

PROJECT

① SD 75, MRM 213.65 to MRM 242.99

DESIGN DESIGNATION

ADT (2024)	240
ADT (2044)	359
DHV	57
D	50%
T DHV	8.3%
T ADT	18.1%
V	65 MPH

STORM WATER PERMIT

No Permit Required

Gross Length 29.352 Miles
Length of Exceptions 0.000 Miles
Net Length 29.352 Miles

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT P 0042(103)
SD HIGHWAY 75
PERKINS COUNTY

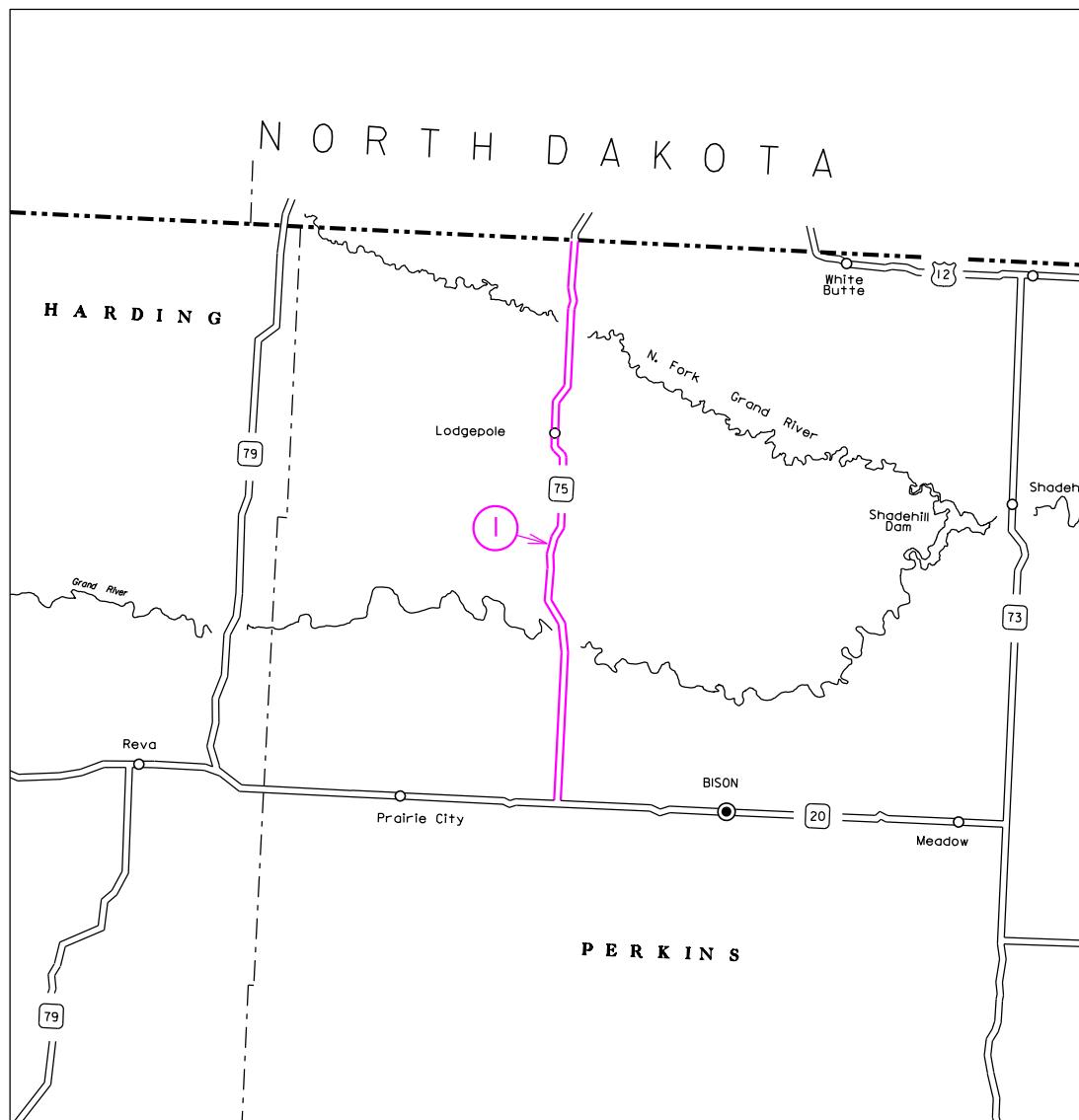
ASPHALT CONCRETE CRACK LEVELING
PCN 09WY

	PROJECT	SECTION	SHEET
	P 0042(103)	Non	1/8

Plotting Date: 1/26/2026

INDEX OF SHEETS

1	General Layout with Index
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March 18, 2026

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	LS
320E0402	Asphalt Repair Mastic Type 2	76,612	Lb
350E0010	Asphalt Concrete Crack Sealing	52,160	Lb
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	7,770	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	3,885	Ft
634E0010	Flagging	300.0	Hour
634E0020	Pilot Car	150.0	Hour
634E0110	Traffic Control Signs	120.2	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

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: WOOPING 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.

COMMITMENT H: WASTE DISPOSAL SITE

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 Environment 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 completely 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 of time not to exceed the duration of the project. Prior to project completion, the waste shall 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.

ESTIMATED QUANTITIES FOR ASPHALT CONCRETE CRACK LEVELING

The quantities of mastic for crack leveling are based off the following criteria:

1/8" avg. depth x 6" wide x 132,090 linear feet of transverse cracks = 660 cubic feet.

A unit weight of 116 lbs./cuft was used for estimating purposes. Provided in the estimate of quantities is 76,612 lbs. of "Asphalt Repair Mastic Type 2".

TABLE OF CRACK LEVELING QUANTITIES

Highway	MRM to	MRM	Length (Miles)	Asphalt Repair Mastic Type 2 (Lb)
SD75	213.65+	0.000	242.99+	0.000
		Total	29.352	76,612

ROADWAY CLEANING

The Contractor will be responsible for removing the router tailings from the roadway surface, including shoulders, intersecting roads, median crossovers, sidewalks, etc. as directed by the Engineer.

A Pickup Broom will be required to remove the router tailings from the project as per Sec. 360.3.B.1. All costs associated with this work will be incidental to the various bid items on the project.

CRACK SEALING

All quantities are based on a factor of 0.4 lbs. of sealant per 1 foot of existing crack. Actual quantities used may vary depending upon the location and width of the existing crack. Rates may vary as directed by the Engineer.

The Typical Reservoir Section will be 3/4 inch wide x 3/4 inch deep.

The use of a squeegee will not be allowed on this project except for locations where the sealant begins to run out of the routed crack due to the grade or superelevation of the road and at locations where cracks are less than 6" apart. The squeegee will be used to push the sealant material back into the crack and remove as much sealant as possible from the roadway surface at these locations.

At locations with multiple cracks less than 6" apart, route only the widest crack. Routing will not be required to seal the remaining cracks. Trace these remaining cracks with sealant and use a squeegee to level and fill.

Crack Sealing will not be needed at the Crack Leveling locations. Crack depreciation less than 1/8" will be crack sealed. Crack leveling will be required at the locations that exceed 1/8" depth.

TABLE OF CRACK SEAL QUANTITIES

Highway	MRM to	MRM	Length (Miles)	Asphalt Concrete Crack Sealing (Lb)
SD75	213.65+	0.000	242.99+	0.000
		Total	29.352	52,160

TABLE OF EXCEPTIONS

Highway	MRM	Structure Number or Other	Length (ft)
US212	126.36	69105289	74
US212	40.63	10324337	151
US212	44.91	10357312	192
		Total	417

RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

Solid 4" line = 27.8 Gals/Mile
Dashed 4" line = 7.6 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.

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 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.

It is estimated that 1' of pavement marking will be needed where it's been disturbed by the crack leveling work. It is estimated that 3885 cracks will need leveling on the project.

- Yellow marking – 1 x 3885 x 1' = 3885'
- White marking – 2 x 3885 x 1' = 7770

SEQUENCE OF OPERATIONS

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.

Work will proceed according to the following sequence:

Install Traffic Control
Perform Asphalt Crack Sealing
Perform Asphalt Crack Leveling
Install Pavement Marking
Remove Traffic Control

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.

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.

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

Traffic will be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment will be repaired at no expense to the Department.

FLAGGING

Operations will be conducted so that the traveling public will not have to wait longer than 15 minutes at the flagger station.

Included in the Estimate of Quantities are WAIT FOLLOW PILOT CAR signs for use on low volume intersecting roads as determined by the Engineer. WAIT FOLLOW PILOT CAR signs will not block the view of the stop sign.



It is required that the flaggers and pilot car operators be able to communicate with one another. If an emergency vehicle needs to pass through the project, the Contractor will be required to expedite traffic movement. All costs associated with this will be incidental to the contract unit price per hour for "Flagging".

INVENTORY OF TRAFFIC CONTROL DEVICES SD75, MRM 213.65 to MRM 242.99

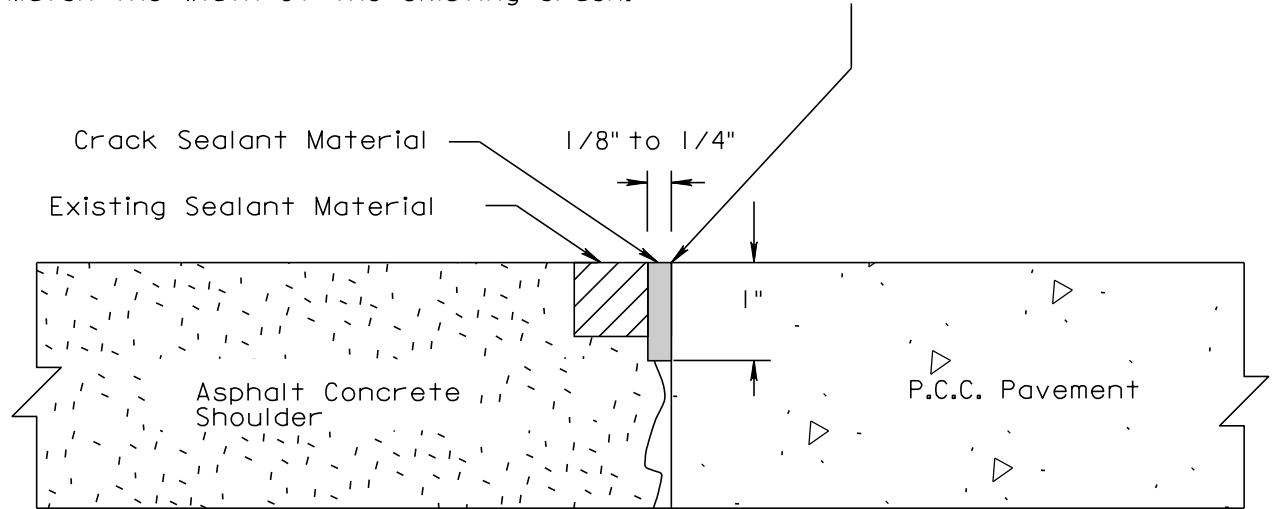
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
SPECIAL	WAIT FOLLOW PILOT CAR	4	30" x 18"	3.8	15.2
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT 120.2					

CRACK SEALING SHOULDER JOINT ADJACENT TO PCC PAVEMENT

If spalling of the PCC Pavement occurs or the existing sealant is damaged during routing, the Contractor will switch to sawing.

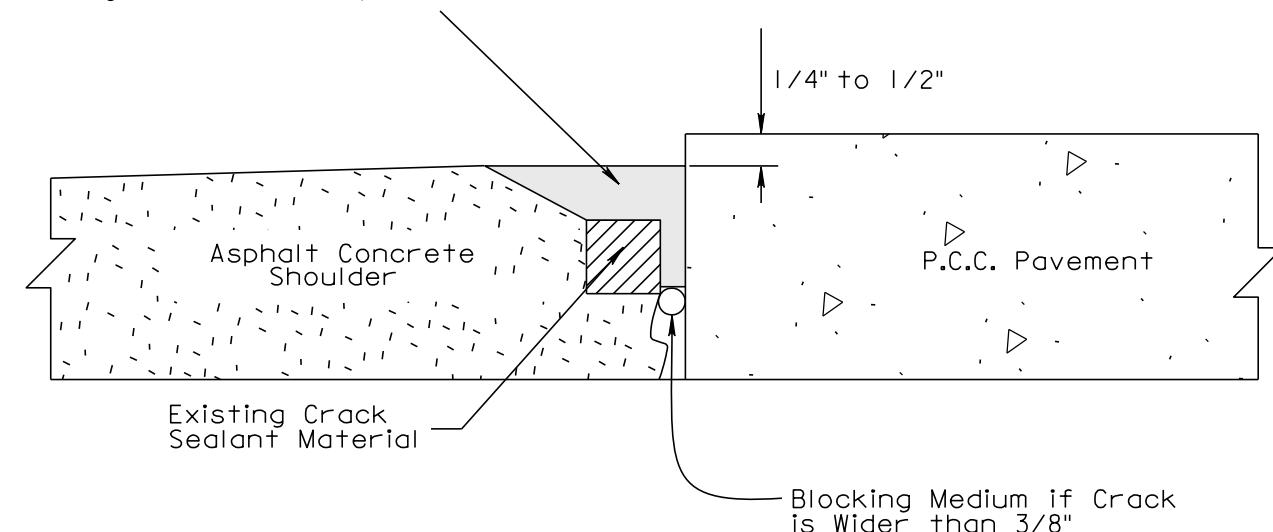
If the existing sealant is easily removed during routing, remove and replace the existing sealant.

If the crack is greater than $1/4"$, routing will not be required. Match the width of the existing crack.

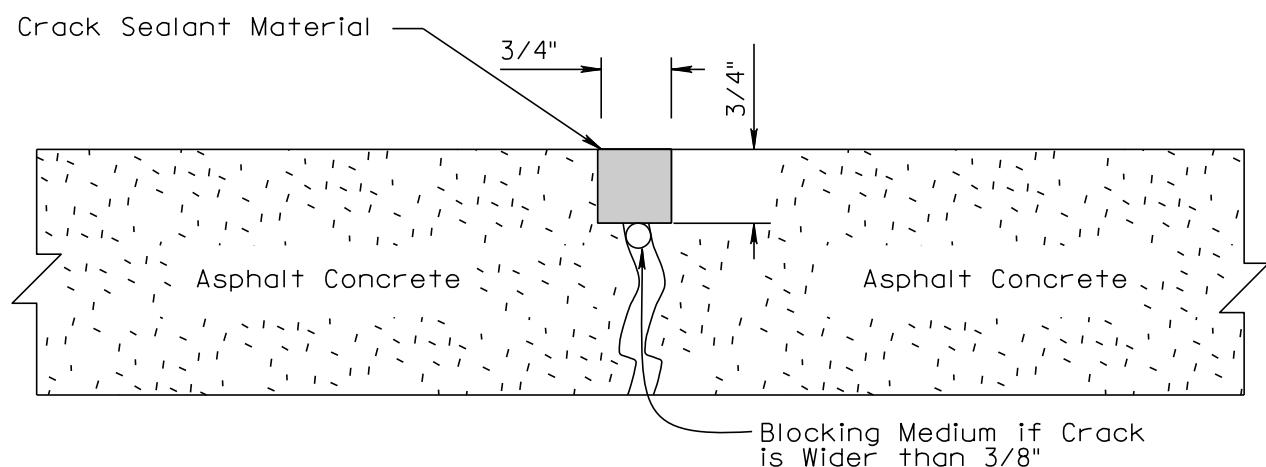


CRACK SEALING SHOULDER JOINT ADJACENT TO PCC PAVEMENT with SETTLEMENT

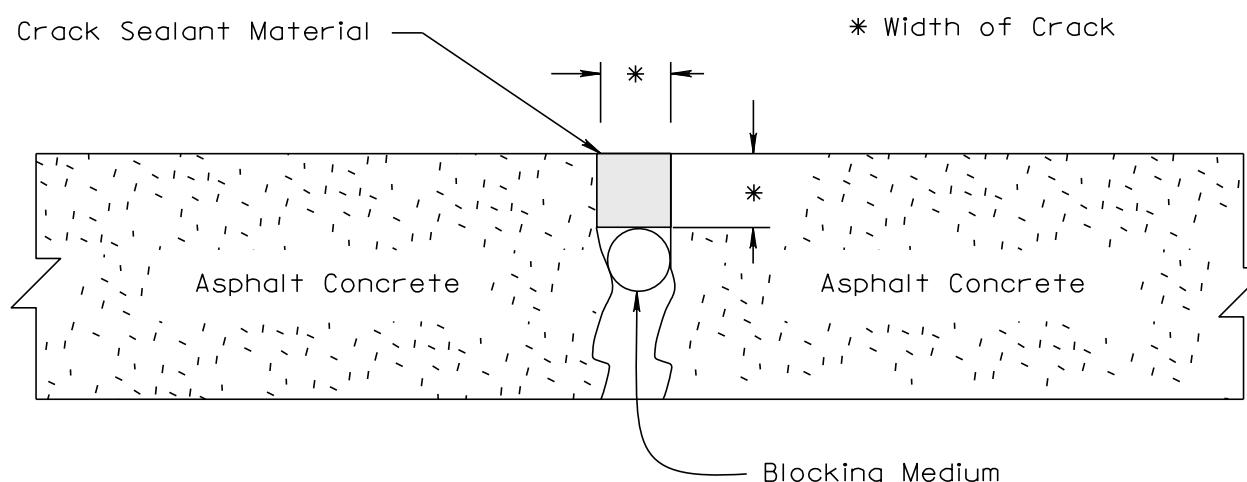
Remove Vegetation, Clean and Seal Crack. Routing will not be required.



CRACK SEALING FOR CRACKS LESS THAN 3/4" WIDTH (ROUTING REQUIRED)

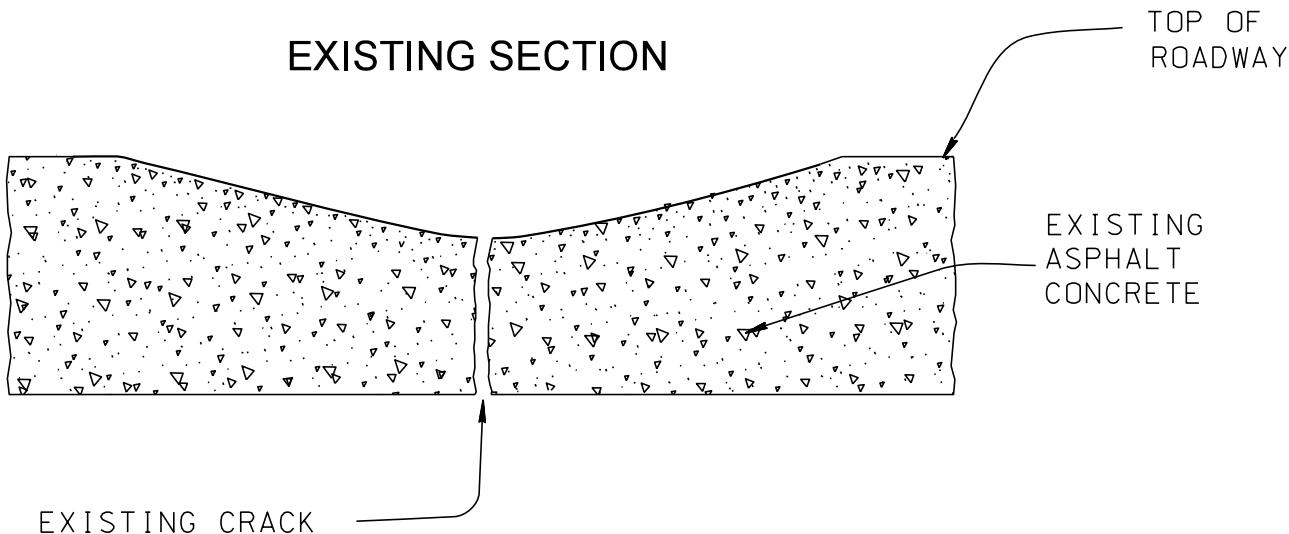


CRACK SEALING FOR CRACKS 3/4" OR GREATER WIDTH (ROUTING NOT REQUIRED)

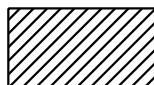
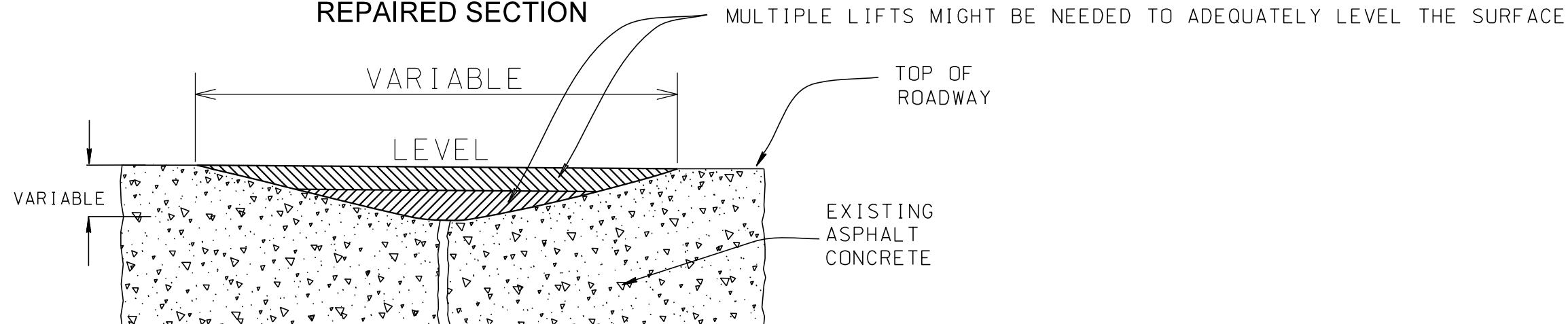


TYPICAL SECTION FOR CRACK LEVELING

EXISTING SECTION



REPAIRED SECTION



ASPHALT REPAIR MASTIC

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.

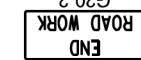
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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.

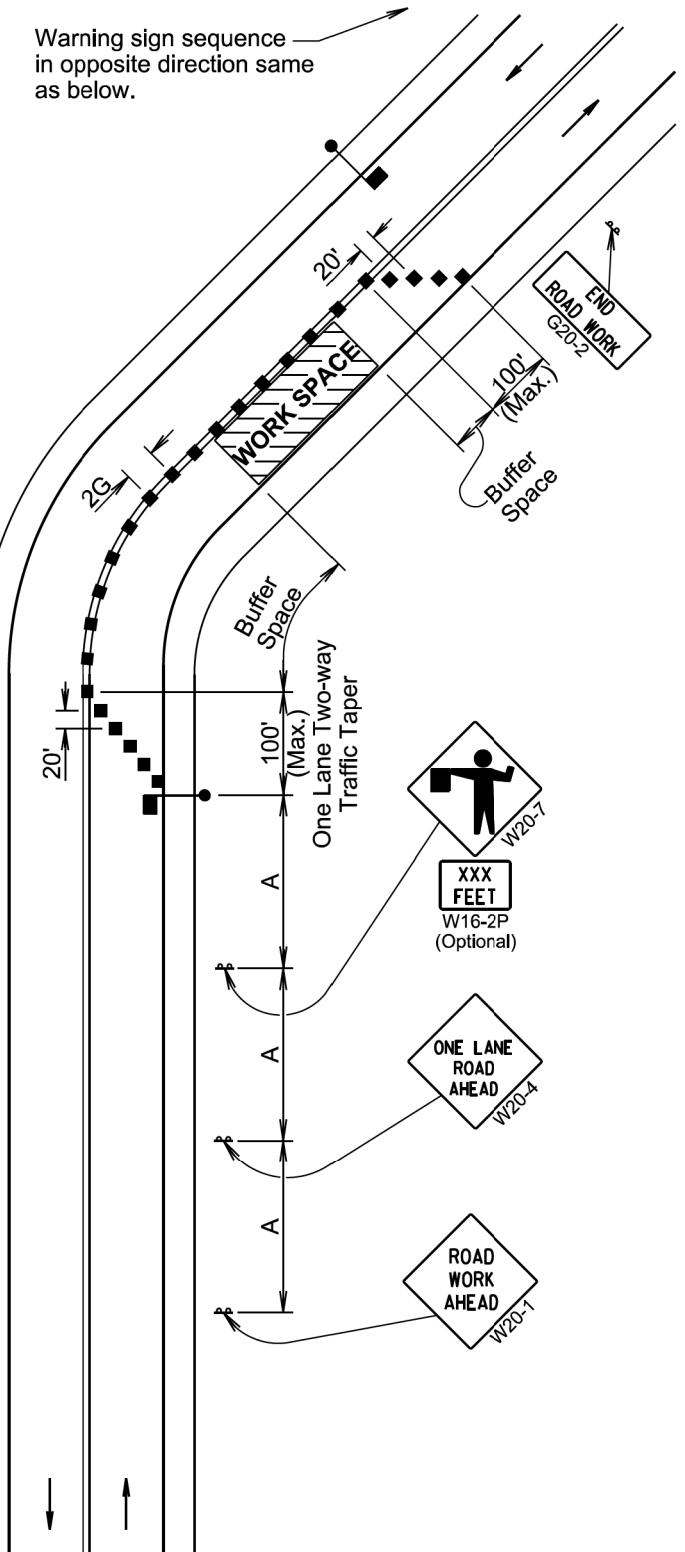
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.



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.



January 22, 2021

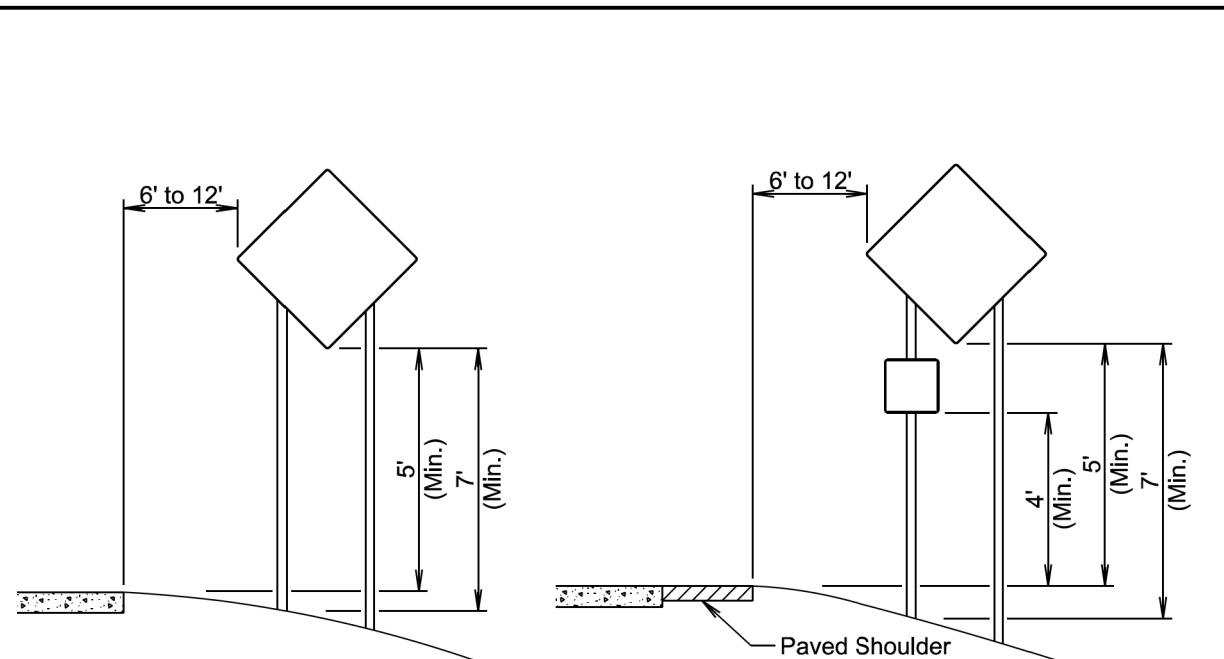
Published Date: 2026



LANE CLOSURE WITH FLAGGER PROVIDED

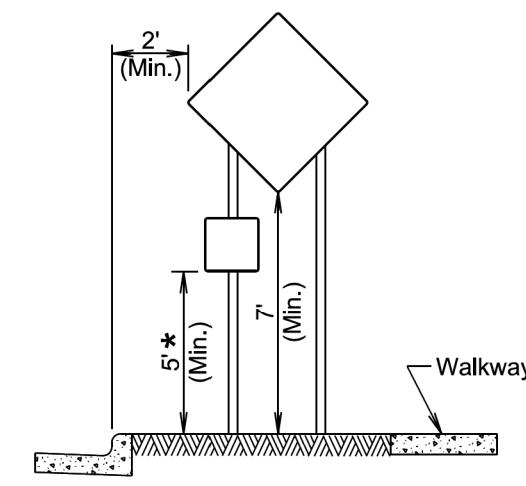
PLATE NUMBER
634.23

Sheet 1 of 1

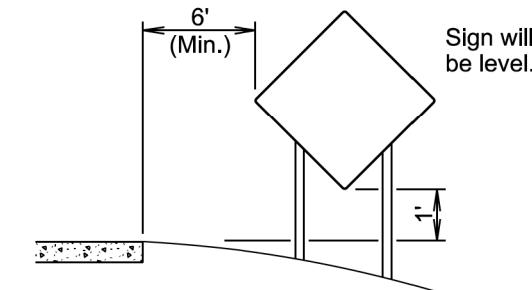


RURAL DISTRICT

RURAL DISTRICT WITH
SUPPLEMENTAL PLATE



URBAN DISTRICT



RURAL DISTRICT
3 DAY MAXIMUM

(Not applicable to regulatory signs)

January 22, 2021

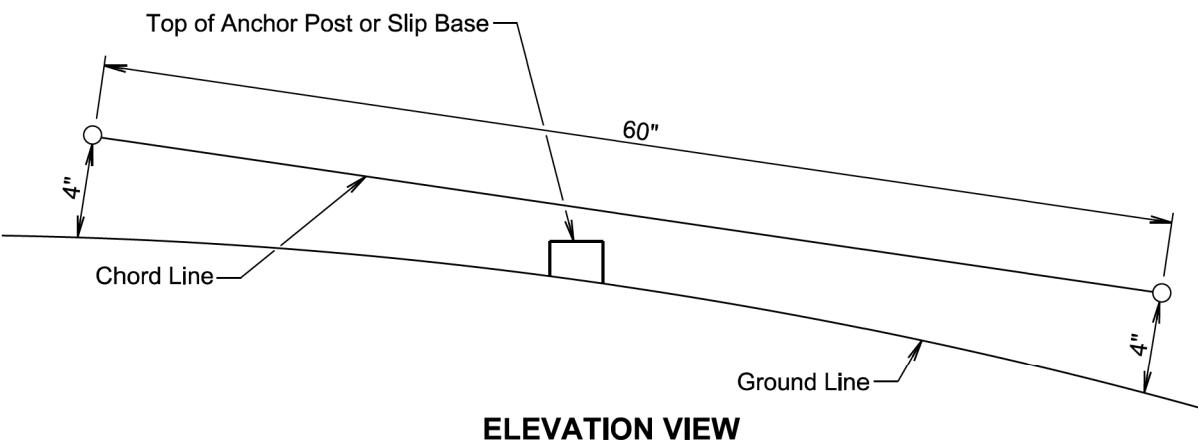
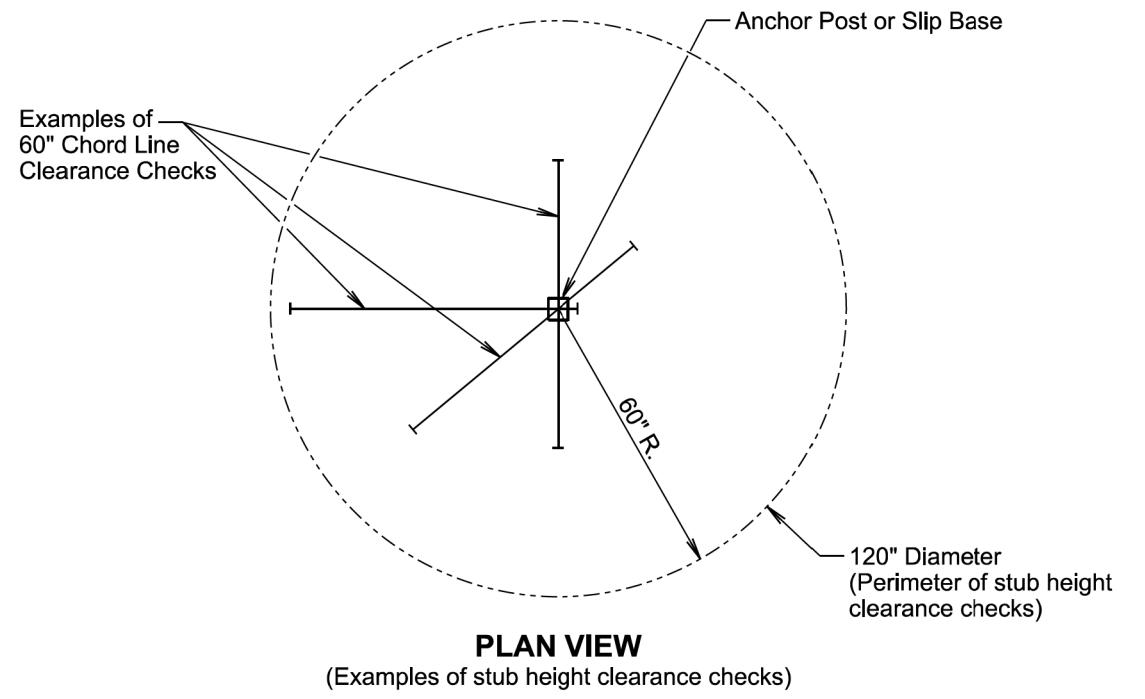
Published Date: 2026



CRASHWORTHY SIGN SUPPORTS
(Typical Construction Signing)

PLATE NUMBER
634.85

Sheet 1 of 1



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: 2026	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99 Sheet 1 of 1
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