellow	493	Ft
634E0010	Flagging	200	Hour
634E0100	Traffic Control	548	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0525	Linear Delineation System Panel, Barrier Mounted	72	Each
634E0700	Traffic Control Movable Concrete Barrier	72	Each
634E0750	Temporary Concrete Barrier End Protection	2	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	Each
634E1002	Detour Signing	176.0	SqFt

**PROJECT COORDINATION**

The Contractor shall coordinate the work on Str. No. 32-250-300 MRM 121.82 with Project P 0085(81)112, PCN 036G Cold Mill Asphalt Concrete and Asphalt Concrete Resurfacing.

**SEQUENCE OF OPERATIONS**

The Contractor shall submit their proposed sequence of operations for the Engineer's approval at least one week prior to the preconstruction meeting.

US Hwy 85 traffic shall be controlled using the layout in these plans labeled "Temporary Moveable Concrete Barrier Placement and Traffic Control Layout at Bridge Ends on Two Lane Highways with a Signal Condition". This layout is to be used in conjunction with Standard Plate 634.26.

SD Hwy 79 traffic shall be controlled using the layout in these plans labeled "Temporary Moveable Concrete Barrier Placement and Traffic Control Layout at Bridge Ends on Two Lane Highways with a Stop Condition". This layout is to be used in conjunction with Standard Plate 634.25.

Standard Plate 634.23, "Guides for Traffic Control Devices Lane Closure with Flagger Provided" shall apply when the use of flaggers are needed to control traffic at any location.

See Structure Plans for Scope of Bridge Work and Sequence of Operations for each location.

The intent of the plan sequence of operations is to have the least amount of impact on the traveling public. Request to deviate from the sequence of operations shall be submitted in writing to the Engineer for review. Approval of an alternate sequence on 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 shall be submitted for review a minimum of two weeks prior to potential implementation.

**TRAFFIC CONTROL – GENERAL NOTES**

1. Unless otherwise stated in these plans, no work will be allowed during hours of darkness. Hours of darkness are defined, as ½ hour after sunset until ½ hour before sunrise.
2. Storage of vehicles and equipment shall be as near the right-of-way as possible. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work sites in a minimum number of vehicles necessary to perform the work. Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage of the vegetation, surfacing, embankment, delineators, and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.
3. Existing guide, route, informational logo, regulatory, and warning signs shall be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging and resetting of existing traffic control devices, including delineation, shall be the responsibility of the Contractor. Non-applicable signing shall be covered or removed during periods of inactivity. Periods of inactivity shall be defined as no work taking place for a period of more than 36 hours. The cost of removing or covering non-applicable signs shall be incidental to the contract lump sum price for, Traffic Control, Miscellaneous.

**TRAFFIC CONTROL – GENERAL NOTES (Cont.)**

4. Construction signing mounted on portable supports shall not be used for a duration of more than 3 days, unless approved by the Engineer. Construction signing that remains in the same location for more than 3 days shall be mounted on fixed location, ground mounted, breakaway supports.
5. If inappropriate/conflicting pavement markings exist, the markings shall be removed and replaced with applicable temporary pavement markings when the work duration is more than 3 days. When the work duration is less than 3 days, the channelizing devices in the area where the pavement markings conflict shall be placed at a spacing of ½ G. The additional channelizing devices shall be incidental to the contract lump sum price for Traffic Control, Miscellaneous.
6. The quantity of Signs paid for will be for the greatest number of installations per sign in place at any one time regardless of the number of set-ups on the project.
7. Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.
8. All materials and equipment shall be stored a minimum distance of 30' from the traveled way during nonworking hours.
9. The Contractor shall provide documentation that all breakaway sign supports comply with FHWA NCHRP 350 or MASH crash-worthy requirements. The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.
10. The Contractor shall be required to have a person available 24 hour/day, 7 days/week to maintain traffic control devices. The name and cellular telephone number of this individual shall be given to the Engineer at the preconstruction meeting.
11. The Contractor or designated traffic control subcontractor shall make night inspections at the initial set up of traffic control and every week thereafter to ensure the adequacy, legibility and reflectivity of each sign and device. A written summary of each inspection shall be given to the Engineer within 24 hours after completion of the inspection. The cost for the nighttime inspection work shall be incidental to the contract lump sum price for Traffic Control, Miscellaneous.
12. Vehicles working in traffic or alongside traffic shall be equipped with a flashing amber light visible from all directions. The amber light shall be mounted on the uppermost part of the contractor's vehicle. Lights must have peak intensity within the range of 40 to 400 candelas and must flash at 75 ± 15 flashes per minute. Vehicle flasher/hazard lights are not acceptable. All haul trucks shall be equipped with a second flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights shall be incidental to the various related contract bid items.

**TRAFFIC CONTROL – GENERAL NOTES (Cont.)**

13. All construction operations shall be conducted in the general direction of traffic movement.
14. If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD – whichever is more stringent shall be used, as determined by the Engineer.
15. Temporary Road Markers shall be used for lane closure tapers or lane shift tapers. Temporary Road Markers used for tapers and shifts will not be measured for payment and will be incidental to the contract lump sum price for Traffic Control, Miscellaneous.
16. Drums are required in all lane closure tapers.
17. Bump Signs (W8-1, black on orange) with appropriate Advisory Speed Plaque (W13-1P, black on orange) shall be placed 500' in advance of the bump or as approved by the Engineer for adequate sight distance.

**TRAFFIC CONTROL MOVABLE CONCRETE BARRIERS**

Concrete barriers will be provided by the State and the barrier will be available for pickup near Interstate 90 Exit 52 (N1/2 SW1/4 LYING S & W OF LOT H2/E OF RR & I90 TRT IN S1/2 SW1/4 OF S5-T2N-R7E). The barriers shall be hauled back to the SDDOT Maintenance Yard located adjacent to Hwy 79 approximately two miles south of Rapid City when they are no longer needed on the project.

Barriers to be adjusted or moved shall be disconnected from adjacent barriers to minimize damage to connecting pins. Pins damaged by the Contractor shall be replaced at no cost to the Department.

Concrete barrier sections shall be placed as depicted in the plans to comply with clear zone requirements and as required by the Engineer. The barriers shall be pinned and bolted together as directed by the Engineer.

Concrete barriers shall, at all times, be set on a flat surface for a minimum of 4' behind the barrier. Where 4' of flat surfacing is not attainable behind the barriers due to steep inslopes, the Contractor shall furnish and install Guardrail Post and Block behind the barriers at 6'-3" spacing. All costs associated with furnishing and installing Guardrail Post and Block shall be included in the contract unit price per each for "Traffic Control Moveable Concrete Barriers".

All costs associated with picking up from the SDDOT Maintenance Yard, transporting, setting, connecting, and hauling back to the SDDOT Maintenance Yard shall be included in the contract unit price per each for "Traffic Control Movable Concrete Barrier".

After the initial placement, concrete barriers may need to be adjusted. All costs associated with removing concrete barriers from the initial placement or onsite storage location and resetting/bolting, etc. in the new location will be paid for at the contract unit price per each for Remove and Reset Traffic Control Movable Concrete Barrier. No additional payment will be made for concrete barriers that are not immediately reset at a new location on the project and will be stored onsite until they are either reset or returned to the SDDOT Maintenance Yard as determined by the Engineer.

**BARRIER MOUNTED LINEAR DELINEATION SYSTEM PANELS**

A linear delineation system (LDS) panel shall be attached to each side of the barrier section. One panel shall be white and the other panel shall be yellow. The color shall be the same as the nearest pavement marking, white along outside edgelines or yellow for the left side on one way traffic sections. The linear delineation system shall be 34 inches long and 6 inches in height and be constructed of aluminum formed into a shape to provide retroreflective properties across a wide range of angles. It shall be sheeted with super high (ASTM D 4956-04 Type IV) or very high intensity (Type VIII or IX) sheeting. The panels shall be installed at the center of the barrier when measured along the length, with the top of the panel 4 inches below the top of the barrier. Installation shall be as per the manufacturer's recommendation using stainless steel inserts and bolts. This will allow for easy removal for replacement of damaged panels or to replace with an alternate color. The Contractor shall furnish, and install one panel along each side of the barrier if any panels are missing from the barriers. Replacement of damaged linear delineation system panels shall be furnished and replaced by the Contractor. All costs associated with furnishing, installing and replacing the linear delineation system shall be included in the contract unit price per each for Linear Delineation System Panel, Barrier Mounted.

All linear delineation system panels shall remain attached to the barrier sections and shall become the property of the State of South Dakota upon completion of the project.

The Contractor shall verify the number of LDS panels that will need to be installed or replaced on the Traffic Control Movable Concrete Barriers. The contract amount of LDS panels is an estimate and the full contract amount may not be required.

Maintaining the linear delineation system, including moving LDS panels from one side of the barrier to the other side of barrier to match the applicable color of the nearest pavement marking shall be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

**TEMPORARY CONCRETE BARRIER END PROTECTION**

Crash attenuators meeting the requirements of NCHRP 350 TL-3 or MASH shall be furnished and installed by the Contractor. Attachment of the attenuators to the concrete barriers shall be by approved methods.

All costs associated with furnishing, transporting, initial setup, connecting, maintaining, and removal shall be incidental to the contract unit price per each for Temporary Concrete Barrier End Protections.

Crash attenuators that need to be moved and reset to accommodate traffic flows after initial setup shall be paid for at the contract unit price per each for Remove And Reset Temporary Concrete Barrier End Protection. All costs associated with removing from initial placement and resetting at a new location shall be incidental to the contract unit price per each. No additional payment will be made for end protections that are not immediately reset at a new location on the project and will be stored onsite until they are either reset or removed from the project as determined by the Engineer. No additional payment will be made for minor adjustments.

The Contractor shall have replacement hardware available so that, in the event that an attenuator is hit and made unusable, the attenuator can be made functional within 24 hours. The cost of replacement is included in the contract unit price per each for Temporary Concrete Barrier End Module Set or Repair Kit. No payment will be made for the Concrete Barrier End Module Set or Repair Kit in the event that no repairs are necessary. Upon completion of the project, crash attenuators shall remain the property of the Contractor.

**WIDTH RESTRICTION SIGNING**

Details of the approximate location of the Width Restriction signing are as shown in these plans. Prior to installing the signs the Contractor shall mark out the sign locations and review them with the Engineer.

Width Restriction signing shall be furnished and installed by the Contractor as detailed in these plans. It will be the responsibility of the Contractor to maintain and reinstall these signs during the project as required by the construction progress. Upon completion of the project, the Contractor shall remove the Width Restriction signing. Width Restriction signing shall be installed on fixed location, ground mounted, breakaway supports.

Payment for furnishing, installing, maintaining and removing the signs and hardware shall be incidental to the contract unit price per square foot for Detour Signing.

Structure No.	Width Restriction (Ft)
* 32-250-478	18
* 32-250-411	18
32-250-300	11
32-257-233	11
32-518-145	11

\* Width Restriction signing not required.

**PORTABLE TEMPORARY TRAFFIC SIGNAL SYSTEM**

Portable Traffic Signal System will be paid for at the contract unit price per each. Each is defined as a site. One site will be considered to be two portable signal units (master and slave unit) with the necessary controller unit.

**TEMPORARY PAVEMENT MARKINGS**

Project sites shall be delineated with barrels and pavement marking according to the layout in these plans labeled "Temporary Moveable Concrete Barrier Placement and Traffic Control Layout at Bridge Ends on Two Lane Highways with a Signal Condition" and "Temporary Moveable Concrete Barrier Placement and Traffic Control Layout at Bridge Ends on Two Lane Highways with a Stop Condition", or as specified elsewhere in the plans. Raised pavement markers, or tabs shall be used as pavement marking. Pavement marking tape, Type 2 shall be used for all stop bars. All costs for furnishing, installing, and removal of the pavement markings shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

Existing pavement markings shall be removed in areas where traffic is forced to cross over the existing lane marking. Costs for the removal of the existing pavement markings shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

**PERMANENT PAVEMENT MARKINGS**

Permanent pavement markings shall be installed on completed sections of roadway prior to the opening to traffic. The Contractor shall survey and remark disturbed Passing/No Passing some markings as the currently exist.

The pavement marking paint and glass beads shall be furnished and applied by the Contractor and shall meet the requirements for materials and application as per the Standard Specifications for Toads and Bridges, 2004 Edition.

All areas to be painted shall be thoroughly broomed prior to the placement of any permanent paint to the satisfaction of the Engineer.

Traffic Control shall be incidental to the cost of application. The striper and advance or trailing warning vehicle shall be equipped with flashing amber lights or advance warning arrow panel.

Approximate paint application rates for one line shall be as follows:

- Dashed Centerline striping (yellow) – 4.6 gallons per mile
- Solid Edgeline striping (white) – 16.9 gallons per mile
- Glass Beads – 8 lbs. per gallon of paint

All costs for Permanent Pavement Markings shall be incidental to the contract unit price per foot for "Pavement Marking Paint, 4" White and Pavement Marking Paint, 4" Yellow".

**INVENTORY OF TRAFFIC CONTROL DEVICES**

**HWY 85 - PCN 6263**

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	8	17	136
R10-6	24" x 36"	STOP HERE ON RED	8	20	160
W1-4	48" x 48"	REVERSE CURVE SIGN (LEFT OR RIGHT)	4	34	136
W3-3	48" x 48"	SIGNAL AHEAD (SYMBOL)	8	34	272
W8-1	48" x 48"	BUMP	8	34	272
W13-1P	30" x 30"	ADVISORY SPEED PLATE	8	21	168
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	8	34	272
W20-4	48" x 48"	ONE LANE ROAD ##### FT. OR AHEAD	8	34	272
W20-7	48" x 48"	FLAGGER	8	34	272
*****		TYPE III BARRICADE - 8 FT. DOUBLE SIDED	4	56	224
<b>TOTAL UNITS</b>					<b>2184</b>

**HWY 79 – PCN 02RQ**

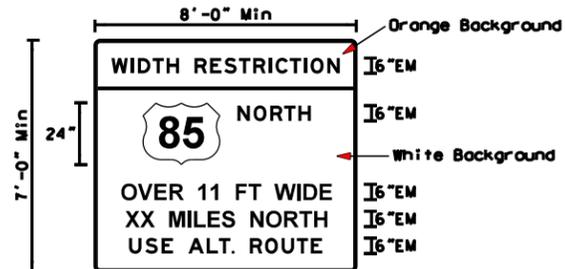
SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	2	17	34
R1-1	30" x 30"	STOP	2	21	42
W1-4	48" x 48"	REVERSE CURVE SIGN (LEFT OR RIGHT)	1	34	34
W3-1	48" x 48"	STOP AHEAD (SYMBOL)	2	34	68
W8-1	48" x 48"	BUMP	2	34	68
W13-1P	30" x 30"	ADVISORY SPEED PLATE	2	21	42
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	2	34	68
W20-4	48" x 48"	ONE LANE ROAD ##### FT. OR AHEAD	2	34	68
W20-7	48" x 48"	FLAGGER	2	34	68
*****		TYPE III BARRICADE - 8 FT. DOUBLE SIDED	1	56	56
<b>TOTAL UNITS</b>					<b>548</b>

# DETOUR SIGNING

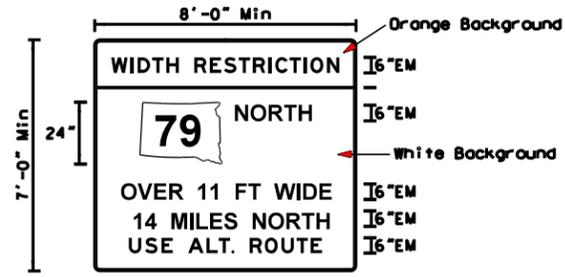
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0085(71)103 & P 0079(69)217	C5	C10

Plotting Date: 01/31/2014

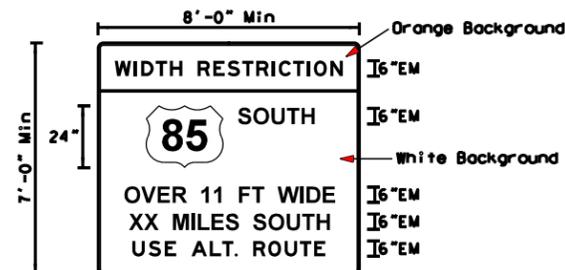
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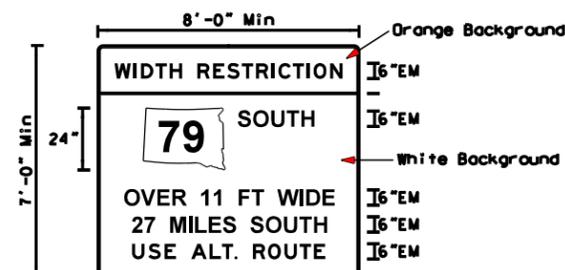
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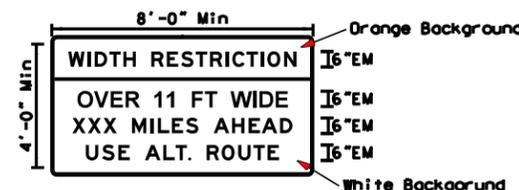
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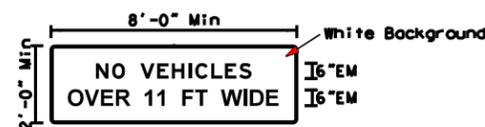
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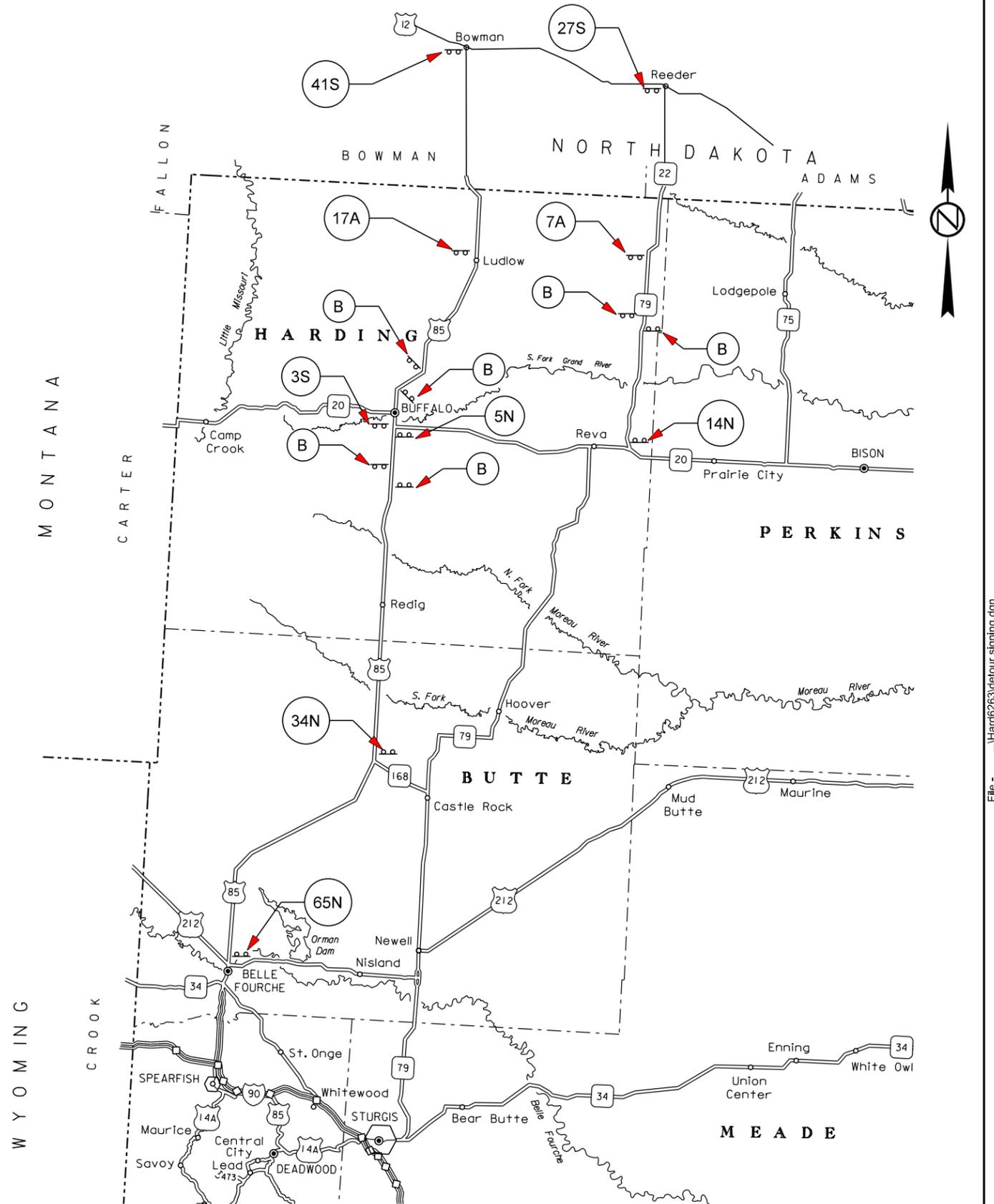
(XXS)  
(XXS = Miles South)



(XXA)  
(XXA = Miles Ahead)



(B)



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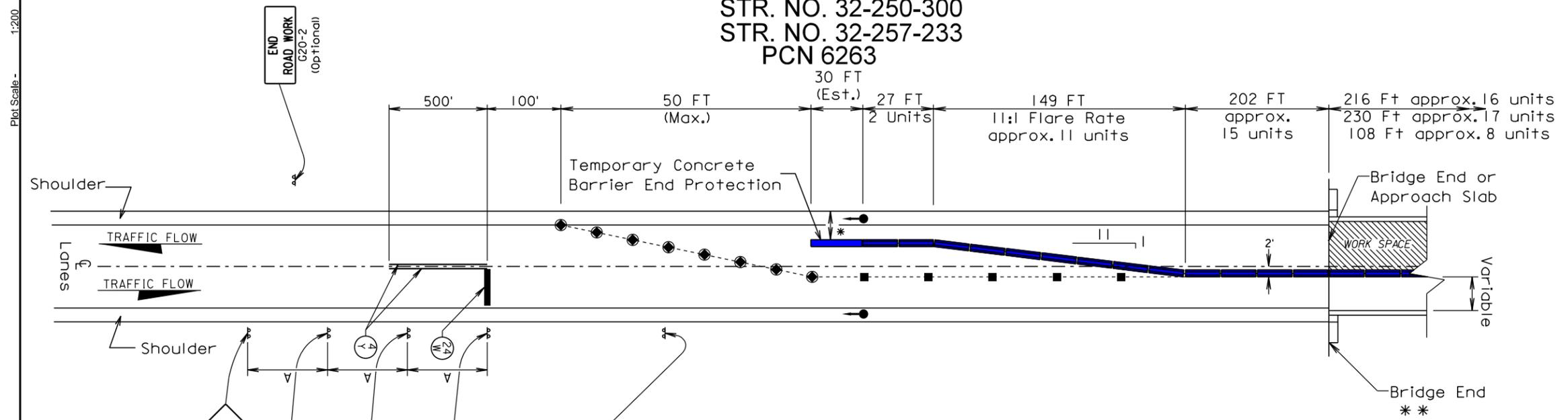
# TEMPORARY MOVEABLE CONCRETE BARRIER PLACEMENT AND TRAFFIC CONTROL LAYOUT AT BRIDGE ENDS ON TWO LANE HIGHWAYS WITH A SIGNAL CONDITION

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0085(71)103 & P 0079(69)217		

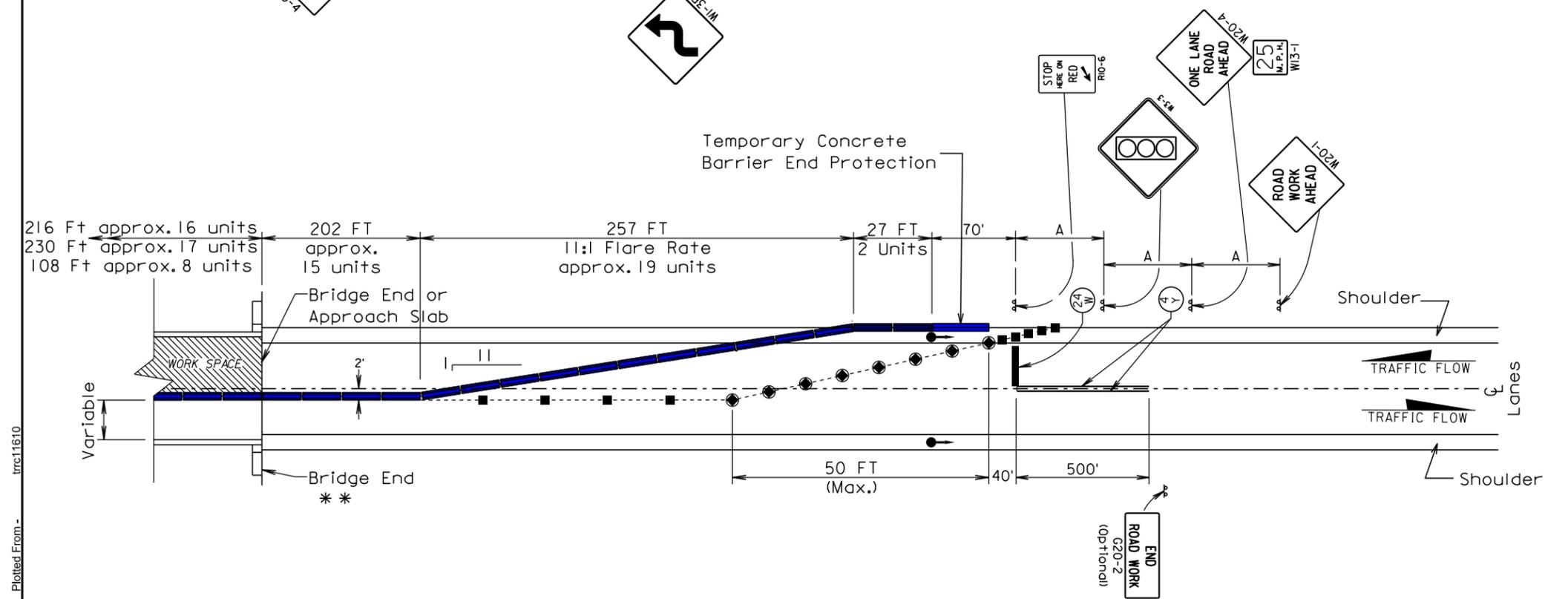
Plotting Date: 01/31/2014

STR. NO. 32-250-478  
 STR. NO. 32-250-411  
 STR. NO. 32-250-300  
 STR. NO. 32-257-233  
 PCN 6263

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

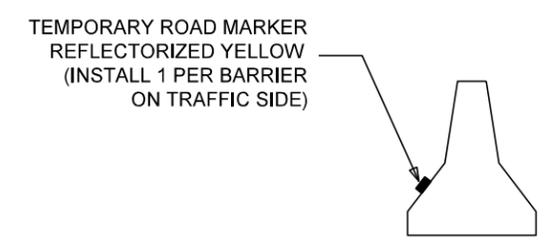


- ⊙ 24" White Temporary Pavement Marking
  - ⊙ 4" Yellow Temporary Pavement Marking
  - Traffic Signal
  - Channelizing Device
  - Channelizing Device (Drum Required)
  - \* 10 Foot Maximum Distance from edge of shoulder to temporary concrete barrier end protection. If construction access is not needed, temporary concrete barrier end protection shall be placed at edge of shoulder.
  - \*\* Bridge ends shall have guardrail installed on the side adjacent to traffic, at all times.
- The concrete barrier lengths were estimated to be 13.5 feet long.



Estimate of Traffic Control Moveable Concrete Barriers

Structure No.	Approx. Length (ft)	Quantity of Barriers (each)
32-250-478	1080	80
32-250-411	1094	81
32-250-300	971	72
32-257-233	971	72



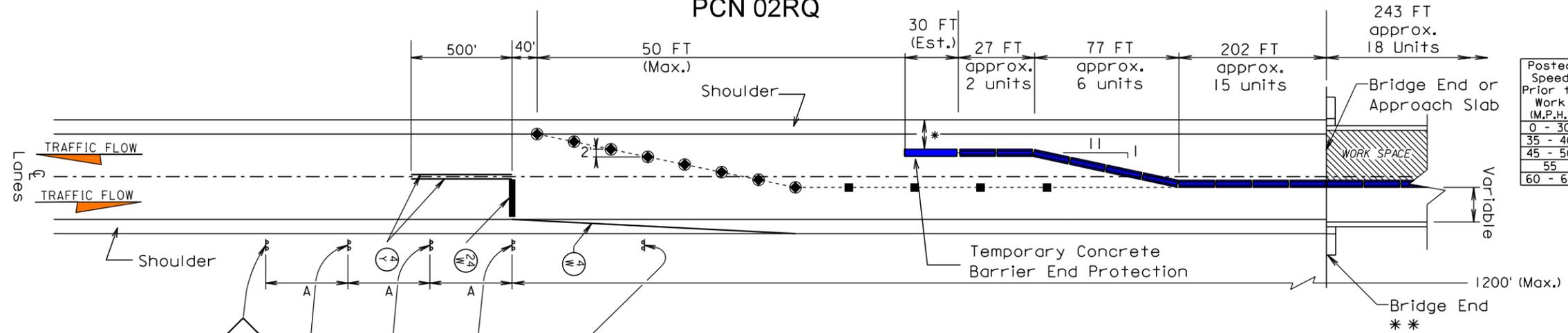
Plot Scale - 1:200

Plotted From - trrs11610

File - ...temp barrier 2lane hwy.dgn

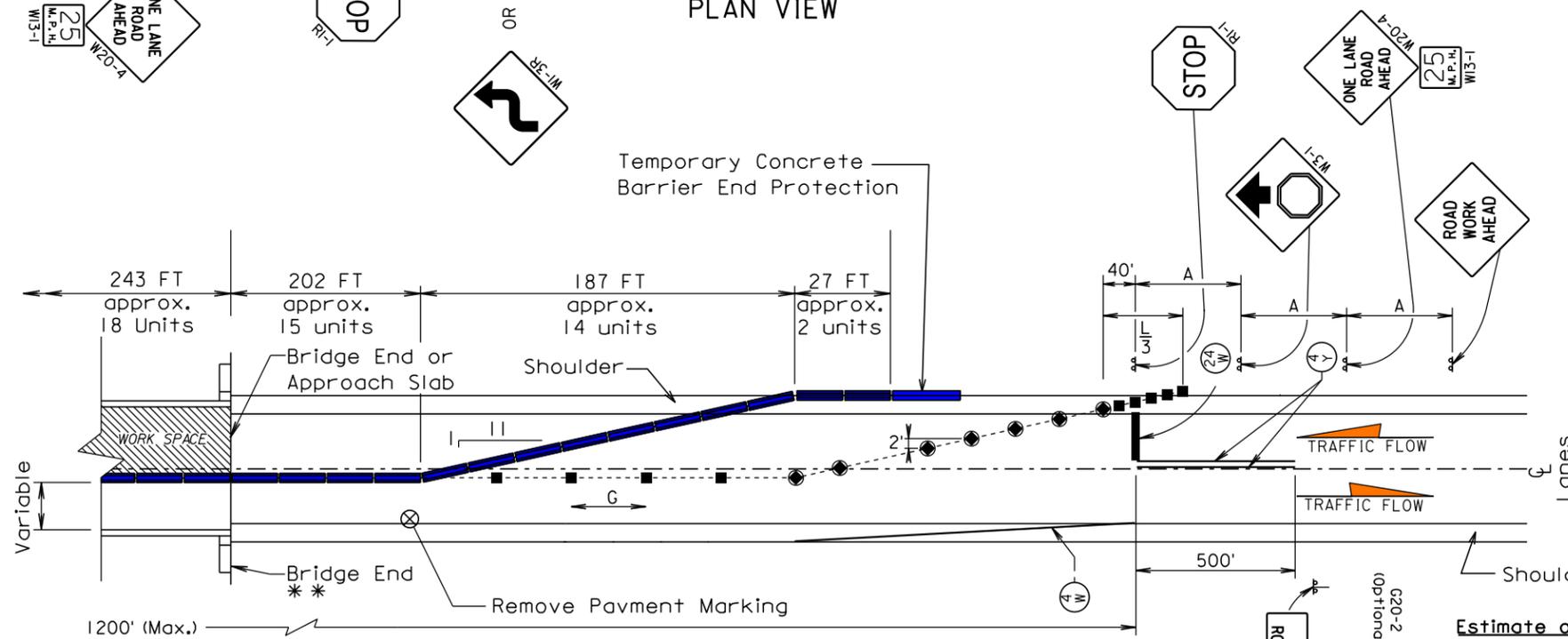
# TEMPORARY MOVEABLE CONCRETE BARRIER PLACEMENT AND TRAFFIC CONTROL LAYOUT AT BRIDGE ENDS ON TWO LANE HIGHWAYS WITH A STOP CONDITION

STR. NO. 32-518-145  
PCN 02RQ



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

PLAN VIEW



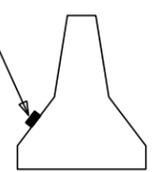
PLAN VIEW

- ⊙ 24" White Temporary Pavement Marking
  - ⊙ 4" Yellow Temporary Pavement Marking
  - ⊙ 4" White Temporary Pavement Marking
  - Channelizing Device
  - Channelizing Device (Drum Required)
- \* 10 Foot Maximum Distance from edge of shoulder to temporary concrete barrier end protection. If construction access is not needed, temporary concrete barrier end protection shall be placed at edge of shoulder.
- \*\* Bridge ends shall have guardrail installed on the side adjacent to traffic, at all times.
- The concrete barrier lengths were estimated to be 13.5 feet long.

**Estimate of Traffic Control Moveable Concrete Barriers**

Structure No.	Approx. Length (ft)	Quantity of Barriers (each)
32-518-145	956	72

TEMPORARY ROAD MARKER REFLECTORIZED YELLOW (INSTALL 1 PER BARRIER ON TRAFFIC SIDE)



**GENERAL NOTES:**

- \* 10 FOOT MAXIMUM DISTANCE FROM EDGE OF SHOULDER TO TEMPORARY CONCRETE BARRIER END PROTECTION. IF CONSTRUCTION ACCESS IS NOT NEEDED, TEMPORARY CONCRETE BARRIER END PROTECTION SHALL BE PLACED AT EDGE OF SHOULDER.

Plot Scale - 1:200

Plotted From - trcs11610

File - ...temp barrier 2lane hwy.dgn

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 - 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.

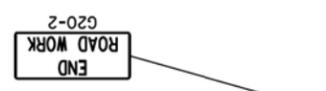
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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.

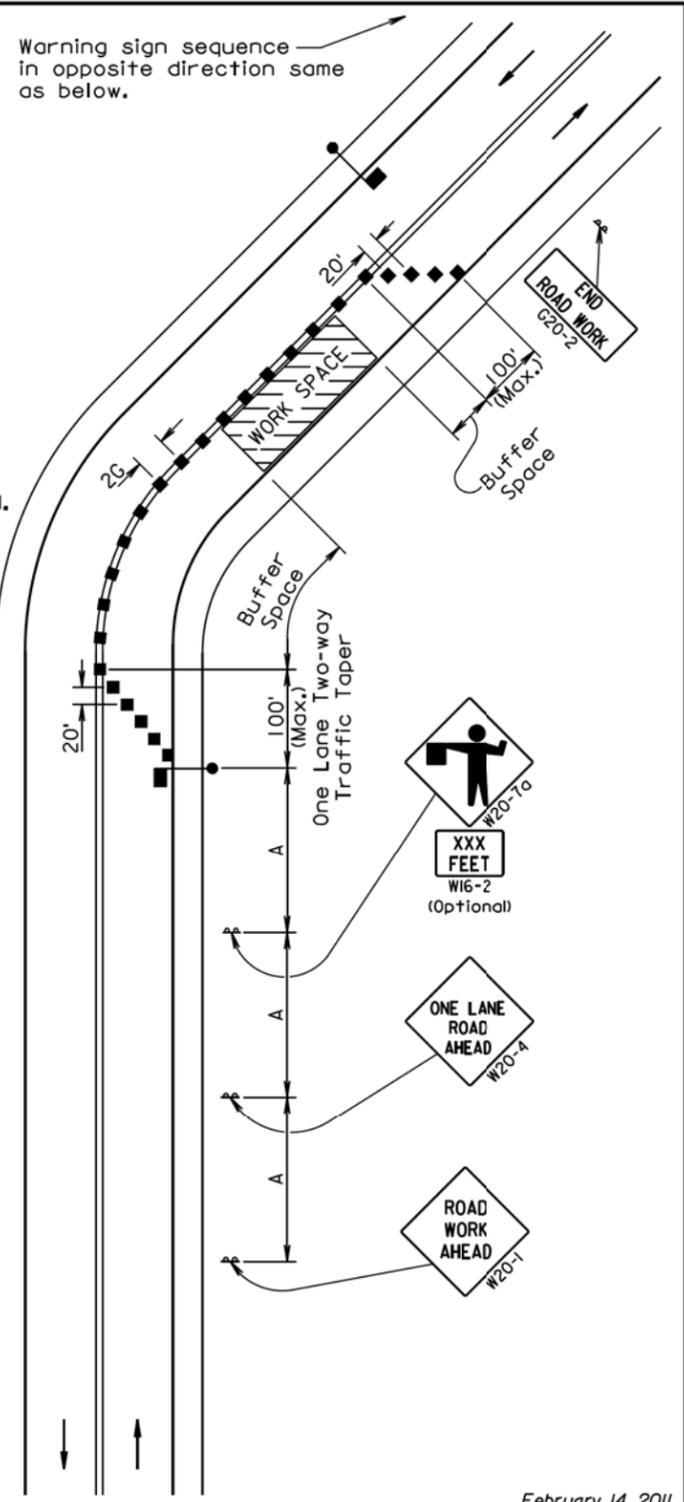
The channelizing devices shall be drums or 42" cones.

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



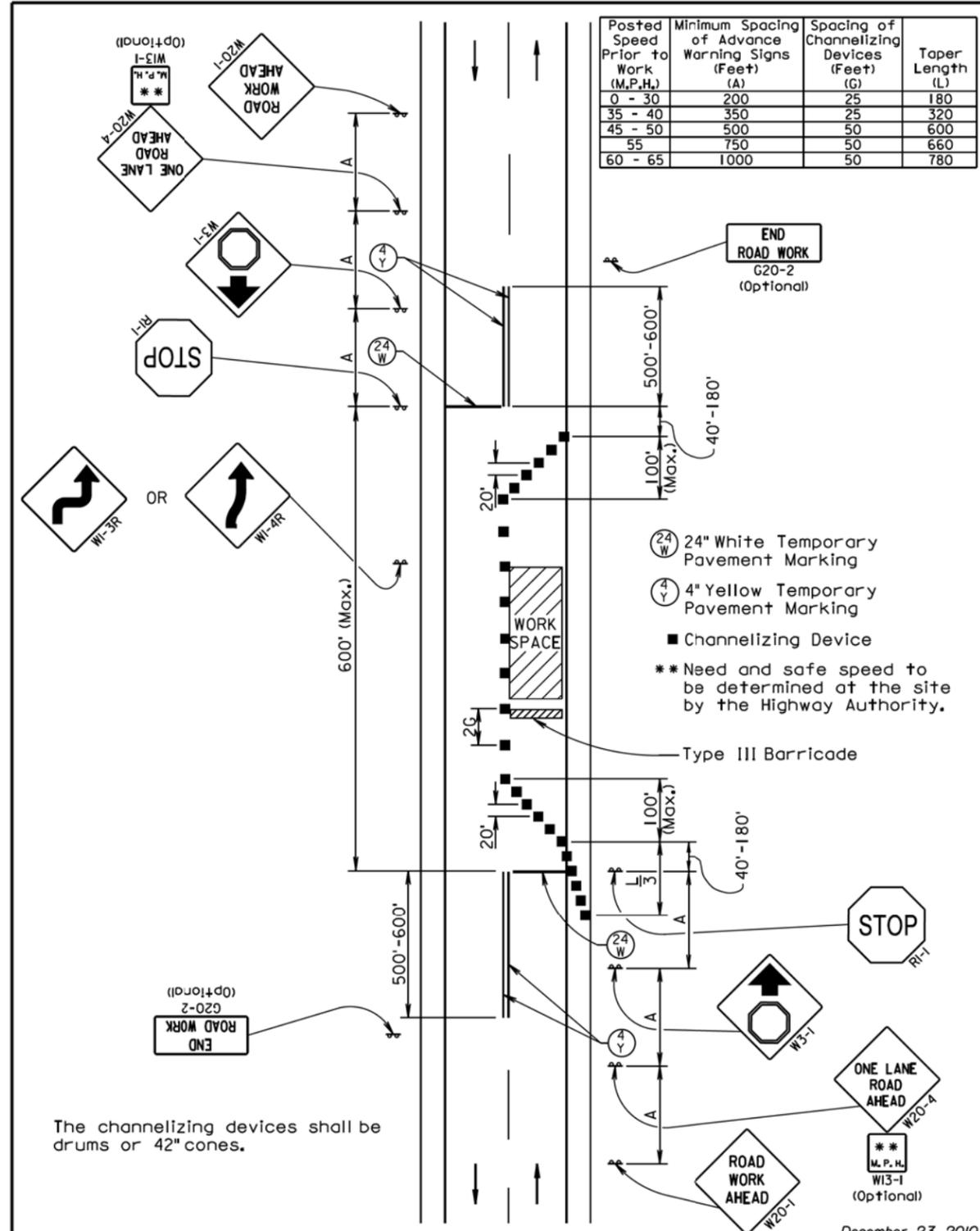
Channelizing devices and flaggers shall be used at intersecting roads to control intersecting road traffic as required.

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.



February 14, 2011

<b>S D D O T</b>	<b>GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE WITH FLAGGER PROVIDED</b>	PLATE NUMBER <b>634.23</b>
	Published Date: 1st Qtr. 2014	Sheet 1 of 1



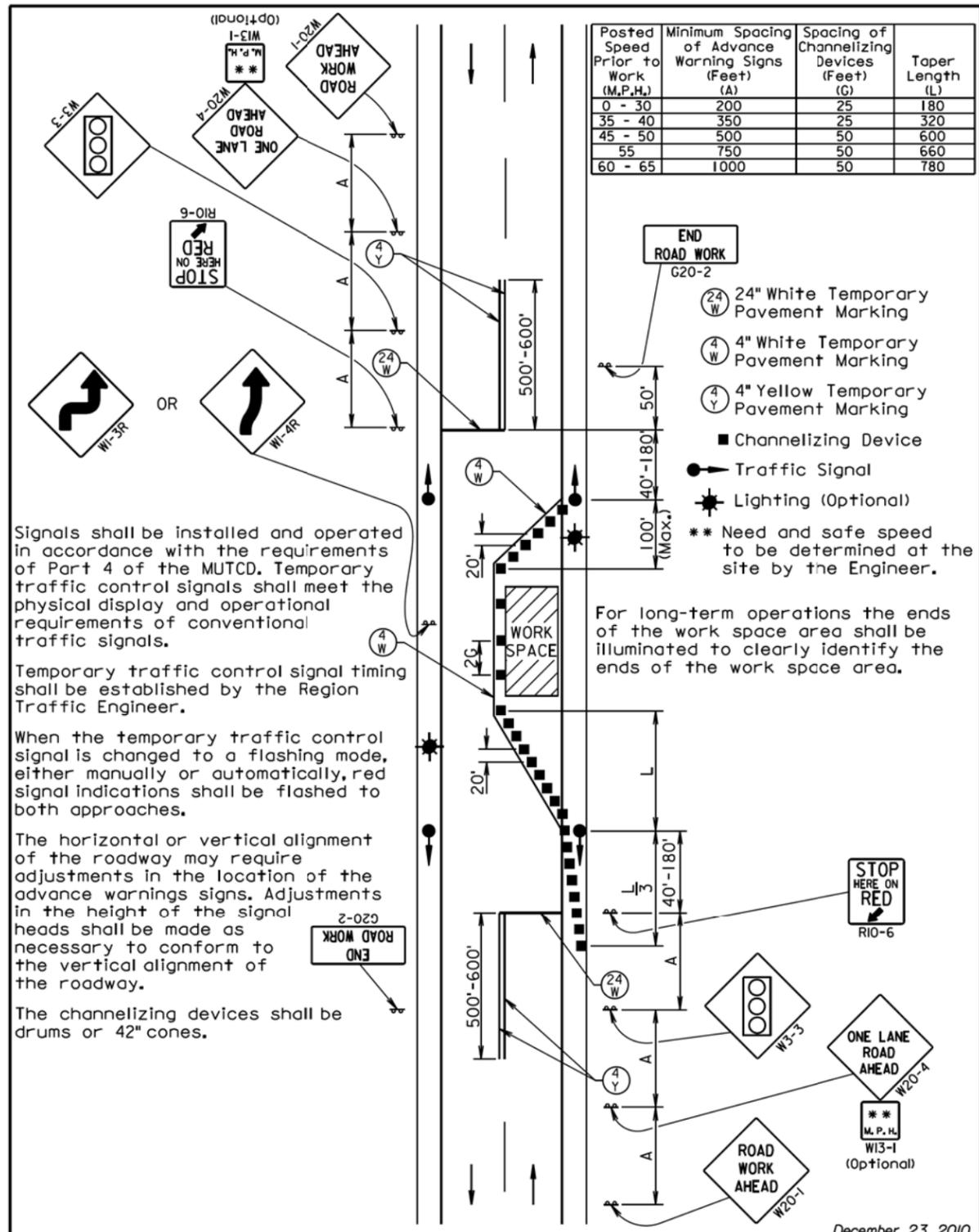
December 23, 2010

<b>S D D O T</b>	<b>GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE USING STOP SIGNS</b>	PLATE NUMBER <b>634.25</b>
	Published Date: 1st Qtr. 2014	Sheet 1 of 1

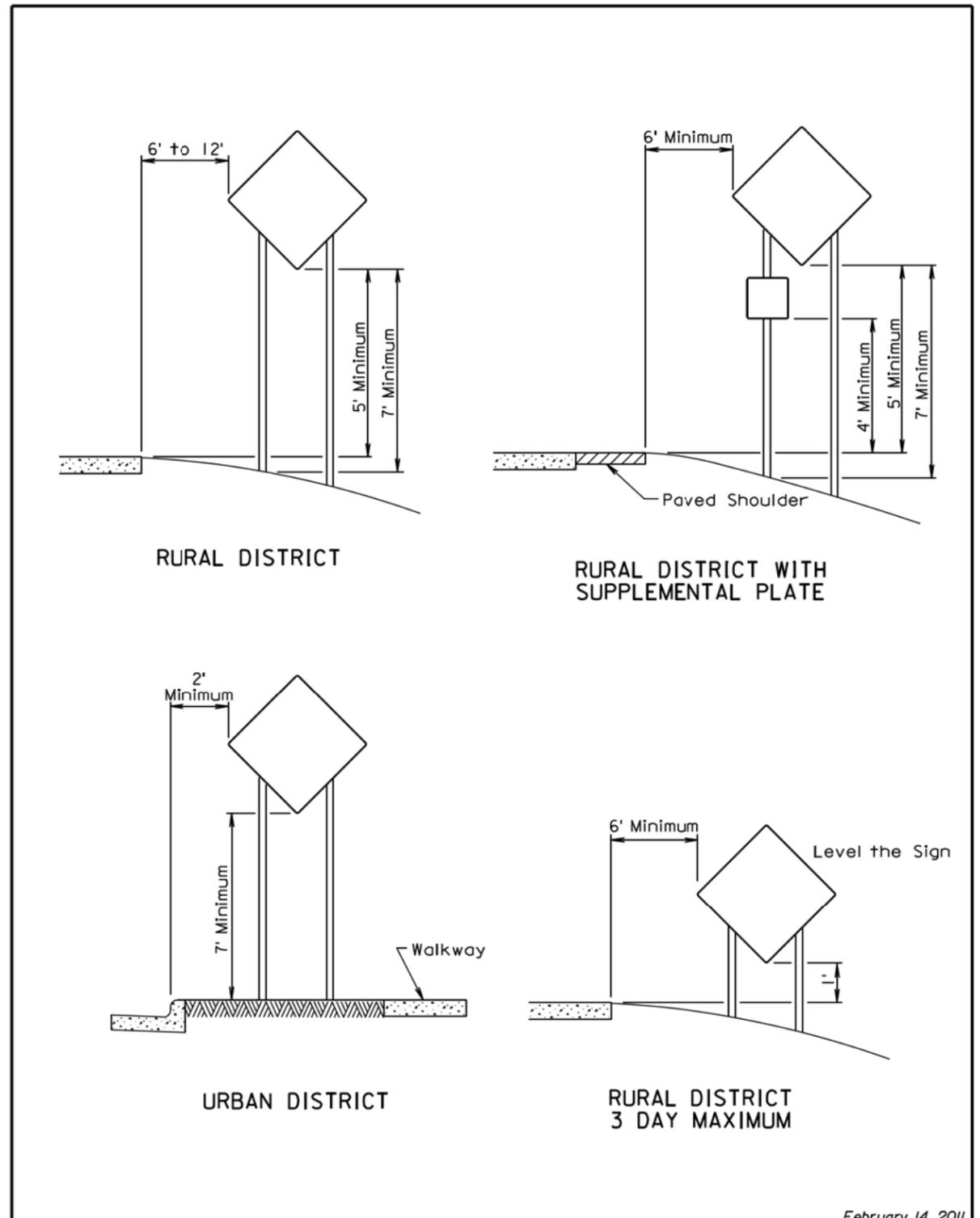
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0 - 30	200	25	180
35 - 40	350	25	320
45 - 50	500	50	600
55	750	50	660
60 - 65	1000	50	780

- 24" White Temporary Pavement Marking
- 4" Yellow Temporary Pavement Marking
- Channelizing Device
- \*\* Need and safe speed to be determined at the site by the Highway Authority.

The channelizing devices shall be drums or 42" cones.



S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE USING TRAFFIC SIGNALS	PLATE NUMBER 634.26
		Sheet 1 of 1
Published Date: 1st Qtr. 2014		



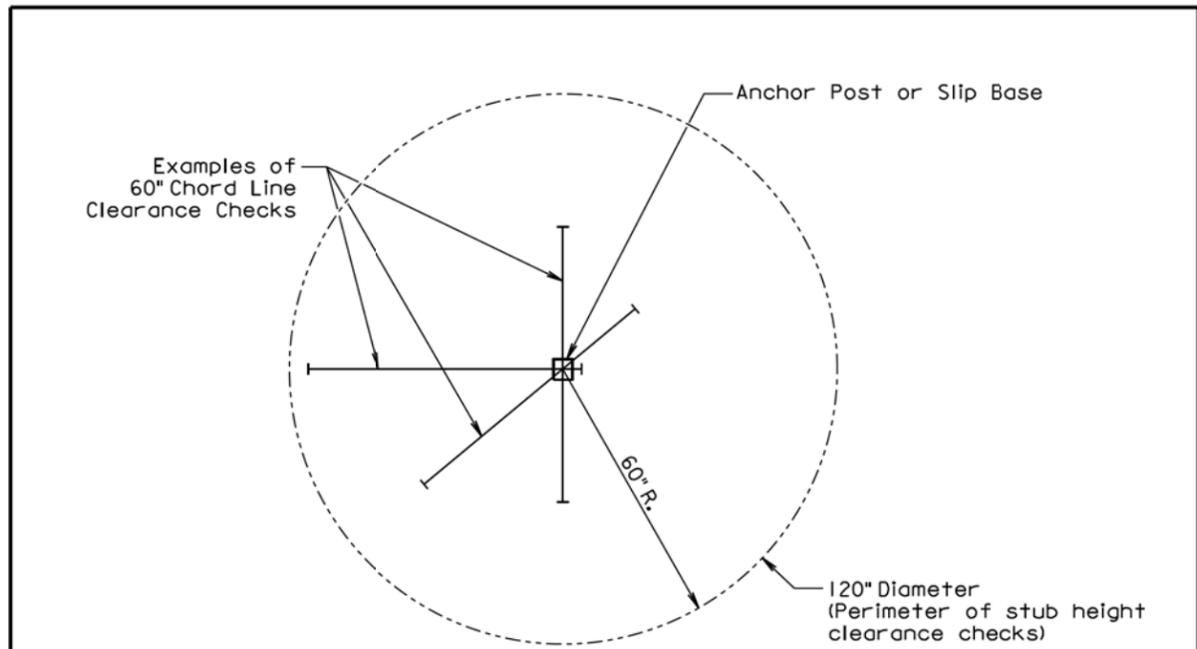
S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
		Sheet 1 of 1
Published Date: 1st Qtr. 2014		

Plot Scale - 1:200

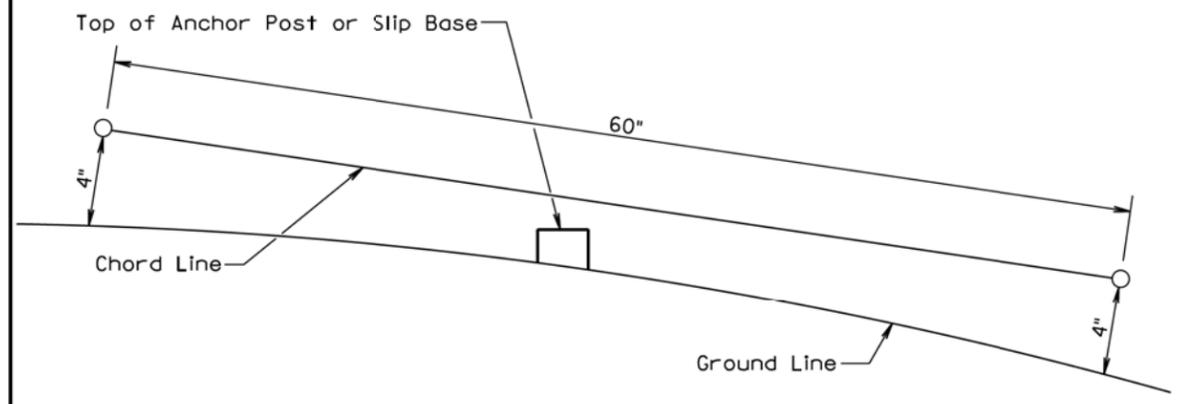
Plotted From - trc11610

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Plot Scale - 1:200



**PLAN VIEW**  
(Examples of stub height clearance checks)



**ELEVATION VIEW**

**GENERAL NOTES:**

The top of anchor posts and slip bases SHALL 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 shall 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.

July 1, 2005

<b>S D D O T</b>	<b>BREAKAWAY SUPPORT STUB CLEARANCE</b>	PLATE NUMBER <b>634.99</b>
		Sheet 1 of 1

*Published Date: 1st Qtr. 2014*

- Plotted From - trcs11610

File - ...hpj\Hard6263\StdPlatePg11.dgn