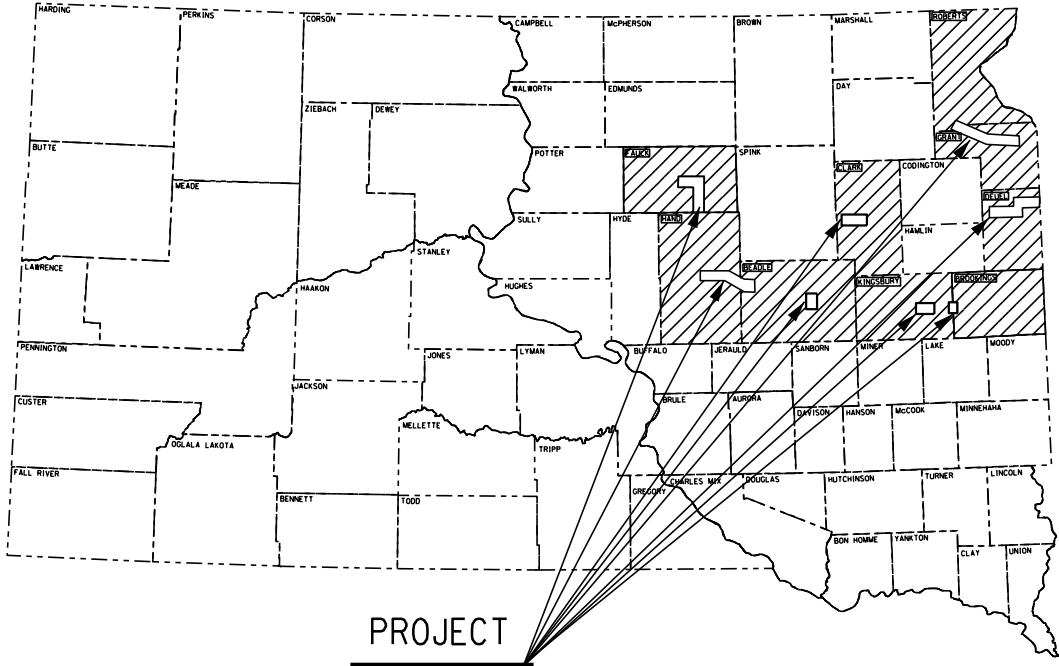


PLOT SCALE - 1:17299.5

PLOTTED FROM - TRAB17901



STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
PROJECT PH 0010(229)
US HIGHWAYS 12, 14, & 212
SD HIGHWAY 37
BEADLE, CLARK,
DEUEL, FAULK, GRANT,
HAND, KINGSBURY, BROOKINGS
& ROBERTS COUNTIES

CENTERLINE RUMBLE STRIPES
PCN 09FN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	1	32
Plotting Date: 01/26/2024			

INDEX OF SECTIONS

- Sheets 1-8: Title Sheets/Segment Maps
Sheets 9-10: Estimate of Quantities & Environmental Commitments
Sheet 11: Table of Quantities
Sheets 12-14: Plan Notes
Sheets 15-17: Traffic Control
Sheet 18: Pavement Marking Details
Sheets 19-24: Pavement Marking Layouts
Sheets 25-29: Rumble Stripe/Strip Layouts
Sheet 30: Centerline Joint Detail
Sheets 31-32: Standard Plates

US HIGHWAY 12
GRANT COUNTY
MRM 367.00+0.035 TO MRM 387.00+0.500

US HIGHWAY 14
HAND & BEADLE COUNTIES
MRM 302.00+0.120 TO MRM 320.00+0.516

US HIGHWAY 14
KINGSBURY COUNTY
MRM 388.00+0.423 TO MRM 392.00+0.041

SD HIGHWAY 37
BEADLE COUNTY
MRM 129.00+0.864 TO MRM 133.00+0.329

US HIGHWAY 212
FAULK COUNTY
MRM 267.00+0.431 TO MRM 282.00+0.050

US HIGHWAY 212
CLARK COUNTY
MRM 338.00+0.440 TO MRM 344.00+0.661

US HIGHWAY 212
DEUEL COUNTY
MRM 389.00+0.288 TO MRM 412.00+0.040

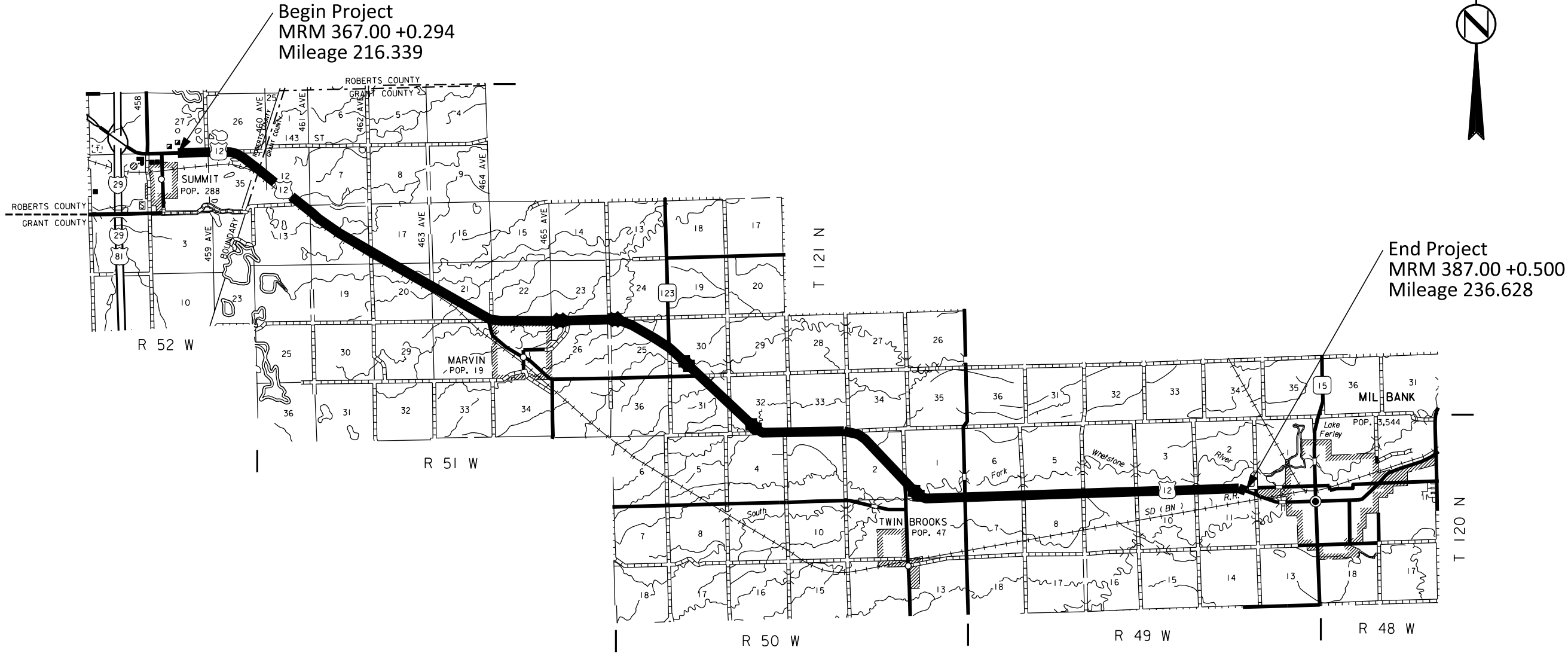
US HIGHWAY 14
KINGSBURY & BROOKINGS COUNTIES
EB MRM 402.00+1.046 TO EB MRM 403.09+0.220
WB MRM 402.94+0.010 TO WB MRM 403.09+0.220

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	2	32
Plotting Date: 02/12/2024			

US Highway 12

Grant & Roberts Counties

SEGMENT 1



DESIGN DESIGNATION

AADT (2022)	1477
AADT (2042)	2304
DHV	256
D	50
DHV T%	11.6%
AADT T%	25.6%
V	65 MPH

GROSS LENGTH	107,125.92 FEET	20.289MILES
LENGTH OF EXCEPTIONS	0.00 FEET	0.000MILES
NET LENGTH	107,125.92 FEET	20.289MILES

PLOT SCALE - 1:10215.2

PLOTTED FROM - TRAB17901

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	3	32
Plotting Date: 01/26/2024			

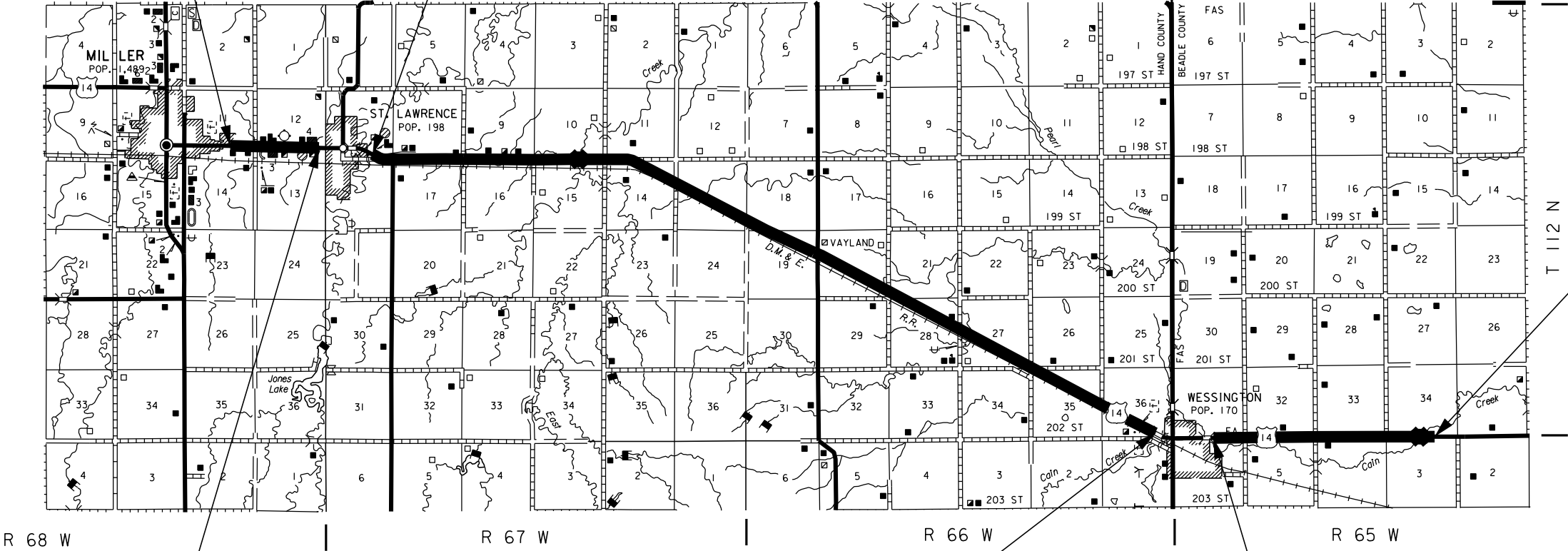
US Highway 14

Hand & Beadle Counties

SEGMENT 2

Begin Project
MRM 302.00 +0.120
Mileage 183.046

End Exception
MRM 303.77 +0.000
Mileage 184.746



End Project
MRM 320.00 +0.516
Mileage 201.457

Begin Exception
MRM 303.00 +0.375
Mileage 184.301

Begin Exception
MRM 316.21 +0.159
Mileage 197.300

End Exception
MRM 316.21 +0.543
Mileage 197.684

DESIGN DESIGNATION

AADT (2022)	1280
AADT (2042)	1743
DHV	225
D	50
DHV T%	8.3%
AADT T%	18.2%
V	65 MPH

GROSS LENGTH	97,210.08 FEET	18.41 MILES
LENGTH OF EXCEPTIONS	4,377.12 FEET	0.829 MILES
NET LENGTH	92,832.96 FEET	17.582 MILES

PLOT NAME - 3

FILE - ... \BEAD09\FN\09FN TITLE SHEET.DGN

PLOT SCALE - 1:11350.2

PLOTTED FROM - TRAB17901

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	4	32
Plotting Date: 01/26/2024			

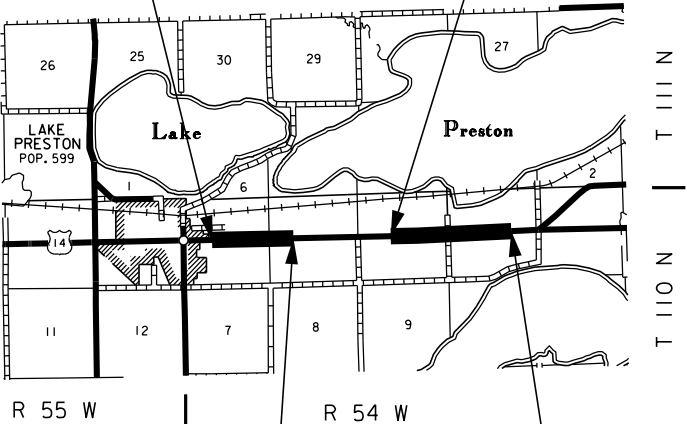
US Highway 14 Kingsbury County SEGMENT 3

SD Highway 37 Beadle County SEGMENT 4



Begin Project
MRM 388.00 +0.423
Mileage 260.881

End Exception
MRM 390.00 +0.490
Mileage 262.971



Begin Exception
MRM 389.00 +0.400
Mileage 261.883

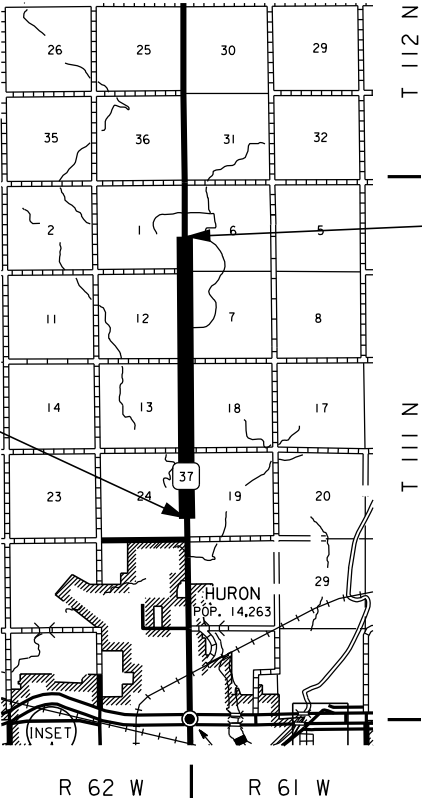
End Project
MRM 392.00 +0.041
Mileage 264.442

DESIGN DESIGNATION

AADT (2022)	2017
AADT (2042)	2904
DHV	602
D	50
DHV T%	9%
AADT T%	19.7%
V	65 MPH

GROSS LENGTH	18,802.08 FEET	3.561 MILES
LENGTH OF EXCEPTIONS	5744.64 FEET	1.088 MILES
NET LENGTH	13057.44 FEET	2.473 MILES

Begin Project
MRM 129.00 +0.864
Mileage 76.308



End Project
MRM 133.00 +0.329
Mileage 79.757

DESIGN DESIGNATION

AADT (2022)	1806
AADT (2042)	2700
DHV	559
D	50
DHV T%	4.2%
AADT T%	9.3%
V	65 MPH

GROSS LENGTH	18,210.72 FEET	3.449 MILES
LENGTH OF EXCEPTIONS	0.00 FEET	0.000 MILES
NET LENGTH	18,210.72 FEET	3.449 MILES

PLOT NAME - 4

FILE - ... \BEAD09FN\09FN TITLE SHEET.DGN

PLOT SCALE - 1:10215.2

PLOTTED FROM - TRAB17901

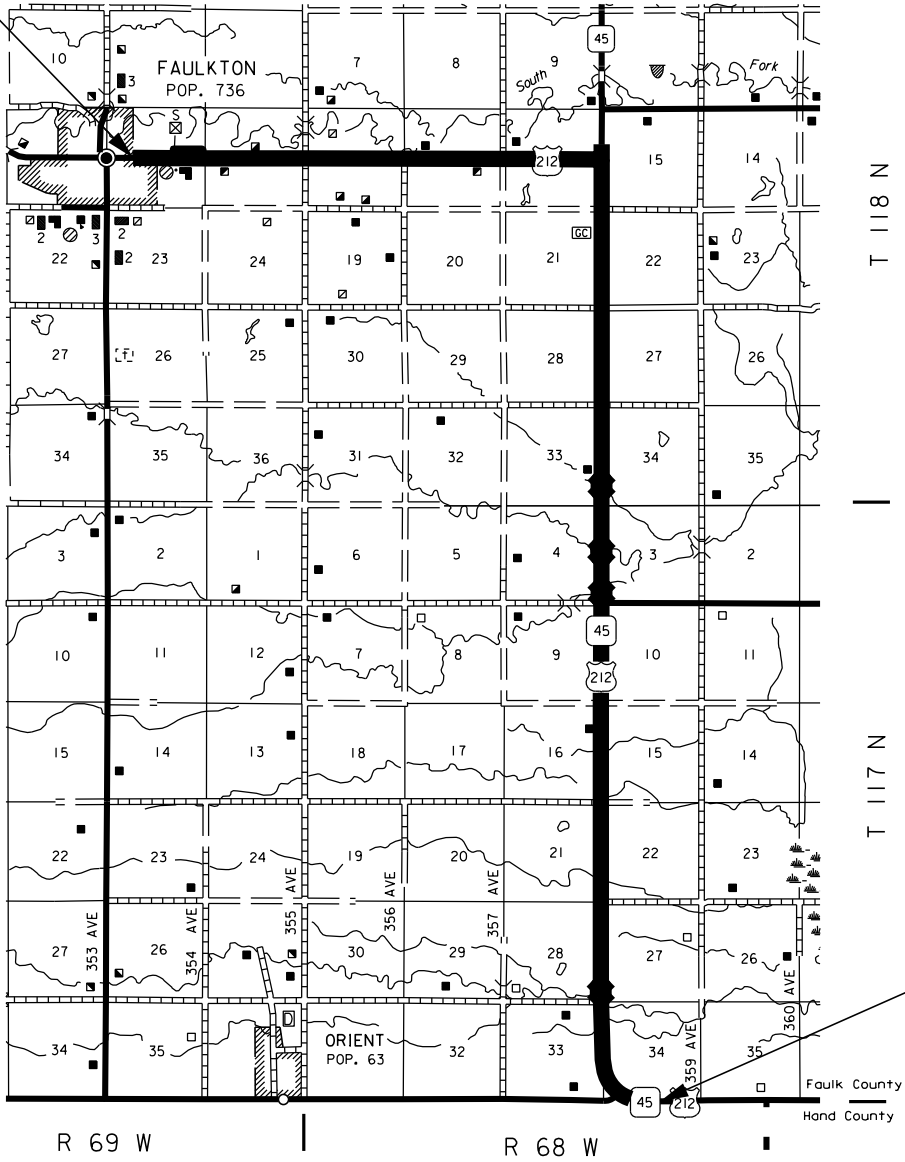
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	5	32
Plotting Date: 01/26/2024			

US Highway 212

Faulk County

SEGMENT 5

Begin Project
MRM 267.00 +0.431
Mileage 266.603



End Project
MRM 282.00 +0.050
Mileage 281.187

DESIGN DESIGNATION

AADT (2022)	818
AADT (2042)	1181
DHV	131
D	51
DHV T%	9.4%
AADT T%	20.7%
V	65 MPH

GROSS LENGTH	77,003.52 FEET	14.584 MILES
LENGTH OF EXCEPTIONS	0.00 FEET	0.000 MILES
NET LENGTH	77,003.52 FEET	14.584 MILES

FILE - ... \BEAD09FN\09FN TITLE SHEET.DGN

PLOT NAME - 5

PLOT SCALE - 1:6702.19

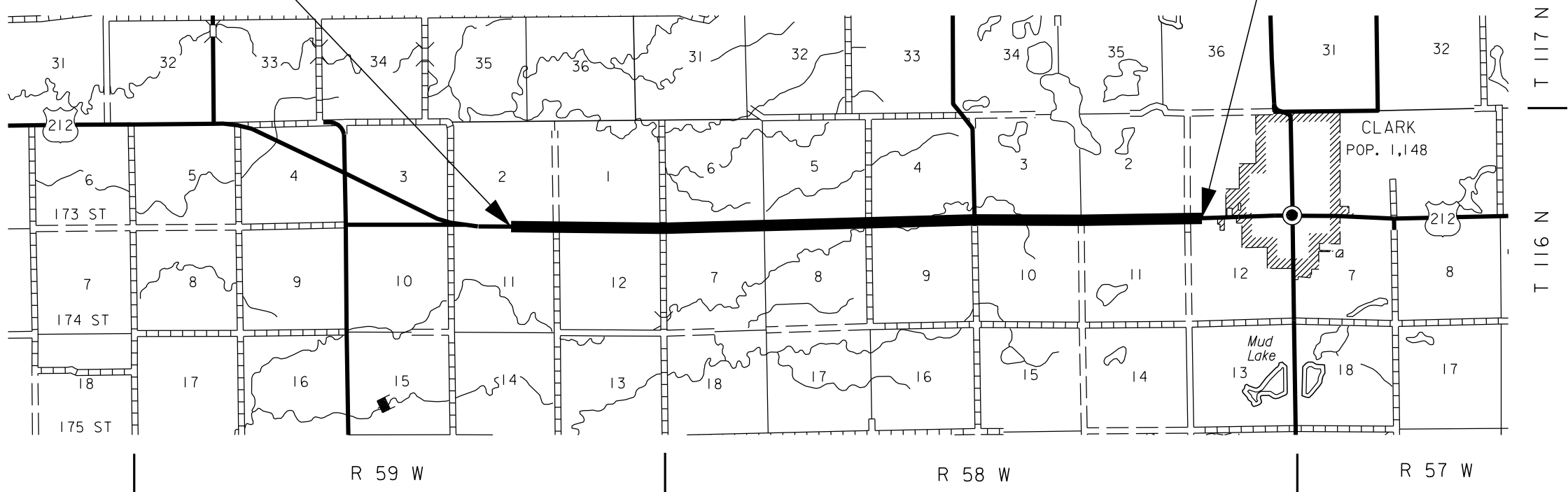
PLOTTED FROM - TRAB17901

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	6	32
Plotting Date: 01/26/2024			

US Highway 212 Clark County Segment 6

Begin Project
MRM 338.00 +0.440
Mileage 337.589

End Project
MRM 344.00 +0.661
Mileage 343.857



DESIGN DESIGNATION

AADT (2022)	2225
AADT (2042)	3246
DHV	360
D	50
DHV T%	10%
AADT T%	21.9%
V	65 MPH

GROSS LENGTH	33,095.04 FEET	6.268 MILES
LENGTH OF EXCEPTIONS	0.00 FEET	0.000 MILES
NET LENGTH	33,095.04 FEET	6.268 MILES



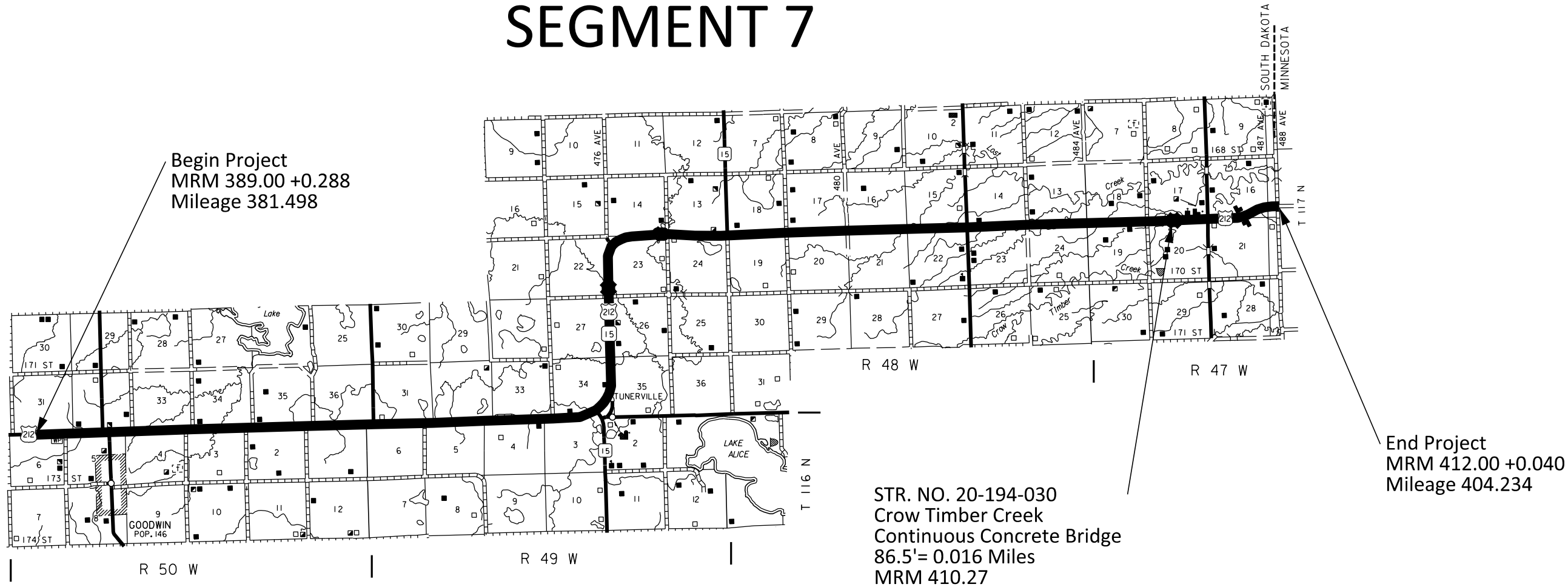
FILE - ... \BEAD09FN\09FN TITLE SHEET.DGN PLOT NAME - 6

PLOT SCALE - 1:10215.2

PLOTTED FROM - TRAB17901

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	7	32
Plotting Date: 01/26/2024			

US Highway 212 Deuel County SEGMENT 7



DESIGN DESIGNATION

AADT (2022)	1612
AADT (2042)	2193
DHV	246
D	50
DHV T%	11.9%
AADT T%	26.2%
V	65 MPH

GROSS LENGTH	120,046.08 FEET	22.736 MILES
LENGTH OF EXCEPTIONS	0.00 FEET	0.000 MILES
NET LENGTH	120,046.08 FEET	22.736 MILES



PLOT NAME - 7

FILE - ... \BEAD09\FN\09FN TITLE SHEET.DGN

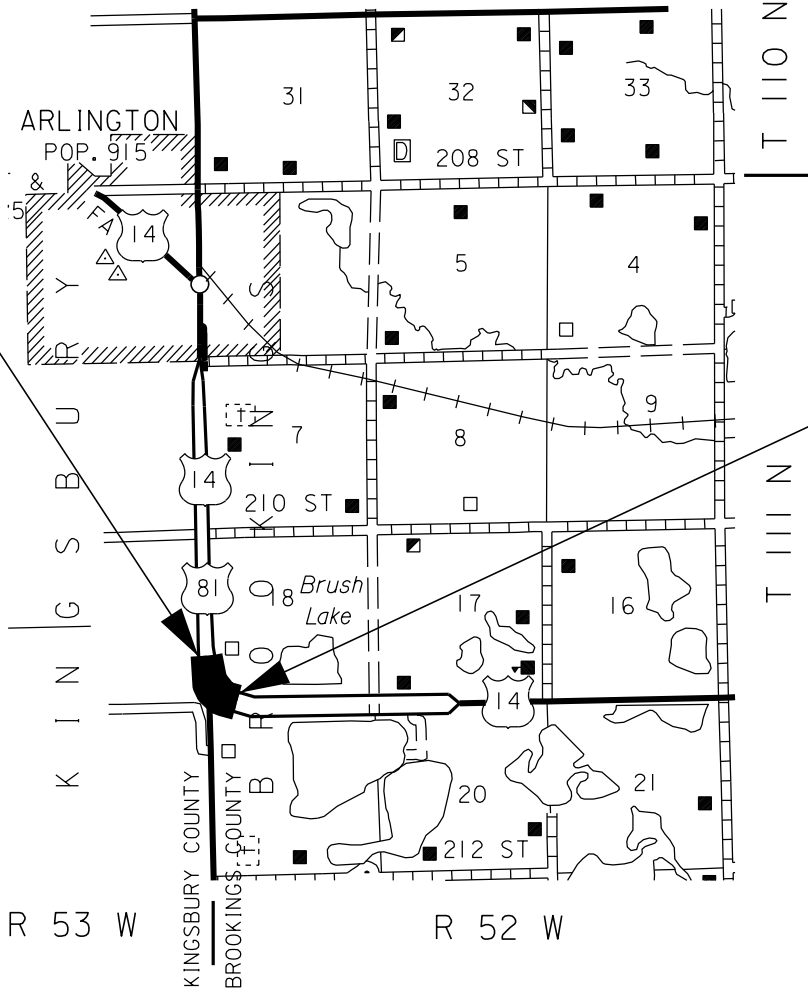
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	8	32
Plotting Date: 01/26/2024			

US Highway 14

Kingsbury & Brookings Counties

SEGMENT 8

Begin Project
EB MRM 402.00 +1.046
WB MRM 402.94 +0.010
WB Station 111+40.0



End Project
EB MRM 403.09 +0.220
WB MRM 403.09 +0.220
WB Station 134+70.0



DESIGN DESIGNATION

AADT (2022)	2582
AADT (2042)	3506
DHV	394
D	50
DHV T%	14.8%
AADT T%	32.5%
V	65 MPH

GROSS LENGTH	2,330.00 FEET	0.441 MILES
LENGTH OF EXCEPTIONS	0.00 FEET	0.000 MILES
NET LENGTH	2,330.00 FEET	0.441 MILES

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PH 0010(229)	9	32

Revised: 02/23/2024 PB

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	0.6	Mile
320E7028	Grind Centerline Rumble Stripe in Asphalt Concrete	0.1	Mile
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	0.2	Ton
380E6302	Reseal PCC Pavement Joint - Hot Pour	461,372	Ft
380E6450	Saw Joint in PCC Pavement	461,372.0	Ft
380E6548	Grind Sinusoidal Centerline Rumble Stripe in PCC Pavement	87.4	Mile
633E0030	Cold Applied Plastic Pavement Marking, 24"	305	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	2	Each
633E1206	High Build Waterborne Pavement Marking Paint with Reflective Elements, Yellow	1,040	Gal
633E3000	Durable Pavement Marking, 4" White	437,741	Ft
633E5050	Surface Preparation for Pavement Marking	378,951	Ft
633E5052	Surface Preparation for Pavement Marking	2	Each
633E5100	Grooving for Durable Pavement Marking, 4"	66,190	Ft
634E0010	Flagging	2,000.0	Hour
634E0020	Pilot Car	750.0	Hour
634E0110	Traffic Control Signs	337.8	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0320	Temporary Flexible Vertical Markers (Tabs)	87.5	Mile

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 B4: BALD EAGLE

Bald eagles are known to occur in this area.

Action Taken/Required:

If a nest is observed within one mile of the project site, notify the Project Engineer immediately so that he/she can consult with the Environmental Office for an appropriate course of action.

COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:
< <https://sdleastwanted.sd.gov/maps/default.aspx>>

< [South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04](https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04) >

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

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

Action Taken/Required:

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.

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 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 100 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.

Breakdown of Segments (For Information Only)										
Segment	Hwy	Begin MRM	Begin Disp.	Begin Mileage	End MRM	End Disp.	End Mileage	Exceptions (Mile)	Gross Length (Mile)	Net Miles
1	12	367.00	0.294	216.339	387.00	0.500	236.628	0.000	20.289	20.289
2	14	302.00	0.120	183.046	320.00	0.516	201.457	0.829	18.411	17.582
3	14	388.00	0.423	260.881	392.00	0.041	264.442	1.088	3.561	2.473
4	37	129.00	0.864	76.308	133.00	0.329	79.757	0.000	3.449	3.449
5	212	267.00	0.431	266.603	282.00	0.050	281.187	0.000	14.584	14.584
6	212	338.00	0.440	337.589	344.00	0.661	343.857	0.000	6.268	6.268
7	212	389.00	0.288	381.498	412.00	0.040	404.234	0.000	22.736	22.736
		Begin Sta.			End Sta.					
8	14	111+40.0	-		134+70.0	-		0.000	0.441	0.441
								Total Project Less Exceptions:		87.8

Estimate of Quantites (For Information Only)															
Segment	Highway	Length (Miles)	Grind Sinusoidal Centerline Rumble Stripe in PCC (Miles)	Grind 12" Centerline Rumble Stripe in AC (Miles)	Grind 12" Rumble Strip in AC (Miles)	High Build Waterborne Pavement Marking Paint w/ Reflective Elements, Yellow (Gal)	Durable Pavement Marking, White (Ft)	Cold Applied Plastic Pavement Marking, 24" (Each)	Cold Applied Plastic Pavement Marking, Arrows (Each)	Surface Preparation for Pavement Marking (Ft)	Surface Preparation for Pavement Marking (Each)	Grooving for Durable Pavement Marking, 4" (Ft)	Saw Joint/Reseal in PCC (Ft)	SS-1h/ CSS-1h Asphalt for Flush Seal (Tons)	Comments
1	US 12	20.289	20.289	-	-	233	214252	-	-	214252	-	-	107125.9	-	
2	US 14	18.411	17.582	-	-	157	-	-	-	-	-	-	92833.0	-	*See title sheet for exceptions information.
3	US 14	3.561	2.473	-	-	20	-	-	-	-	-	-	13057.4	-	*See title sheet for exceptions information.
4	SD 37	3.449	3.449	-	-	28	192	-	-	192	-	-	18210.7	-	
5	US 212	14.584	14.584	-	-	216	157107	305	2	164507	2	-	77003.5	-	Includes 7 gal of waterborne yellow paint and 1700' of durable white paint for the edgelines along the curve at Sta. 239+80. Includes 3.2 gal of waterborne yellow paint for centerline island and 1400' of durable white paint for the edgelines on the PCCP north of the SD45/US212 Jct. For all three centerline islands, includes 2550' of surface preparation for double yellow lines running opposite of double yellow lines with ground-in Sinusoidal Centerline rumble stripes. For curve at Sta. 239+80, includes 3020' of surface preparation for yellow painted edgeline and white durable painted edgeline. Cold Applied Markings include 1830' of surface preparation, measured as 4" equivalent, so 305 ft of 24" Cold Applied Markings is multiplied by 6. *See Pavement Marking Layout
6	US 212	6.268	6.268	-	-	102	66190	-	-	-	-	66190	33095.0	-	
7	US 212	22.736	22.736	-	-	278	-	-	-	-	-	-	120046.1	-	
8	US 14	0.441	-	0.1	0.6	6	-	-	-	-	-	-	-	0.2	*See Rumble Stripe/Strip Layout
		Total:	87.4	0.1	0.6	1040	437741	305	2	378951	2	66190	461372	0.2	

SCOPE OF WORK

Work on this project includes Installation of Centerline Rumble Stripes and Permanent Pavement Markings.

SEQUENCE OF OPERATIONS

- 1. Install traffic control for 3-mile closure.
- 2. Grind centerline rumble stripes.
- 3. Repeat 3-mile process until project completion.
- 4. Place temporary pavement markings before the end of each day.
- 5. Sawcut and seal centerline longitudinal joint.
- 6. Install permanent pavement marking paint.

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.

COORDINATION BETWEEN CONTRACTORS

A separate contract for Project NH 0014(256)385 – PCN 09C7 will be awarded to Bituminous Paving Inc. of Ortonville, MN for Asphalt Concrete Resurfacing of Shoulder on Hwy 14 east of Lake Preston within the limits of Segment 3 of this project (PCN 09FN).

The Contractor will schedule work so as not to interfere with or hinder the progress of the work performed by Bituminous Paving Inc. on PCN 09C7. Conflicting traffic control devices may need to be temporarily adjusted or removed as directed by the Engineer and at no additional cost to the contract.

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.

After the completion of sinusoidal rumble stripe grinding and temporary pavement marking, the centerline joint will be cleaned, sawed and sealed. During the sealing, traffic will be maintained by pilot car and flagging operation.

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

A mobile operation will be used for permanent pavement marking application.

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

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

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

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

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.

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.

Additional flagger warning signs and flagger hours have been included in the Estimate of Quantities for use on intersecting roads. These flaggers will be used as directed by the Engineer and will be used primarily during daytime hours. Also 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”.

GRIND CENTERLINE RUMBLE STRIPES

The Engineer will provide the exact start and end locations for the rumble stripe installation. The Contractor will be responsible for marking minor exceptions, such as approaches and bridges.

The Contractor is responsible for inspecting project locations prior to letting to identify potential problems for installing the rumble stripes. Any damage to the existing shoulders and/or roadway during the construction of rumble stripes will be repaired by the Contractor at no cost to the State of South Dakota.

The Contractor will demonstrate to the Engineer on an initial 50’ test section that the equipment and method will provide the desired ground rumble strip and surface inside each depression. If the desired results are not being provided, as determined by the Engineer, the Contactor will provide different equipment or method until satisfactory installation is completed. Any damage to the PCC concrete will be replaced by the Contractor at no addition cost to the State.

Construct rumble stripes in a uniform position according to the dimensions and at locations shown in the plans. Indentations must comply with the specified dimensions in the plans within 0.06 inch in depth and 10 percent in length and width. The depressions must have well defined edges and not snag or tear the existing pavement. Rumble stripes will be constructed in a way that does not spall the centerline joint of the existing pavement. Do not construct rumble stripes on structures or approach slabs.

The rumble stripe installation equipment requires a cutting head consisting of diamond blades. The grinding process will produce a surface uniform in appearance with longitudinal line-type texture. The line-type texture will contain corrugations parallel to the centerline and present a narrow ridge corduroy type appearance. The peaks of the ridges will be 3/8 inch ± 1/16 inch higher than the bottom of the grooves with evenly spaced ridges. It is the Contractor’s responsibility to select the number of blades per foot to be used to provide the proper surface finish for the aggregate type and concrete present on the project.

GRIND CENTERLINE RUMBLE STRIPES (CONTINUED)

If the grinding process requires the use of water, the Contractor will establish a positive means for vacuuming the grinding residue from the pavement surface leaving the surface in a clean, near-dry condition. Solid residue will be removed from the pavement surfaces before being blown by traffic action or wind. Residue will not be permitted to flow across lanes used by public traffic. Residue and wastewater will not be expelled on the roadway or shoulder surface. Residue will be disposed of in a manner that will prevent residue, whether in solid or slurry form, from reaching any waterway in a concentrated state. Residue may continuously flow on adjacent dry vegetated roadway slopes or ditches within the right-of-way. If the Engineer determines that the slurry is going to enter a waterway, drainage facility, or curb & gutter section, the slurry will be placed in storage tanks and deposited in settling basins, spread over flat vegetated areas, or filtered by other means approved by the Engineer at no additional cost. The Contractor will satisfactorily remove grinding material or wastes prior to returning traffic to the roadway.

All costs associated with rumble stripe grinding work on Segment 1 through Segment 7 will be incidental to the contract unit price per mile for “GRIND SINUSOIDAL CENTERLINE RUMBLE STRIPE IN PCC PAVEMENT”.

All costs associated with the work on Segment 8 will be incidental to the contract unit price per mile for “GRIND CENTERLINE RUMBLE STRIPE IN ASPHALT CONCRETE”.

SEGMENT 8: GRIND RUMBLE STRIPES/STRIPS IN ASPHALT CONCRETE

Asphalt concrete rumble strips/strips will be constructed as shown in the Rumble Stripe/Strip Layouts. Rumble strips/strips will be paid for at the contract unit price per mile for Grind 12” Rumble Strip or Stripe in Asphalt Concrete. It is estimated that 0.7 miles of asphalt concrete rumble strips/strips will be required for Segment 8.

Rumble strip/stripe installation will be completed prior to application of the flush seal and permanent pavement markings. The Contractor will still be required to apply a flush seal to the newly installed 12” rumble strips/strips at a width of 18” and at the same rate as specified in this plan set. No adjustment in payment will be made and SS-1h or CSS-1h Asphalt for Flush Seal will be paid at the contract unit price per ton.

Included in the Estimate of Quantities are 0.1 tons of SS 1h or CSS 1h Asphalt for Flush Seal for sealing the interior rumble strips. (Rate = 0.05 Gal./ Sq.Yd.). See Rumble Stripe/Strip Layout for Segment 8.

RUMBLE STRIPE/STRIP ROADWAY CLEANING

The Contractor will remove all loose materials from the driving surface and shoulders of the roadway on the daily basis. Loose material may be used as fill material adjacent to the paved shoulder. It will be Contractor’s responsibility to ensure the loose material doesn’t enter any vegetated areas and/or waterways.

All costs associated with rumble stripe grinding work will be incidental to the contract unit price per mile for “GRIND SINUSOIDAL CENTERLINE RUMBLE STRIPE IN PCC PAVEMENT”, “GRIND 12” RUMBLE STRIP OR STRIPE IN ASPHALT CONCRETE”, and “GRIND CENTERLINE RUMBLE STRIPE IN ASPHALT CONCRETE”.

SAW AND SEAL CENTERLINE LONGITUDINAL JOINT

Existing longitudinal joints will be sawed, cleaned and resealed with Hot Poured Elastic Joint Sealer.

Joints will not be sealed unless they are thoroughly clean and dry. Cleaning will be accomplished by sandblasting and other tools as necessary. Just prior to sealing, each joint will be blown out using a jet of compressed air to remove all traces of dust.

Any additional cost to perform this work will be at no additional cost to the State. The Contractor will be responsible to verify joint widths prior to establishing the contract unit price.

It is not essential that all the sealant be removed. Remaining sealant adhering to the sides may remain in place if the Engineer determines that it is not detrimental to the joint.

All costs for sawing and cleaning the centerline longitudinal joint will be incidental to the contract unit price per foot for “SAW JOINT IN PCC PAVEMENT”. All costs for sealing the centerline longitudinal joint will be included in the contract unit price per foot for “RESEAL PCC PAVEMENT JOINT– HOT POUR”.

MARKINGS WITHIN SINUSOIDAL CENTERLINE RUMBLE STRIPES

The sinusoidal centerline rumble stripes are recessed below the pavement surface, so pavement marking grooving will not be required at these locations.

Retroreflectivity readings will not be taken for pavement markings within the sinusoidal rumble stripe. Restriping of pavement markings to meet the specified application rate requirements and to provide a quality retroreflective line will be at the expense of the Contractor with no additional cost to the Department. Sections to be restriped will be determined by the Engineer.

TEMPORARY PAVEMENT MARKINGS

A quantity of 87.5 miles of Temporary Pavement Markings has been included in the plans to mark centerline where grinding centerline rumble stripes has altered the centerline pavement markings.

Temporary flexible vertical markers (tabs) will be installed on one side of the centerline rumble for the temporary pavement marking. No passing zones will be marked using DO NOT PASS (R4-1) and PASS WITH CARE (R4-2) signs.

It is estimated that 55 DO NOT PASS and 55 PASS WITH CARE signs will be required.

The Contractor will remove and properly dispose of the tabs after permanent pavement marking is applied. Method of removal will be nondestructive to the road surface and will be accomplished within one week of completion of the permanent pavement marking.

Cost for furnishing and applying of the Temporary Pavement Marking Paint will be included in the contract unit price per mile for “TEMPORARY FLEXIBLE VERTICAL MARKERS (TABS)”.

SURFACE PREPARATION FOR PAVEMENT MARKING

The Contractor will prepare the pavement surface prior to applying the high build waterborne 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 ¹ + 15 mils	+ 5 mils

¹ 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.

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 consisting of glass beads as well as bonded core reflective elements will be adhered to the paint.

The bonded core reflective elements will contain either clear or yellow tinted microcrystalline ceramic beads bonded to the outer surface. The bonded core reflective elements will provide a 50/50 blend of dry to wet ratio of reflective element. All microcrystalline ceramic beads bonded to reflective elements will have a minimum index of refraction of 1.8 for dry retroreflectivity and 2.4 for wet retroreflectivity when tested using the liquid oil immersion method.

The Department will take retroreflectivity readings on the pavement marking lines no sooner than 3 days and no later than 30 days after the completion of all line applications required for an individual highway route using a portable retroreflectometer conforming to 30-meter geometry. Retroreflectivity readings will be taken on a test location with cleaning being limited to light hand brooming.

Pavement markings not conforming to the retroreflectivity requirements will be removed and replaced. If replacement of markings cannot be applied within the same year, the Contractor will schedule subject work to be completed no later than June 15th in the following year. Upon replacement, the retroreflectivity testing process will be done again requiring new readings.

The Department will randomly select one test location per mile of each edge line including ramps and one test location per mile of centerline (solid and/or skip line will be considered as one centerline). Three retroreflectivity readings will be taken at each test location. The three readings will be averaged and become the reading for that test location.

Initial readings:

Pavement Marking Color	Minimum Value
White	350 mc/m²/lux
Yellow	275 mc/m²/lux

All pavement markings not conforming to the requirements provided in these plans will be considered deficient and will be removed and replaced. Additional retroreflectivity readings will be taken by the Department to determine the limits of removal. The removal will be accomplished using suitable sand blasting or grinding equipment unless the Engineer authorizes other means. The removal process will remove at least 90% of the deficient line, with no excessive scarring of the existing pavement. The removal width will be one inch wider all around the nominal width of the pavement marking to be removed. Removal and replacement of the pavement markings will be at the Contractor’s expense, with no cost incurred by the State.

High Build Waterborne Pavement Marking Paint applied after October 15 must be formulated as cold-weather waterborne paint. Cold weather waterborne paint will meet the requirements of Section 980.1 C.

RATES OF MATERIALS FOR WATERBORNE PAVEMENT MARKING PAINT WITH HIGH GRADE POLYMER

Solid 4” line = 27.8 Gals/Mile
Dashed 4” line = 7.6 Gal/Mile
Glass Beads = 5.3 Lbs/Gal.
Composite Reflective Elements = 2.1 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.

EXISTING PAVEMENT MARKINGS

The existing pavement markings on all segments, except Segment 6, along US 212, west of Clark, are a sprayable durable pavement marking. It is the contractor’s responsibility to investigate in-place pavement markings along each segment.

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.

Cold Applied Plastic Pavement Marking Table

ITEM	LOCATION	QUANTITY
Cold Applied Plastic Pavement Marking, 24" White	Segment 4- Sta. 240+00	5 Ft
Cold Applied Plastic Pavement Marking, 24" Yellow	Segment 4- Sta. 245+70 to Sta. 248+00	40 Ft
Cold Applied Plastic Pavement Marking, 24" White	Segment 4- Sta. 248+70	22 Ft
Cold Applied Plastic Pavement Marking, 24" Yellow	Segment 4- (North at Sta. 249) Sta. 9+20 to Sta. 4+80	89 Ft
Arrows	Segment 4- (South at Sta. 249) Sta. 249+60 to Sta. 250+07	2 Each
Cold Applied Plastic Pavement Marking, 24" Yellow	Segment 4- (South at Sta. 249) Sta. 249+80 to Sta. 252+70	61.5 Ft
Cold Applied Plastic Pavement Marking, 24" Yellow	Segment 4- Sta. 257+00 to Sta. 263+50	87.5 Ft

* Messages on signs will vary depending on the operation being conducted.

Vehicle-mounted signs will be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs will be covered or turned from view when work is not in progress.

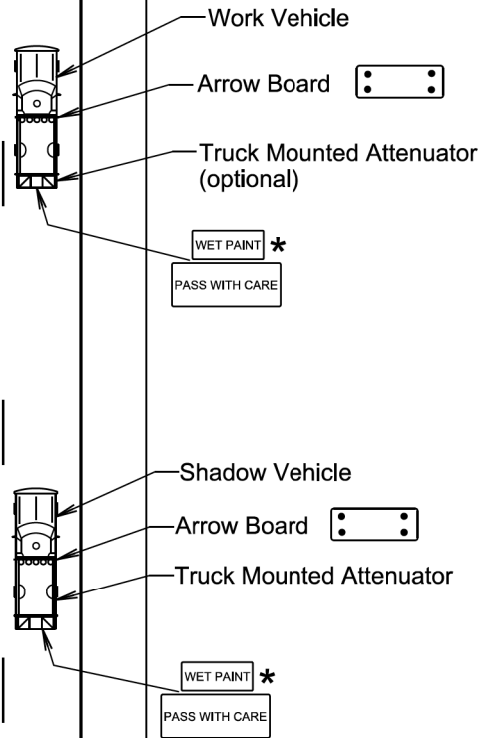
Shadow and Work vehicles will display high-intensity rotating, flashing, oscillating, or strobe lights, flags, signs, or arrow boards.

Vehicle hazard warning signals will not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

When an arrow board is used, it will be used in the caution mode. Marching Diamonds are acceptable.

Arrow boards will, as a minimum, be Type B, with a size of 60" x 30".

All costs associated with the traffic control for mobile operation including signs, arrow boards and equipment will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".



January 22, 2021

Published Date: 2024	S D D O T	MOBILE OPERATIONS ON 2-LANE ROAD	PLATE NUMBER
			634.06
			Sheet 1 of 1

* Messages on signs will vary depending on the operation being conducted.

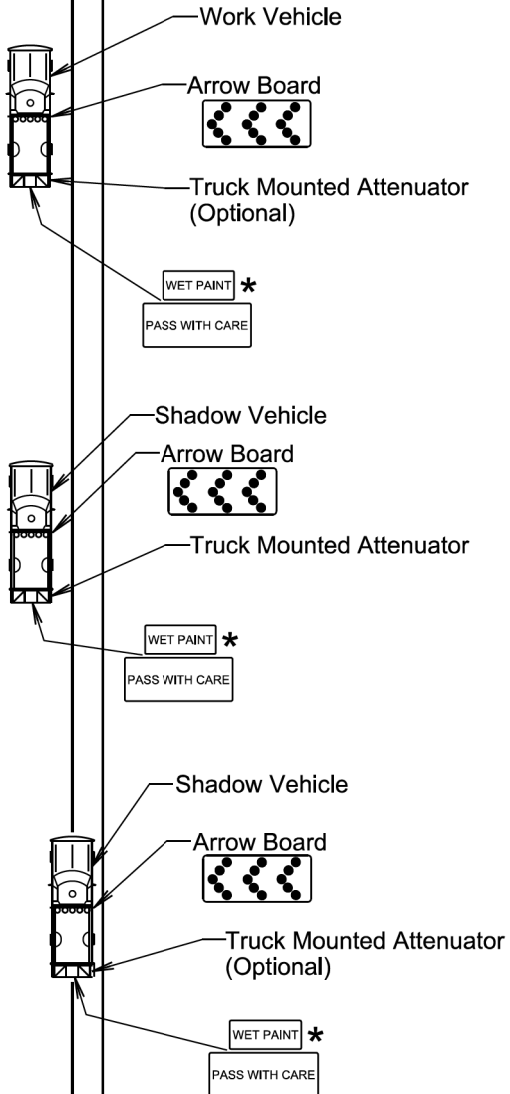
Vehicle-mounted signs will be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs will be covered or turned from view when work is not in progress.

Shadow and Work vehicles will display high-intensity rotating, flashing, oscillating, or strobe lights, flags, signs, or arrow boards.

Vehicle hazard warning signals will not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Arrow boards will, as a minimum, be Type B, with a size of 60" x 30".

All costs associated with the traffic control for mobile operation including signs, arrow boards and equipment will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".



January 22, 2021

Published Date: 2024	S D D O T	MOBILE OPERATIONS ON MULTI-LANE HIGHWAYS	PLATE NUMBER
			634.08
			Sheet 1 of 1

Plotting Date: 01/25/2024

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.

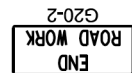
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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.

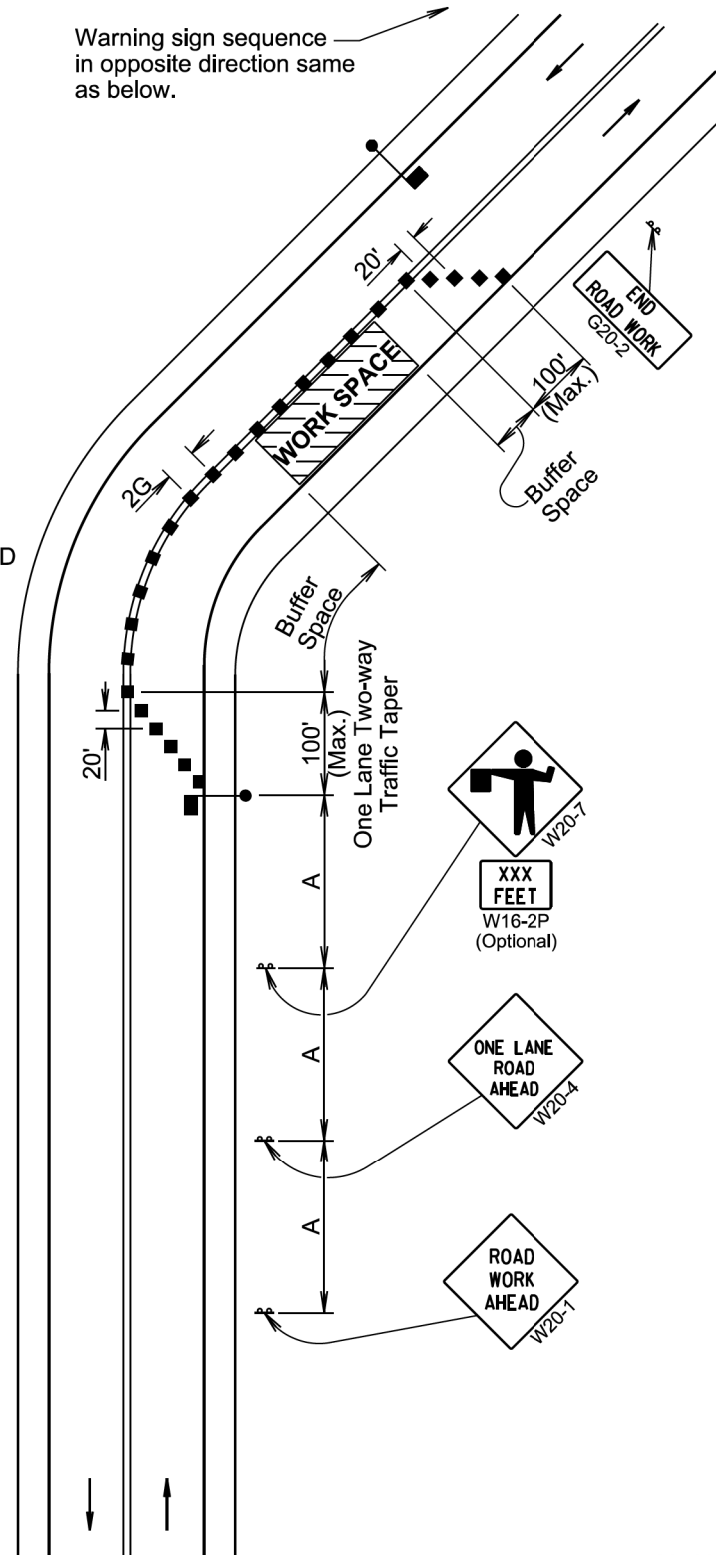


Channelizing devices and flaggers will be used at intersecting roads to control intersecting road traffic as required.

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.

Warning sign sequence —
in opposite direction same
as below.



January 22, 2021

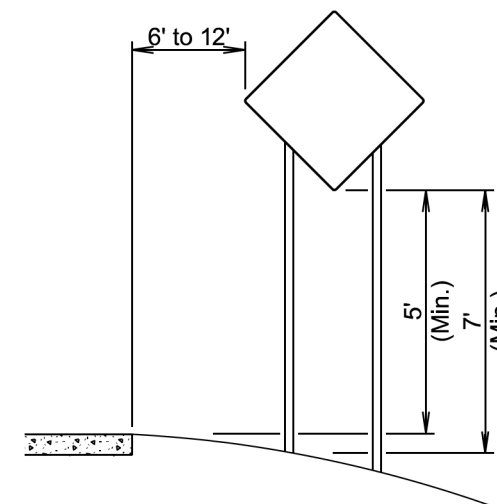
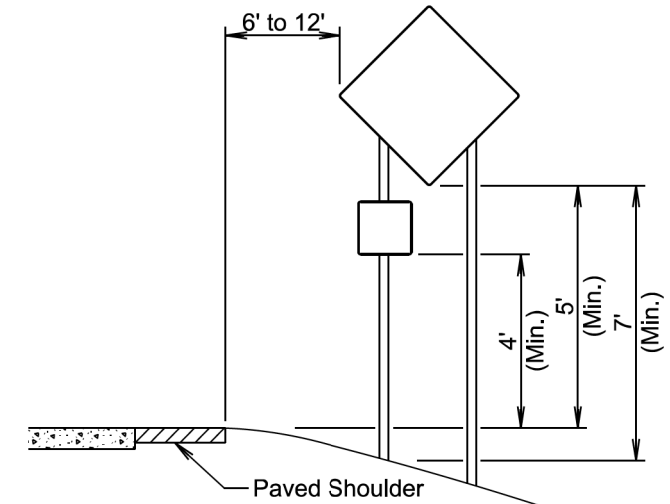
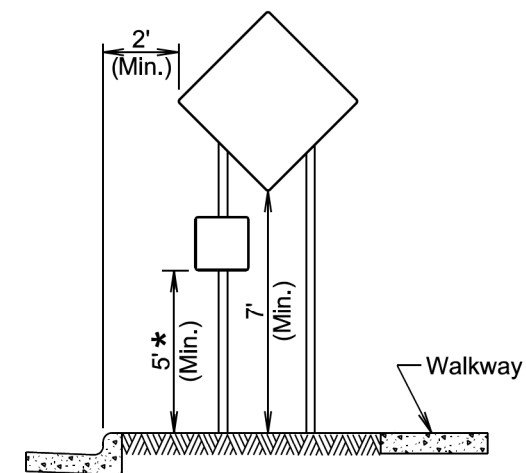
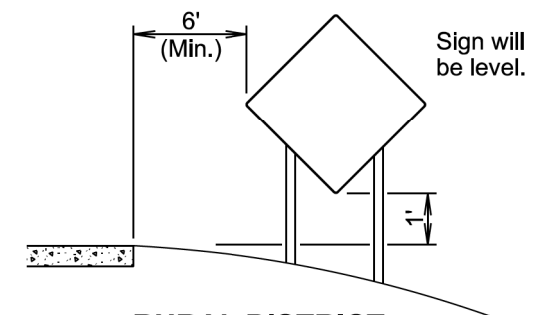
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LANE CLOSURE WITH FLAGGER PROVIDED

PLATE NUMBER
634.23

Sheet 1 of 1

Published Date: 2024

**RURAL DISTRICT**RURAL DISTRICT WITH
SUPPLEMENTAL PLATE**URBAN DISTRICT**

**RURAL DISTRICT
3 DAY MAXIMUM**

(Not applicable to regulatory signs)

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

January 22, 2021

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CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)

PLATE NUMBER
634.85

Sheet 1 of 1

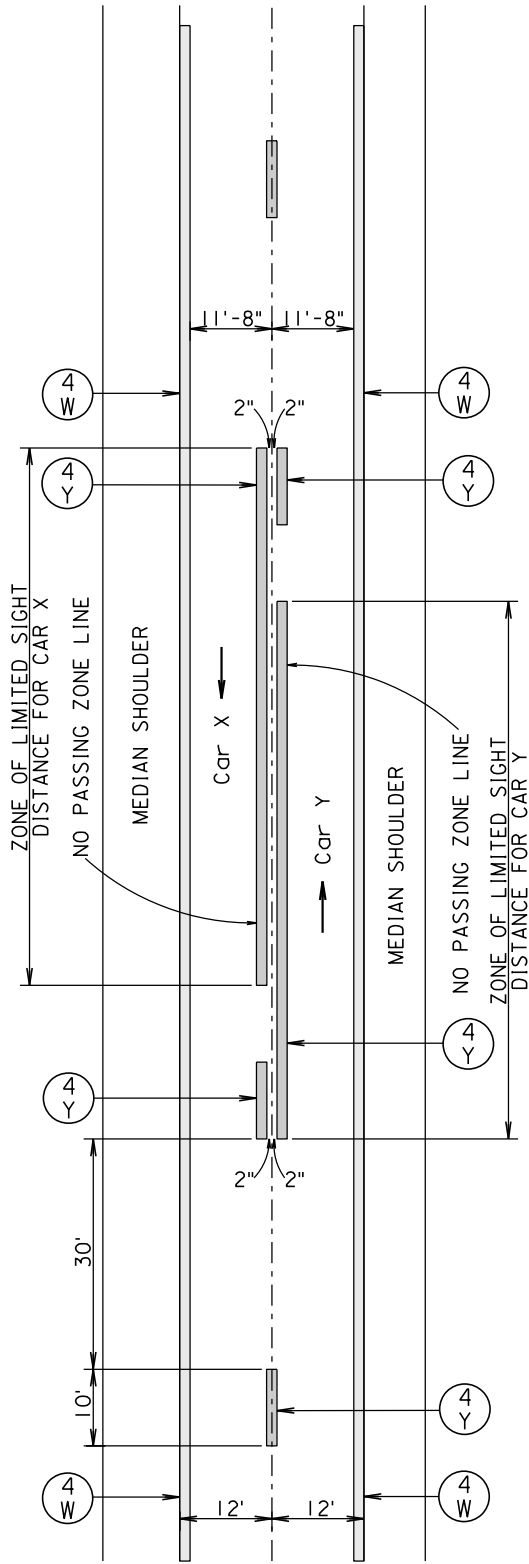
Published Date: 2024



		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
W20-4	ONE LANE ROAD AHEAD	6	48" x 48"	16.0	96.0
W20-7	FLAGGER (symbol)	6	48" x 48"	16.0	96.0
SPECIAL	WAIT FOLLOW PILOT CAR	6	30" x 18"	3.8	22.8
G20-2	END ROAD WORK	6	36" x 18"	4.5	27.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT 337.8			

January 22, 2021

TWO LANE
UNDIVIDED ROADWAY



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	18	32
Plotting Date: 02/12/2024			

KEY	ITEM
④ W	4" White - Durable Pavement Marking
④ Y	4" Yellow - High Build Waterborne Pavement Marking Paint with Reflective Elements

FURNISHING AND APPLYING HIGH BUILD WATERBORNE PAINT WITH REFLECTIVE ELEMENTS
& DURABLE PAVEMENT MARKINGS

1. The typical pavement markings as shown on the following sheet shall be applied on each segment. (*See Rumble Stripe/Strip Layout for Segment 8.)
2. 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.







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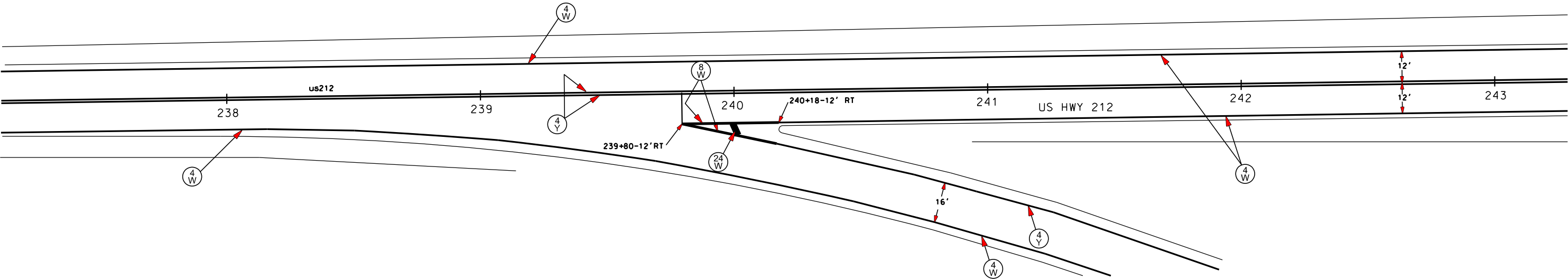
PLOTTED FROM - TRAB17901

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	19	32
Plotting Date: 02/09/2024			

PAVEMENT MARKING LAYOUT

SEGMENT 5
US HWY 212 FAULK COUNTY

LEGEND	
KEY	ITEM
	DURABLE PAVEMENT MARKING, 4" WHITE
	HIGH BUILD WATERBORNE PAVEMENT MARKING WITH REFLECTIVE ELEMENTS, 4" YELLOW
	DURABLE PAVEMENT MARKING, 8" WHITE
	COLD APPLIED PLASTIC PAVEMENT MARKING, 24" WHITE
	COLD APPLIED PLASTIC PAVEMENT MARKING, 24" YELLOW
	COLD APPLIED PLASTIC PAVEMENT MARKING, ARROW



FILE - ... \SEG 5\239244PM.DGN

PLOT NAME - 2

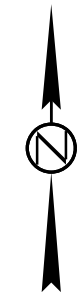
PLOT SCALE - 1"=40'

PLOTTED FROM - TRAB17901

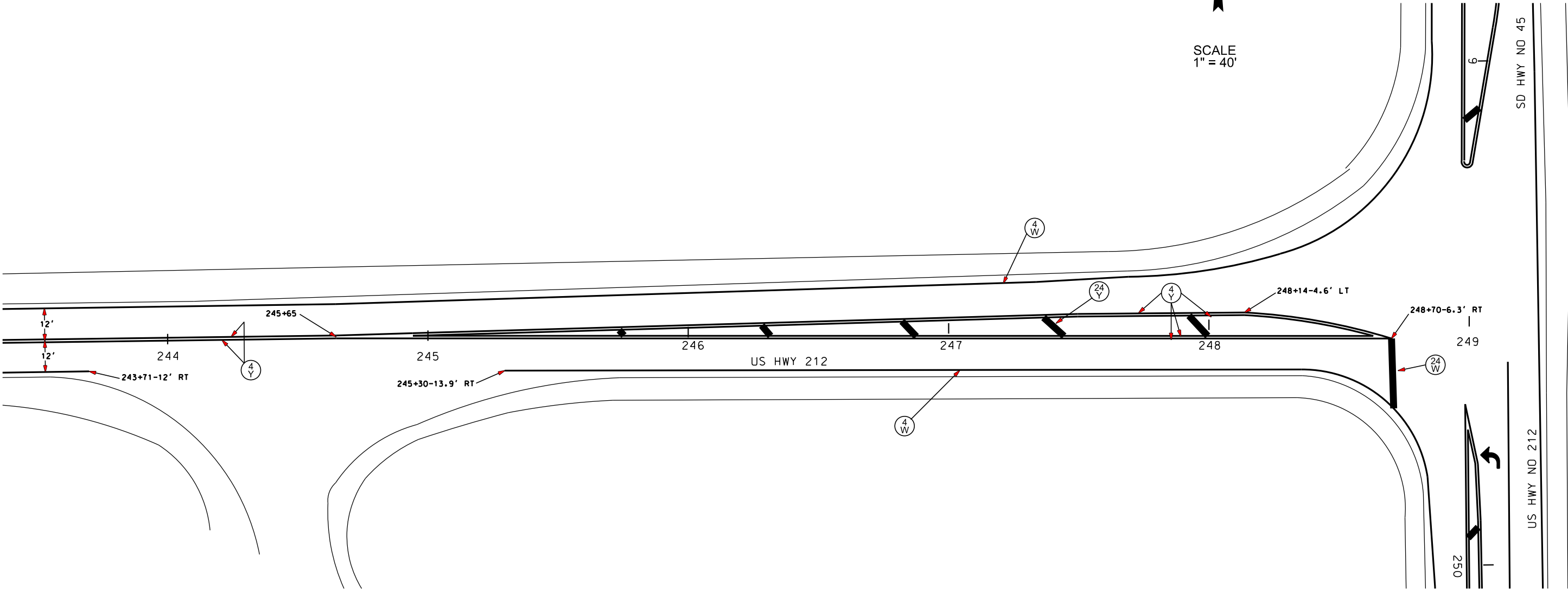
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	20	32
Plotting Date: 02/09/2024			

PAVEMENT MARKING LAYOUT

SEGMENT 5
US HWY 212 FAULK COUNTY



SCALE
1" = 40'



PLOT NAME - 3

FILE - ... \SEG 5\242429PM.DGN

PLOT SCALE - 1:40

PLOTTED FROM - TRAB17901

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	21	32
Plotting Date: 02/09/2024			

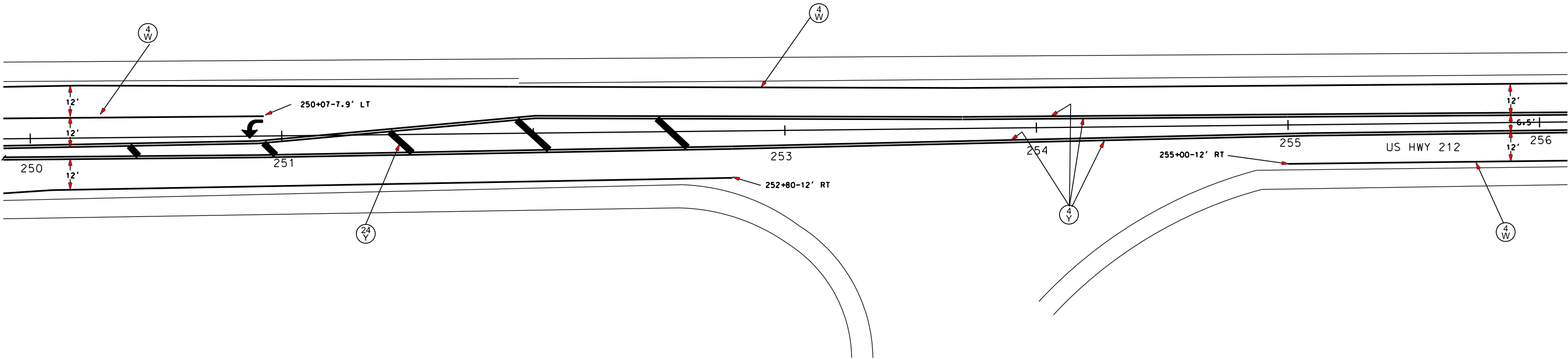
PAVEMENT MARKING LAYOUT

SEGMENT 5

US HWY 212 FAULK COUNTY



SCALE
1" = 40'



PLOT NAME - 4

FILE - ... \SEG 5\250256PM.DGN

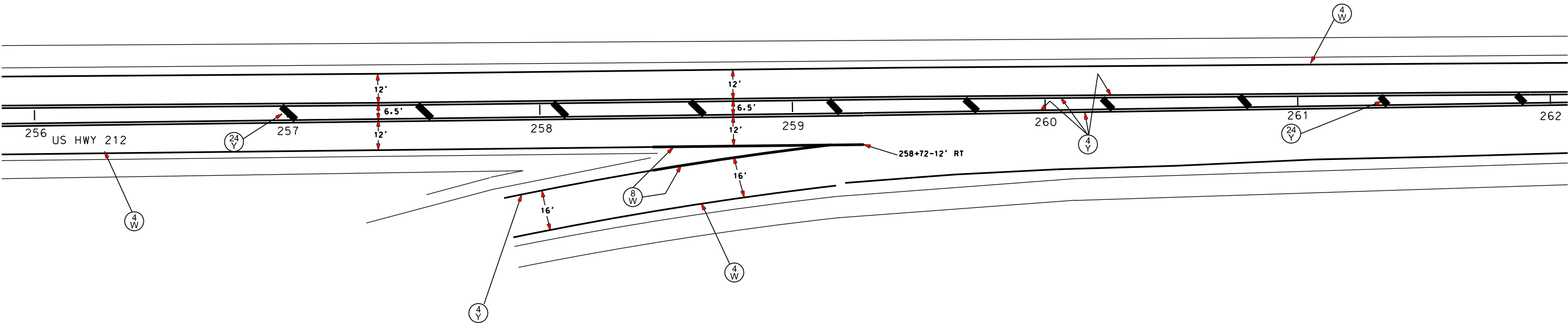
PAVEMENT MARKING LAYOUT

SEGMENT 5
US HWY 212 FAULK COUNTY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	22	32
Plotting Date: 02/09/2024			



SCALE
1" = 40'



PLOT SCALE - 1"=40'

PLOTTED FROM - TRAB17901

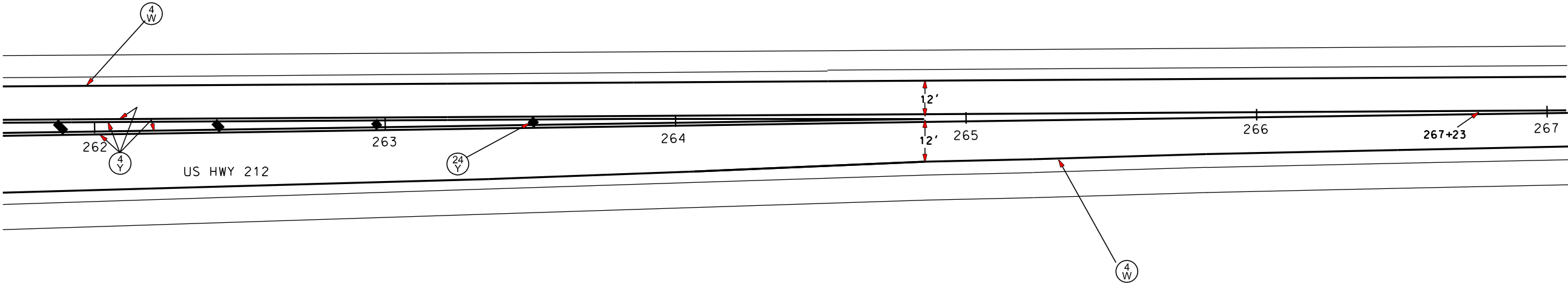
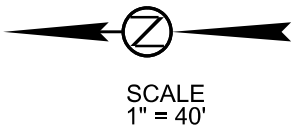
PLOT NAME - 5

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	23	32
Plotting Date: 02/09/2024			

PAVEMENT MARKING LAYOUT

SEGMENT 5
US HWY 212 FAULK COUNTY



PLOT SCALE - 1"=40'

PLOTTED FROM - TRAB17901

PLOT NAME - 6

FILE - ... \SEG 5\262268PM.DGN

PLOT SCALE - 1:40

PLOTTED FROM - TRAB17901

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	24	32
Plotting Date: 02/09/2024			

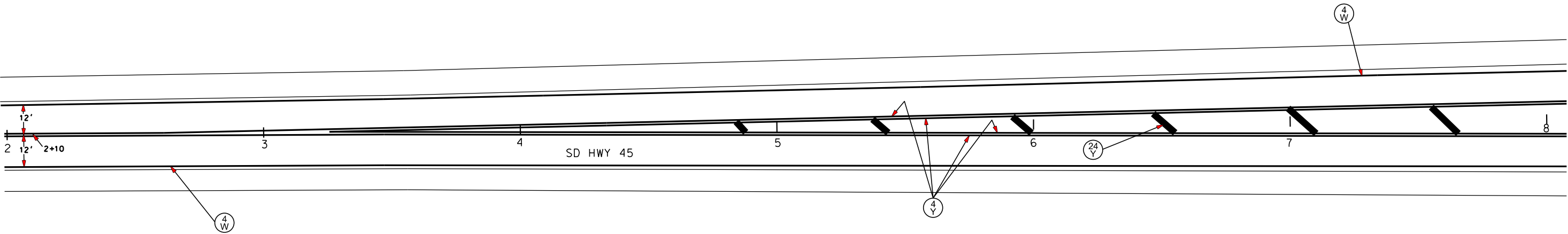
PAVEMENT MARKING LAYOUT

SEGMENT 5

SD HWY 45 FAULK COUNTY



SCALE
1" = 40'



PLOT SCALE - 1"=40'

PLOTTED FROM - TRAB17901

RUMBLE STRIPE/STRIP LAYOUT

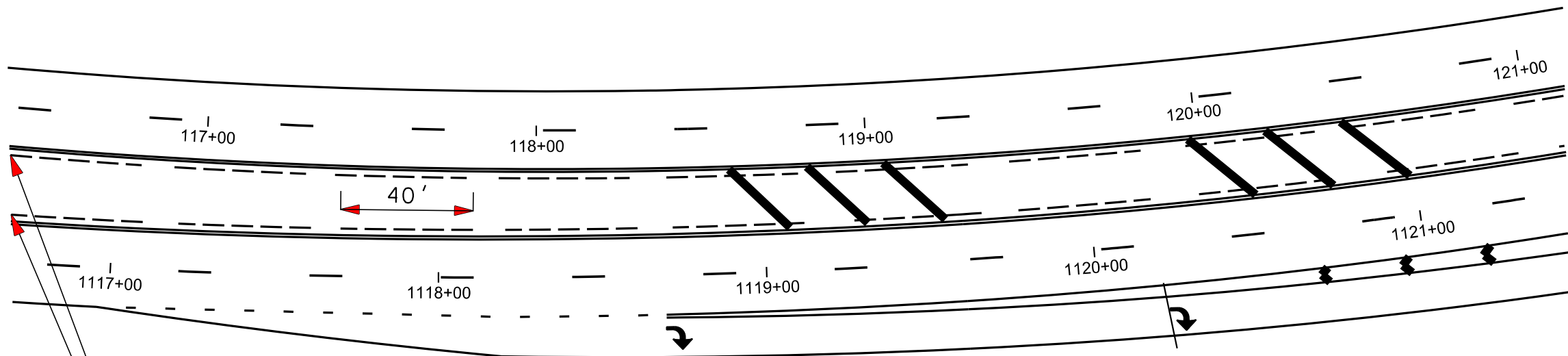
SEGMENT 8

US HWY 14

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	26	32
Plotting Date: 02/09/2024			

PLOT NAME - 2

FILE - ... \US 14 & 81 CURVE\09PH17PH.DGN



PLOT SCALE - 1"=40'

PLOTTED FROM - TRAB17901

RUMBLE STRIPE/STRIP LAYOUT

SEGMENT 8 US HWY 14 & US HWY 81

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	27	32
Plotting Date: 02/09/2024			

End 12" Rumble Strips on interior side of Double Yellow Line. Strips are offset 6" inside the interior 4" Double Yellow Line as per Std. Plate 320.26.

Begin 4" Yellow High Build Waterborne Pavement Marking Paint with Reflective Elements and 12" Rumble Stripes on Double Yellow Centerline as per Std. Plate 320.18.

LEGEND	
KEY	ITEM
(4 Y)	HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT WITH REFLECTIVE ELEMENTS, 4" YELLOW

PLOT NAME - 3

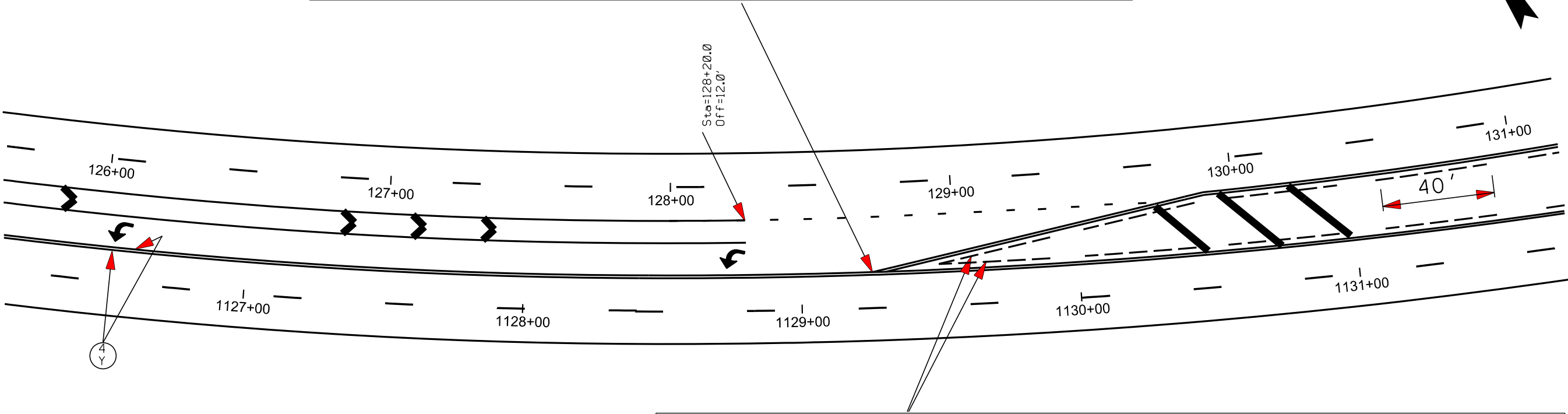
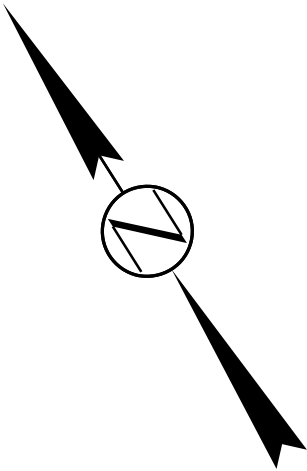
FILE - ... \US 14 & 81 CURVE\09FN121PH.DGN

RUMBLE STRIPE/STRIP LAYOUT

SEGMENT 8 US HWY 14

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	28	32
Plotting Date: 02/09/2024			

End 4" Yellow High Build Waterborne Pavement Marking Paint with Reflective Elements and 12" Rumble Stripes on Double Yellow Centerline as per Std. Plate 320.18.



Begin 12" Rumble Strips on interior side of Double Yellow Line. Strips are offset 6" inside the interior 4" Double Yellow Line as per Std. Plate 320.26.

LEGEND	
KEY	ITEM
(4 Y)	HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT WITH REFLECTIVE ELEMENTS, 4" YELLOW

PLOT SCALE - 1"=40'

PLOTTED FROM - TRAB17901

PLOT NAME - 4

FILE - ... \US 14 & 81 CURVE\09FN126PH.DGN

PLOT SCALE - 1"=40'

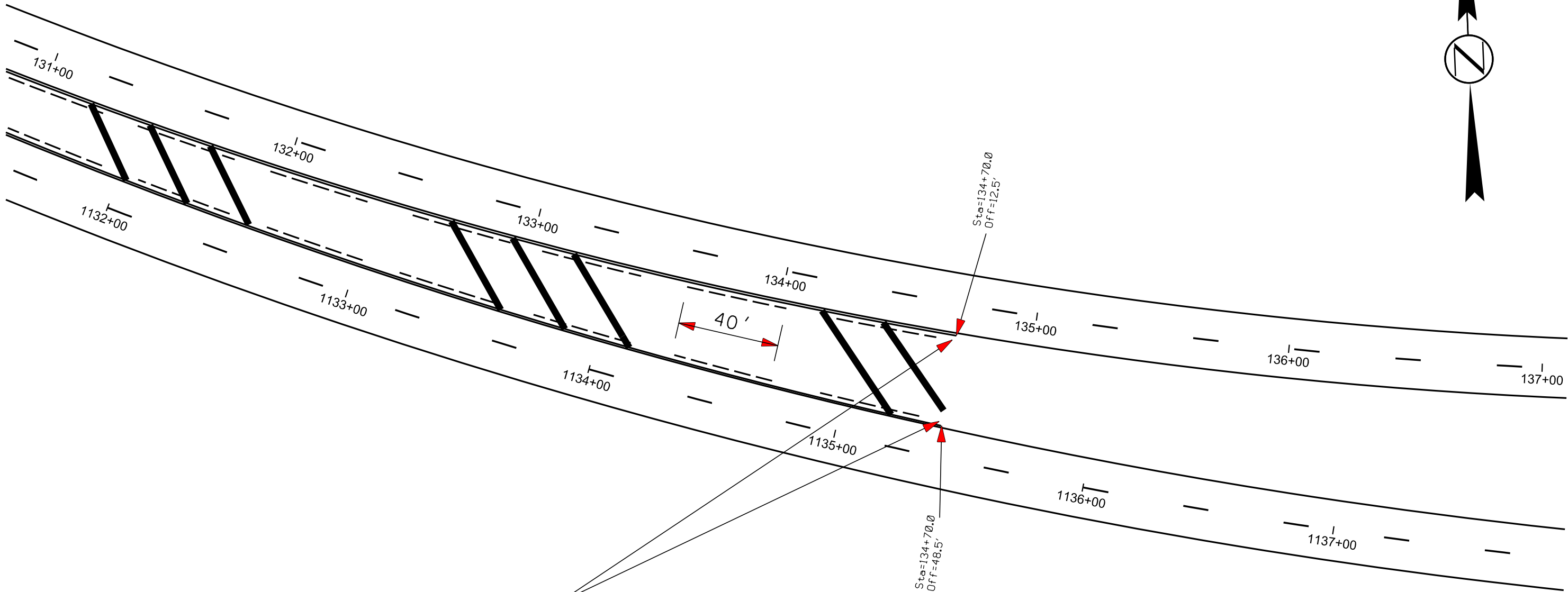
PLOTTED FROM - TRAB17901

RUMBLE STRIPE/STRIP LAYOUT

SEGMENT 8

US HWY 14

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	PH 0010(229)	29	32
Plotting Date: 02/09/2024			



End 12" Rumble Strips on interior side of Double Yellow Line. Strips are offset 6" inside the interior 4" Double Yellow Line as per Std. Plate 320.26.

PLOT NAME - 5

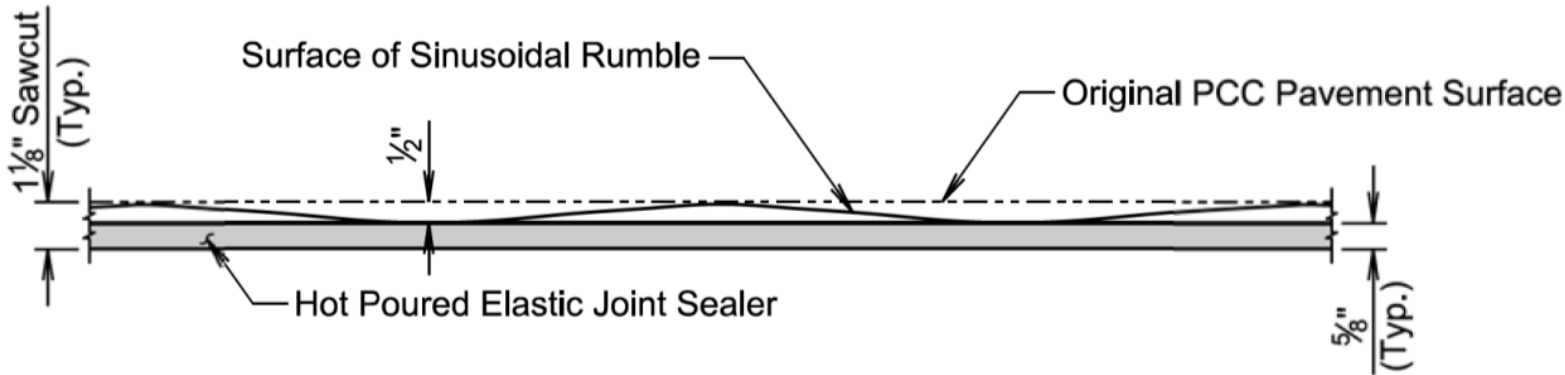
FILE - ... \US 14 & 81 CURVE\09PH131PH.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	PH 0010(229)	30	32

Plotting Date: 01/25/2024

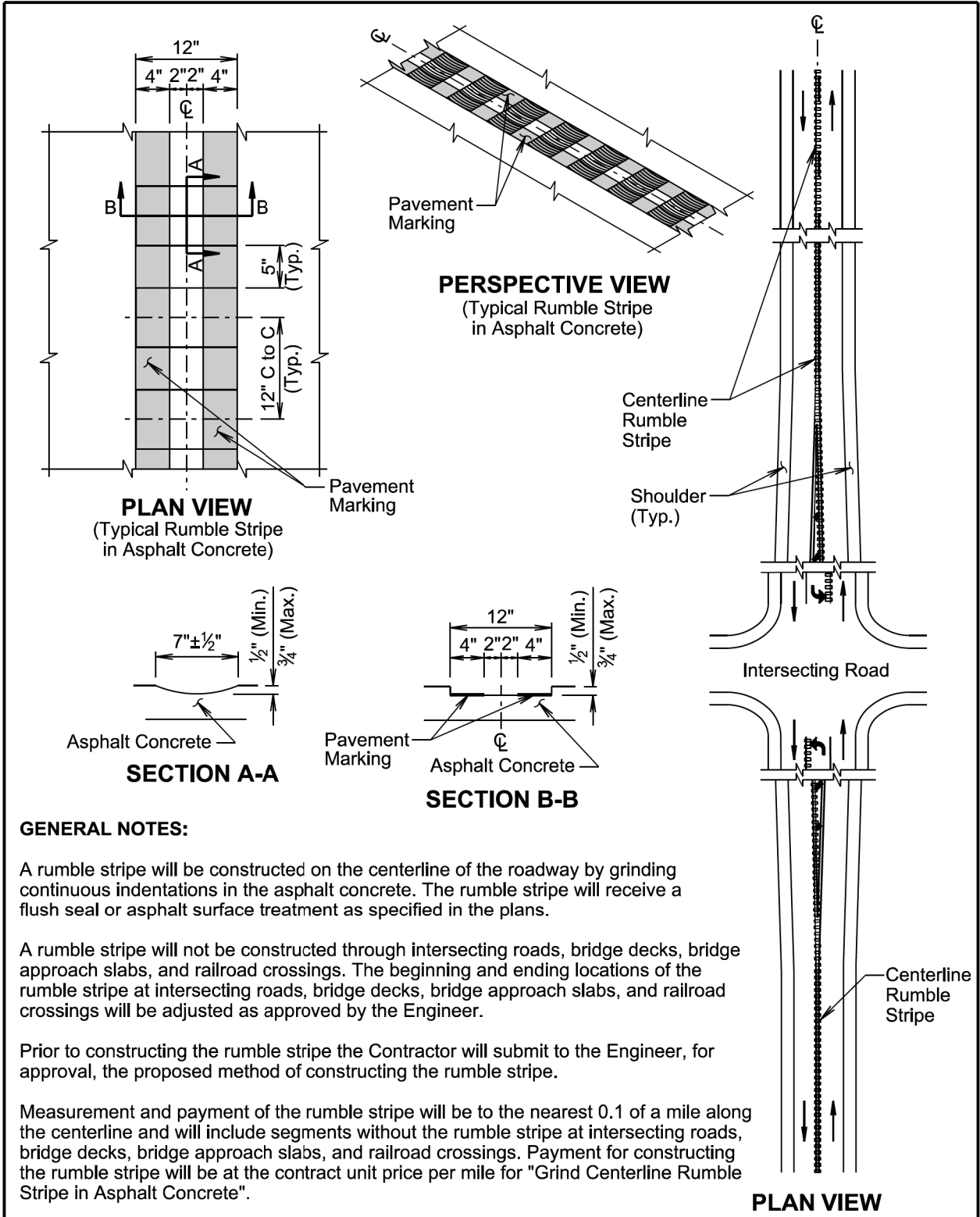
**LONGITUDINAL JOINT AT CENTERLINE OF PORTLAND CEMENT CONCRETE PAVEMENT
WITH SINUSOIDAL CENTERLINE RUMBLE STRIPE**

Sheet 1 of 1

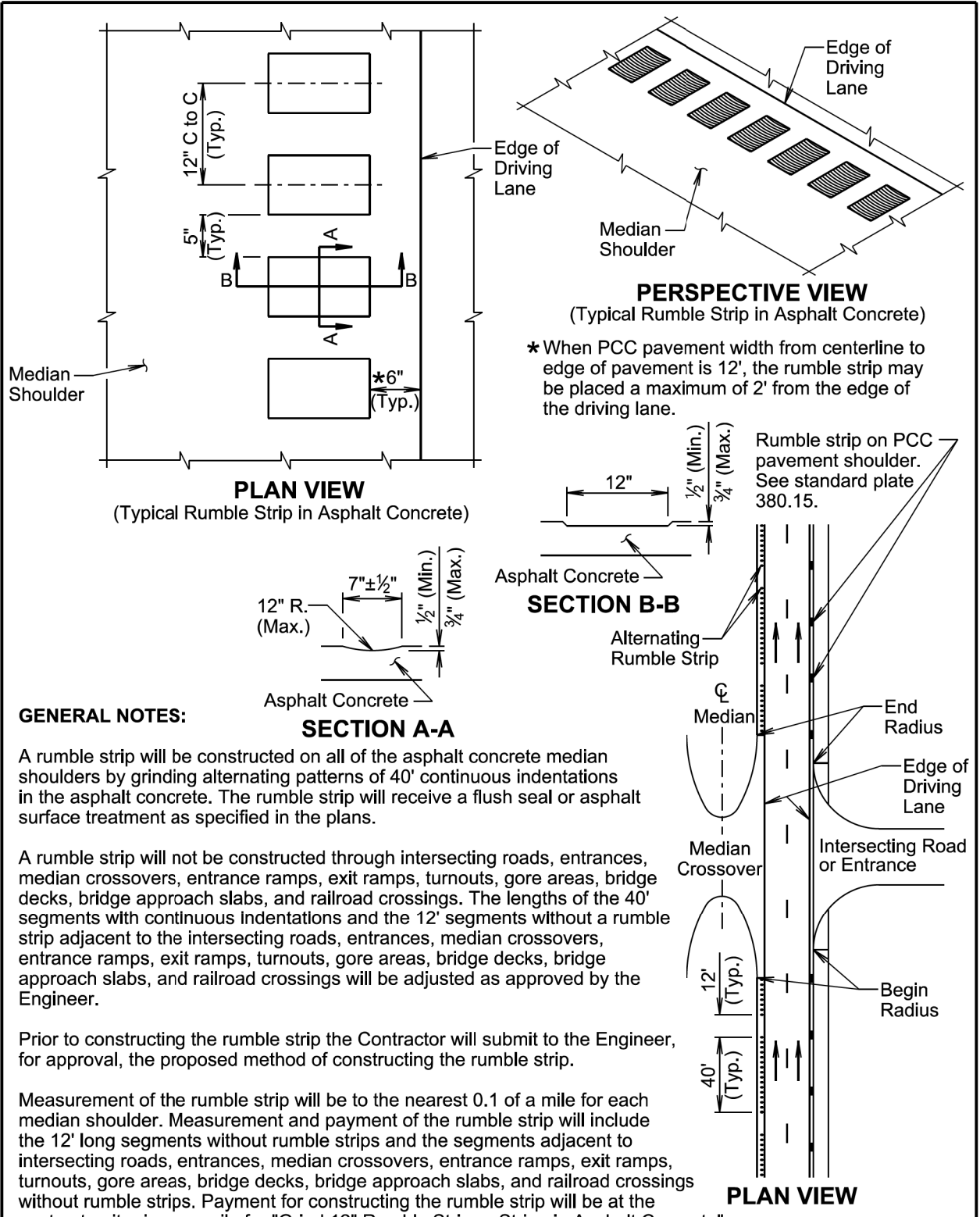


SECTIONAL VIEW
(Section along Longitudinal Joint at Centerline)

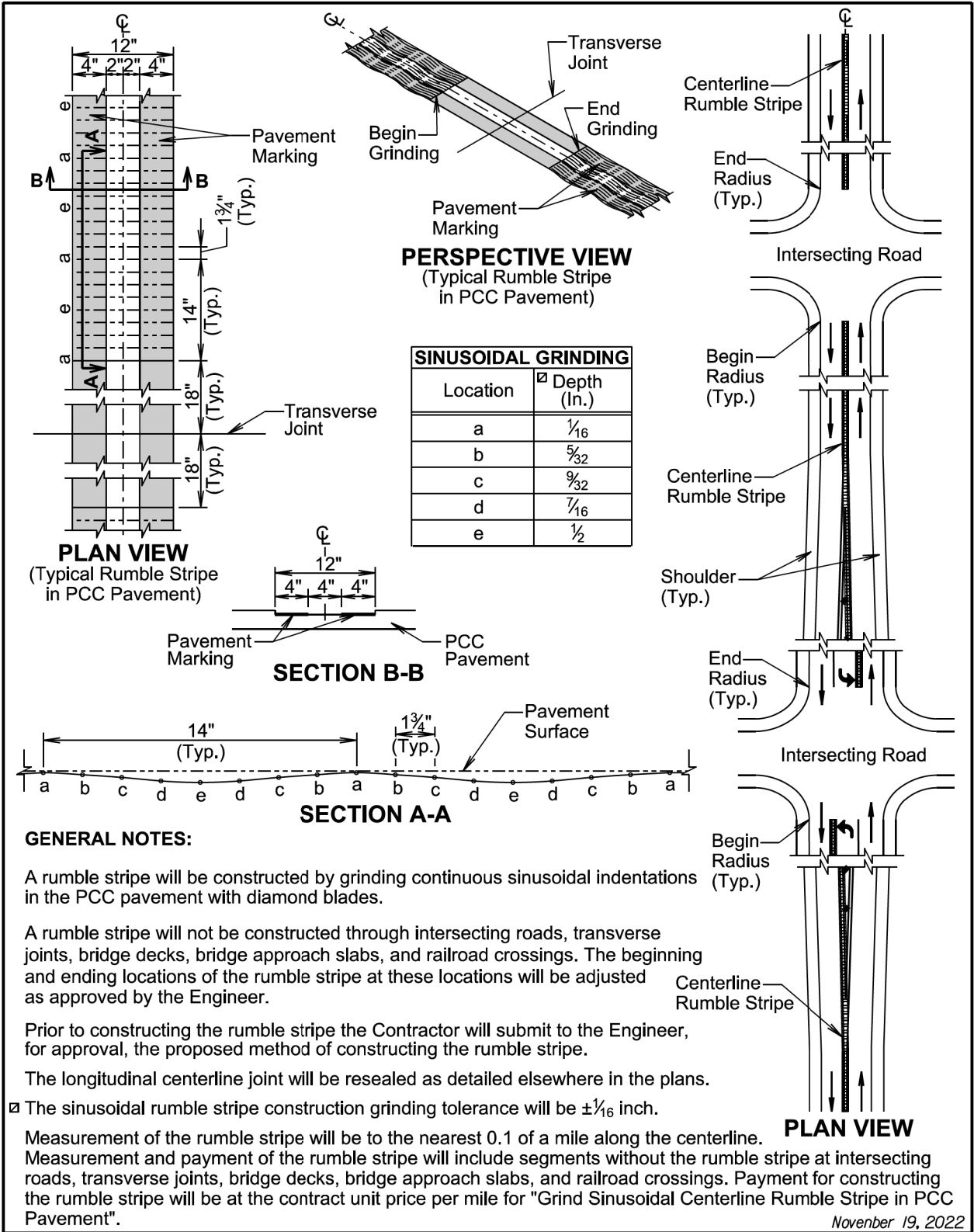
NOTE: The width of the sawcut will be the the current width of the existing longitudinal joint.



Published Date: 2024	S D D O T	12" CENTERLINE RUMBLE STRIPE IN ASPHALT CONCRETE	PLATE NUMBER
			320.18
			Sheet 1 of 1



Published Date: 2024	S D D O T	12" RUMBLE STRIP IN ASPHALT CONCRETE ON DIVIDED HIGHWAY MEDIAN SHOULDER	PLATE NUMBER
			320.26
			Sheet 1 of 1



Published Date: 2024	S D D O T	SINUSOIDAL CENTERLINE RUMBLE STRIPE IN PCC PAVEMENT	PLATE NUMBER
			380.56
			Sheet 1 of 1