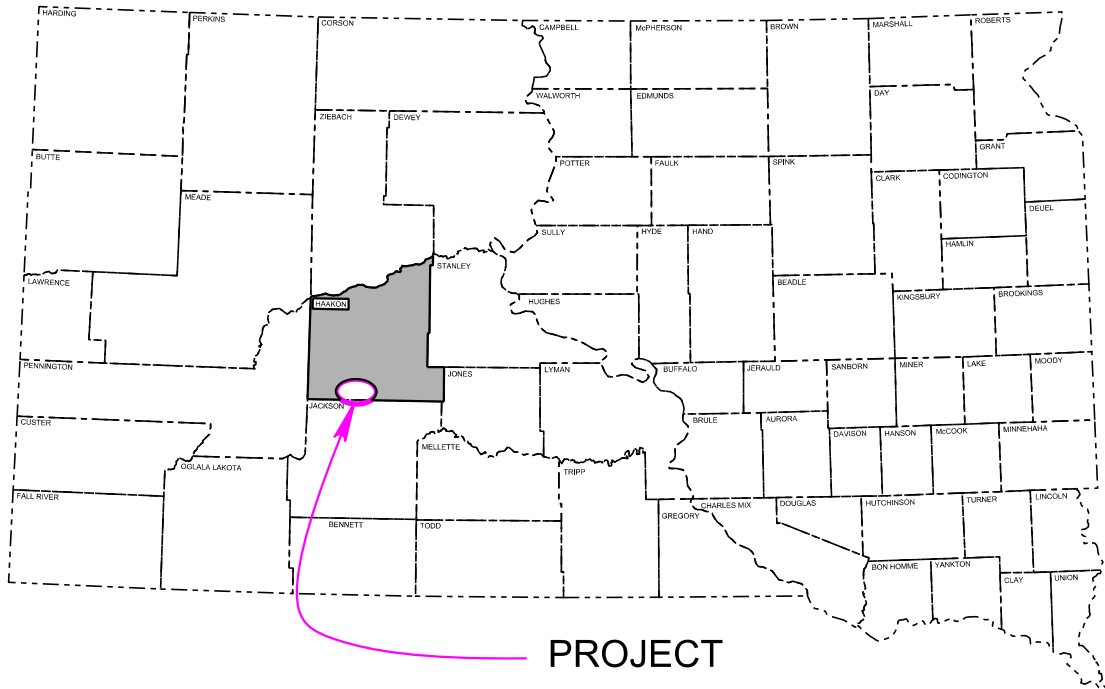


Plot Scale - 1:200

Plotted From - tpr25289



PROJECT

STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION  
PLANS FOR PROPOSED

PROJECT NH-PS 0073(83)92  
SD HIGHWAY 73  
HAAKON COUNTY  
RAILROAD CROSSING IMPROVEMENT &  
ASPHALT CONCRETE SURFACING  
PCN 08RU

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-PS 0073(83)92	1	11

Plotting Date: 02/14/2025

INDEX OF SHEETS

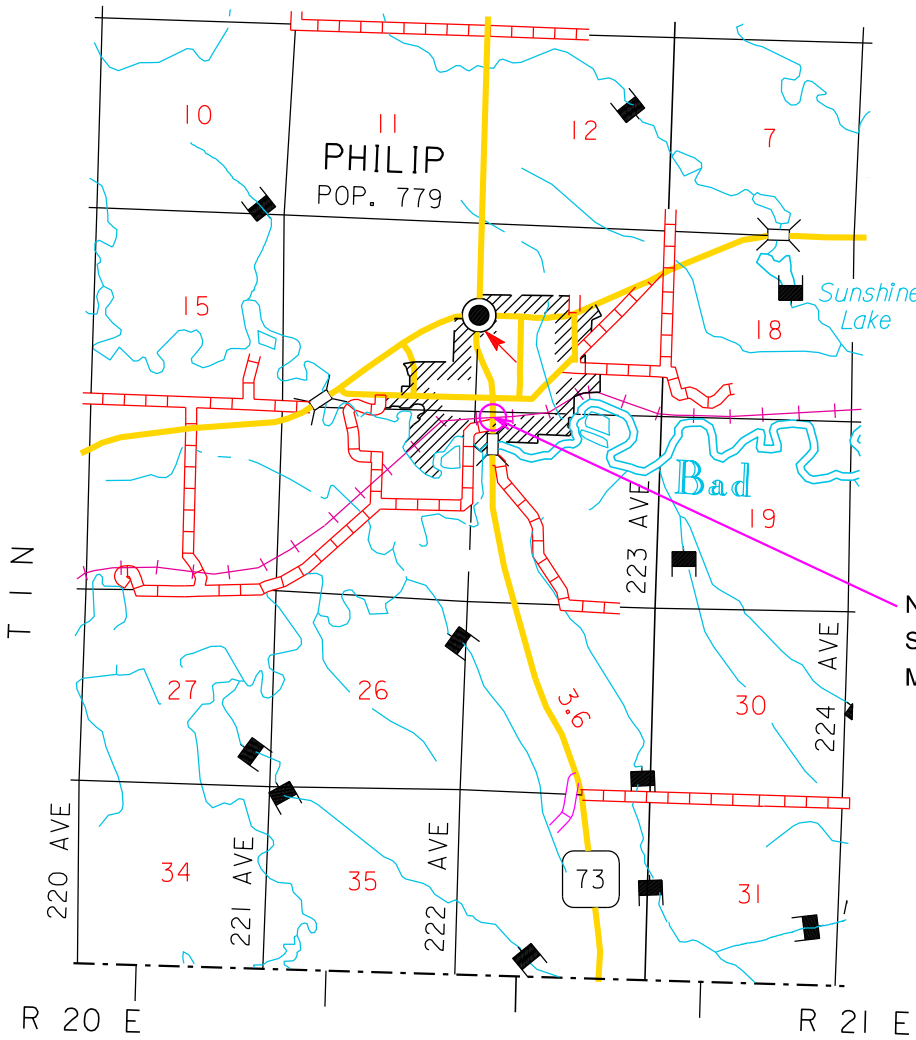
1	General Layout with Index
2-4	Estimate with General Notes & Tables
5	Typical Sections
6	Paving Detail Sheet
7	Restriction Signing Layout
8-11	Standard Plates



DESIGN DESIGNATION

AADT (2020)	602
AADT (2040)	686
DHV	109
D	50%
DHV T%	12.7%
AADT T%	28.0%
V	30mph

STORM WATER PERMIT  
NONE REQUIRED



NH-PS 0073(83)92  
SD73 RR Crossing  
MRM 92.35

3

May 7, 2025

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	194.5	SqYd
120E6200	Water for Granular Material	0.5	MGal
210E1005	Surface Preparation	0.007	Mile
320E1200	Asphalt Concrete Composite	63.8	Ton
633E0055	Cold Applied Plastic Pavement Marking, Railroad Crossing	2	Each
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	1,200	Ft
633E5052	Surface Preparation for Pavement Marking	2	Each
634E0010	Flagging	40.0	Hour
634E0110	Traffic Control Signs	137.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	8	Each
634E1002	Detour and Restriction Signing	353.4	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	2	Each

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor’s primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT’s Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <<https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf> >

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

Action Taken/Required:

The DANR General Permit for Stormwater Discharges Associated with Construction Activities is required for construction activity disturbing one or more acres of earth and work in a waterway. The SDDOT is the owner of this permit and will submit the NOI to DANR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DANR letter of approval is received.

The Contractor must adhere to the “Special Provision Regarding Storm Water Discharges to Waters of the State.”

The Contractor will complete the DANR Contractor Certification Form prior to the pre-construction meeting. The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the permit for this project. Work may not begin on this project until this form is signed and submitted to DANR.

The form can be found at: <[https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR\\_CGPA\\_ppendixCCA2018Fillable.pdf](https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_CGPA_ppendixCCA2018Fillable.pdf) >

The Contractor is advised that permit coverage may also be required for off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

Action Taken/Required: Revised 3/27/25 SML

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, “No Dumping Allowed”.

2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06. Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

Add Commitment I in case the contractor wants a stockpile site or plant site.

COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material

**COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES  
(CONTINUED)**

processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow 30 Days from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 150 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

**UTILITIES**

The Contractor will contact the involved utility companies through South Dakota One Call (1-800-781-7474) prior to starting work. It will be the responsibility of the Contractor to coordinate work with the utility owners to avoid damage to existing facilities.

If utilities are identified near the improvement area through the SD One Call Process as required by South Dakota Codified Law 49-7A and Administrative Rule Article 20:25, the Contractor will contact the Engineer to determine modifications that will be necessary to avoid utility impacts.

The Contractor will be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location. The Contractor will contact each utility owner and confirm the status of all

existing and new utility facilities. The utility contact information is provided elsewhere in the plans or bidding documents.

**RAILROAD**

The Contractor will coordinate work with RCP&E Railroad Corporation (Tyler VanAsperen – Ph.# (605)430-5582) and RJ Corman Railroad Services (Chris Casey – Ph.# (859)533-9028) to complete the work to be done adjacent to the railroad tracks.

**SEQUENCE OF OPERATIONS**

Prior to beginning work on the railroad crossing on SD73, the Contractor must contact RCP&E Railroad Corporation. Traffic will not be disrupted until RCP&E and RJ Corman are on site to begin crossing rehabilitation.

The following sequence of operations will be used:

1. Installation of Signs and Road Closure for Rail Upgrade.
2. RCP&E Contractor to upgrade the railroad crossing and complete paving included in the railroad contract.
3. Installation of the new precast concrete panel crossing and rail by RCP&E.
4. Removal of existing pavement and some of the base on SD73 by the Contractor as shown on the Paving Details sheet.
5. Placement of new pavement on SD73, to commence within one working day upon the completion of the crossing installation by RCP&E.
6. Reopen SD73 and remove traffic diversion upon completion of SD73 surfacing.
7. Installation of Pavement Markings.

Contractor requests to deviate from the sequence of operations will be submitted in writing to the Engineer for review. 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

**REMOVE ASPHALT CONCRETE PAVEMENT**

An estimated 194.5 Square Yards of the in-place asphalt concrete surfacing will be removed from the existing highway according to the in-place surfacing typical sections and disposed of by the Contractor. Care will be taken not to waste the in-place granular material. The remaining in-place granular material will be prepared as per the notes for Surface Preparation and any remaining material will be reused at the discretion of the Engineer. Any remaining material not used on the project will become the property of the Contractor for use or disposal.

The quantity of removed asphalt material is estimated from the in-place surfacing typical sections.

**SURFACE PREPARATION**

Prior to placement of the Asphalt Concrete Composite, the Contractor will be required to prepare the existing surface according to the Surface Preparation

specifications provided in Section 210, at locations determined by the Engineer.

Included in the Estimate of Quantities are 0.5M Gal of Water for Granular Material for compaction and applied 50 feet wide at the locations shown of the Paving Details Sheet.

The Contractor will ensure excess in place granular material (Approx. 1.5”) is removed at locations shown on the Paving Details Sheet to achieve the required elevation for the placement of the asphalt concrete. Payment for the removal of excess in place granular material will be incidental to the contract unit price per mile for Surface Preparation. This material may be reused at the discretion of the Engineer.

**ASPHALT CONCRETE COMPOSITE**

The Contractor will begin placement of the new asphalt surfacing within one working day upon the completion of installation of the new RR crossing by RCP&E and pursue completion to allow for a minimum of one lane open to traffic.

Mineral aggregate for the Asphalt Concrete Composite will conform to the requirements of the Standard Specifications for Class E, Type 1.

All other requirements in the Standard Specifications for Asphalt Concrete Composite will apply.

The asphalt binder used in the mixture will be PG 58-34 or PG 64-34 Asphalt Binder.

The Contractor will place asphalt concrete composite (approx. 6.0” thick) in the areas between the new railroad tracks and the existing pavement as shown in the plans. Lifts will not exceed 3 inches in depth.

**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 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.



**GENERAL TRAFFIC CONTROL(CONTINUED)**

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

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.

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W3-4	BE PREPARED TO STOP	2	48" x 48"	16.0	32.0
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-4	ONE LANE ROAD 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	2	36" x 18"	4.5	9.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			
		137.0			

**ITEMIZED LIST FOR DETOUR AND RESTRICTION SIGNING**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R11-2	ROAD CLOSED	2	48" x 30"	10.0	20.0
R11-3a	ROAD CLOSED ___ MILES AHEAD LOCAL TRAFFIC ONLY	2	60" x 30"	12.5	25.0
W20-2	DETOUR AHEAD	2	48" x 48"	16.0	32.0
W20-3	ROAD CLOSED AHEAD	4	48" x 48"	16.0	64.0
M4-8	DETOUR	6	24" x 12"	2.0	12.0
M4-8a	END DETOUR	2	24" x 18"	3.0	6.0
M4-9	DETOUR (ARROW L or R)	2	30" x 24"	5.0	10.0
M4-10	DETOUR ARROW (L or R)	2	48" x 18"	6.0	12.0
M5-1	ADVANCE TURN ARROW 90° (L or R)	2	21" x 15"	2.2	4.4
A	ROAD CLOSED USE ALTERNATE ROUTE South	2	48" x 84"	28.0	56.0
B	ROAD CLOSED USE ALTERNATE ROUTE North	4	48" x 84"	28.0	112.0
		CONVENTIONAL ROAD DETOUR AND RESTRICTION SIGNING SQFT			
		353.4			

**COLD APPLIED PLASTIC PAVEMENT MARKING**

All materials will be applied as per the manufacturer’s recommendations.

Cold Applied Plastic Pavement Markings will be 3M Series 380 AW or an approved equal.

**HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT**

All materials will be applied as per manufacturer’s recommendations. High build waterborne pavement marking paint will conform to the supplemental specifications for Section 980.1 B.

Reflective media will consist of glass beads. Reflective media will require a Certificate of Compliance for Certification for each source and lot. Acceptance sampling will not be required.

**RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT**

Solid 4” line = 22.5 Gals/Mile  
Dashed 4” line = 6.2 Gal/Mile  
Glass Beads = 8 Lbs/Gal.

All cost for materials, labor, and equipment necessary to furnish and install the pavement markings will be incidental to the contract unit price for the respective High Build Waterborne Pavement Marking Paint items.

**RETROREFLECTIVITY FOR PAVEMENT MARKING PAINT**

The Department may take retroreflectivity readings on the pavement marking lines after 2 days and within 30 days of the line application using either a portable or mobile retroreflectometer that conforms to 30-meter geometry. If the Department chooses to take retroreflectivity readings, three retroreflectivity readings will be taken on each line at each test location. The three readings will be averaged and become the reading for that test location.

If the Department chooses to take retroreflectivity readings, three readings will be taken on the edge lines and lane lines in the direction of application. For combination solid yellow and skip yellow lines for turn lanes and for centerline markings on two-way roadways, three readings will be taken in one direction, the reflectometer will be turned 180 degrees and three more readings will be taken. The six readings for the centerline markings will be averaged and become the test reading for that test location.

If the Department chooses to take readings, the minimum retroreflectivity values will be 275 mc/m²/lux for white and 170 mc/m²/lux for yellow.

**SURFACE PREPARATION FOR PAVEMENT MARKING**

The Contractor will prepare the pavement surface prior to applying the durable pavement marking in accordance with the following.

In areas where the existing groove meets the required depth and existing markings are still in place, the Contractor will clean the existing groove without adding additional depth beyond the required depth for the new pavement marking, including reflective media as noted below.

Description	Specification	Tolerance
Depth of Groove	Marking Thickness <sup>1</sup> + 15 mils	+ 5 mils

<sup>1</sup> Marking thickness will include the thickness of marking material and reflective media.

The cleaning will result in the existing pavement marking being adequately scuffed, abraded, and removed by light grinding or abrasive blasting or both to allow proper adhesion of the new durable pavement marking as per the manufacturer’s recommendations to comply with product warranties.

Existing grooves not meeting the required depth will be re-grooved to the required depth for the new pavement marking, including reflective media. Equipment for grooving will be capable of the following:

- Grooving the total width of the groove in one pass or uniform depths with multiple passes.
- Grooving without causing damage to the pavement joints or joint sealant material.
- Provide uniform alignment and depth.
- Moving continuously to permit a mobile traffic work operation.

All costs associated with cleaning of the existing groove, including re-grooving, if needed, will be included in the contract unit price per foot for “Surface Preparation for Pavement Marking”. Surface preparation will be measured as 4” equivalent.

**INCIDENTS**

An incident is an emergency road user occurrence, a natural disaster, or other unplanned event that affects or impedes the normal flow of traffic such as a crash, hazardous materials spill, or other event.

The Contractor will set up a meeting prior to start of work to plan and coordinate responses to an incident. The Contractor will invite the Department of Transportation, the South Dakota Highway Patrol, the Haakon County Sheriff and local emergency response entities to the meeting.

The Contractor will assist to maintain traffic as required by these plan notes and as agreed to at that meeting.

Emergency vehicle access through the project will be considered and discussed at the meeting.

The Contractor may be required to modify messages on portable changeable message signs or relocate portable changeable message signs, and to provide flaggers to direct or detour traffic. The Contractor should be prepared to relocate advance warning signs if determined to be necessary for a major traffic incident lasting more than two hours. Fixed location ground mounted signs may be covered and additional portable signs provided.



No additional payment will be made for the modification of portable changeable message sign messages or the relocation of portable changeable message signs. Cost for the relocation of an advance warning sign due to an incident will be 50% of the designated sign rate. Flaggers will be paid for at the contract unit price per hour for “Flagging”.

**PRESS RELEASE ANNOUNCEMENTS**

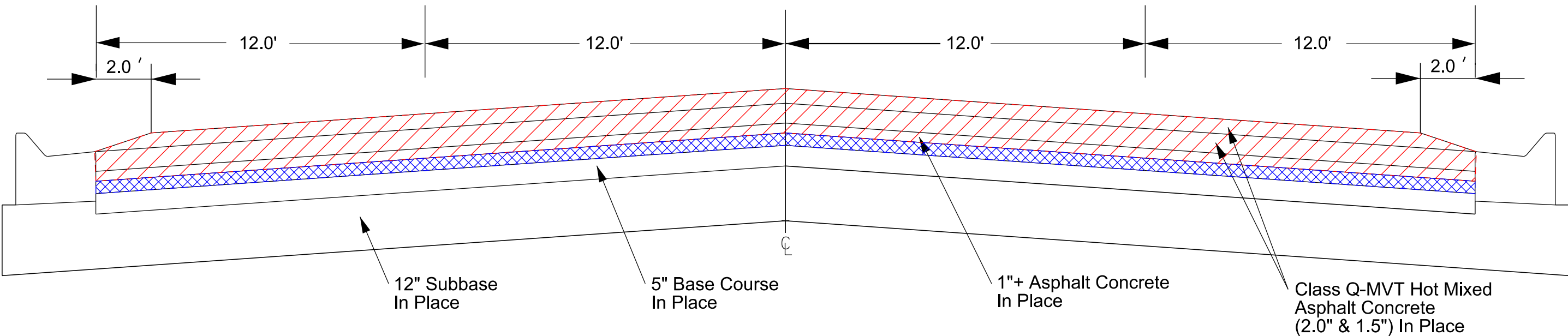
The SDDOT will prepare a press release to be released 5 days prior to any phase change or any other major change that affects traffic flow. The SDDOT will be responsible to keep law enforcement, emergency services, and the traveling public notified of changes in project access. The Contractor will provide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



# TYPICAL SURFACING SECTION - SD73

## Station 1+13 to 1+69

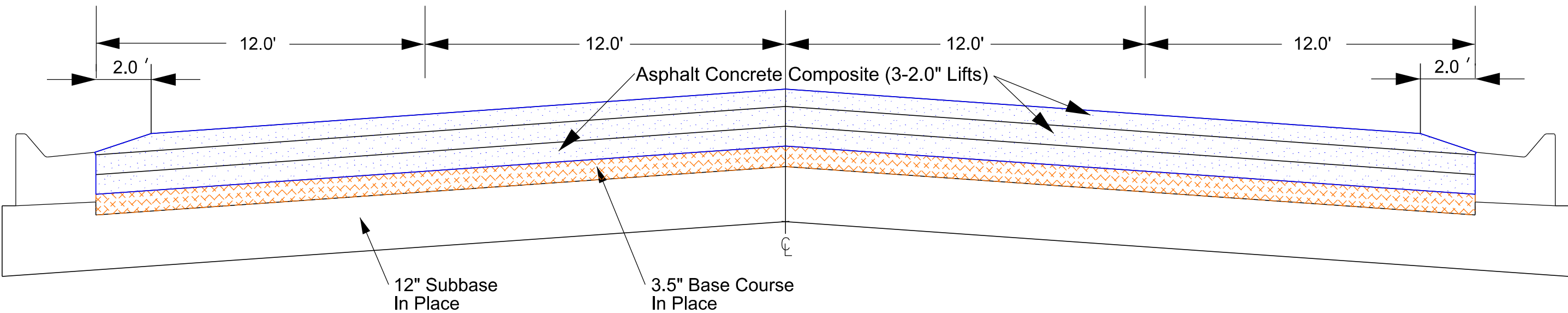
-  Remove excess Granular Material
-  Remove Existing AC

IN PLACE, REMOVE EXISTING ASPHALT CONCRETE & SURFACE PREPARATION



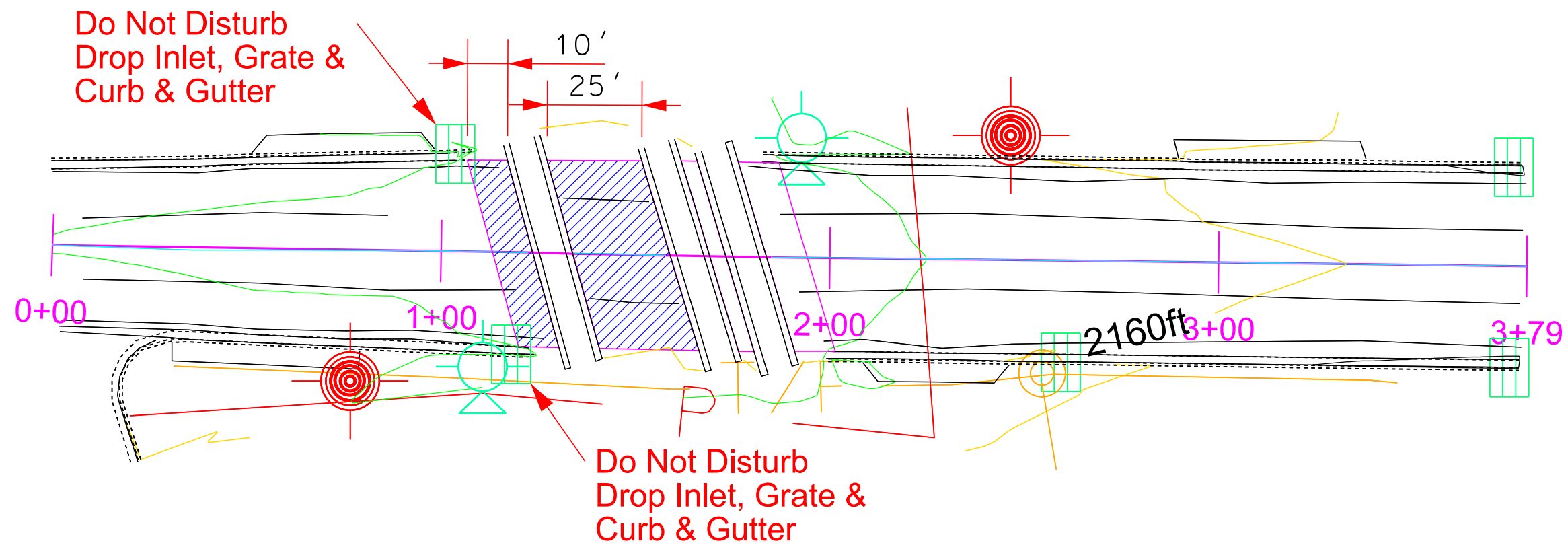
-  Asphalt Concrete Composite
-  Surface Preparation

ReSurfacing Section



# PAVING DETAILS

 REMOVE EXISTING ASPHALT CONCRETE & SURFACE PREPARTION & PLACE 6" ASPHALT CONCRETE COMPOSITE (3 - 2" Lifts)

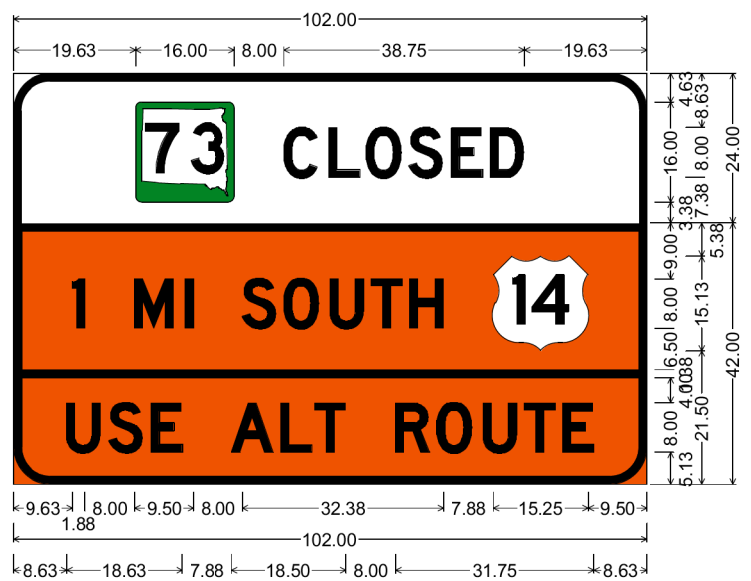


# ROAD CLOSURE LAYOUT SD73 & SIGN DETAILS

Plotting Date: 02/24/2025



A



6.00" Radius, 1.25" Border, Black on White;  
Rounded Rectangle 1.00" Radius Green;  
"CLOSED", D 2K;

6.00" Radius, 1.25" Border, Black on Orange;  
"1 MI SOUTH", D 2K; "USE ALT ROUTE", D 2K;  
Table of letter and object lefts

■	C	L	O	S	E	D
19.63	43.63	50.88	56.88	63.75	70.50	76.88

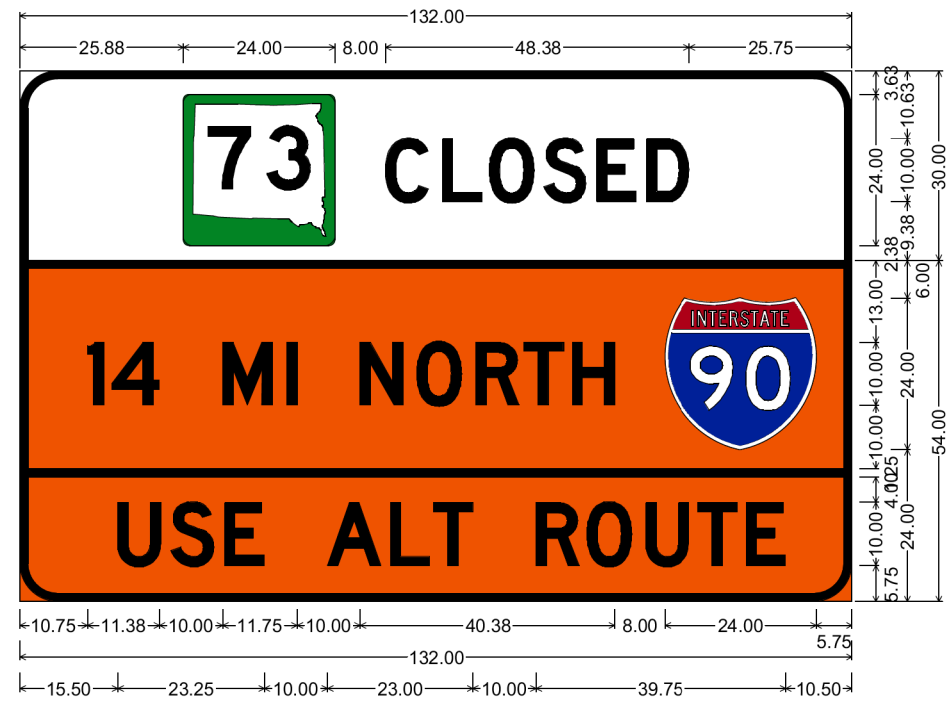
1	M	I	S	O	U	T	H	14
9.63	19.63	27.75	37.00	43.63	51.13	57.75	63.88	77.38

-0.00										
U	S	E	A	L	T	R	O	U	T	E
8.63	15.38	22.25	35.25	43.25	48.63	61.63	68.25	75.63	82.38	88.50

## GENERAL NOTES:

- 1) EXACT LOCATION OF SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER
- 2) NO ADDITIONAL PAYMENT SHALL BE MADE FOR CHANGING THE SIGNS AS CONDITIONS CHANGE DURING THE PROGRESSION OF THE PROJECT.
- 3) SIGNS TO BE FURNISHED, INSTALLED, MAINTAINED, AND REMOVED BY THE CONTRACTOR
- 4) SIGN FACE SHALL BE FLUORESCENT ORANGE AND WHITE, DIAMOND GRADE, BACKGROUND WITH BLACK VINYL LETTERING
- 5) ORANGE REFLECTIVE FLAGS SHALL BE ADDED ABOVE ALL OVERWIDTH SIGNS, CONFORMING TO SECTION 2A.11 "ENHANCED CONSPICUITY FOR STANDARD SIGNS" OF THE M.U.T.C.D. 2023 EDITION


B




6.00" Radius, 1.25" Border, Black on White;  
Rounded Rectangle 1.00" Radius Green;  
"CLOSED", D 2K;

6.00" Radius, 1.25" Border, Black on Orange;  
"14 MI NORTH", D 2K; "USE ALT ROUTE", D 2K;

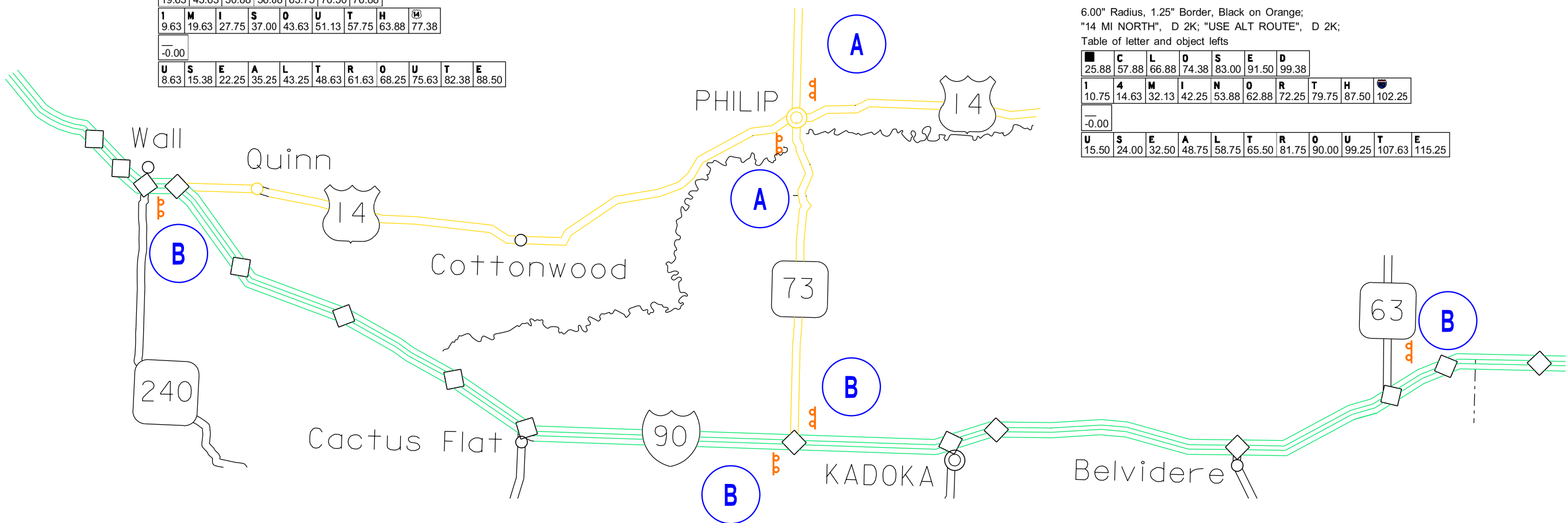
Table of letter and object lefts

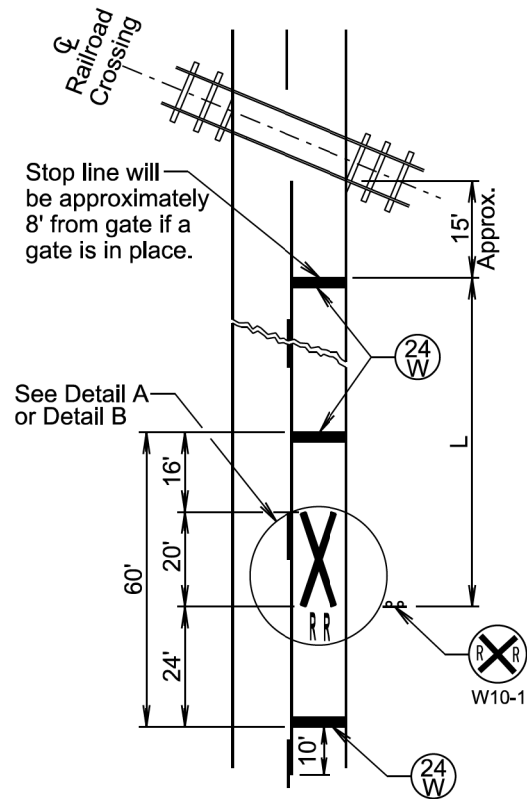
	<b>C</b>	<b>L</b>	<b>O</b>	<b>S</b>	<b>E</b>	<b>D</b>
25.88	57.88	66.88	74.38	83.00	91.50	99.38

<b>I</b>	<b>A</b>	<b>M</b>	<b>I</b>	<b>N</b>	<b>O</b>	<b>R</b>	<b>T</b>	<b>H</b>	
10.75	14.63	32.13	42.25	53.88	62.88	72.25	79.75	87.50	102.25

—
-0.00

<b>U</b>	<b>S</b>	<b>E</b>	<b>A</b>	<b>L</b>	<b>T</b>	<b>R</b>	<b>O</b>	<b>U</b>	<b>T</b>	<b>E</b>
15.50	24.00	32.50	48.75	58.75	65.50	81.75	90.00	99.25	107.63	115.25





PLAN VIEW

GENERAL NOTES:

The railroad crossing pavement markings will be placed symmetrically about the centerline of the railroad crossing. DETAIL A should be used unless the railroad crossing pavement markings are installed in existing grooves that match DETAIL B.

When pavement markings are used, a portion of the RXR symbol will be placed directly opposite of the advance warning sign W10-1.

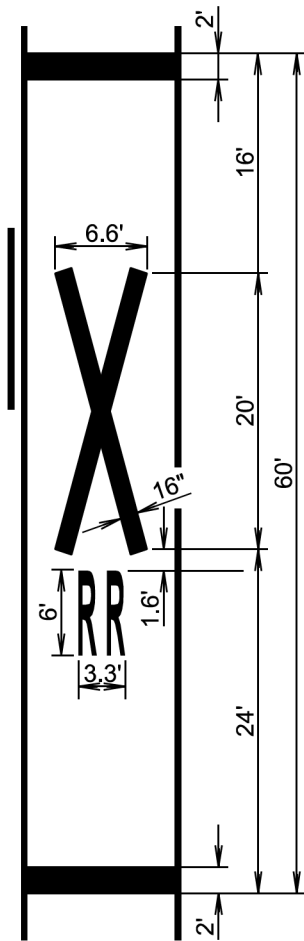
On multi-lane roads the transverse bands will extend across all approach lanes and individual RXR symbols will be placed in each approach lane.

The railroad crossing pavement markings will consist of all the transverse bands, stop lines, and RXR symbols.

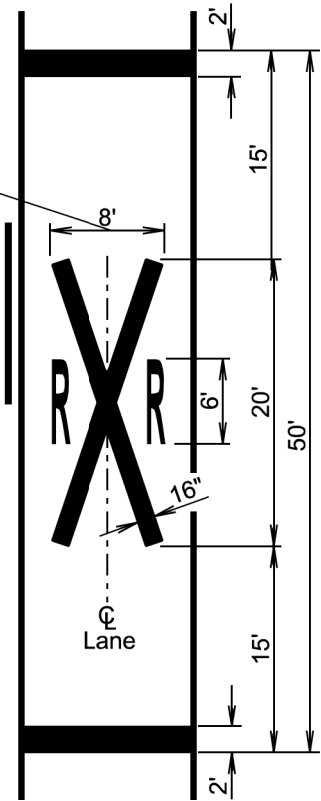
All costs for furnishing and installing the markings, materials, labor, and necessary equipment for the railroad crossing makings will be paid for at the contract unit price per gallon or per each for the type of marking material specified in the plans.

November 19, 2020

Published Date: 2025	S D D O T	PAVEMENT MARKINGS AT RAILROAD CROSSING	PLATE NUMBER 633.10
			Sheet 1 of 2



DETAIL A



DETAIL B

November 19, 2020

Published Date: 2025	S D D O T	PAVEMENT MARKINGS AT RAILROAD CROSSING	PLATE NUMBER 633.10
			Sheet 2 of 2



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) will 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 will 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.

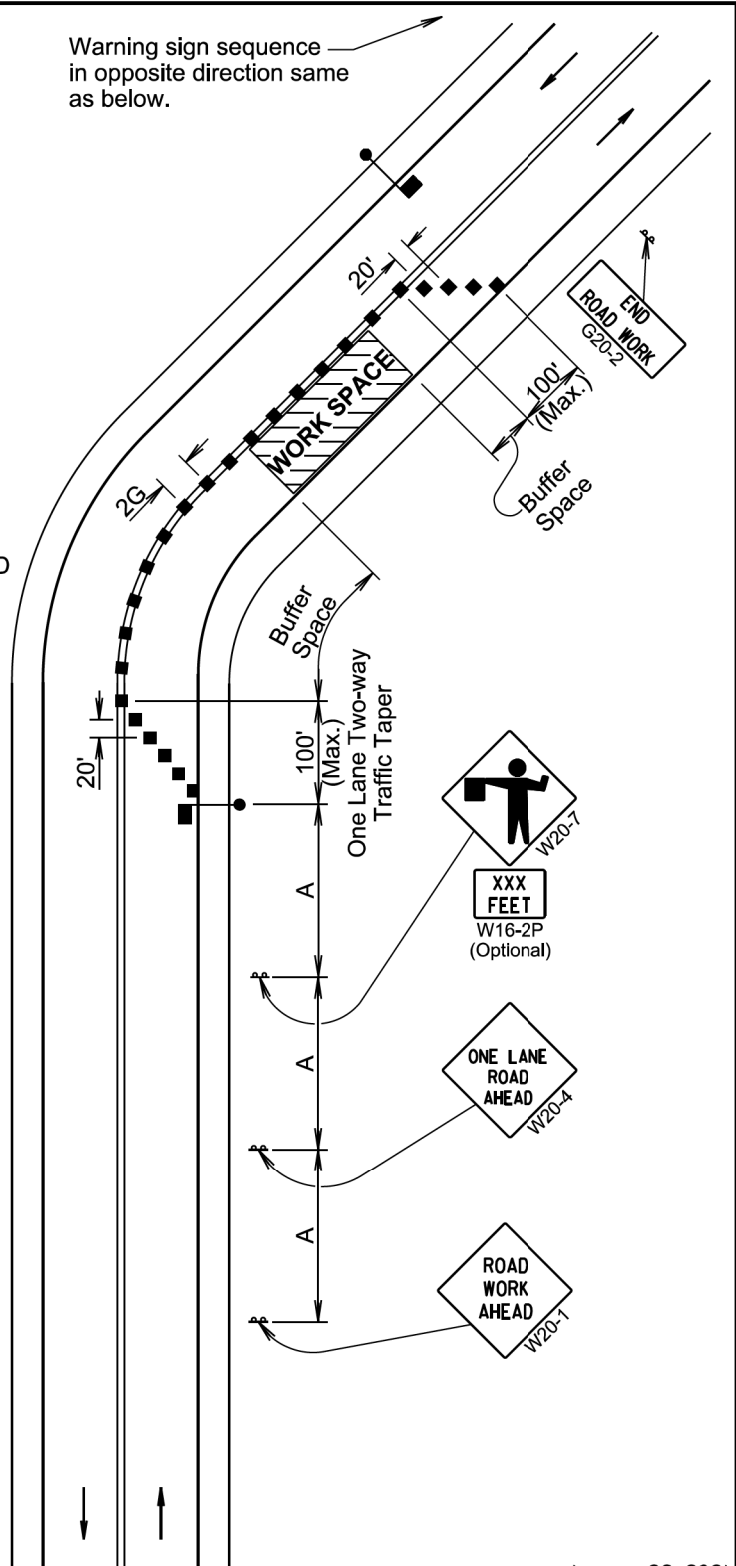
END ROAD WORK  
G20-2

Channelizing devices and flaggers will 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.

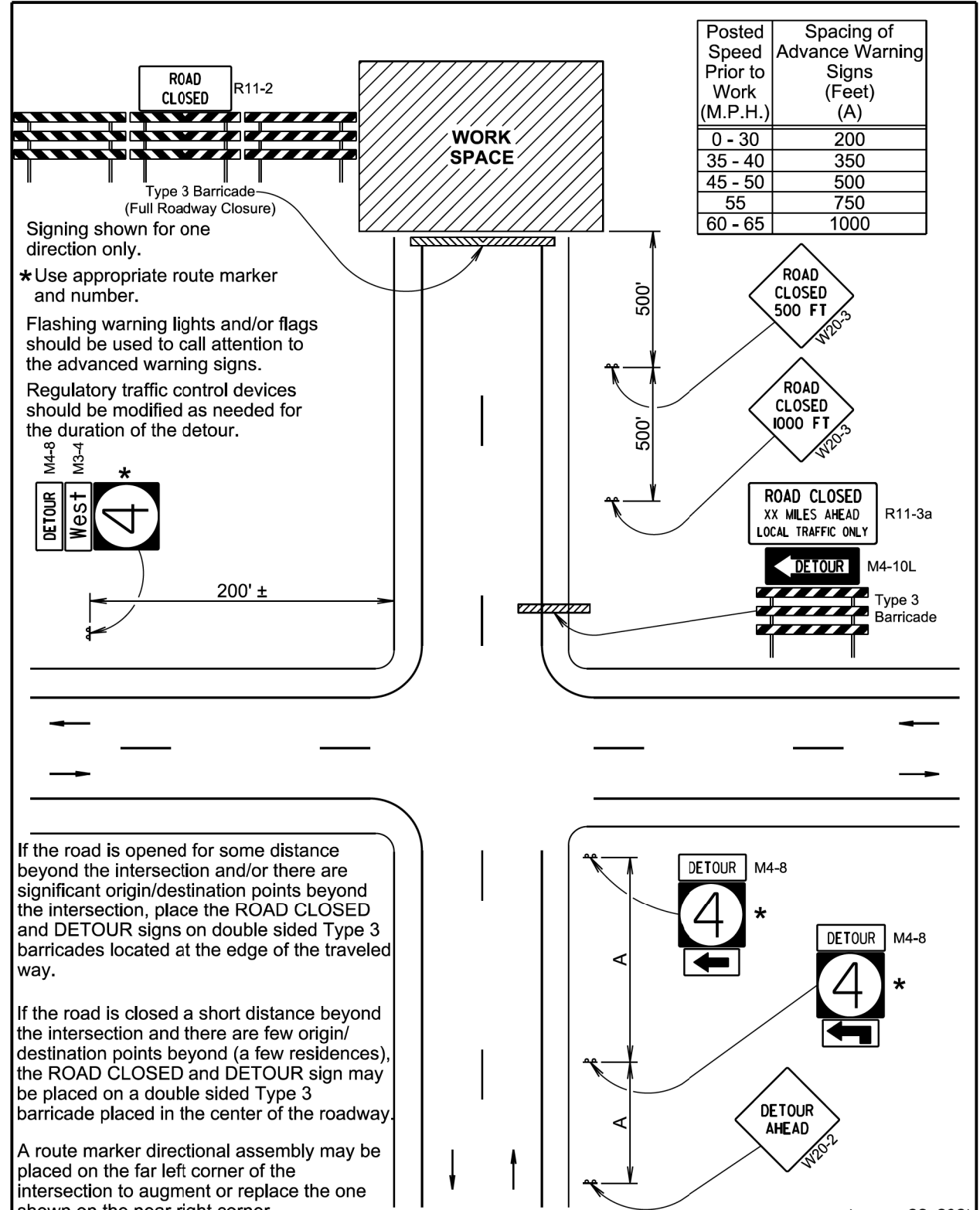
The length of A may be adjusted to fit field conditions.

Warning sign sequence in opposite direction same as below.



January 22, 2021

Published Date: 2025	S D D O T	LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER 634.23
			Sheet 1 of 1



January 22, 2021

Published Date: 2025	S D D O T	ROAD CLOSED WITH OFF-SITE DETOUR	PLATE NUMBER 634.29
			Sheet 1 of 1

The diagram illustrates the setup for temporary road work. It shows a cross-section of a road with a central 'WORK SPACE' indicated by a hatched area. On the left side of the road, signs are placed at distances 'A' from the work space. From left to right, the signs are: 'ROAD WORK AHEAD' (W20-1), 'BE PREPARED TO STOP' (W3-4), and another 'ROAD WORK AHEAD' (W20-1). Below these signs is an 'END ROAD WORK' (G20-2) sign, noted as optional. A 'Buffer Space' is indicated between the signs and the work space. On the right side of the road, a 'Flagger' is positioned near an 'END ROAD WORK' (G20-2) sign, also noted as optional. Below the main diagram, there are two tables and a note.

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

Posted Speed Prior to Work (M.P.H.)	Length of Longitudinal Buffer Space (Feet)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645

Buffer space dependent on work site limitations.

Conditions represented are for work that requires closings during daytime hours only.

This application is intended for a planned temporary closing not to exceed 15 to 20 minutes.

January 22, 2021

**S**  
**D**  
**D**  
**O**  
**T**

**TEMPORARY ROAD WORK**

**PLATE NUMBER**  
**634.30**

*Published Date: 2025*

Sheet 1 of 1

The diagrams show three types of sign supports: 1. 'RURAL DISTRICT' shows a diamond-shaped sign on a post with a height of 5' (Min.) to 7' (Min.) and a horizontal offset of 6' to 12'. 2. 'RURAL DISTRICT WITH SUPPLEMENTAL PLATE' shows a diamond-shaped sign with a supplemental plate below it, with heights of 4' (Min.), 5' (Min.), and 7' (Min.) for the plate, and a horizontal offset of 6' to 12'. A 'Paved Shoulder' is indicated. 3. 'URBAN DISTRICT' shows a diamond-shaped sign on a post with a height of 5' \* (Min.) to 7' (Min.) and a horizontal offset of 2' (Min.). A 'Walkway' is indicated. 4. 'RURAL DISTRICT 3 DAY MAXIMUM' shows a diamond-shaped sign on a post with a height of 6' (Min.) and a horizontal offset of 6' (Min.). A note states 'Sign will be level.' and '(Not applicable to regulatory signs)'. A footnote states: '\* 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

**S**  
**D**  
**D**  
**O**  
**T**

**CRASHWORTHY SIGN SUPPORTS**  
**(Typical Construction Signing)**

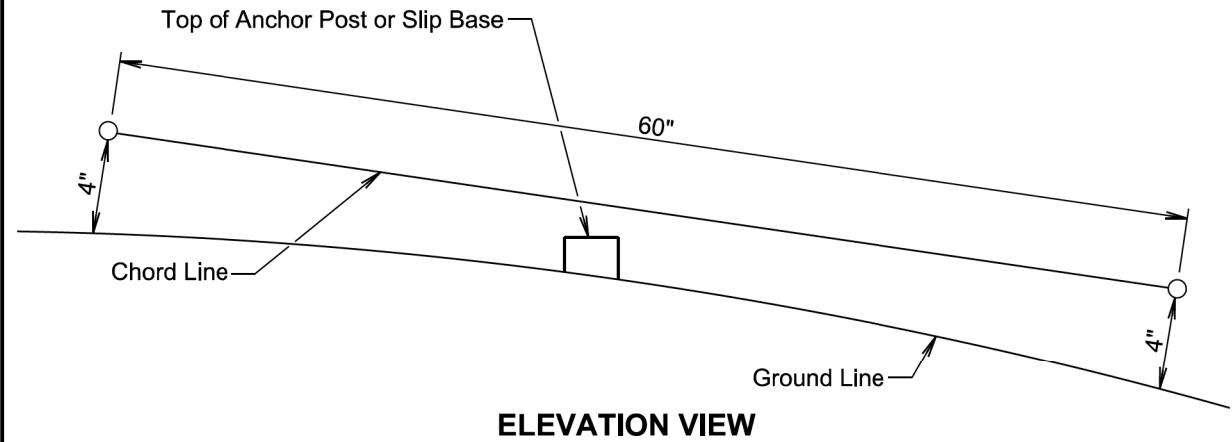
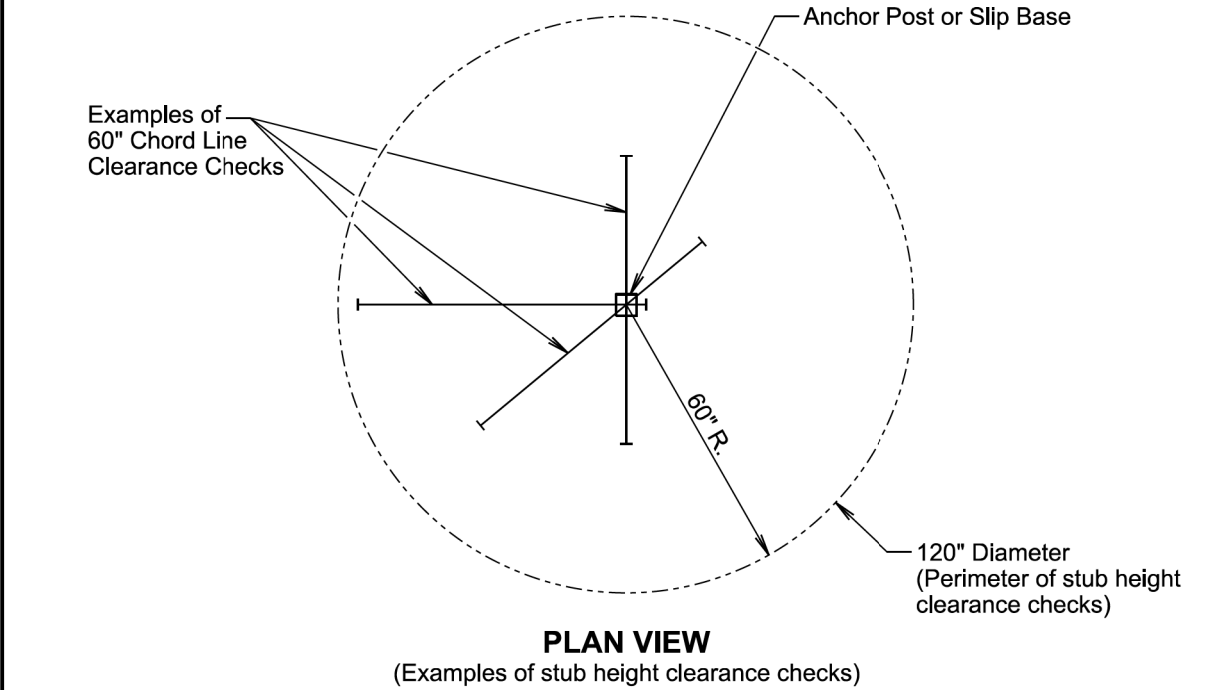
**PLATE NUMBER**  
**634.85**

*Published Date: 2025*

Sheet 1 of 1

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-PS 0073(83)92	11	11

Plotting Date: 02/14/2025



**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

<i>Published Date: 2025</i>	<b>S D D O T</b>	<b>BREAKAWAY SUPPORT STUB CLEARANCE</b>	PLATE NUMBER <b>634.99</b>
			Sheet 1 of 1