

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	1	72

Plotting Date: 02/29/2024

PLANS FOR PROPOSED
PROJECT IM-NH-P 0012(315)
INTERSTATE 29,
US 12, US 14,
SOUTH DAKOTA HWY
10, 20, 22, 25
28, 106, 123, 127

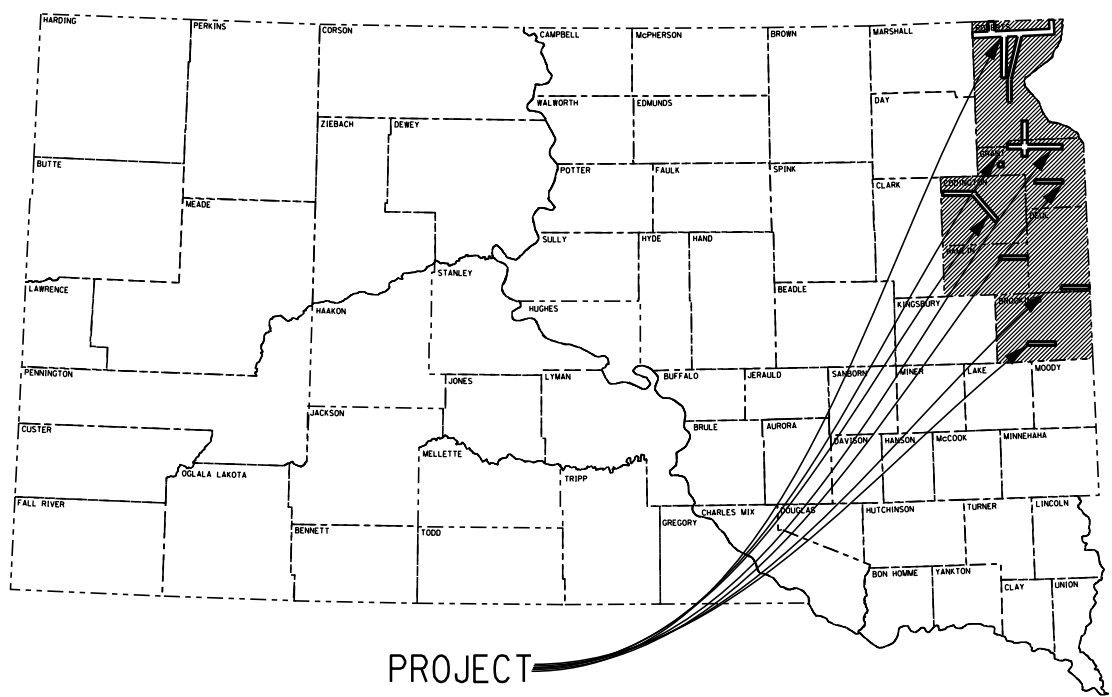
INDEX OF SHEETS

Sheets 1 – 14	Title Sheet and Layout Maps
Sheet 15	Estimate of Quantities and Specifications
Sheet 16	Environmental Commitments
Sheets 17 – 21	Table of Quantities
Sheet 22	Table of Additional Quantities
Sheets 23 – 27	Rates of Materials and Plan Notes
Sheets 28 – 49	Traffic Control
Sheets 50 – 72	Pavement Marking and Layouts (Masking)

BROOKINGS, CODINGTON, DEUEL,
GRANT, HAMLIN, ROBERTS COUNTIES

ASPHALT SURFACE TREATMENT
PCN 097A

Segment 1 - Sheet 2	Segment 13 - Sheet 10
Segment 2 - Sheet 5	Segment 14 - Sheet 11
Segment 3 - Sheet 1	Segment 15 - Sheet 12
Segment 4 & 5 - Sheet 4	Segment 16-19 - Sheet 2
Segment 6 - Sheet 6	Segment 20-21 - Sheet 3
Segment 7 - Sheet 4	Segment 22-23 - Sheet 4
Segment 8 - Sheet 8	Segment 24 - Sheet 13
Segment 9 - Sheet 9	Segment 25-32 - Sheet 14
Segment 10 - Sheet 10	Segment 33 - Sheet 13
Segment 11 & 12 - Sheet 7	Segment 34-41 - Sheet 14

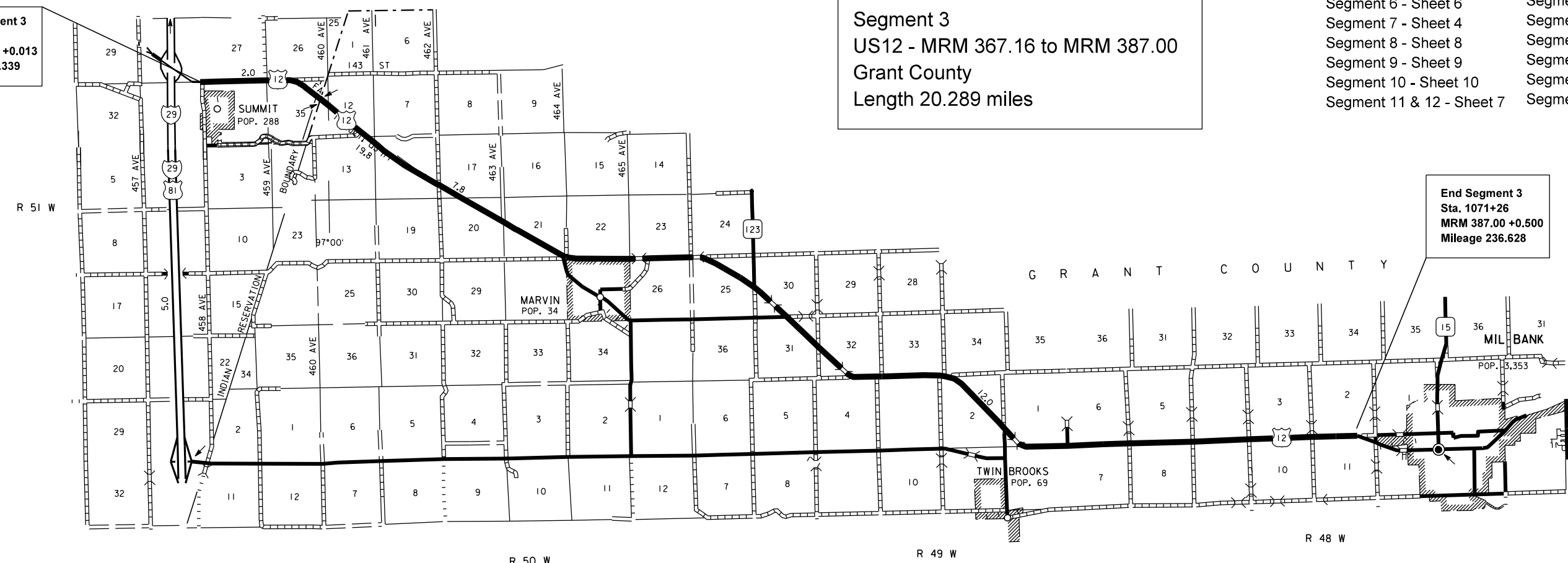


PROJECT

Begin Segment 3
Sta. 0+00
MRM 367.16 +0.013
Mileage 216.339

Segment 3
US12 - MRM 367.16 to MRM 387.00
Grant County
Length 20.289 miles

End Segment 3
Sta. 1071+26
MRM 387.00 +0.500
Mileage 236.628



8

DESIGN DESIGNATION
ADT (2022) 1338
STORM WATER PERMIT
NONE REQUIRED

May 15, 2024

PLOT SCALE - 1" = 10005.1'

PLOT NAME - 1

FILE - ... \097A TITLE SHEET.DGN

PLOTTED FROM - TRWAIN16

Begin Segment 17&18
Sta. 0+00
MRM 358.20
0.242 Miles

Segment 17
SD10 E

Segment 18
SD10 W

End Segment 17&18
Sta. 5+86
MRM 358.40
0.353 Miles

Begin Segment 16&19
Sta. 0+00
MRM 359.33
0.353 Miles

Segment 16
SD10 E

Segment 19
SD10 W

End Segment 16&19
Sta. 5+28
MRM 359.43
0.453 Miles



Begin Segment 1
Sta. 0+00
MRM 358.40
162.720 Miles

Segment 1
SD10

End Segment 1
Sta. 48+58
MRM 359.33
163.640 Miles

Segment 1 - ADT (2022) 6378
Segment 16 - ADT (2022) 3042
Segment 17 - ADT (2022) 2222
Segment 18 - ADT (2022) 2313
Segment 19 - ADT (2022) 3042

SD10 Roundabouts in Sisseton, SD Roberts Co

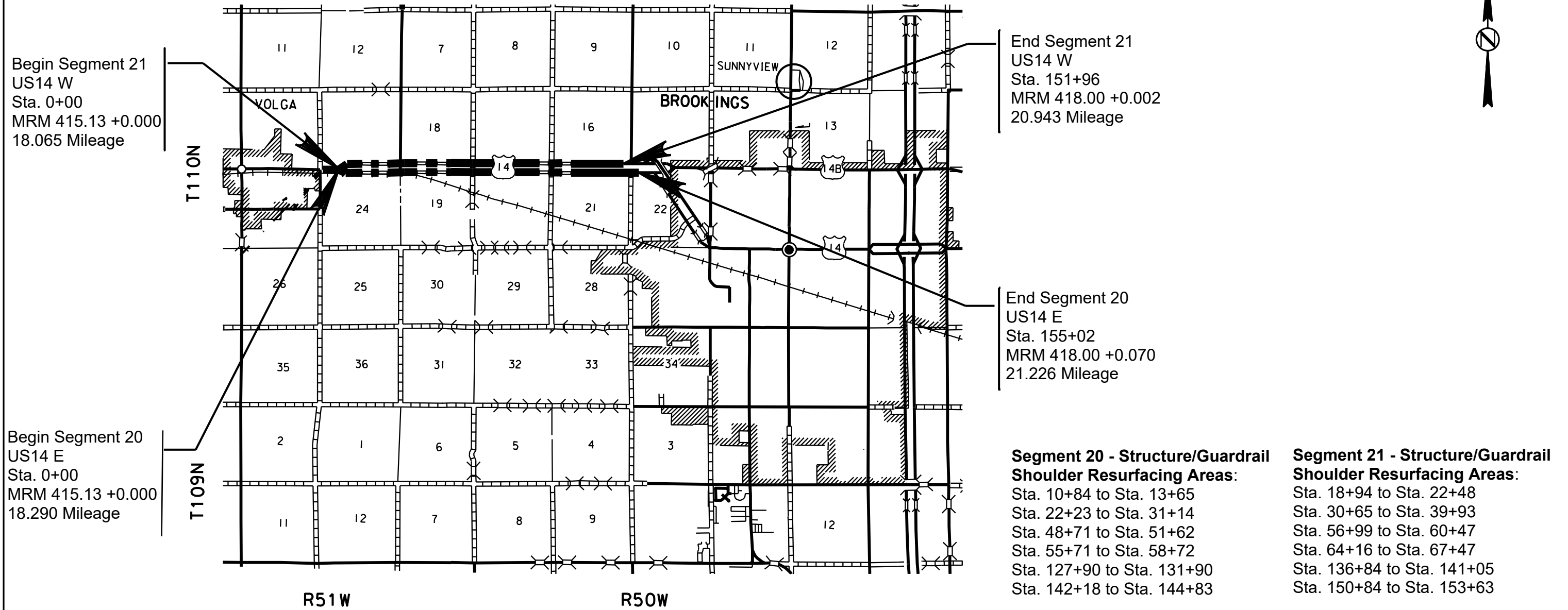
Segment 1 - 0.920 miles
Segment 16 - 0.100 miles
Segment 17 - 0.111 miles
Segment 18 - 0.111 miles
Segment 19 - 0.100 miles



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	3	72

Segment 20
US14 E
MRM 415.13 to MRM 418.07
Length 2.936 miles

Segment 21
US14 W
MRM 415.13 to MRM 418.00
Length 2.878 miles



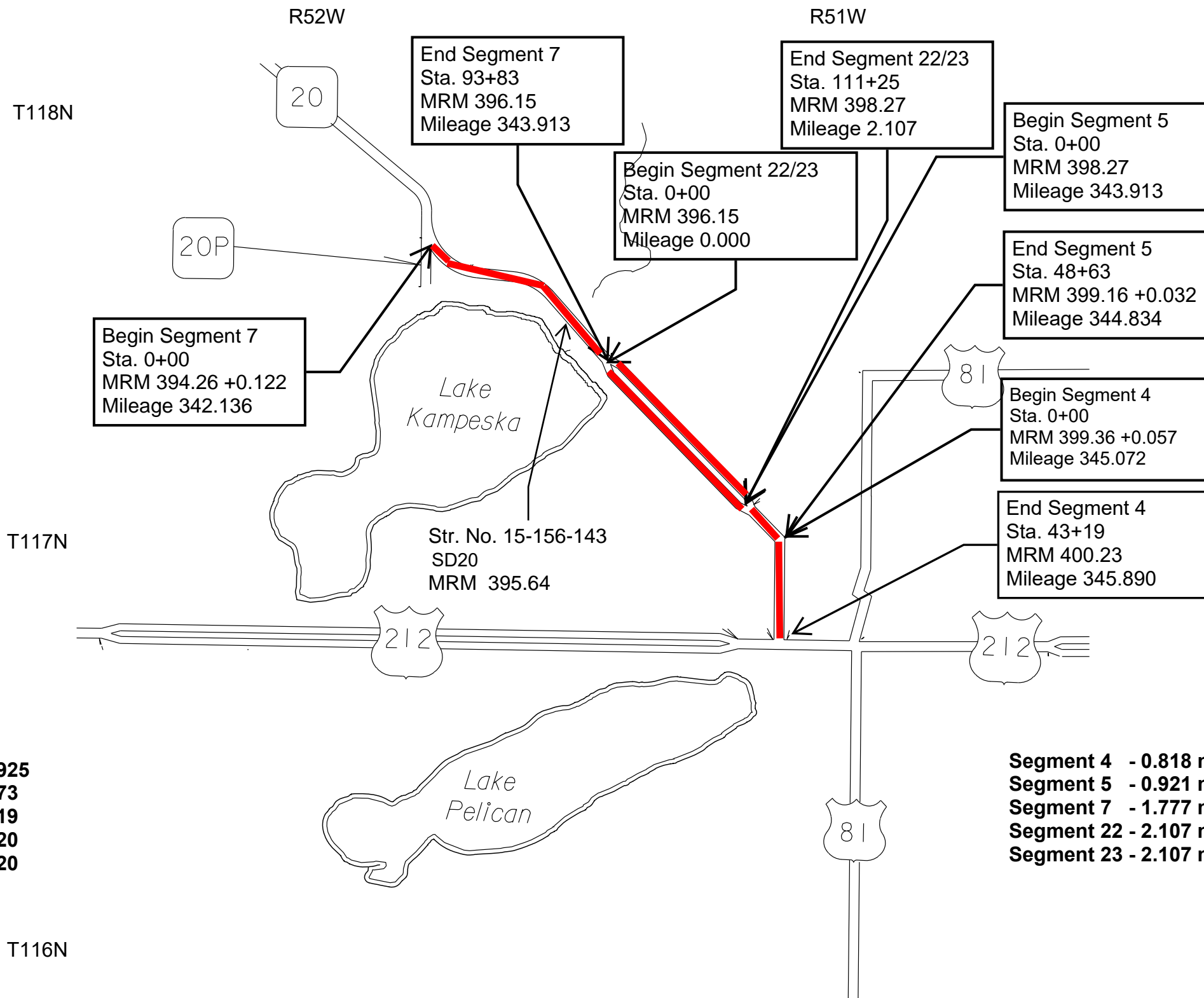
Segment 20 - ADT (2022) 4020
Segment 21 - ADT (2022) 4020

US14 from Brookings to Volga, SD
Brookings Co

PLOTTED FROM - TRAB17882

SD20 From US212 to Junction SD20/Lake Drive

Revised 3-20-24 MAW



Segment 4	- ADT (2022)	10925
Segment 5	- ADT (2022)	7473
Segment 7	- ADT (2022)	3219
Segment 22	- ADT (2022)	4020
Segment 23	- ADT (2022)	4020

Segment 4	- 0.818 miles
Segment 5	- 0.921 miles
Segment 7	- 1.777 miles
Segment 22	- 2.107 miles
Segment 23	- 2.107 miles

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	5	72

SEGMENT 2
SD10 - Over Exit 232
MRM 361.129 to MRM 362.521
Length 1.402 miles

R 50 W

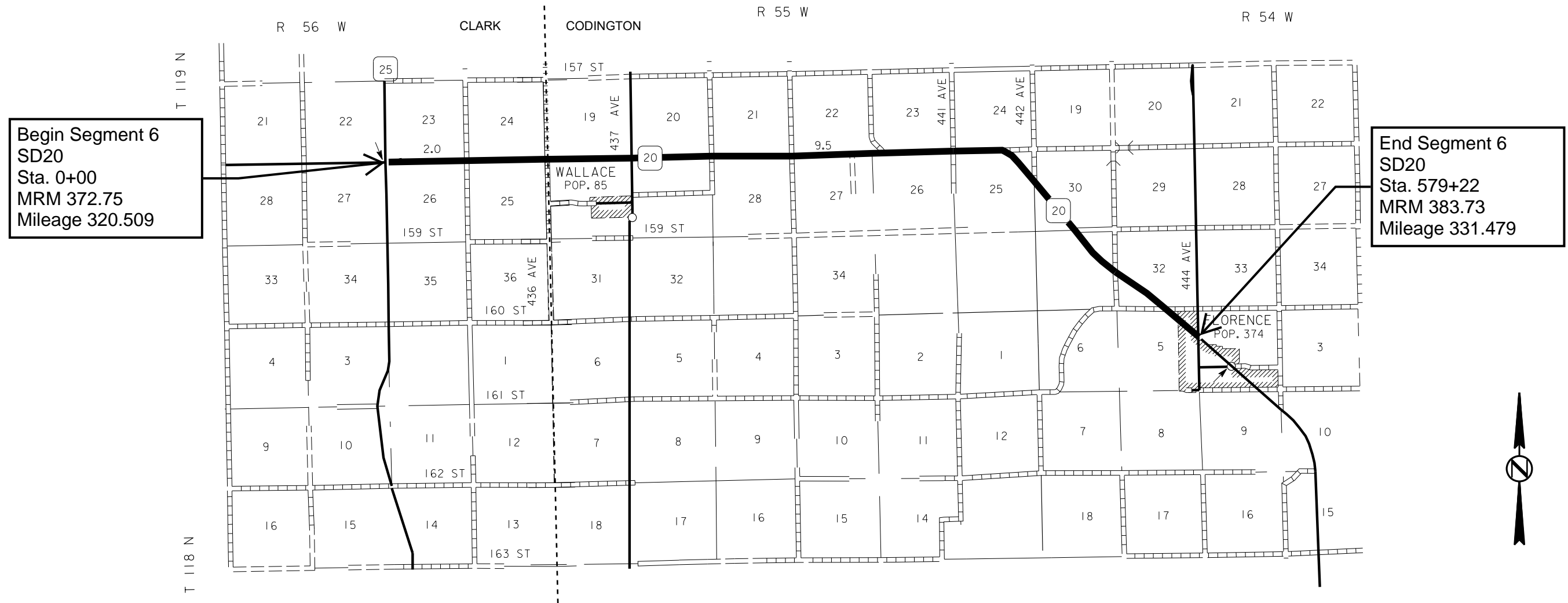
T 126 N



SEGMENT 2 SD10 - Over Exit 232 ADT (2022) 3160

**Structure and Guardrail Exception-
 Sta. 34+40 to Sta. 41+40**

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	6	72



Begin Segment 6
SD20
Sta. 0+00
MRM 372.75
Mileage 320.509

End Segment 6
SD20
Sta. 579+22
MRM 383.73
Mileage 331.479

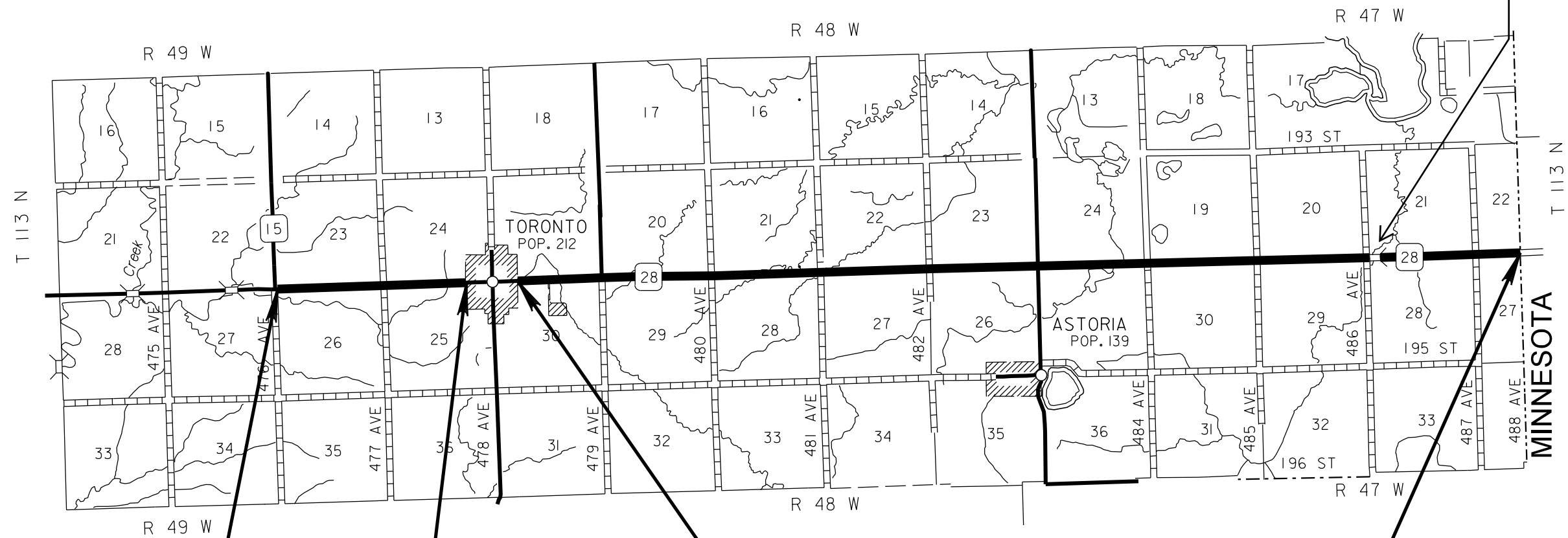
SEGMENT 6 - SD20 - Jct SD25 to 444th Ave - ADT (2023) 1179

Segment 6 - 10.97 miles

Clark, Codington Co

Segment 11
SD 28 - MRM 365.36 to MRM 367.38
Deuel County
Length 1.754 Miles

Segment 12
SD 28 - MRM 367.94 to MRM 377.06
Deuel County
Length 9.188 Miles



Begin Segment 11
 Sta. 0+00
 MRM 365.36
 Mileage 94.481

End Segment 11
 Sta. 92+61.12
 MRM 367.38
 Mileage 96.235

Begin Segment 12
 Sta. 0+00
 MRM 367.94
 Mileage 96.726

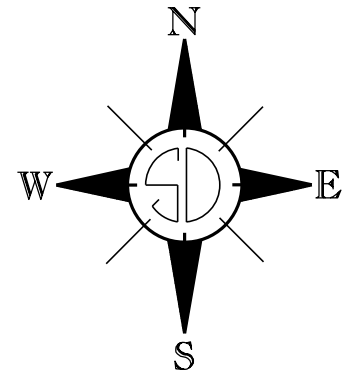
End Segment 12
 Sta. 485+12.64
 MRM 377.06
 Mileage 105.914

Segment 11 ADT(2023) 1167
 Segment 12 ADT(2023) 582

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(315)	8	72

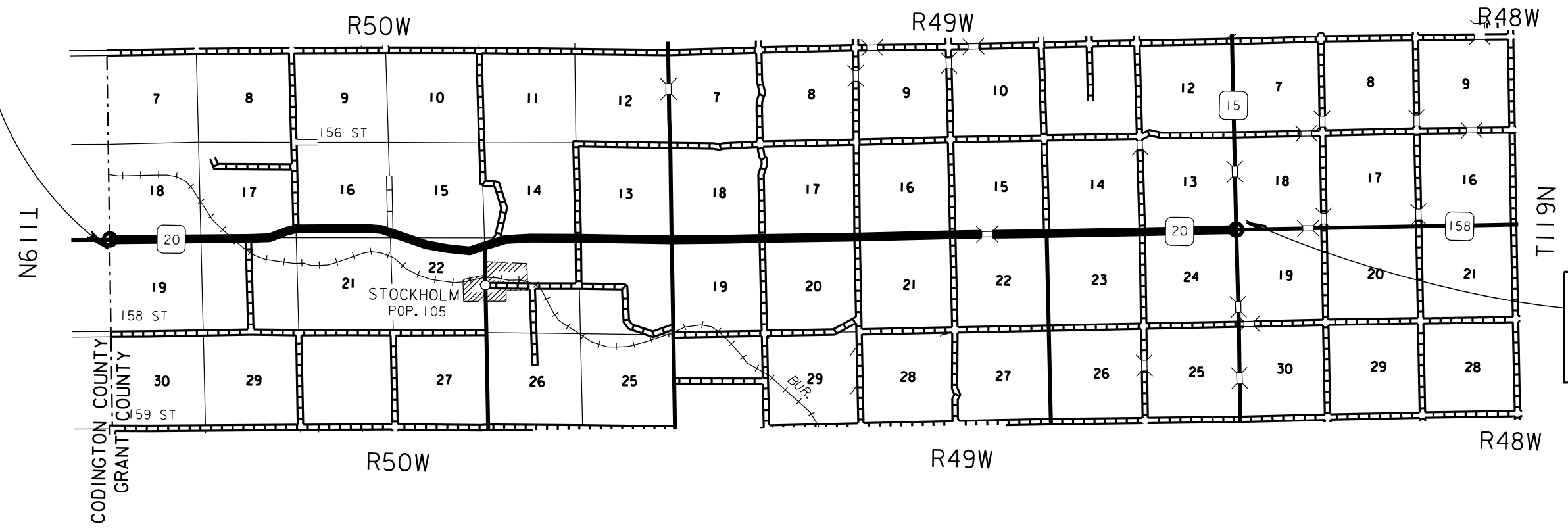
Plotting Date:

Revised 3-20-24 MAW



SEGMENT 8
SD 20- MRM 427.24+0.000 TO MRM 439.25+0.000
Grant County
Length 12.025 Miles

Begin Project
STA 0+00
MRM: 427.24 + 0.000
Mileage 356.724
Codington/Grant Co Line



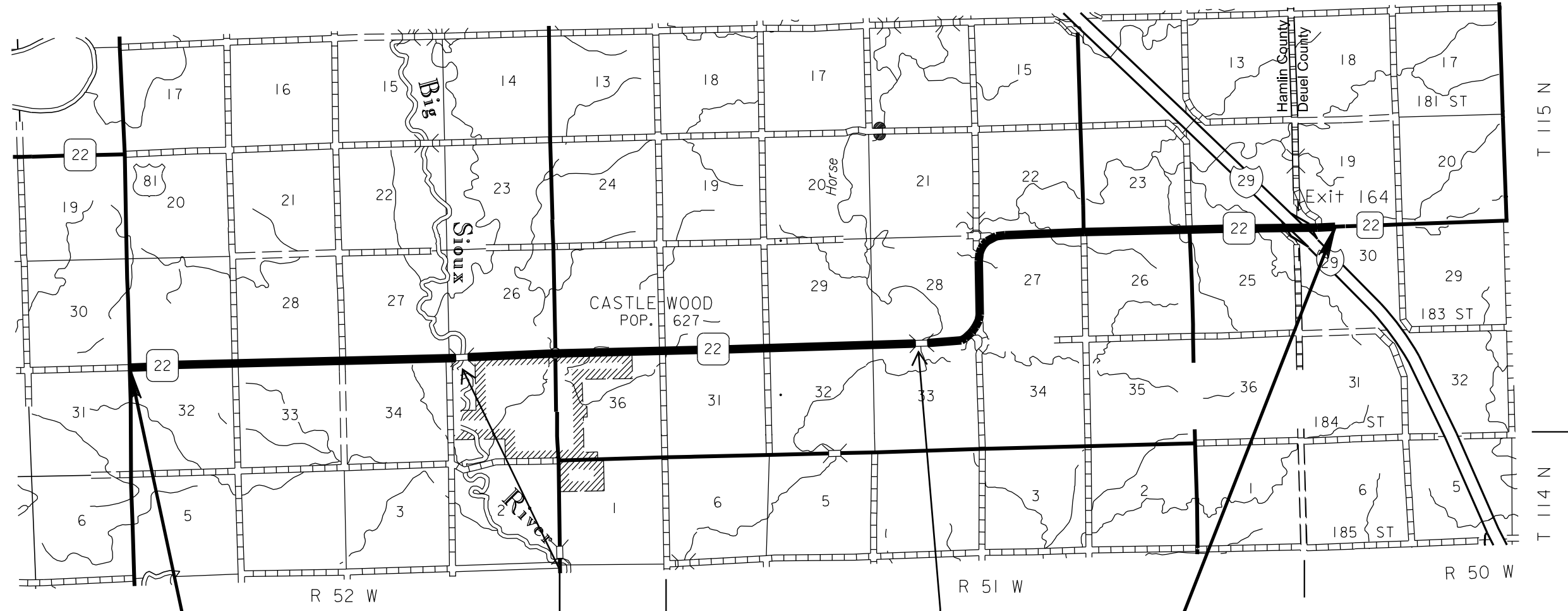
End Project
STA 634+92
MRM: 439.25 + 0.000
Mileage 368.736
SD 20 / SD 15 Jctn

SD20 (ADT) 739 (2023)

PLOT SCALE - 1:6004.58



Segment 9
SD 22 - MRM 348.85 to MRM 360.71 + 0.242
Deuel & Hamlin County
Length 12.091 Miles



Begin Segment 9
Sta. 0+00
MRM 348.85
Mileage 13.487

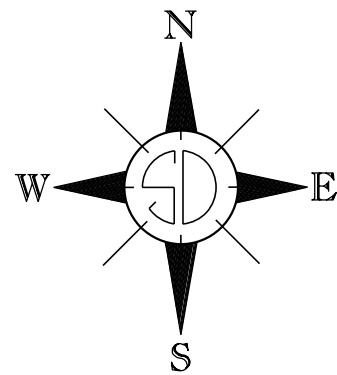
Str. No. 29-222-050
SD22
MRM 351.90

Str. No. 29-264-050
SD22
MRM 356.32

End Segment 9
Sta. 638+40.48
MRM 360.71 + 0.242
Mileage 25.578

PLOTTED FROM - IRVAINT16

FILE - ... \081 TITLE SHEET.DGN PLOT NAME - 1



SEGMENT 10
SD 25 - MRM 230.44 TO MRM 241.46
Roberts County
Length 11.030 Miles

Segment 10
End Project
STA. **582+38.4**
MRM: 241.46 + 0.000
Mileage **194.524**
North Dakota Border

SEGMENT 13
SD 106 - MRM 332.50 TO MRM 337.67
Roberts County
Length 4.935 Miles

Segment 10
Begin Project
STA. 0+00
MRM: 230.44 + 0.000
Mileage **183.494**
Roberts County Line

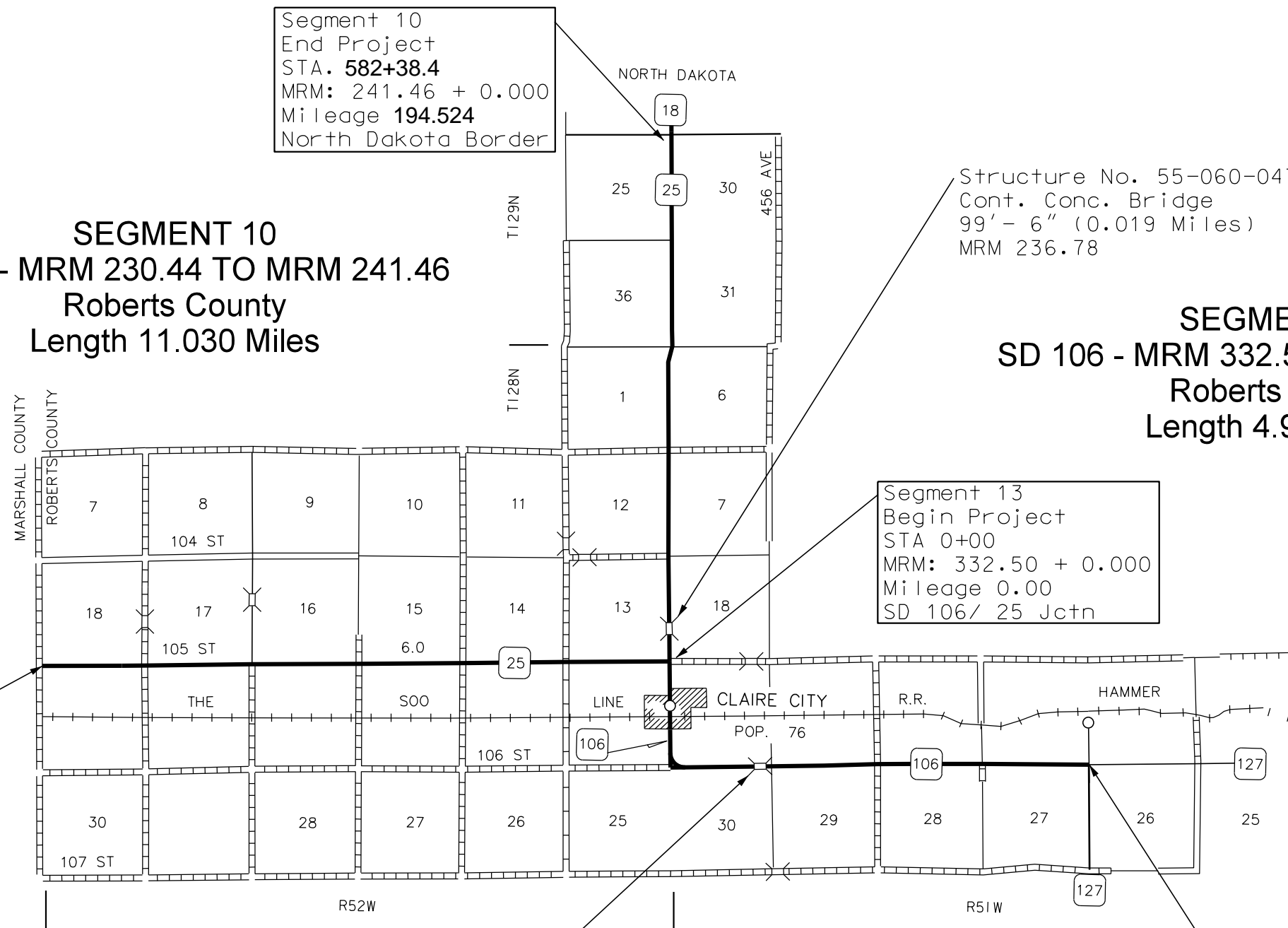
Segment 13
Begin Project
STA 0+00
MRM: 332.50 + 0.000
Mileage 0.00
SD 106/ 25 Jctn

Structure No. 55-060-047
Cont. Conc. Bridge
99' - 6" (0.019 Miles)
MRM 236.78

Structure No. 55-068-060
Cont. Conc. Bridge
119' - 0" (0.023 Miles)
MRM 334.32

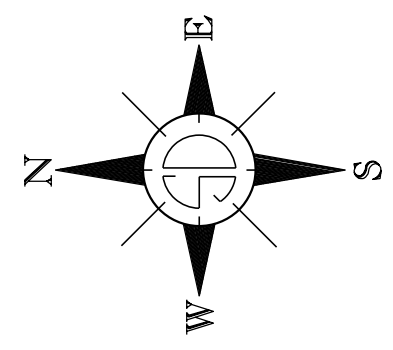
Segment 13
End Project
STA 260+56.80
MRM: 337.67 + 0.000
Mileage 4.935
SD 106/ 127 Jctn

Segment 10 SD25 - ADT (2023) 460
Segment 13 SD106 - ADT (2023) 835



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH-P 0012(315)	11	72

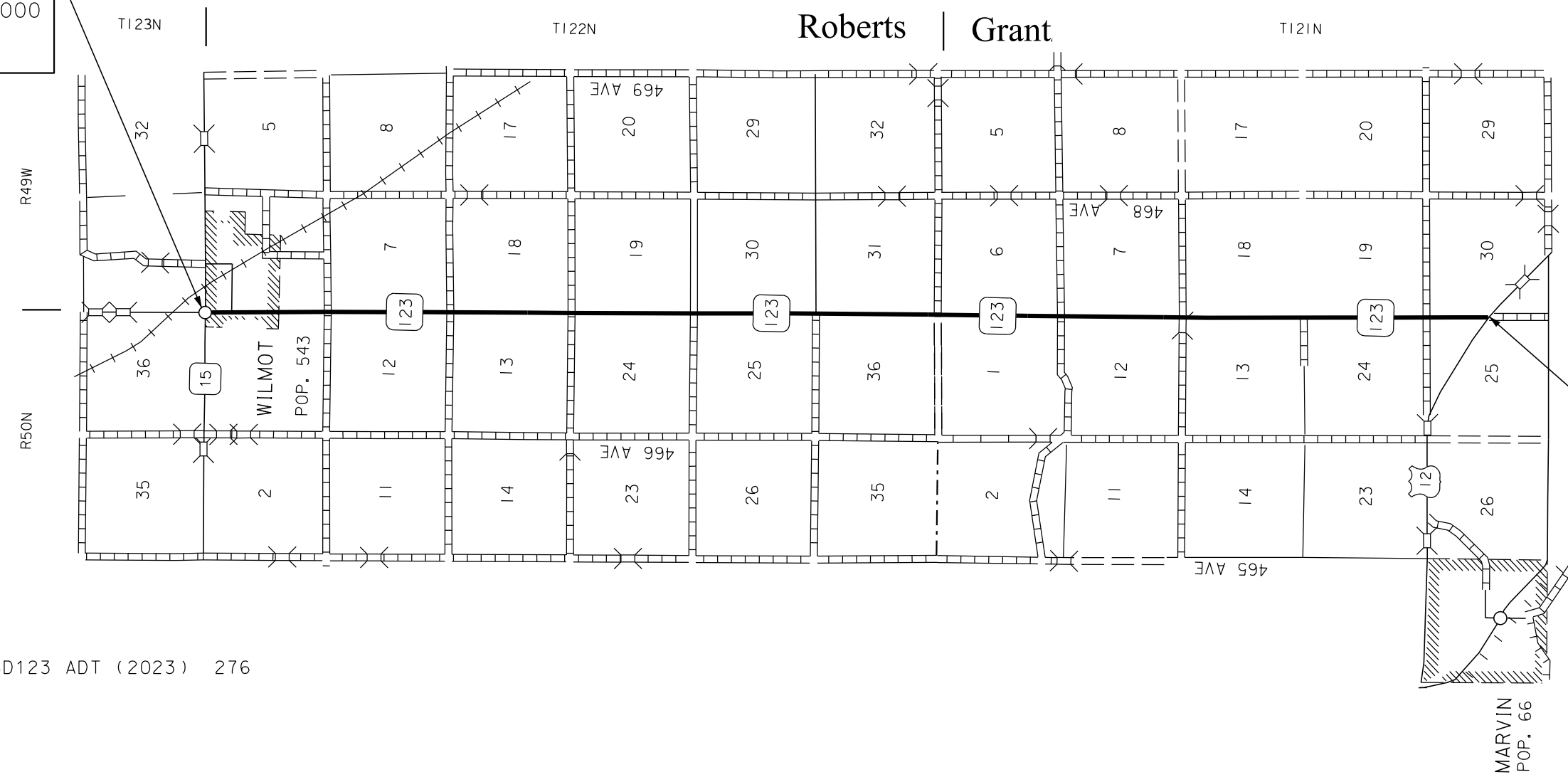
Plotting Date:



SEGMENT 14
SD 123- MRM 172.98 TO MRM 183.46
Grant/ Roberts Counties
Length 10.486 Miles

Roberts | Grant

End Project
STA 553+66.08
MRM: 183.46 + 0.000
Mileage 10.486
SD 123/15 Jctn



Begin Project
STA 0+00
MRM: 172.98 + 0.000
Mileage 0.00
SD 123/ US 12 Jctn

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	12	72

SEGMENT 15
HWY 127 - MRM 213.92 to MRM 251.17
Roberts County
Length 37.349 Miles

End Segment 15
 Sta. 1972+03
 MRM 251.17+0.000
 Mileage 37.349

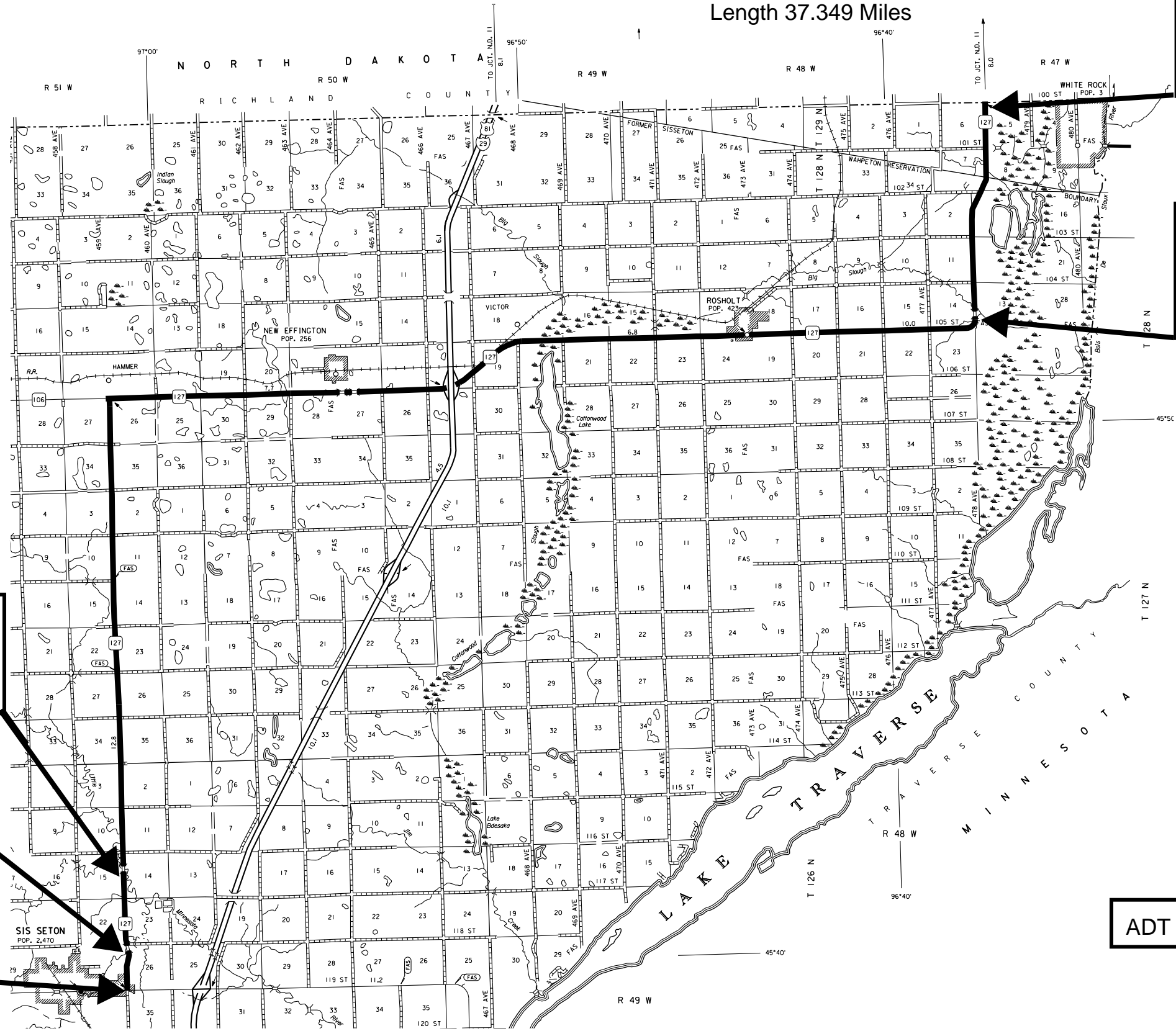
Str. No. 55-290-047
 I Beam Viaduct
 118.5'=0.022 Miles
 MRM 246.61

Str. No. 55-100-164
 Continuous Concrete Bridge
 209'=0.039 Miles
 MRM 216.66

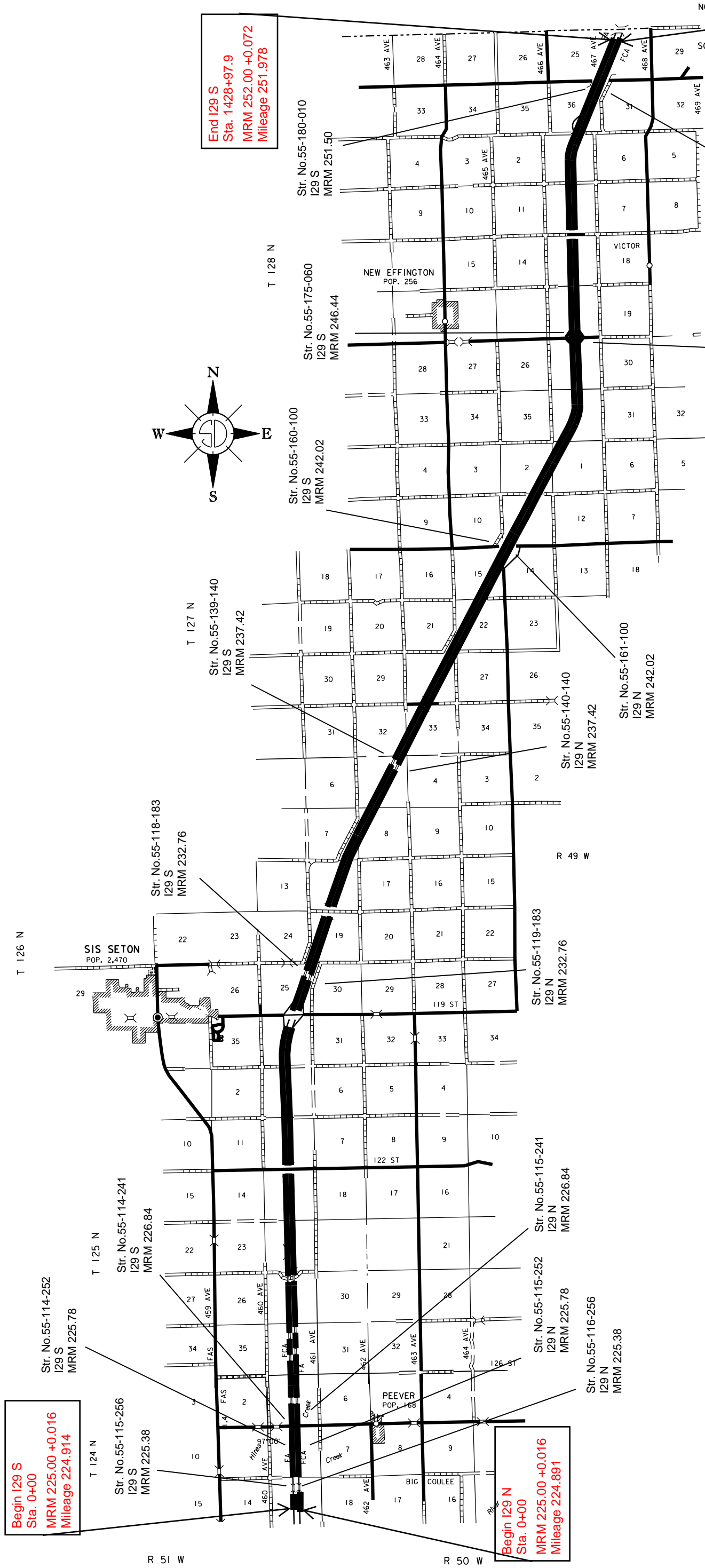
Str. No. 55-101-164
 Continuous Concrete Bridge
 83'=0.015 Miles
 MRM 214.90

Start Segment 15
 Sta. 0+00
 MRM 213.92+0.000
 Mileage 0.000

ADT (2023) 838



STATE OF SOUTH DAKOTA	PROJECT IM-NHP-0012(315)	SHEET NO. 13	TOTAL SHEETS 72
-----------------------	-----------------------------	-----------------	--------------------



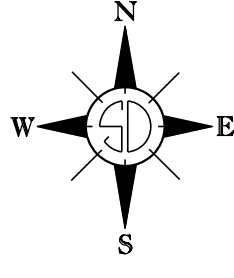
Begin I29 S
Sta. 0+00
MRM 225.00 +0.016
Mileage 224.914

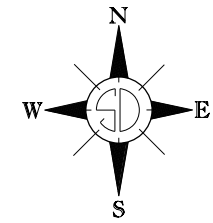
End I29 S
Sta. 1428+97.9
MRM 252.00 +0.072
Mileage 251.978

End I29 N
Sta. 1428+39.8
MRM 252.00 +0.072
Mileage 251.944

Segment 24 I29 N ADT (2022) - 2535
Segment 33 I29 S ADT (2022) - 2535

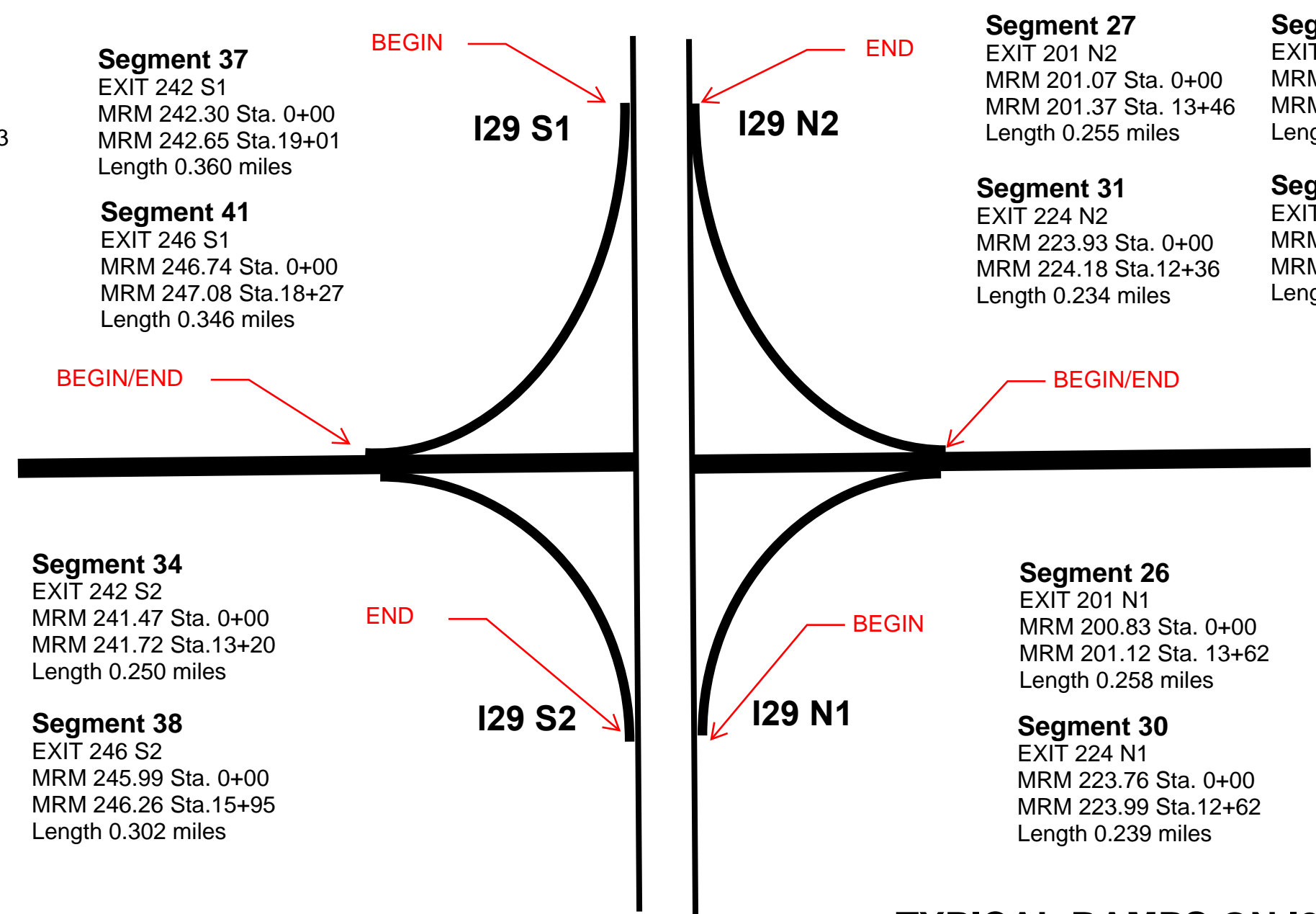
I29 N/S ROBERTS CO





1 = OFF
2 = ON

I29



Segment 28
EXIT 201 S1
MRM 201.36 Sta. 0+00
MRM 201.63 Sta. 12+83
Length 0.243 miles

Segment 37
EXIT 242 S1
MRM 242.30 Sta. 0+00
MRM 242.65 Sta. 19+01
Length 0.360 miles

BEGIN →
I29 S1

← END
I29 N2

Segment 27
EXIT 201 N2
MRM 201.07 Sta. 0+00
MRM 201.37 Sta. 13+46
Length 0.255 miles

Segment 36
EXIT 242 N2
MRM 242.05 Sta. 0+00
MRM 242.28 Sta. 12+88
Length 0.244 miles

Segment 32
EXIT 224 S1
MRM 224.18 Sta. 0+00
MRM 224.42 Sta. 19+01
Length 0.360 miles

Segment 41
EXIT 246 S1
MRM 246.74 Sta. 0+00
MRM 247.08 Sta. 18+27
Length 0.346 miles

Segment 31
EXIT 224 N2
MRM 223.93 Sta. 0+00
MRM 224.18 Sta. 12+36
Length 0.234 miles

Segment 40
EXIT 246 N2
MRM 246.46 Sta. 0+00
MRM 246.72 Sta. 14+73
Length 0.279 miles

BEGIN/END →

← BEGIN/END

Segment 25
EXIT 201 S2
MRM 200.55 Sta. 0+00
MRM 200.82 Sta. 12+62
Length 0.239 miles

Segment 34
EXIT 242 S2
MRM 241.47 Sta. 0+00
MRM 241.72 Sta. 13+20
Length 0.250 miles

← END
I29 S2

BEGIN →
I29 N1

Segment 26
EXIT 201 N1
MRM 200.83 Sta. 0+00
MRM 201.12 Sta. 13+62
Length 0.258 miles

Segment 35
EXIT 242 N1
MRM 241.71 Sta. 0+00
MRM 242.07 Sta. 18+85
Length 0.357 miles

Segment 29
EXIT 224 S2
MRM 223.53 Sta. 0+00
MRM 223.77 Sta. 12+62
Length 0.239 miles

Segment 38
EXIT 246 S2
MRM 245.99 Sta. 0+00
MRM 246.26 Sta. 15+95
Length 0.302 miles

Segment 30
EXIT 224 N1
MRM 223.76 Sta. 0+00
MRM 223.99 Sta. 12+62
Length 0.239 miles

Segment 39
EXIT 246 N1
MRM 246.26 Sta. 0+00
MRM 246.60 Sta. 19+75
Length 0.374 miles

TYPICAL RAMPS ON I29

EXIT 201
EXIT 224
EXIT 242
EXIT 246

Segment 25	ADT (2022)	261	Segment 34	ADT (2022)	66
Segment 26	ADT (2022)	262	Segment 35	ADT (2022)	90
Segment 27	ADT (2022)	135	Segment 36	ADT (2022)	83
Segment 28	ADT (2022)	230	Segment 37	ADT (2022)	72
Segment 29	ADT (2022)	268	Segment 38	ADT (2022)	139
Segment 30	ADT (2022)	317	Segment 39	ADT (2022)	172
Segment 31	ADT (2022)	209	Segment 40	ADT (2022)	120
Segment 32	ADT (2022)	250	Segment 41	ADT (2022)	175

ESTIMATE OF QUANTITIES AND SPECIFICATIONS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	15	72

Revised 3-20-24 MAW

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	120.6	Ton
330E0300	SS-1h or CSS-1h Asphalt for Fog Seal	657.5	Ton
330E2000	Sand for Flush Seal	50.0	Ton
360E0042	CRS-2P Asphalt for Surface Treatment	3,588.7	Ton
360E1010	Type 1A Cover Aggregate	260.2	Ton
360E1010	Type 1A Cover Aggregate	327.4	Ton
360E1010	Type 1A Cover Aggregate	327.2	Ton
360E1010	Type 1A Cover Aggregate	306.3	Ton
360E1010	Type 1A Cover Aggregate	1,672.9	Ton
360E1010	Type 1A Cover Aggregate	366.8	Ton
360E1010	Type 1A Cover Aggregate	2,480.1	Ton
360E1010	Type 1A Cover Aggregate	2,611.8	Ton
360E1010	Type 1A Cover Aggregate	1,991.2	Ton
360E1010	Type 1A Cover Aggregate	417.1	Ton
360E1010	Type 1A Cover Aggregate	1,883.3	Ton
360E1010	Type 1A Cover Aggregate	1,067.6	Ton
360E1010	Type 1A Cover Aggregate	1,487.9	Ton
360E1010	Type 1A Cover Aggregate	7,825.0	Ton
360E1010	Type 1A Cover Aggregate	15.5	Ton
360E1010	Type 1A Cover Aggregate	17.2	Ton
360E1010	Type 1A Cover Aggregate	17.2	Ton
360E1010	Type 1A Cover Aggregate	15.5	Ton
360E1010	Type 1A Cover Aggregate	328.3	Ton
360E1010	Type 1A Cover Aggregate	328.3	Ton
360E1010	Type 1A Cover Aggregate	41.8	Ton
360E1010	Type 1A Cover Aggregate	44.9	Ton
360E1010	Type 1A Cover Aggregate	46.5	Ton
360E1010	Type 1A Cover Aggregate	41.8	Ton
360E1010	Type 1A Cover Aggregate	37.2	Ton
360E1010	Type 1A Cover Aggregate	35.6	Ton
360E1010	Type 1A Cover Aggregate	38.7	Ton
360E1010	Type 1A Cover Aggregate	55.7	Ton
360E1010	Type 1A Cover Aggregate	38.7	Ton
360E1010	Type 1A Cover Aggregate	55.8	Ton
360E1010	Type 1A Cover Aggregate	35.6	Ton
360E1010	Type 1A Cover Aggregate	54.2	Ton
360E1010	Type 1A Cover Aggregate	41.8	Ton
360E1010	Type 1A Cover Aggregate	52.7	Ton
360E1010	Type 1A Cover Aggregate	40.3	Ton
360E1010	Type 1A Cover Aggregate	52.7	Ton
633E0030	Cold Applied Plastic Pavement Marking, 24"	346	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	8	Each

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0045	Cold Applied Plastic Pavement Marking, Combination Arrow	2	Each
633E1200	High Build Waterborne Pavement Marking Paint, White	6,648	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	2,914	Gal
633E6005	Pavement Marking Masking, 5"	10,370	Ft
633E6015	Pavement Marking Masking, 13"	423	Ft
633E6020	Pavement Marking Masking, 25"	3,149	Ft
633E6025	Pavement Marking Masking, Area	370	SqFt
633E6030	Pavement Marking Masking, Arrow	154	Each
633E6035	Pavement Marking Masking, Combination Arrow	4	Each
633E6045	Pavement Marking Masking, Railroad Crossing	12	Each
634E0010	Flagging	610.0	Hour
634E0020	Pilot Car	172.5	Hour
634E0110	Traffic Control Signs	7,761.4	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0420	Type C Advance Warning Arrow Board	8	Each
634E0630	Temporary Pavement Marking	374.1	Mile
998E0100	Railroad Protective Insurance	Lump Sum	LS

SPECIFICATIONS

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

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	16	72

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 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: HISTORICAL 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.

TABLE OF QUANTITIES IM-NH-P 0012(315) PCN 097A

Information Only

Revised 3-20-24 MAW

BID ITEM NUMBER	ITEM	Segment 1 SD10 Sheet 2	Segment 2 SD10 Sheet 5	Segment 3 US 12 Sheet 1	Segment 4 SD20 Sheet 4	Segment 5 SD20 Sheet 4	Segment 6 SD20 Sheet 6	Segment 7 SD20 Sheet 4	Segment 8 SD20 Sheet 8	UNIT
009E0010	Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
330E0210	SS-1H or CSS-1H for Flush Seal	-	-	32.5	-	-	-	-	-	Ton
330E0300	SS-1H or CSS-1H for Fog Seal	6.7	9.8	-	7.9	8.0	45.0	11.2	67.3	Ton
330E3000	Sand for Flush Seal	-	-	10	-	-	-	-	-	Ton
360E0020	CRS-2P Asphalt for Surface Treatment	38.2	48.0	-	48.0	45.9	245.3	53.9	364.1	Ton
360E1010	Type 1A Cover Aggregate	260.2	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	327.4	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	327.2	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	306.3	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	1672.9	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	366.8	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	2480.1	Ton
633E0030	Cold Applied Plastic Pavement Marking, 24"	-	-	-	-	-	-	-	-	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	-	-	-	-	-	-	-	-	Each
633E0045	Cold Applied Plastic Pavement Marking, Combination Arrow	-	-	-	-	-	-	-	-	Each
633E1300	Pavement Marking Paint, White	-	77.4	-	12.4	50.0	610.5	109.7	667.8	Gal
633E1305	Pavement Marking Paint, Yellow	106.0	29.9	-	45.2	65.3	185.6	98.3	335.9	Gal
633E6005	Pavement Marking Masking, 5"	10370	-	-	-	-	-	-	-	Ft
633E6015	Pavement Marking Masking, 13"	105	-	-	-	-	-	-	-	Ft
633E6020	Pavement Marking Masking, 25"	600	690	-	396	35	-	244	24	Ft
633E6025	Pavement Marking Masking, Area	-	-	-	-	-	-	-	-	SqFt
633E6030	Pavement Marking Masking, Arrow	62	24	-	10	16	-	6	-	Each
633E6035	Pavement Marking Masking, Combination Arrow	-	-	-	-	-	-	-	-	Each
633E6045	Pavement Marking Masking, Railroad Crossing	4	-	-	-	-	-	-	4	Each
634E0010	Flagging	20	40	80	-	-	44	8	48	Hour
634E0020	Pilot Car	-	20	-	-	-	11	2	12	Hour
634E0100	Traffic Control Signs	350.6	350.6	266.0	523.2	Included in Seg. 4	359.0	Included in Seg. 4	516.6	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
634E0630	Temporary Pavement Marking	2.8	3.8	-	2.4	2.8	33.0	5.3	36.0	Mile
634E0420	Type C Advance Warning Arrow Panel	-	-	-	-	-	-	-	-	Each

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	18	72

Information Only

Revised 3-20-24 MAW

BID ITEM NUMBER	ITEM	Segment 9 SD22 Sheet 9	Segment 10 SD25 Sheet 10	Segment 11 SD28 Sheet 7	Segment 12 SD28 Sheet 7	Segment 13 SD106 Sheet 10	Segment 14 SD123 Sheet 11	Segment 15 SD127 Sheet 12	Segment 16 SD 10 E Sheet 2	UNIT
009E0010	Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
330E0210	SS-1H or CSS-1H for Flush Seal	-	-	-	-	-	-	-	-	Ton
330E0300	SS-1H or CSS-1H for Fog Seal	69.9	54.1	10.9	51.5	27.6	40.9	211.4	0.3	Ton
360E0020	CRS-2P Asphalt for Surface Treatment	383.5	292.4	61.2	276.5	156.7	218.4	1148.8	2.3	Ton
360E1010	Type 1A Cover Aggregate	2611.8	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	1991.2	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	417.1	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	1883.3	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	1067.6	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	1487.9	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	7825.0	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	15.5	Ton
633E0030	Cold Applied Plastic Pavement Marking, 24"	-	-	-	-	65	-	89	-	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	-	-	-	-	3	-	5	-	Each
633E0045	Cold Applied Plastic Pavement Marking, Combination Arrow	-	-	-	-	-	-	2	-	Each
633E1300	Pavement Marking Paint, White	672.9	612.7	112.3	507.1	287.5	582.7	2071.1	-	Gal
633E1305	Pavement Marking Paint, Yellow	281.0	94.9	43.2	216.7	100.5	296.5	772.4	-	Gal
633E6005	Pavement Marking Masking, 5"	-	-	-	-	-	-	-	-	Ft
633E6015	Pavement Marking Masking, 13"	-	-	-	-	-	-	-	48	Ft
633E6020	Pavement Marking Masking, 25"	24	24	12	-	130	24	178	96	Ft
633E6025	Pavement Marking Masking, Area	-	-	88	-	-	-	-	66	SqFt
633E6030	Pavement Marking Masking, Arrow	4	6	2	-	6	-	10	-	Each
633E6035	Pavement Marking Masking, Combination Arrow	-	-	-	-	-	-	4	-	Each
633E6045	Pavement Marking Masking, Railroad Crossing	-	-	-	-	4	-	-	-	Each
634E0010	Flagging	48	44	8	36	20	42	152	20	Hour
634E0020	Pilot Car	12	11	2	9	5	10.5	38	40	Hour
634E0100	Traffic Control Signs	398.6	306.0	429.8	Included on Seg 11	306.0	443.2	645.0	Included in Seg. 1	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
634E0630	Temporary Pavement Marking	36.3	33.1	5.3	27.4	14.8	31.4	112.0	0.3	Mile
634E0420	Type C Advance Warning Arrow Panel	-	-	-	-	-	-	-	1.0	Each

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	19	72

Information Only

Revised 3-20-24 MAW

BID ITEM NUMBER	ITEM	Segment 17 SD10 E Sheet 2	Segment 18 SD10 W Sheet 2	Segment 19 SD10 W Sheet 2	Segment 20 US 14 E Sheet 3	Segment 21 US 14 W Sheet 3	Segment 22 SD20 E Sheet 4	Segment 23 SD20 W Sheet 4	Segment 24 I29 N Sheet 13	UNIT
009E0010	Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
330E0210	SS-1H or CSS-1H for Flush Seal	-	-	-	3.7	3.6	-	-	40.4	Ton
330E0300	SS-1H or CSS-1H for Fog Seal	0.6	0.6	0.3	-	-	8.9	8.9	-	Ton
330E3000	Sand for Flush Seal	-	-	-	10	10	-	-	10	Ton
360E0020	CRS-2P Asphalt for Surface Treatment	2.5	2.3	2.3	-	-	48.2	48.2	-	Ton
360E1010	Type 1A Cover Aggregate	17.2	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	17.2	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	15.5	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	328.3	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	328.3	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	-	Ton
633E0030	Cold Applied Plastic Pavement Marking, 24"	-	-	-	-	-	-	-	-	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	-	-	-	-	-	-	-	-	Each
633E0045	Cold Applied Plastic Pavement Marking, Combination Arrow	-	-	-	-	-	-	-	-	Each
633E1300	Pavement Marking Paint, White	-	-	-	-	-	74.6	74.6	-	Gal
633E1305	Pavement Marking Paint, Yellow	-	-	-	-	-	58.6	58.6	-	Gal
633E6005	Pavement Marking Masking, 5"	-	-	-	-	-	-	-	-	Ft
633E6015	Pavement Marking Masking, 13"	54	54	54	-	-	54	54	-	Ft
633E6020	Pavement Marking Masking, 25"	96	96	96	-	-	-	-	-	Ft
633E6025	Pavement Marking Masking, Area	78	72	66	-	-	-	-	-	SqFt
633E6030	Pavement Marking Masking, Arrow	-	-	-	-	-	4	4	-	Each
633E6035	Pavement Marking Masking, Combination Arrow	-	-	-	-	-	-	-	-	Each
633E6045	Pavement Marking Masking, Railroad Crossing	-	-	-	-	-	-	-	-	Each
634E0010	Flagging	-	-	-	-	-	-	-	-	Hour
634E0020	Pilot Car	-	-	-	-	-	-	-	-	Hour
634E0100	Traffic Control Signs	Included in Seg. 1	Included in Seg. 1	Included in Seg. 1	114	114	Included in Seg. 4	Included in Seg. 4	1298.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
634E0630	Temporary Pavement Marking	0.3	0.3	0.3	-	-	6.3	6.3	-	Mile
634E0420	Type C Advance Warning Arrow Panel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	Each

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	20	72

Information Only

Revised 3-20-24 MAW

BID ITEM NUMBER	ITEM	Segment 25	Segment 26	Segment 27	Segment 28	Segment 29	Segment 30	Segment 31	Segment 32	UNIT
		I29 S2 Exit 201 Sheet 14	I29 N1 Exit 201 Sheet 14	I29 N2 Exit 201 Sheet 14	I29 S1 Exit 201 Sheet 14	I29 S2 Exit 224 Sheet 14	I29 N1 Exit 224 Sheet 14	I29 N2 Exit 224 Sheet 14	I29 S1 Sheet 14	
009E0010	Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
330E0210	SS-1H or CSS-1H for Flush Seal	-	-	-	-	-	-	-	-	Ton
330E0300	SS-1H or CSS-1H for Fog Seal	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	Ton
360E0020	CRS-2P Asphalt for Surface Treatment	6.1	6.6	6.8	6.1	5.5	5.2	5.7	5.5	Ton
360E1010	Type 1A Cover Aggregate	41.8	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	44.9	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	46.5	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	41.8	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	37.2	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	35.6	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	38.7	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	55.7	Ton
633E0030	Cold Applied Plastic Pavement Marking, 24"	-	24	-	24	-	24	-	24	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	-	-	-	-	-	-	-	-	Each
633E0045	Cold Applied Plastic Pavement Marking, Combination Arrow	-	-	-	-	-	-	-	-	Each
633E1300	Pavement Marking Paint, White	7.5	8.1	8.3	7.5	6.7	6.4	7.0	6.7	Gal
633E1305	Pavement Marking Paint, Yellow	7.5	8.1	8.3	7.5	6.7	6.4	7.0	6.7	Gal
633E6005	Pavement Marking Masking, 5"	-	-	-	-	-	-	-	-	Ft
633E6015	Pavement Marking Masking, 13"	-	-	-	-	-	-	-	-	Ft
633E6020	Pavement Marking Masking, 25"	-	48	-	48	-	48	-	48	Ft
633E6025	Pavement Marking Masking, Area	-	-	-	-	-	-	-	-	SqFt
633E6030	Pavement Marking Masking, Arrow	-	-	-	-	-	-	-	-	Each
633E6035	Pavement Marking Masking, Combination Arrow	-	-	-	-	-	-	-	-	Each
633E6045	Pavement Marking Masking, Railroad Crossing	-	-	-	-	-	-	-	-	Each
634E0010	Flagging	-	-	-	-	-	-	-	-	Hour
634E0020	Pilot Car	-	-	-	-	-	-	-	-	Hour
634E0100	Traffic Control Signs	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
634E0630	Temporary Pavement Marking	0.8	0.8	0.9	0.8	0.7	0.7	0.8	1.1	Mile
634E0420	Type C Advance Warning Arrow Panel	-	-	-	-	-	-	-	-	Each

PLOTTED FROM - TRAB17882

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	21	72

Information Only

Revised 3-20-24 MAW

BID ITEM NUMBER	ITEM	Segment 33	Segment 34	Segment 35	Segment 36	Segment 37	Segment 38	Segment 39	Segment 40	Segment 41	UNIT
		I29 S Sheet 13	I29 S2 Exit 242 Sheet 14	I29 N1 Exit 242 Sheet 14	I29 N2 Exit 242 Sheet 14	I29 S1 Exit 242 Sheet 14	I29 S2 Exit 246 Sheet 14	I29 N1 Exit 246 Sheet 14	I29 N2 Exit 246 Sheet 14	I29 S1 Exit 246 Sheet 14	
009E0010	Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
330E0210	SS-1H or CSS-1H for Flush Seal	40.4	-	-	-	-	-	-	-	-	Ton
330E0300	SS-1H or CSS-1H for Fog Seal	-	0.8	1.1	0.7	1.0	0.8	1.0	0.8	1.0	Ton
330E3000	Sand for Flush Seal	10	-	-	-	-	-	-	-	-	Ton
360E0020	CRS-2P Asphalt for Surface Treatment	-	5.7	8.2	5.2	8.0	6.1	7.7	5.9	7.7	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	38.7	-	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	55.8	-	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	35.6	-	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	54.2	-	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	41.8	-	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	52.7	-	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	40.3	-	Ton
360E1010	Type 1A Cover Aggregate	-	-	-	-	-	-	-	-	52.7	Ton
633E0030	Cold Applied Plastic Pavement Marking, 24"	-	-	24	-	24	-	24	-	24	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	-	-	-	-	-	-	-	-	-	Each
633E0045	Cold Applied Plastic Pavement Marking, Combination Arrow	-	-	-	-	-	-	-	-	-	Each
633E1300	Pavement Marking Paint, White	-	7.0	10.0	6.4	9.7	7.5	9.5	7.2	9.5	Gal
633E1305	Pavement Marking Paint, Yellow	-	7.0	10.0	6.4	9.7	7.5	9.5	7.2	9.5	Gal
633E6005	Pavement Marking Masking, 5"	-	-	-	-	-	-	-	-	-	Ft
633E6001	Pavement Marking Masking, 13"	-	-	-	-	-	-	-	-	-	Ft
633E6020	Pavement Marking Masking, 25"	-	-	48	-	48	-	48	-	48	Ft
633E6025	Pavement Marking Masking, Area	-	-	-	-	-	-	-	-	-	SqFT
633E6030	Pavement Marking Masking, Arrow	-	-	-	-	-	-	-	-	-	Each
633E6035	Pavement Marking Masking, Combination Arrow	-	-	-	-	-	-	-	-	-	Each
633E6045	Pavement Marking Masking, Railroad Crossing	-	-	-	-	-	-	-	-	-	Each
634E0010	Flagging	-	-	-	-	-	-	-	-	-	Hour
634E0020	Pilot Car	-	-	-	-	-	-	-	-	-	Hour
634E0100	Traffic Control Signs	Included in Seg. 24	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
634E0630	Temporary Pavement Marking	-	0.8	1.1	0.7	1.1	0.8	1.0	0.8	1.0	Mile
634E0420	Type C Advance Warning Arrow Panel	-	-	-	-	-	-	-	-	-	Each

Revised 3-20-24 MAW

TABLE OF ADDITIONAL QUANTITIES

Segments	Highway	White Paint (Gal)	Yellow Paint (Gal)	Aggregate (Tons)	CRS-2P (Tons)	Fog Seal (Tons)	Location	County
1	10	1.0	1.0	46.5	6.8	0.9	Beginning and End of Divided Hwy at the Eastern Roundabout on SD10, EB Right turn lane and WB Accel lane West of Veterans Ave	Roberts
4	20	1.0	1.0	116.2	17.1	2.2	Jct Kemp - US212 10th St in Watertown, SD , Turn Lanes and Accel Lane by 14th Ave	Codington
5	20	1.0	1.0	116.2	17.1	2.2	Jct 20 E/W in Watertown, SD, Turn Lanes and Accel Lane by 14th Ave	Codington
6	20	-	-	116.2	17.1	2.2	Jct SD25 - 444th Ave in Florence, SD, Weigh Scale Site East of SD25	Codington
9	22	1.0	1.0	116.2	17.1	2.2	Jct US81 - Exit 164 Ramps N1/N2, Turn Lanes at the beginning of the Segments	Hamlin
11	28	1.0	1.0	58.1	8.5	1.1	Jct 15/128 - West Toronto City Limits, Turn Lanes at the beginning of the Segment	Deuel
13	106	1.0	1.0	58.1	8.5	1.1	Jct SD25 - Jct SD127, Extra Lane at the East End of SD106	Roberts
15	127	1.0	1.0	116.2	17.1	2.2	Jct SD10 Sisseton, SD - SD/ND Border, Extra Lane at the SD106 Junction	Roberts
TOTALS		7.0	7.0	743.7	109.3	14.1		

Revised 3-20-24 MAW

RATE OF MATERIALS

The Estimate of Quantities is based on the following quantities of materials per mile.

FLUSH SEAL:

SEGMENT	ROUTE	STATION	to	STATION
20	US 14 E	0+00		155+02
21	US 14 W	0+00		151+96
24	I 29 N	0+00		1428+39.8
33	I 29 S	0+00		1428+97.9

Median Shoulders

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 0.5 tons applied 4 feet wide.
(Rate = 0.05 Gal./S.Y.)

Outside Shoulders

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 1.0 tons applied 8 feet wide.
(Rate = 0.05 Gal./S.Y.)

SEGMENT	ROUTE	STATION	to	STATION
3	US 12	0+00		1071+26

Mainline Shoulders – Rates Are For One Shoulder Only

SS-1h or CSS-1h Emulsified Asphalt for Flush Seal at the rate of 0.8 tons applied 6 feet wide.
(Rate = 0.05 Gal./S.Y.)

ASPHALT SURFACE TREATMENT:

SEGMENT	ROUTE	STATION	to	STATION
1	10	0+00		48+58

CRS-2P Asphalt for Surface Treatment at the rate of 34.1 tons applied 36 feet wide.
(Rate = 0.38 Gal./S.Y.)

Type 1A Cover Aggregate at the rate of 232.2 tons applied 36 feet wide.
(Rate = 22 Lbs./S.Y.)

CSS-1H or SS-1H for Fog Seal at the rate of 6.3 tons applied 36 feet wide.
(Rate = 0.07 Gal./S.Y.)

SEGMENT	ROUTE	STATION	to	STATION
2	10	0+00		74+00
4	20	0+00		43+19

CRS-2P Asphalt for Surface Treatment at the rate of 37.8 tons applied 40 feet wide.
(Rate = 0.38 Gal./S.Y.)

Type 1A Cover Aggregate at the rate of 258 tons applied 40 feet wide.
(Rate = 22 Lbs./S.Y.)

CSS-1H or SS-1H for Fog Seal at the rate of 7.0 tons applied 40 feet wide.
(Rate = 0.07 Gal./S.Y.)

SEGMENT	ROUTE	STATION	to	STATION
5	20	0+00		48+63
7	20	0+00		93+83
8	20	0+00		634+92
9	22	0+00		638+40.48
11	28	0+00		92+61.12
12	28	0+00		485+12.64
13	106	0+00		260+56.8
15	127	0+00		1972+03

CRS-2P Asphalt for Surface Treatment at the rate of 30.3 tons applied 32 feet wide.
(Rate = 0.38 Gal./S.Y.)

Type 1A Cover Aggregate at the rate of 206.4 tons applied 32 feet wide.
(Rate = 22 Lbs./S.Y.)

CSS-1H or SS-1H for Fog Seal at the rate of 5.6 tons applied 32 feet wide.
(Rate = 0.07 Gal./S.Y.)

SEGMENT	ROUTE	STATION	to	STATION
6	20	0+00		579+22
14	123	0+00		553+66.08

CRS-2P Asphalt for Surface Treatment at the rate of 20.8 tons applied 22 feet wide.
(Rate = 0.38 Gal./S.Y.)

Type 1A Cover Aggregate at the rate of 141.9 tons applied 22 feet wide.
(Rate = 22 Lbs./S.Y.)

CSS-1H or SS-1H for Fog Seal at the rate of 3.9 tons applied 22 feet wide.
(Rate = 0.07 Gal./S.Y.)

SEGMENT	ROUTE	STATION	to	STATION
10	25	0+00		582+38.4

CRS-2P Asphalt for Surface Treatment at the rate of 26.5 tons applied 28 feet wide.
(Rate = 0.38 Gal./S.Y.)

Type 1A Cover Aggregate at the rate of 180.6 tons applied 28 feet wide.
(Rate = 22 Lbs./S.Y.)

CSS-1H or SS-1H for Fog Seal at the rate of 4.9 tons applied 28 feet wide.
(Rate = 0.07 Gal./S.Y.)

**RATE OF MATERIALS, CONT.
ASPHALT SURFACE TREATMENT**

SEGMENT	ROUTE	STATION	to	STATION
16	010 E	0+00		5+28
17	010 E	0+00		5+86
18	010 W	0+00		5+86
19	010 W	0+00		5+28
22	020 E	0+00		111+25
23	020 W	0+00		111+25
25	029 S2	0+00		12+62
26	029 N1	0+00		13+62
27	029 N2	0+00		13+46
28	029 S1	0+00		12+83
29	029 S2	0+00		12+62
30	029 N1	0+00		12+62
31	029 N2	0+00		12+36
32	029 S1	0+00		19+01
34	029 S2	0+00		13+20
35	029 N1	0+00		18+85
36	029 N2	0+00		12+88
37	029 S1	0+00		19+01
38	029 S2	0+00		15+95
39	029 N1	0+00		19+75
40	029 N2	0+00		14+73
41	029 S1	0+00		18+27

CRS-2P Asphalt for Surface Treatment at the rate of 22.7 tons applied 24 feet wide.
(Rate = 0.38 Gal./S.Y.)

Type 1A Cover Aggregate at the rate of 154.8 tons applied 24 feet wide.
(Rate = 22 Lbs./S.Y.)

CSS-1H or SS-1H for Fog Seal at the rate of 4.2 tons applied 24 feet wide.
(Rate = 0.07 Gal./S.Y.)

COORDINATION OF WORK

A separate contract for Project IM-NH-P 0012(290) PCN 07D8 Roberts County will be awarded to another Contractor for Approach Slab Repair.

A separate contract for Project IM 0299(73)232 PCN 03R6 Roberts County will be awarded to another Contractor for Structure Repainting.

The Contractor will schedule his work so as not to interfere with or hinder the progress of the work performed by other contractors on the above project.

SEQUENCE OF OPERATIONS

The below sequence is for **All Segments except the ones receiving just a flush seal. (Asphalt Surface Treatment):**

1. Install fixed location ground mounted traffic control devices.
2. Install and remove temporary traffic control devices as needed for each type of work.
3. Install cold applied plastic pavement marking.
4. Place temporary pavement marking and pavement marking masking not more than 24 hours prior to chip seal.
5. Apply chip seal.

The brooming operation will be immediately in front of the asphalt distributor.

The Contractor will begin sealing operations at the farthest point from the stockpile site and work towards the stockpile site to eliminate unnecessary driving and turning on the fresh seal.

The application of the asphalt and aggregate will cease at least one hour prior to sunset each day.

Remove cover from tabs and remove masking.

6. Broom chip sealed areas each morning following chip seal application.
7. Pick up cover aggregate in curb & gutter areas and other areas as stated in the plans and directed by the Engineer.

Install Masking.

8. Apply fog seal.
Remove cover from tabs and remove masking.

9. Complete the pavement marking. Immediately prior to application of the permanent pavement marking, the areas to be painted will be broomed or blown off with high pressure compressed air. (If a high pressure air device is used to clean the pavement surface, it will be capable of sustaining continuous high pressure for the duration of the pavement marking process.)

10. Remove temporary pavement marking within the seven day time period specified elsewhere in the plans.

11. Remove traffic control devices.

The below sequence is for **Segments 3, 20, 21, 24, 33 (Flush Seal Only):**

1. Install fixed location ground mounted traffic control devices.
2. Install and remove temporary traffic control devices as needed for each type of work.
3. Apply flush seal.

The brooming operation will be immediately in front of the asphalt distributor.

The application of the asphalt will cease at least one hour prior to sunset each day.

4. Remove traffic control devices.

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.

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.

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.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	25	72

GENERAL TRAFFIC CONTROL, CONTINUED

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.

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.

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.

The Contractor will furnish, install, maintain, and remove TRUCK CROSSING (W8-6) signs daily. The TRUCK CROSSING signs will be displayed always when haul vehicles are hauling material. When hauling conditions no longer exist, the signs will be covered or removed from view. The exact number and location will be determined during construction. Payment for additional signs will be based on the contract unit price per square foot for "Traffic Control Signs".

Traffic control signs have been included in a table for each segment. Payment will only be for those signs used on each segment.

On Asphalt Surface Treatment Segments, the Contractor will furnish, install, and maintain LOOSE GRAVEL (W8-7) signs with 40 MPH (W13-1P) advisory speed plaques upon start of surface treatment operations at each end of the segment and on either side of intersecting asphalt roads and major intersections as determined by the Engineer. In addition, LOOSE GRAVEL signs with 40 MPH advisory speed plaques will be installed at no more than 4 mile intervals throughout each segment. The 40 MPH advisory speed plaque should not be installed with LOOSE GRAVEL signs in areas where the posted speed limit is less than 40 MPH. LOOSE GRAVEL signs and 40 MPH advisory speed plaques will be covered or removed from view when they are not applicable.

On Segments 3, 20, 21, 24, 33 (Flush Seal), the Contractor will furnish, install and maintain FRESH OIL signs with ON SHOULDER signs upon start of flush seal operations at each end of the project. In addition, FRESH OIL signs with ON SHOULDER signs will be installed at 3 mile intervals throughout each project and at other location(s) determined in the field by the Engineer. The aforementioned signs will be removed 3 days following application of flush seal.

Traffic Control for Segments 3, 20, 21, 24, 33 will conform to Standard Plate 634.04. The remaining segments will conform to Standard Plate 634.23 or as directed by the Engineer.

ROAD WORK NEXT XX MILES (G20-1), LOOSE GRAVEL (W8-7), and END ROAD WORK (G20-2) signs are the only signs that need to be mounted on fixed location breakaway sign supports, as shown on the plan layout. ROAD WORK AHEAD (W20-1), FLAGGER (W20-7), ONE LANE ROAD AHEAD (W20-4), and TRUCK CROSSING (W8-6) signs may be mounted on portable supports. Signs mounted on portable supports will be moved as necessary to keep current with the work activities.

Until the end of each day's chip seal operations, at the discretion of the Contractor, additional flaggers and FLAGGER (W20-7) symbol signs will be provided to alert the traveling public entering completed portions of the project to the potential of airborne chips.

The flaggers will provide each motorist with a printed notice on the Contractor's letterhead similar to the one shown below. Cost of the notice will be incidental to other contract items.

"CONTRACTOR'S LETTERHEAD"

THIS HIGHWAY IS BEING RESURFACED WITH A ROCK CHIP SEAL COAT.

THIS TYPE OF CONSTRUCTION HAS THE POTENTIAL OF CAUSING VEHICLE DAMAGE SUCH AS CHIPPED WINDSHIELDS AND BROKEN HEADLIGHTS DUE TO ROCKS BEING THROWN BY HIGH SPEED ONCOMING OR PASSING TRAFFIC.

YOU MAY WISH TO CONSIDER TAKING AN ALTERNATE ROUTE. IF YOU PROCEED, KEEP TO THE RIGHT AND DRIVE 40 MPH OR LESS. ANOTHER FLAGGER AND A PILOT CAR WILL BE ESCORTING YOU AROUND THE OIL SEAL COAT APPLICATION AREA.

THANK YOU.

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".

HAUL ROAD

The Contractor will be responsible for any haul roads used to transport material to the project site. The State will not participate in the cost of restoration of any haul roads used by the Contractor.

SHOULDER WORK

Prior to construction, Department of Transportation Maintenance Forces will spray the shoulders to kill existing vegetation. It will be the Contractor's responsibility to notify the State a minimum of thirty days prior to starting work on the shoulders of the highway. The State assumes no responsibility for the effectiveness of the herbicide applied. Contact: Watertown Area Engineer, Matt Brey 605-882-5166.

Vegetation and accumulated material on or adjacent to the existing roadway will be removed by the Contractor to the satisfaction of the Engineer prior to asphalt flush seal.

Shoulder work will be incidental to other contract items. Separate measurement and payment will not be made.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	26	72

BRIDGES, APPROACH SLABS, SLEEPER SLABS, STRIP SEALS, MANHOLES, WATER VALVES AND CONCRETE

Asphalt Surface Treatment will not be placed on any of the bridges, approach slabs, sleeper slabs, strip seals, manholes, water valves or any type of concrete on these projects.

Loose aggregate will not be swept onto bridge decks or into drop inlets. Aggregate will be removed from neoprene joints located on approach slabs or bridge decks.

ESTIMATED QUANTITIES

The quantities of SS-1h or CSS-1h Asphalt for Flush Seal are based off the rates shown in the Rates of Materials. This is only an estimate. The Contract unit prices for the Flush Seal contract items will be nonnegotiable regardless of changes in contract quantities.

The quantities of asphalt for surface treatment and cover aggregate are based off the rates shown in the Rates of Materials. This is only an estimate. The actual application rates of materials will be determined in the field during construction based upon the surface condition, aggregate type, aggregate gradation and flakiness index.

FLUSH SEAL

The Contractor will maintain traffic control on the flush sealing area until flush seal is cured enough to prevent pickup on vehicles.

The Contractor will take care not to get asphalt on the existing pavement marking. The distributors used during the flush seal will be equipped with guards to prevent the emulsified asphalt from coming in contact with the existing pavement marking. The existing pavement marking on the concrete is approximately two inches from the asphalt shoulder on the median side of the I29 Segments 24 – 33 & US 14 Segments 20 - 21.

The Contractor will use guides (wheels, cameras, etc.) installed on the distributors to follow the alignment of the concrete during sealing operations. The tracking of asphalt materials onto existing markings will not be acceptable.

Any damage to the existing pavement marking on the shoulders will be replaced with waterborne paint at the Contractor's expense with no additional costs to the State.

TYPE 1A COVER AGGREGATE

Failure on the #200 sieve will shut down operations until the Engineer determines if changes or corrections are required.

EXISTING PAVEMENT CONDITIONS & TRAFFIC VOLUMES

The existing pavement conditions have been checked for each project and factored into the rates of materials. All segments are slightly pocked, porous, and oxidized. Actual rates will be adjusted in the field during construction by the Engineer.

The descriptions used were from the McLeod procedure for seal coat design.

The traffic volumes are shown on the title sheets.

ASPHALT FOR SURFACE TREATMENT

The asphalt for surface treatment that is delivered for use on this contract will be used in the order it is received. Storage of asphalt for surface treatment will only be allowed at the end of the work day. The material that is placed in storage will be the first material used the following day.

FOG SEAL

The fog seal will begin within 7 calendar days following the completion of the chip seal on each segment. Prior to the application of the fog seal the Contractor will be required to broom the chip seal. A CSS-1h or SS-1h emulsion will be used for the fog seal application. A water-to-emulsion ratio of 1:1 will be used for the binder application.

The Contractor will avoid placing the Fog Seal over any newly placed Cold Applied Permanent Pavement Markings. The Contractor will be responsible for removing any CSS-1h or SS-1h that is on the markings. All costs associated with cleaning the pavement markings will be incidental to the contract unit price per ton for CSS-1h or SS-1h Asphalt for Fog Seal.

Blotting Sand for Fog Seal will conform to the Specifications Section 879.1 B.

Prior to hauling, Blotting Sand will be screened to minimize segregation, eliminate oversize and effectively breakup or discard material bonded into chunks.

The Contractor will maintain traffic control on the fog sealing area until the fog seal is cured enough to prevent pickup on vehicles. Sand will be applied at intersections or other locations as directed by the Engineer.

TEMPORARY PAVEMENT MARKING

Revised 3-20-24 MAW

Temporary flexible vertical markers (tabs) with covers will be used to mark centerline. Paint will not be allowed for Temporary Pavement Marking.

The temporary flexible vertical markers (tabs) will have secure double covers. The Contractor will be required to remove the covers manually after completion of the sand seal and again after completion of the fog seal. Any markers that are non-reflective will be cleaned. Cleaning of temporary flexible vertical markers (tabs) will be incidental to the contract unit price per mile for Temporary Pavement Marking. Petroleum products will not be used to clean markers. The tab covers are considered construction debris and will be disposed of properly by the Contractor.

Any temporary flexible vertical markers (tabs) with covers removed before the fog seal will be replaced prior to application of the fog seal. Full reflectivity of all temporary flexible vertical markers (tabs) is required at all times. The Contractor will be required to replace any missing or non-reflective tabs at no additional cost to the State.

The Contractor will remove and dispose of the temporary flexible vertical markers (tabs) after Permanent Pavement Marking is applied. Method of removal will be nondestructive to the road surface and will result in the marker being separated from the adhesive (the adhesive will remain on the road surface and the marker is discarded) or the marker will be cut in such a manner that no more than 1/4" of the vertical portion of the marker remains on the road surface. Removal will be accomplished within 7 days of completion of the permanent pavement marking.

Cost for furnishing, applying, uncovering, cleaning, removing and disposing of the temporary flexible vertical markers (tabs) will be included in the contract unit price per mile for Temporary Pavement Marking.

Segment 1 (SD10) has a 2-way left turn lane configuration.

The total length of no passing zone on this project is estimated to be as follows:

Segment 6 (SD 20):	3.7 miles
Segment 7 (SD 20)	2.9 miles
Segment 8 (SD 20)	8.8 miles
Segment 9 (SD 22)	6.8 miles
Segment 10 (SD 25)	0.4 miles
Segment 11 (SD 28)	1.0 miles
Segment 12 (SD 28)	5.3 miles
Segment 13 (SD 106)	2.2 miles
Segment 14 (SD 123)	7.8 miles
Segment 15 (SD 127)	17.6 miles

TEMPORARY PAVEMENT MARKING, CONTINUED

The Contractor is allowed to use DO NOT PASS and PASS WITH CARE signs for a period of 2 weeks to mark no passing zones on roads with an average daily traffic of 2500 vehicles or less, should the Contractor elect to use these signs. It is estimated that the following signs will be required to mark the no passing zones:

Location	DO NOT PASS	PASS WITH CARE
Segment 2 (SD 10)	2	2
Segment 6 (SD 20)	22	22
Segment 7 (SD 20)	3	1
Segment 8 (SD 20)	39	37
Segment 9 (SD 22)	35	35
Segment 10 (SD 25)	3	3
Segment 11 (SD 28)	7	7
Segment 12 (SD 28)	37	37
Segment 13 (SD 106)	8	7
Segment 14 (SD 123)	37	37
Segment 15 (SD 127)	71	68

Flagger Symbol signs (W20-7) and flaggers, or a shadow vehicle with rotating yellow lights or strobe lights, will be positioned on the roadway shoulder in advance of workers for both directions of traffic during the installation of temporary flexible vertical markers (tabs). The traffic control device used will be moved to provide proper warning of the work operation. A ROAD WORK AHEAD (W20-1) sign, a Workers symbol sign (W21-1), or a BE PREPARED TO STOP (W3-4) warning sign will be mounted on the rear of the shadow vehicle. The method of traffic control used by the Contractor for this work will be approved by the Engineer.

Cost for traffic control to install and remove the temporary flexible vertical markers (tabs) will be incidental to the contract unit price per mile for Temporary Pavement Marking.

Quantities of Temporary Pavement Markings consist of:

- One pass prior to the Seal Coat.
- One pass after the Seal Coat.
- One pass after the Fog Seal.

PERMANENT PAVEMENT MARKING

The Contractor will be required to repaint both centerline and edgelines with High Build Waterborne Pavement Marking Paint.

The application of Permanent Pavement Marking Paint will begin no sooner than 7 calendar days following completion of Flush Sealing or Fog Sealing and will be completed within 14 calendar days following completion of Flush Sealing or Fog Sealing.

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.

RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

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

REMOVE EXISTING PAVEMENT MARKING

The existing pavement markings consist of cold applied plastic pavement marking and paint.

Existing cold applied plastic pavement marking being replaced will be removed in their entirety. It will be the Contractor's responsibility to visit the project site to determine what type of material(s) are present and the extent of the work required to remove the existing pavement markings.

Removal of the existing markings will be accomplished without causing damage to the pavement, pavement joints, or joint sealant. The Contractor will repair any damage to the pavement, pavement joints, or joint sealant for no additional payment and at no cost to the State.

Payment for removal of the existing lines and other miscellaneous payment markings as necessary will be included in the contract unit price for the various contract items.

COLD APPLIED PLASTIC PAVEMENT MARKING

Revised 3-20-24 MAW

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 will be placed prior to asphalt surface treatment as noted in the plans and as directed by the Engineer.

Cold Applied Plastic Pavement Marking will be placed in the same location as existing markings, unless otherwise directed by the Engineer.

Cold Applied Plastic Pavement Markings will be installed as follows:

ITEM	LOCATION	QUANTITY
Stop Bar (24" White)	Segment 26/ Exit 201 NB Off Ramp	24 Ft.
Stop Bar (24" White)	Segment 28/ Exit 201 SB Off Ramp	24 Ft.
Stop Bar (24" White)	Segment 30/ Exit 224 NB Off Ramp	24 Ft.
Stop Bar (24" White)	Segment 32/ Exit 224 SB Off Ramp	24 Ft.
Stop Bar (24" White)	Segment 35/ Exit 242 NB Off Ramp	24 Ft.
Stop Bar (24" White)	Segment 37/ Exit 242 SB Off Ramp	24 Ft.
Stop Bar (24" White)	Segment 39/ Exit 246 NB Off Ramp	24 Ft.
Stop Bar (24" White)	Segment 41/ Exit 246 SB Off Ramp	24 Ft.

PAVEMENT MARKING MASKING

Immediately prior to placement of asphalt surface treatment, and prior to the fog seal, durable markings will be covered with an approved pavement marking masking. All cost for furnishing, installing, removing, and disposing of masking will be incidental to the various contract unit prices for Pavement Marking Masking.

If new markings are damaged due to masking failure they will be replaced at the Contractor's expense.

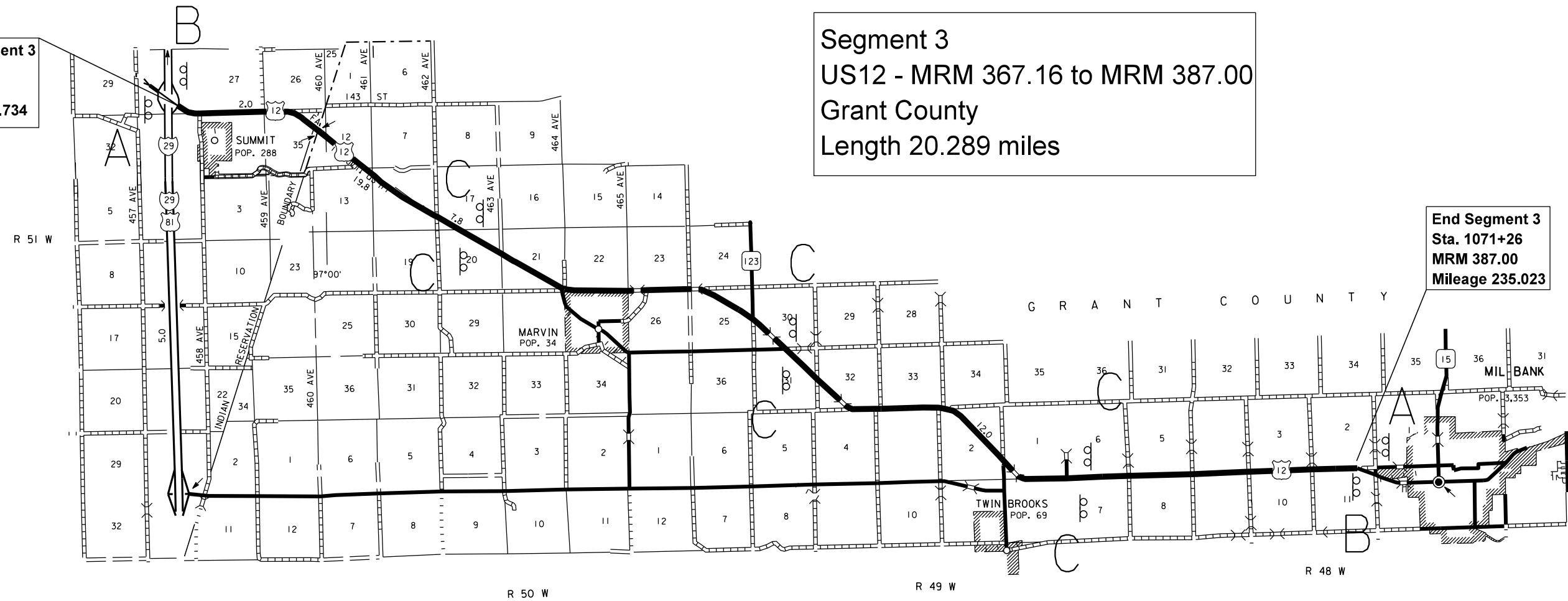
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	28	72

Fixed Location Ground Mounted Breakaway Support Signs

Begin Segment 3
Sta. 0+00
MRM 367.16
Mileage 214.734

Segment 3
US12 - MRM 367.16 to MRM 387.00
Grant County
Length 20.289 miles

End Segment 3
Sta. 1071+26
MRM 387.00
Mileage 235.023



ROAD WORK
NEXT MILES

G20-1

A

END
ROAD WORK

G20-2

B

FRESH
OIL

ON
SHOULDER

C

ROAD
WORK
AHEAD

W20-1

W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

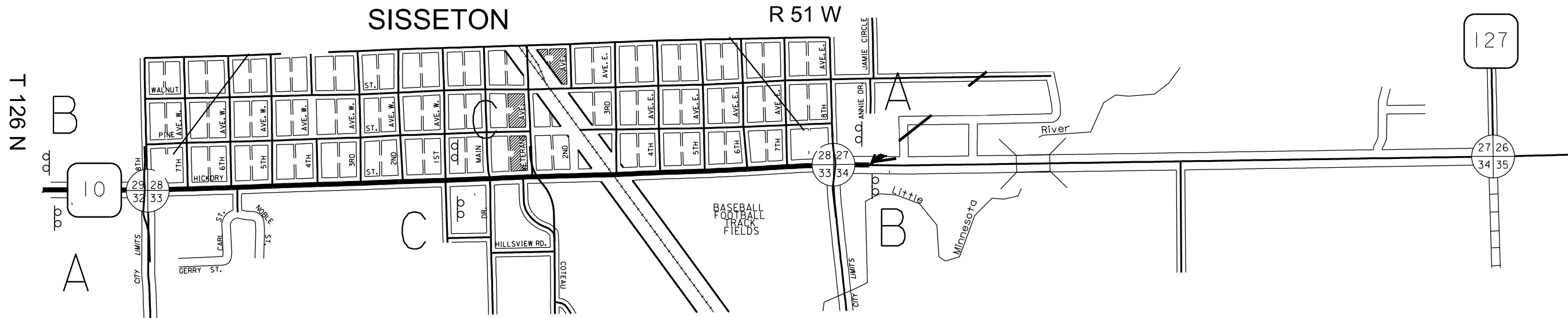
PLOT SCALE - 1:7976.69

PLOTTED FROM - IRBRINT12

Fixed Location Ground Mounted Breakaway Support Signs

SD10 Roundabouts in Sisseton, SD Roberts Co

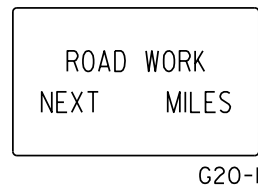
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	29	72
Plotting Date: 01/20/2022			



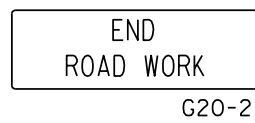
Segment 17
SD10 E
Segment 18
SD10 W

Segment 1
SD10

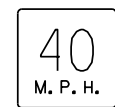
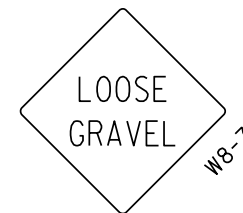
Segment 16
SD10 E
Segment 19
SD10 W
R 51 W



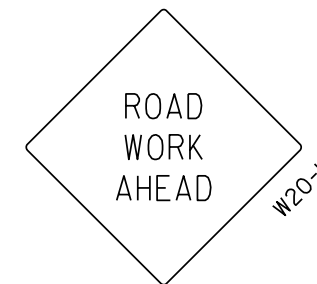
A



B



C



W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

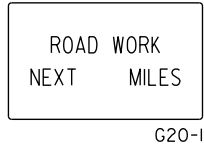
PLOT NAME - 1

FILE - ... \2022 ROUT & SEALS\TITLE.DGN

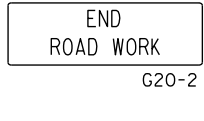
Fixed Location Ground Mounted Breakaway Support Signs

SEGMENT 2
SD10 - Over Exit 232
MRM 361.129 to MRM 362.521
Length 1.402 miles

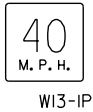
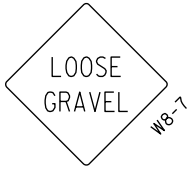
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	30	72



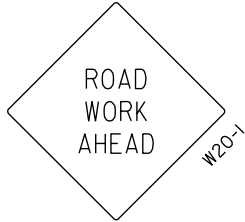
A



B



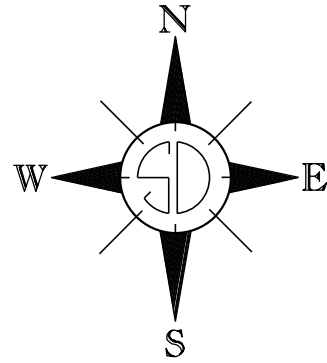
C



W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

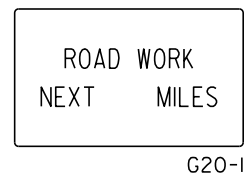
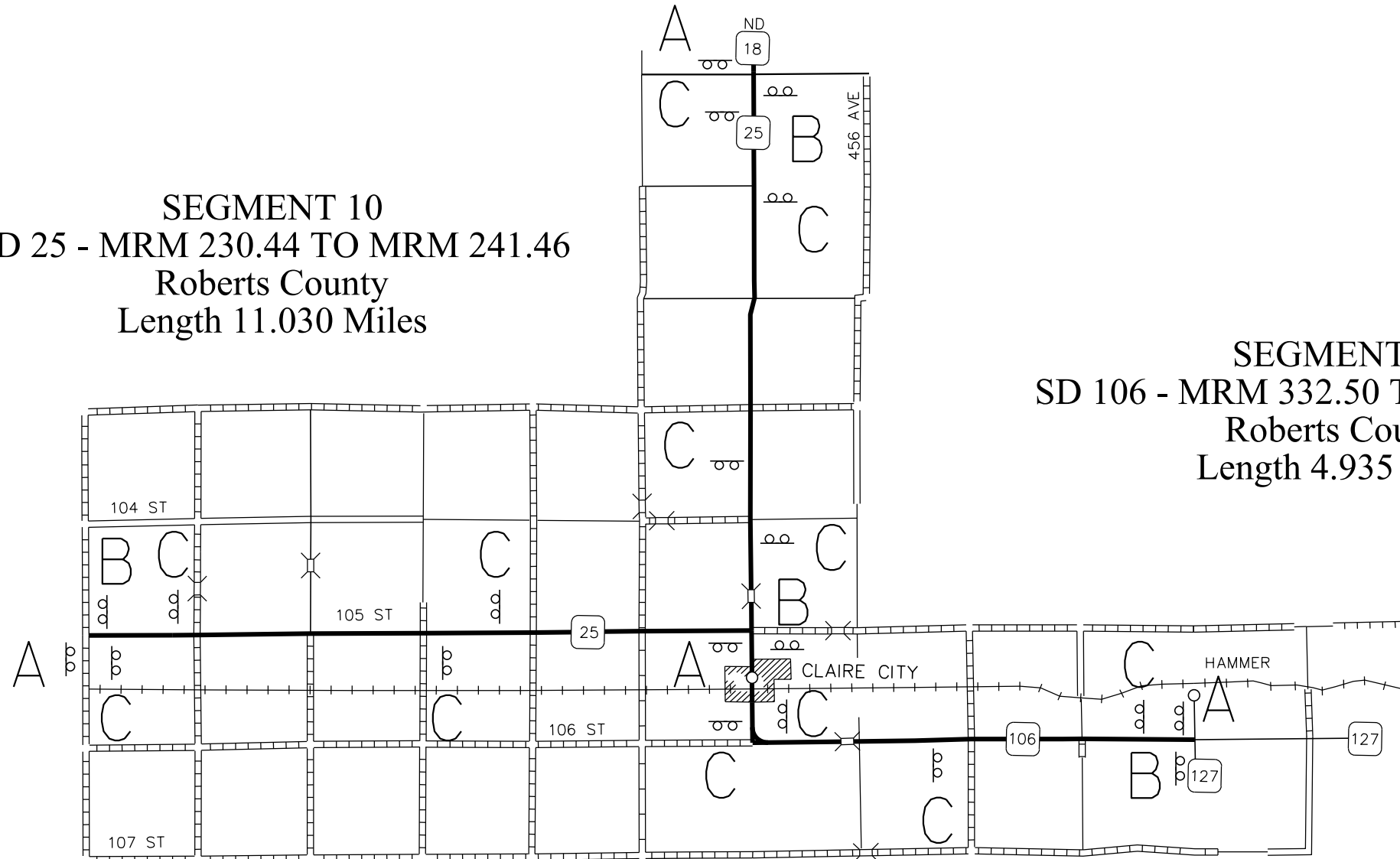
Fixed Location Ground Mounted Breakaway Support Signs

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	31	72
Plotting Date:			

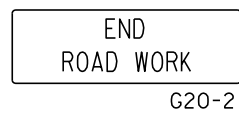


SEGMENT 10
SD 25 - MRM 230.44 TO MRM 241.46
Roberts County
Length 11.030 Miles

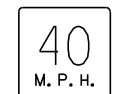
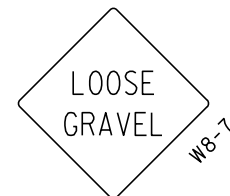
SEGMENT 13
SD 106 - MRM 332.50 TO MRM 337.67
Roberts County
Length 4.935 Miles



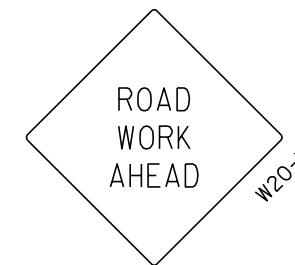
A



B



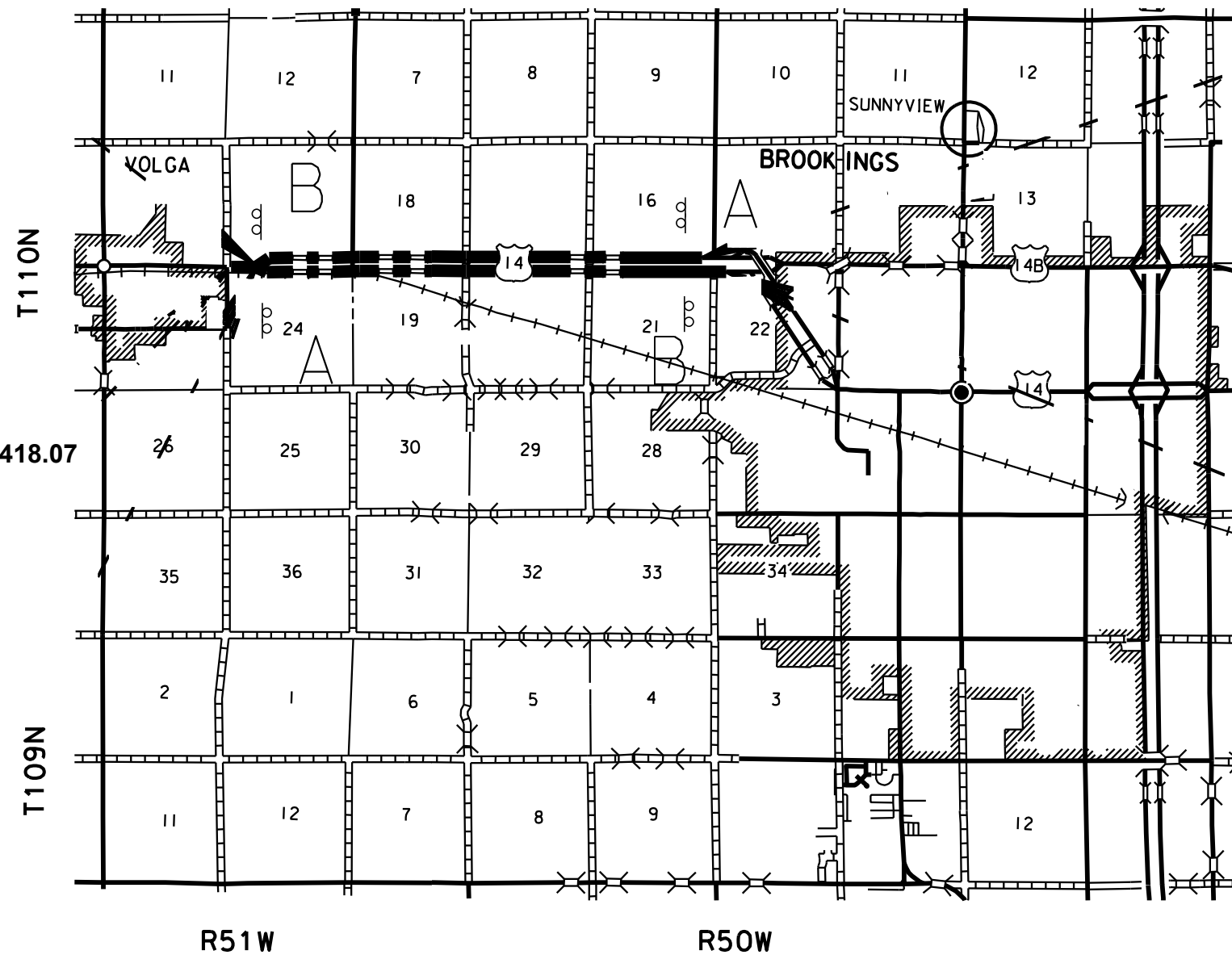
C



W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	32	72

Fixed Location Ground Mounted Breakaway Support Signs



Segment 20
US14 E
MRM 415.13 to MRM 418.07
Length 2.936 miles

Segment 21
US14 W
MRM 415.13 to MRM 418.00
Length 2.878 miles

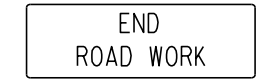
US14 from Brookings to Volga, SD Brookings Co

Fresh Oil Signs are to be installed on areas of shoulder work as sealing progresses. These can be portable due to the short period of time required.

W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.



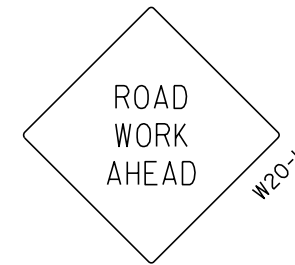
A



B



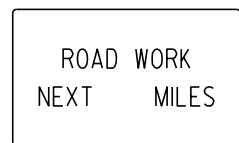
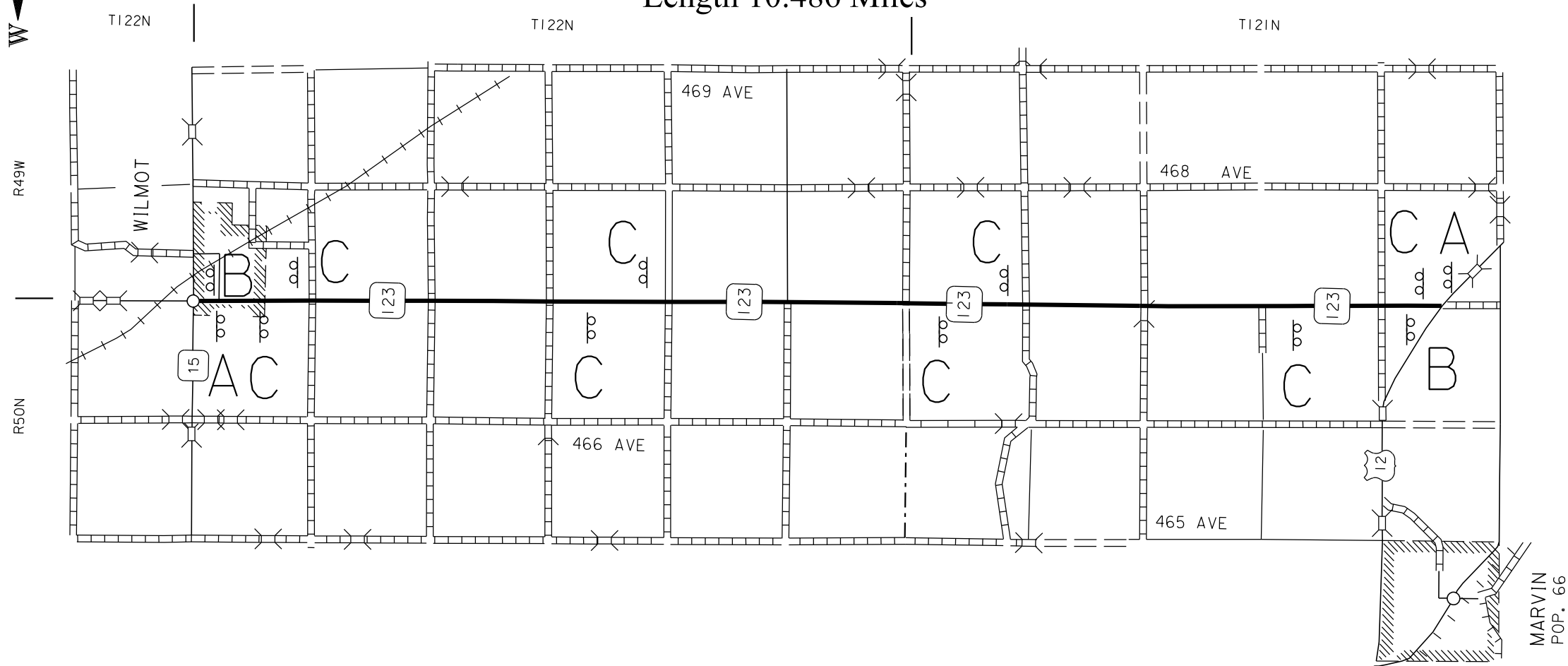
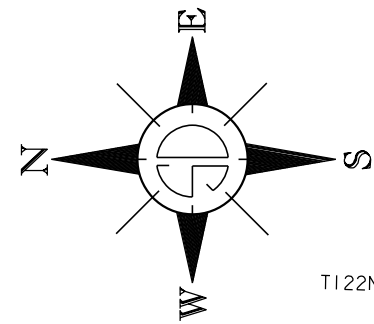
C



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	33	72
Plotting Date:			

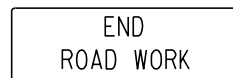
Fixed Location Ground Mounted Breakaway Support Signs

SEGMENT 14
SD 123- MRM 172.98 TO MRM 183.46
Grant/ Roberts Counties
Length 10.486 Miles



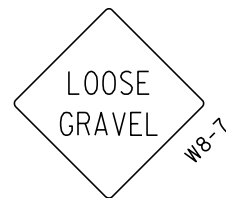
G20-1

A



G20-2

B

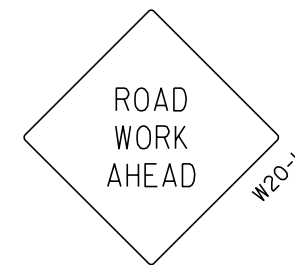


W8-7



W13-IP

C

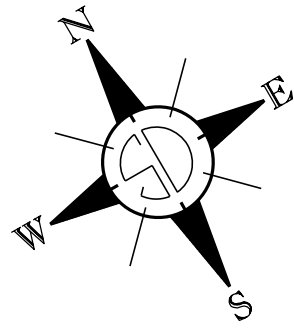


W20-1

W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	34	72
Plotting Date:			

Fixed Location Ground Mounted Breakaway Support Signs



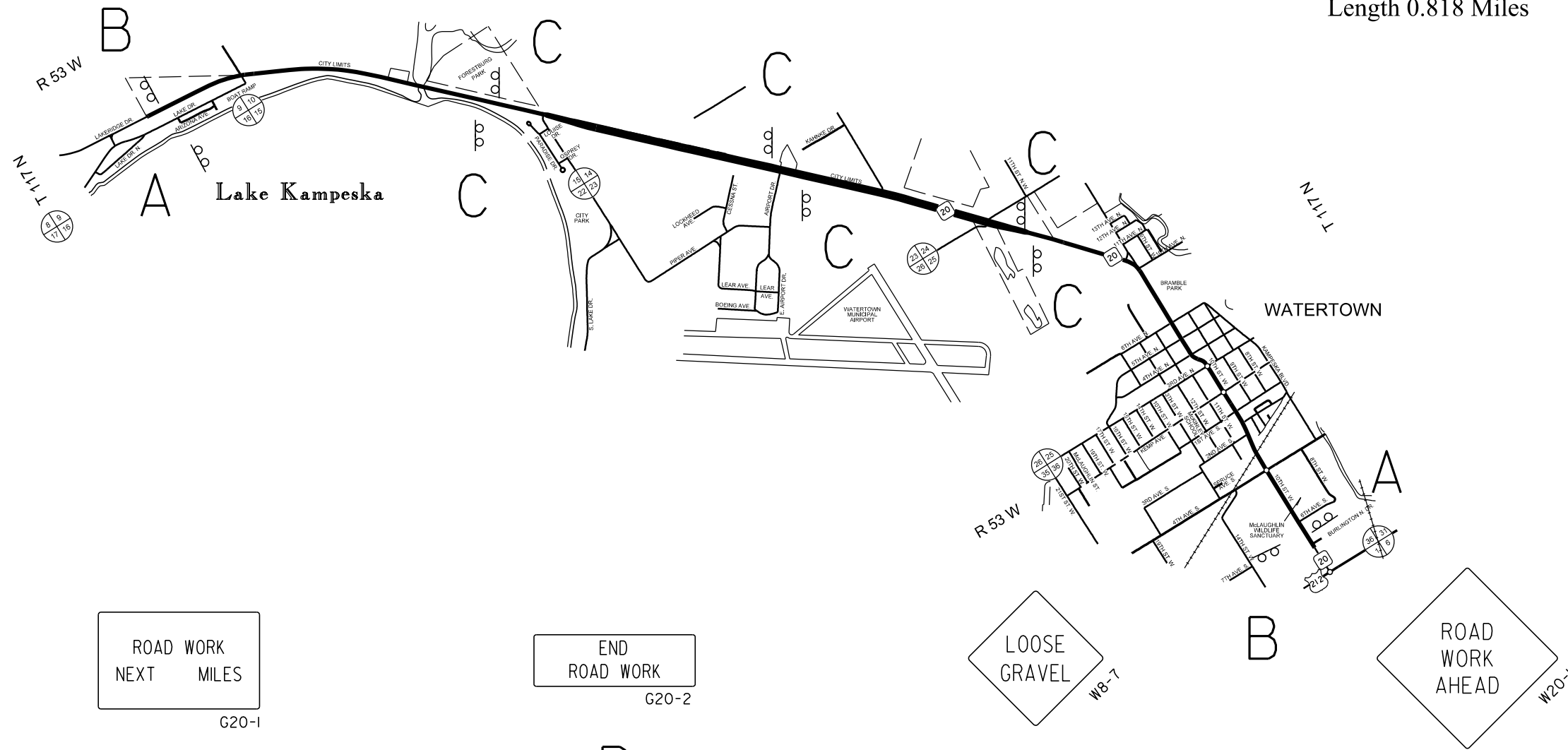
SEGMENT 7
SD 20- MRM 394.26 TO MRM 396.15
Codington County
Length 1.777 Miles

SEGMENT 22
SD 20 E- MRM 396.15 TO MRM 398.27
Codington County
Length 2.107 Miles

SEGMENT 23
SD 20 W- MRM 396.15 TO MRM 398.27
Codington County
Length 2.107 Miles

SEGMENT 5
SD 20- MRM 398.27 TO MRM 399.16
Codington County
Length 0.921 Miles

SEGMENT 4
SD 20- MRM 399.36 TO MRM 400.23
Codington County
Length 0.818 Miles

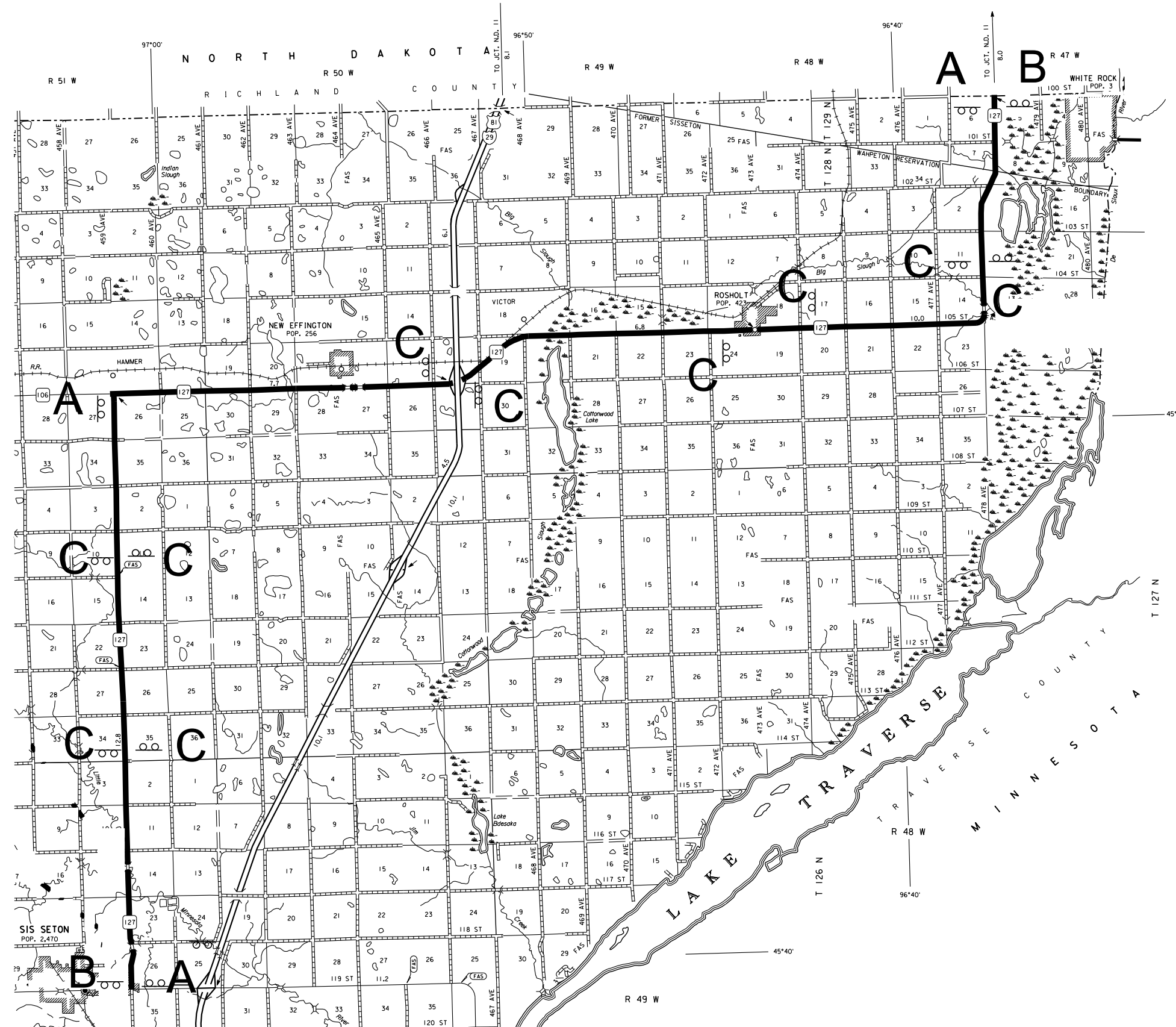


W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

Fixed Location Ground Mounted Breakaway Support Signs

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	35	72

SEGMENT 15
 HWY 127 - MRM 213.92 to MRM 251.17
 Roberts County
 Length 37.349 Miles



ROAD WORK NEXT MILES
 G20-1

A

END ROAD WORK
 G20-2

B

LOOSE GRAVEL
 WB-7

40 M. P. H.
 W13-IP

C

ROAD WORK AHEAD
 W20-1

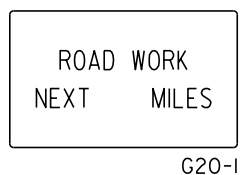
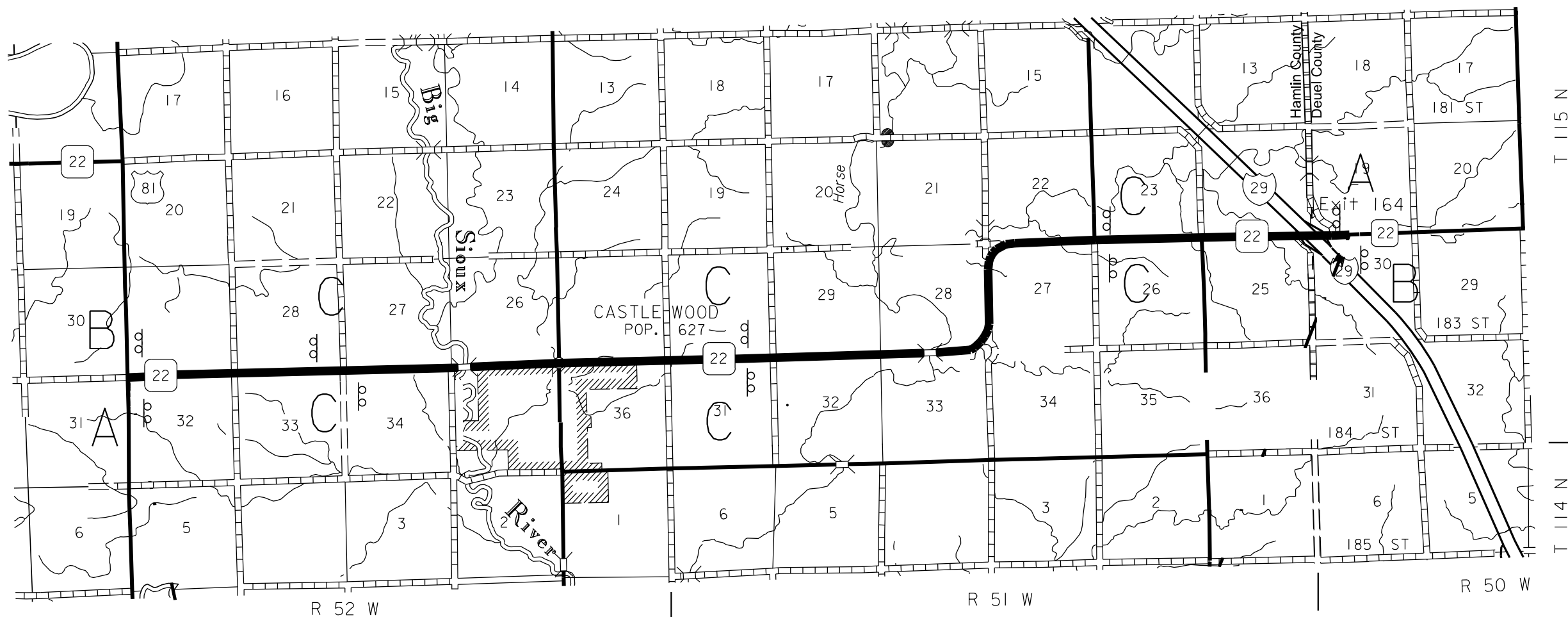


W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

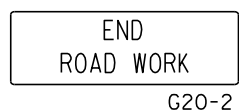
Fixed Location Ground Mounted Breakaway Support Signs

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	36	72

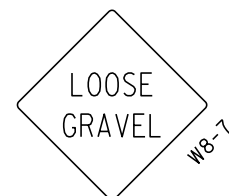
Segment 9
 SD 22 - MRM 348.85 to MRM 360.71 + 0.242
 Deuel & Hamlin County
 Length 12.091 Miles



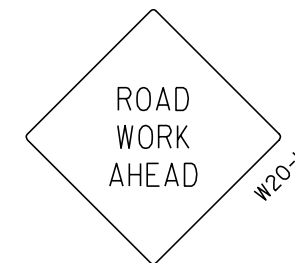
A



B



C



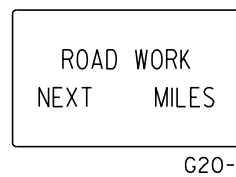
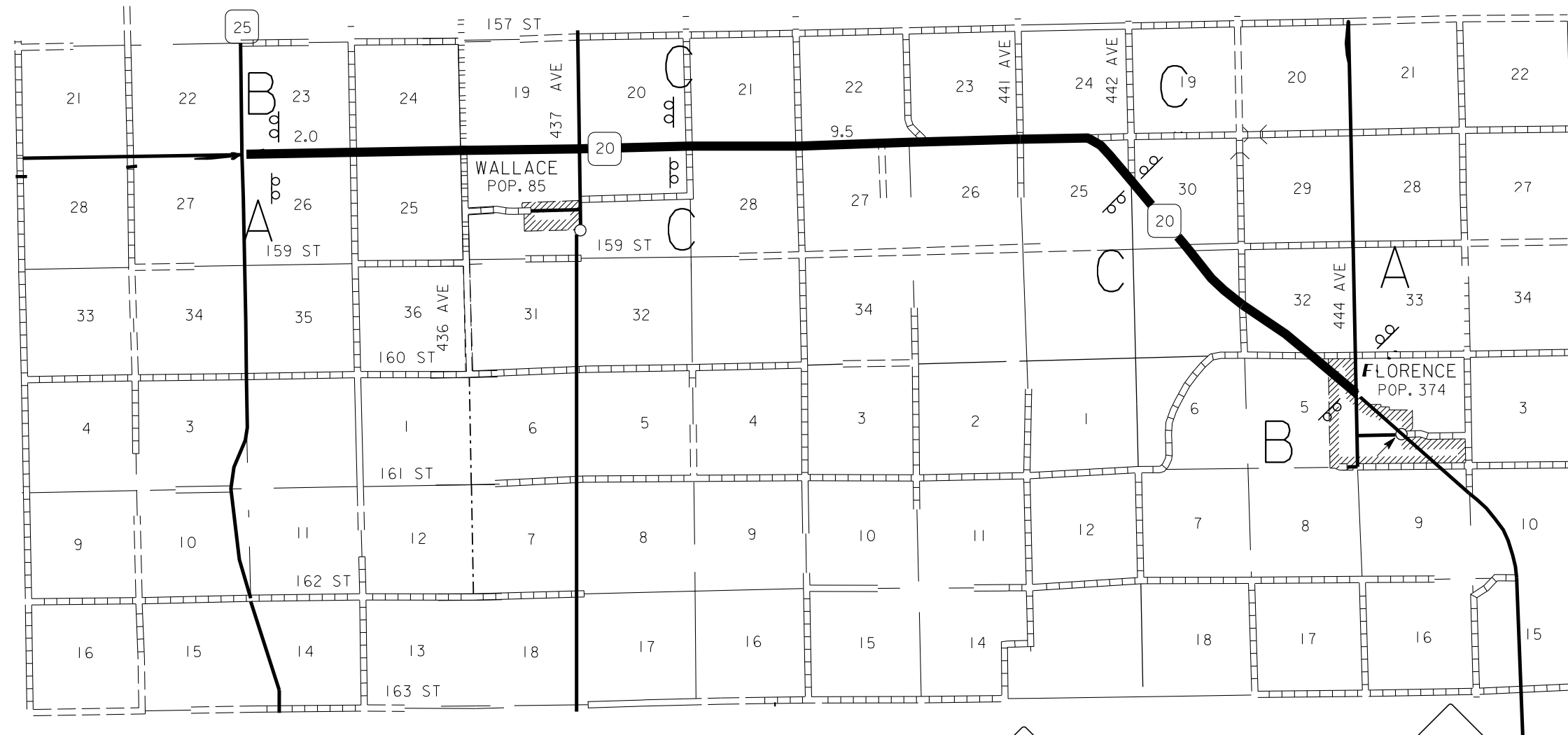
W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	37	72

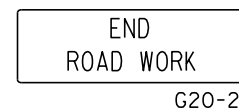
Fixed Location Ground Mounted Breakaway Support Signs

SEGMENT 6 - SD20 - Jct SD25 to 444th Ave

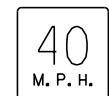
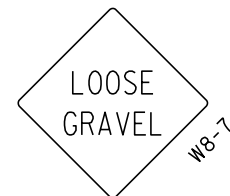
Clark, Codington Co



A

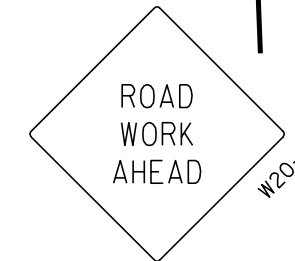


B



W13-1P

C



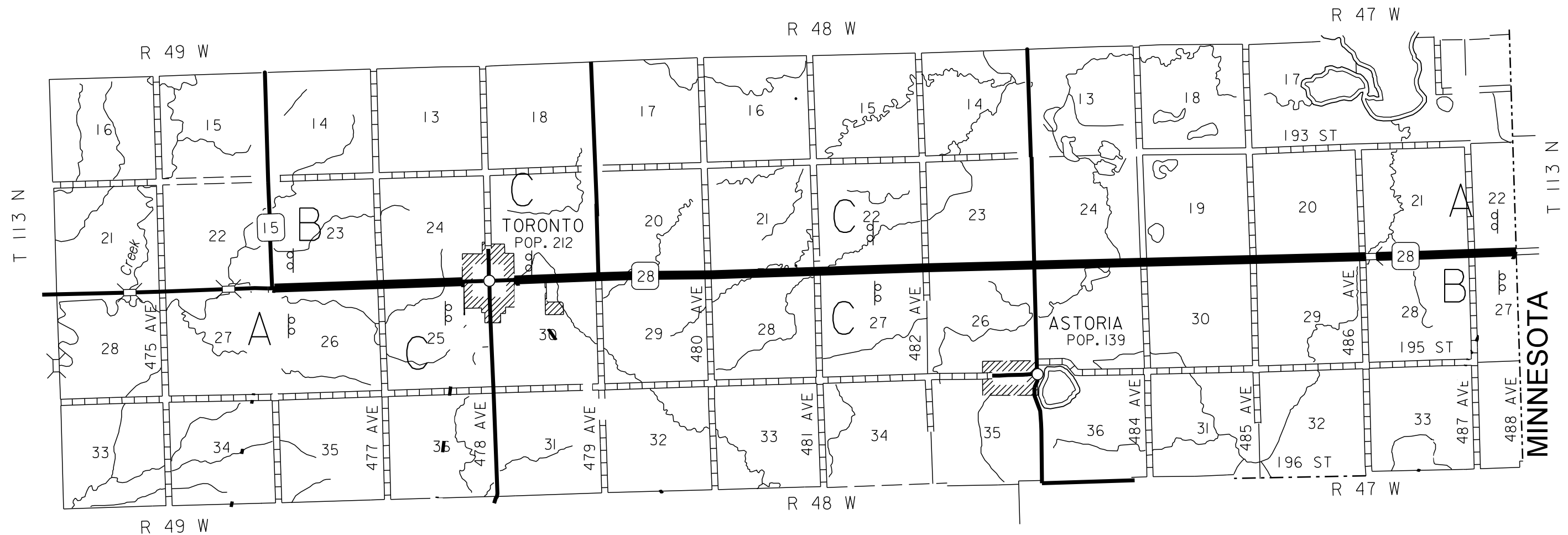
W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	38	72

Fixed Location Ground Mounted Breakaway Support Signs

Segment 11
SD 28 - MRM 365.36 to MRM 367.38
Deuel County
Length 1.754 Miles

Segment 12
SD 28 - MRM 367.94 to MRM 377.06
Deuel County
Length 9.188 Miles



ROAD WORK
NEXT MILES

G20-1

A

END
ROAD WORK

G20-2

B

LOOSE
GRAVEL

W8-7

40
M. P. H.

W13-IP

C

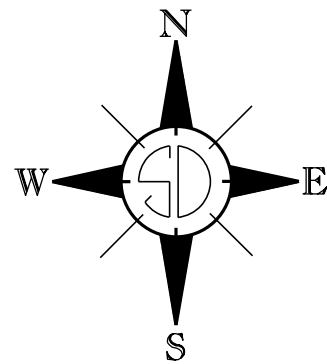
ROAD
WORK
AHEAD

W20-1

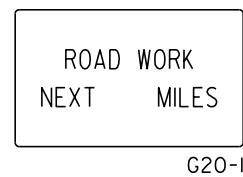
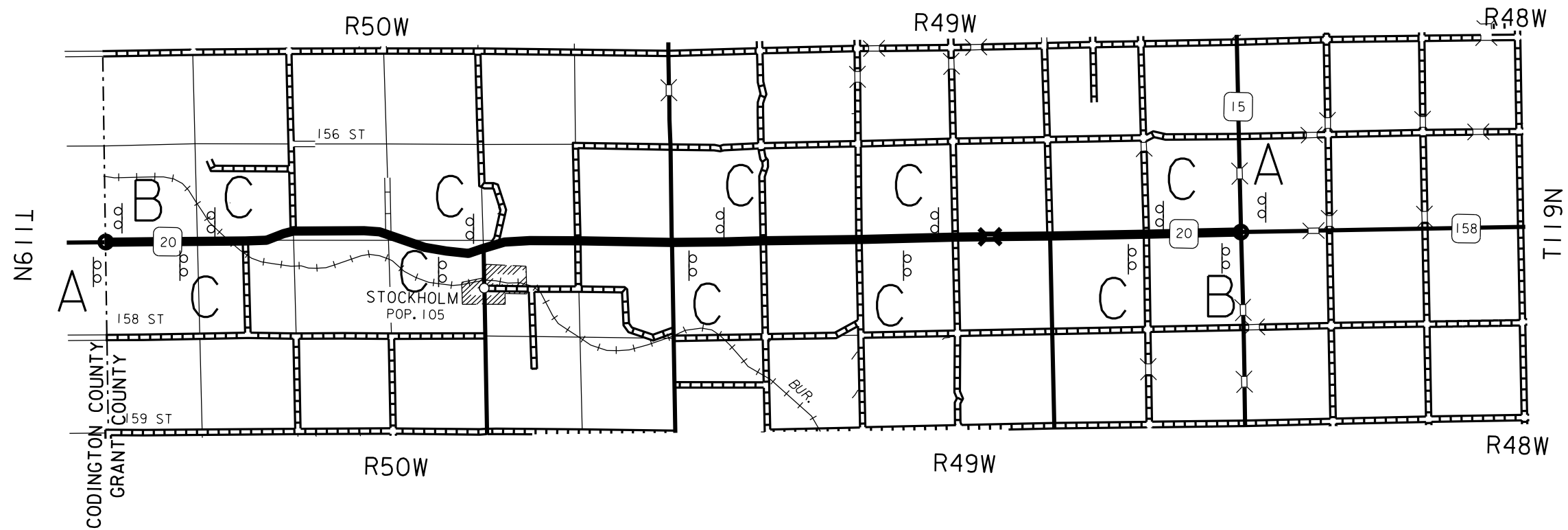
W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	39	72
Plotting Date:			

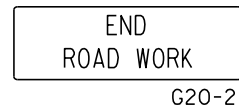
Fixed Location Ground Mounted Breakaway Support Signs



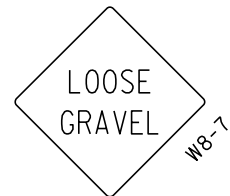
SEGMENT 8
SD 20- MRM 427.24+0.000 TO MRM 439.25+0.000
Grant County
Length 12.02 Miles



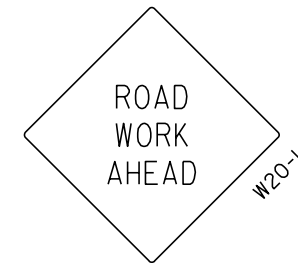
A



B



C

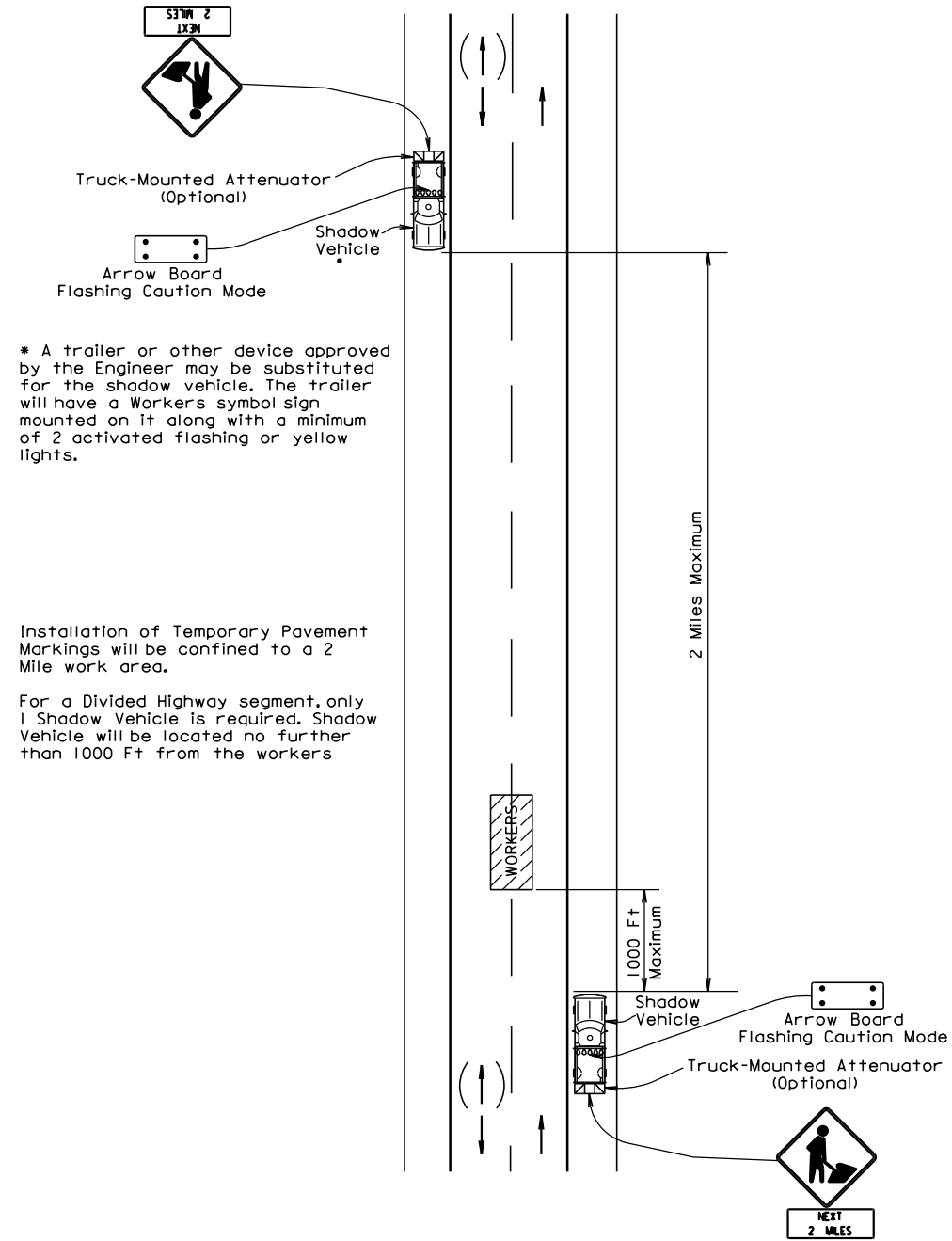


W20-1 ROAD WORK AHEAD signs shall be mounted on portable supports, and shall be placed on intersecting roadways as directed by the Engineer. ROAD WORK AHEAD signs shall be moved as necessary to keep current with the work activities.

PLOT SCALE - 1:249.201

PLOTTED FROM - IRBRINT12

**GUIDES FOR TRAFFIC CONTROL DEVICES
APPLICATION OF TEMPORARY FLEXIBLE VERTICAL MARKERS**

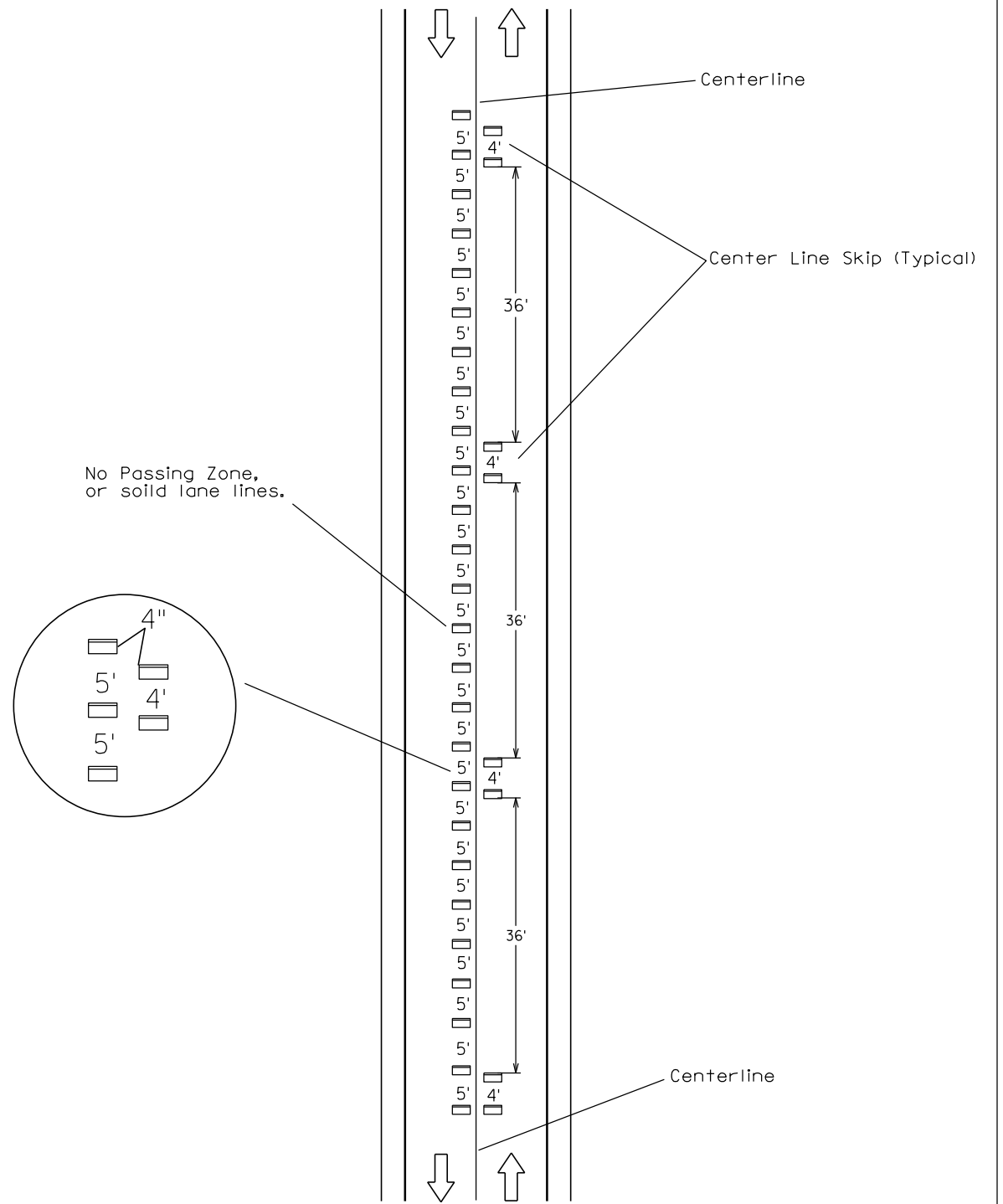


* A trailer or other device approved by the Engineer may be substituted for the shadow vehicle. The trailer will have a Workers symbol sign mounted on it along with a minimum of 2 activated flashing or yellow lights.

Installation of Temporary Pavement Markings will be confined to a 2 Mile work area.

For a Divided Highway segment, only 1 Shadow Vehicle is required. Shadow Vehicle will be located no further than 1000 Ft from the workers

**DETAILS FOR TRAFFIC CONTROL DEVICES
TEMPORARY ROAD MARKER INSTALLATION**



PLOT NAME - 1

FILE - ... \TC_TAB_INSTALLATION.DGN

*In situations where multiple work locations in a limited distance make it practical to place stationary signs, the distance between the advance warning sign and the work should not exceed 5 miles.

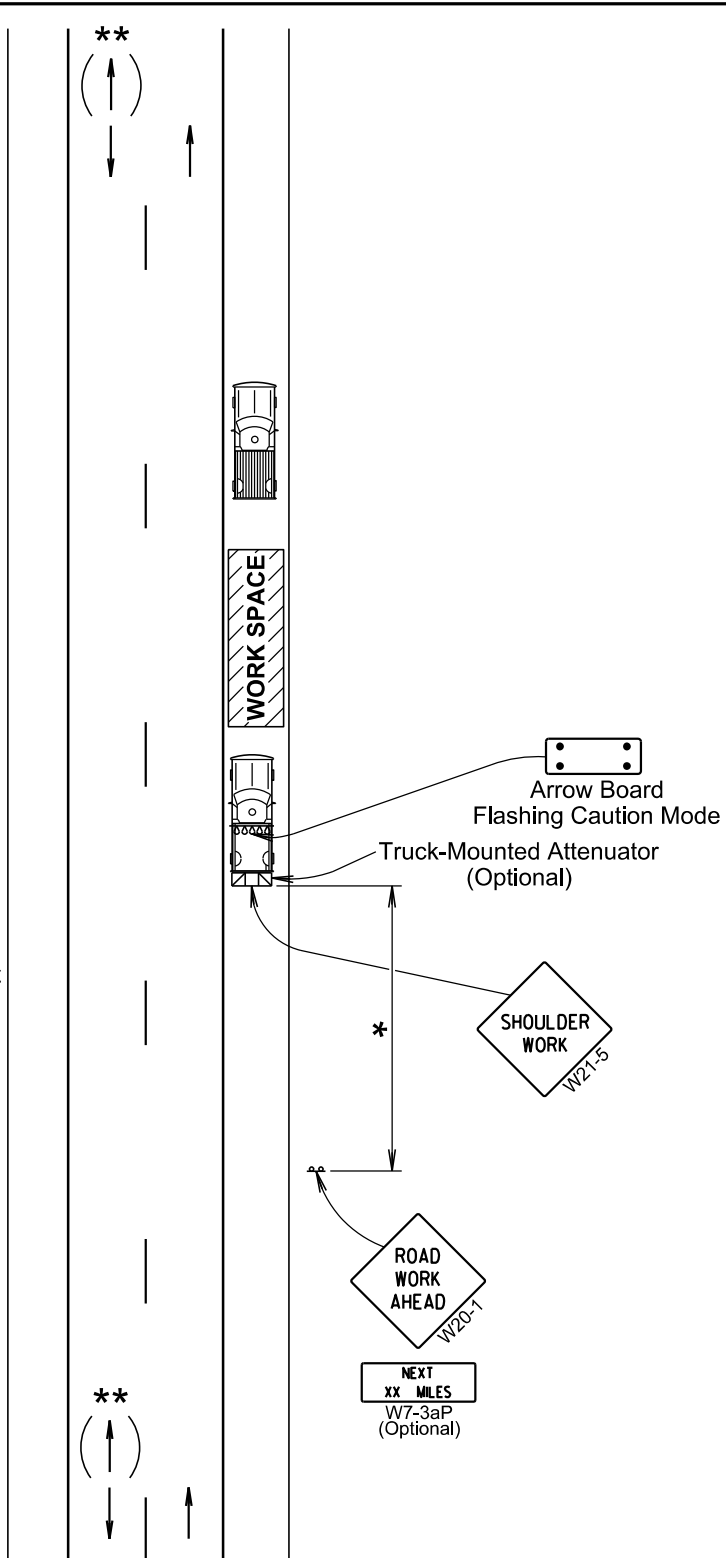
The ROAD WORK NEXT xx MILES sign may be used instead of the ROAD WORK AHEAD sign if the work locations occur over a distance of more than 2 miles.

Arrow board is required for intermittently and continuously moving mobile operations when work exceeds 1 hour.

**If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

In situations where the distance between the advance warning signs and the work is 2 miles to 5 miles, a Supplemental Distance plaque should be used with the ROAD WORK AHEAD sign.

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

* 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.

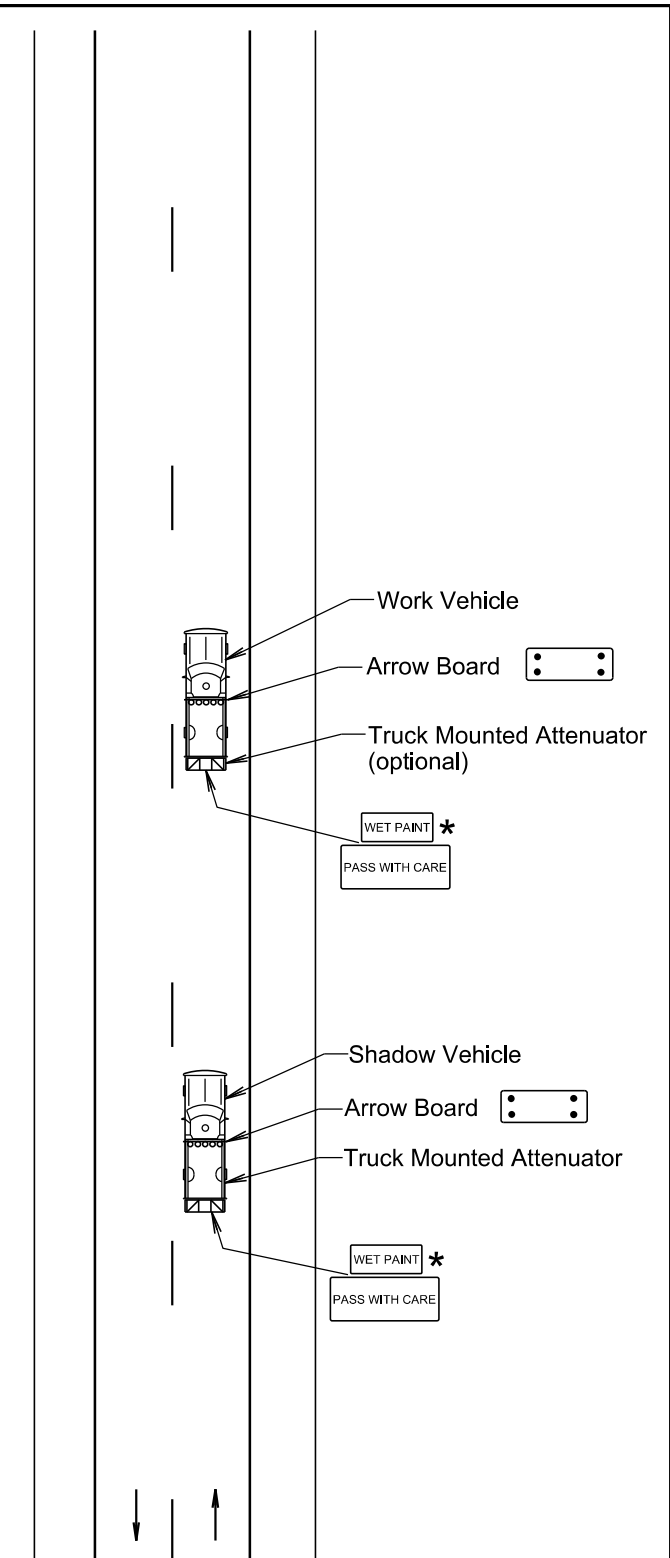
Shadow and Work vehicles will display high-intensity rotating, flashing, oscillating, or strobe lights, flags, signs, or arrow boards.

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

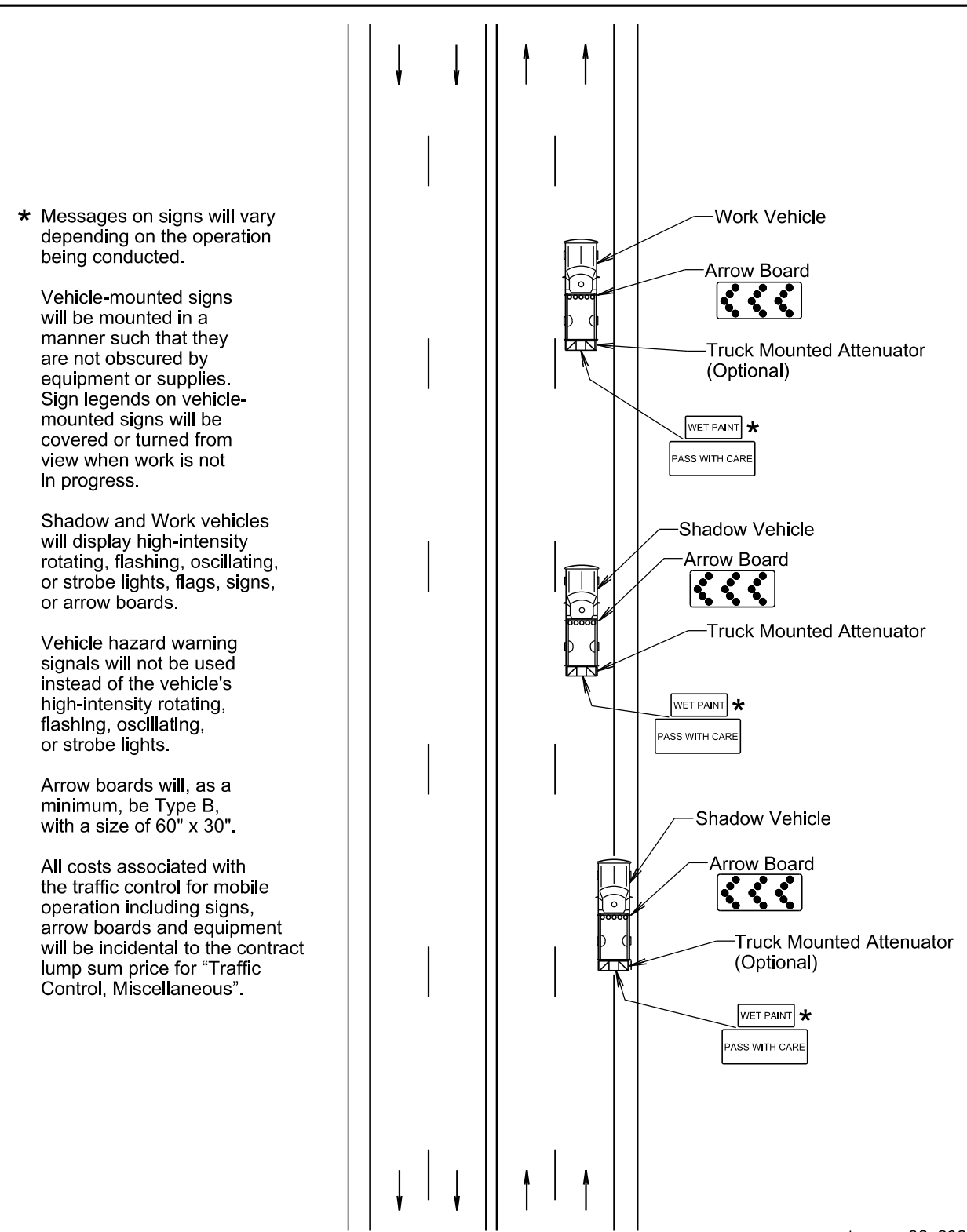
When an arrow board is used, it will be used in the caution mode. Marching Diamonds are acceptable.

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



* 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

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.

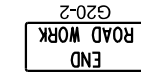
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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.

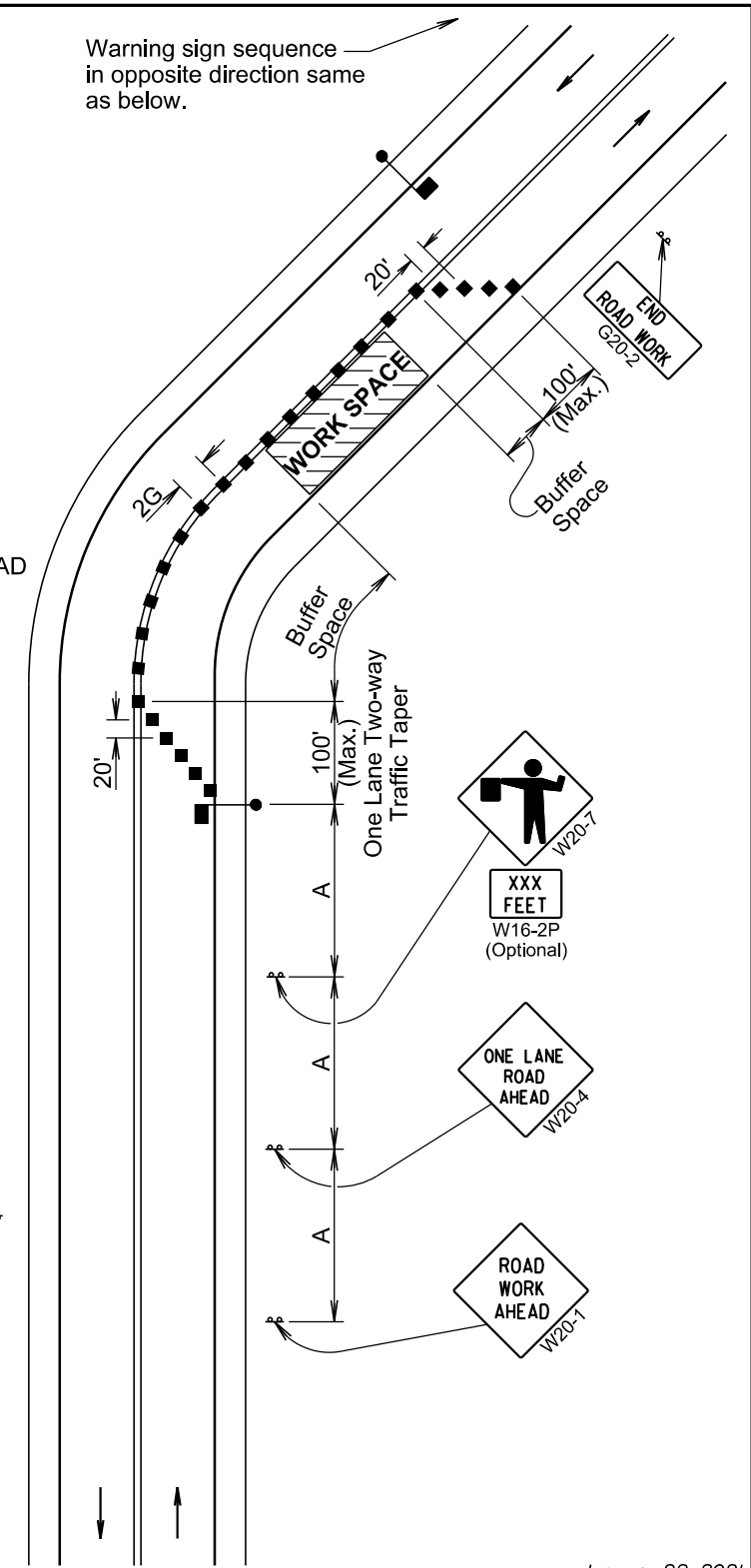


Channelizing devices and flaggers will be used at intersecting roads to control intersecting road traffic as required.

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

PLOTTED FROM - TRAB17882

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

* Spacing is 40' for 42" cones.

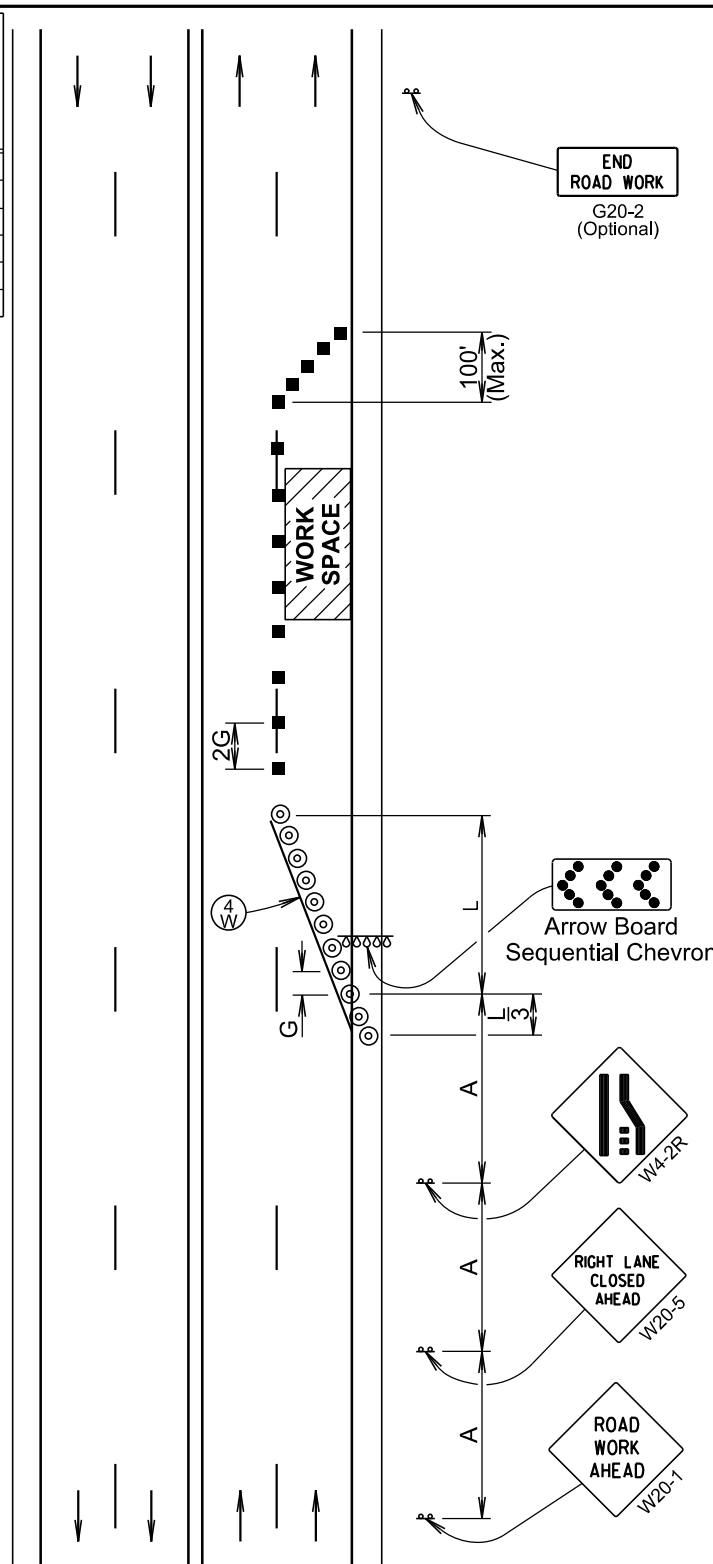
- ⊙ Reflectorized Drum
- Channelizing Device
- ④ 4" White Temporary Pavement Marking

The channelizing devices will be 42" cones or drums.

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

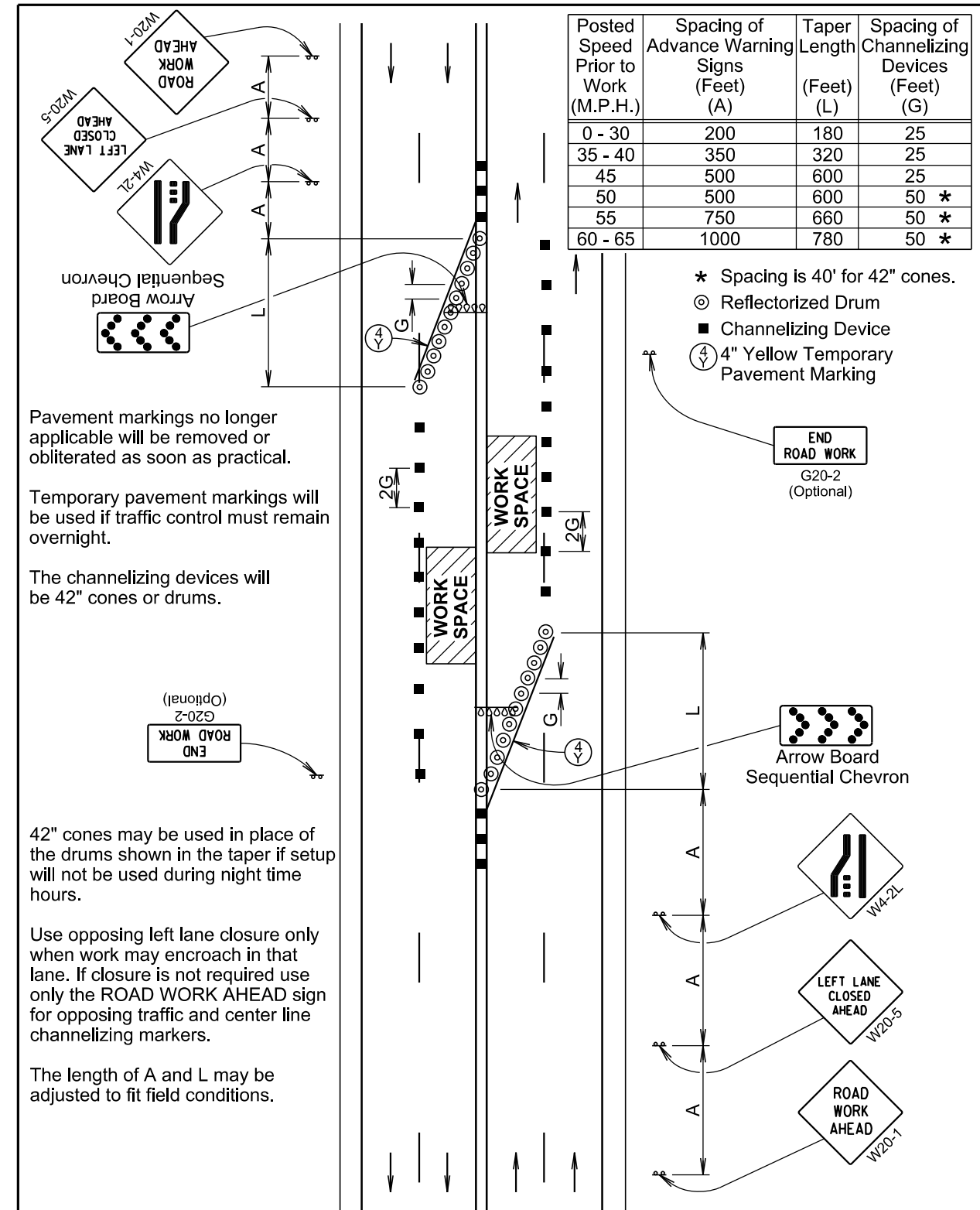
Temporary pavement markings will be used if traffic control must remain overnight.

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



September 22, 2021

Published Date: 2024	SDDOT	4-LANE UNDIVIDED, RIGHT LANE CLOSED	PLATE NUMBER 634.47
			Sheet 1 of 1



August 31, 2022

Published Date: 2024	SDDOT	4-LANE UNDIVIDED, LEFT LANE CLOSED	PLATE NUMBER 634.48
			Sheet 1 of 1

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

* Spacing is 40' for 42" cones.

- ⊙ Reflectorized Drum
- Channelizing Device
- ④ 4" Yellow Temporary Pavement Marking

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

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

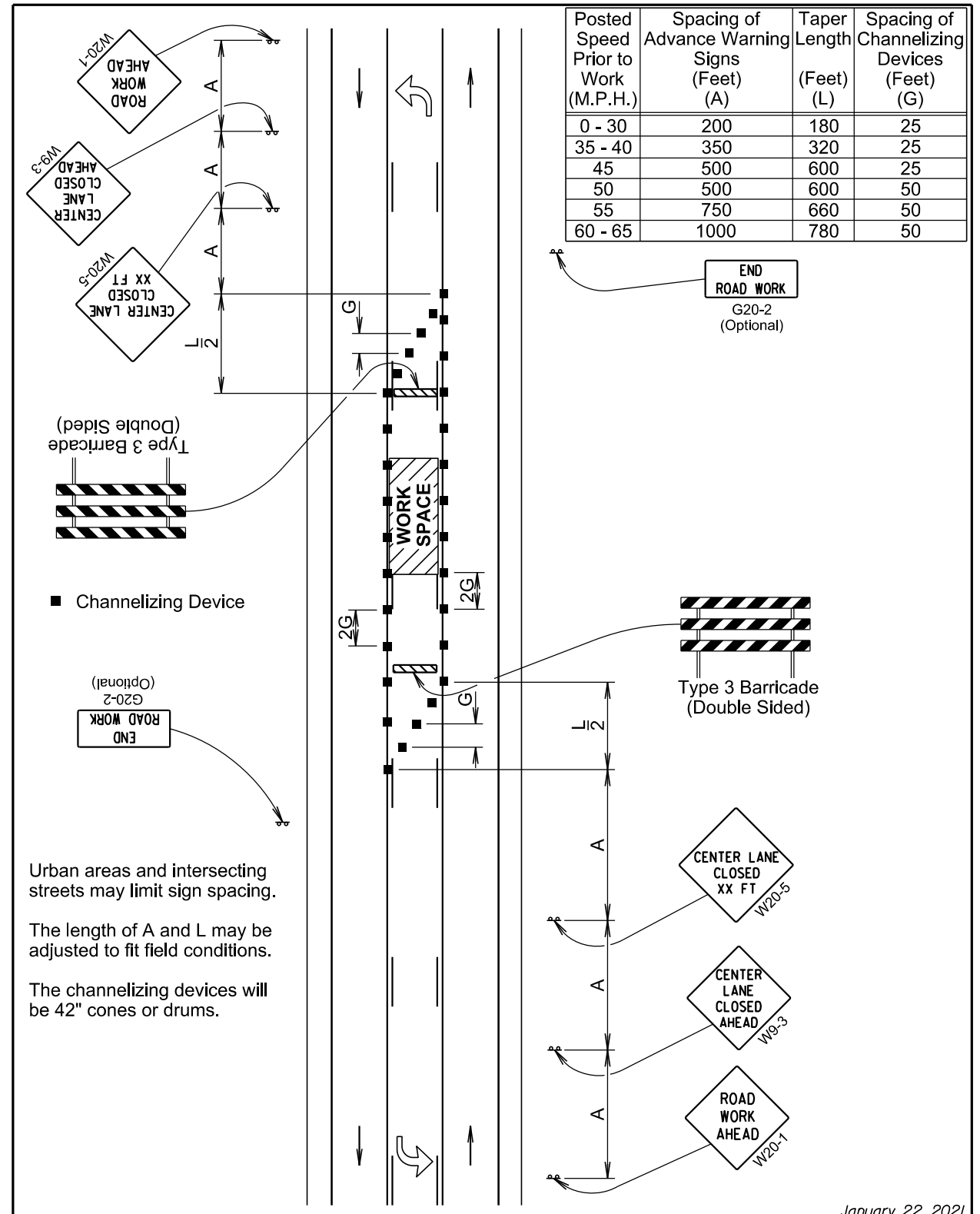
The channelizing devices will be 42" cones or drums.

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

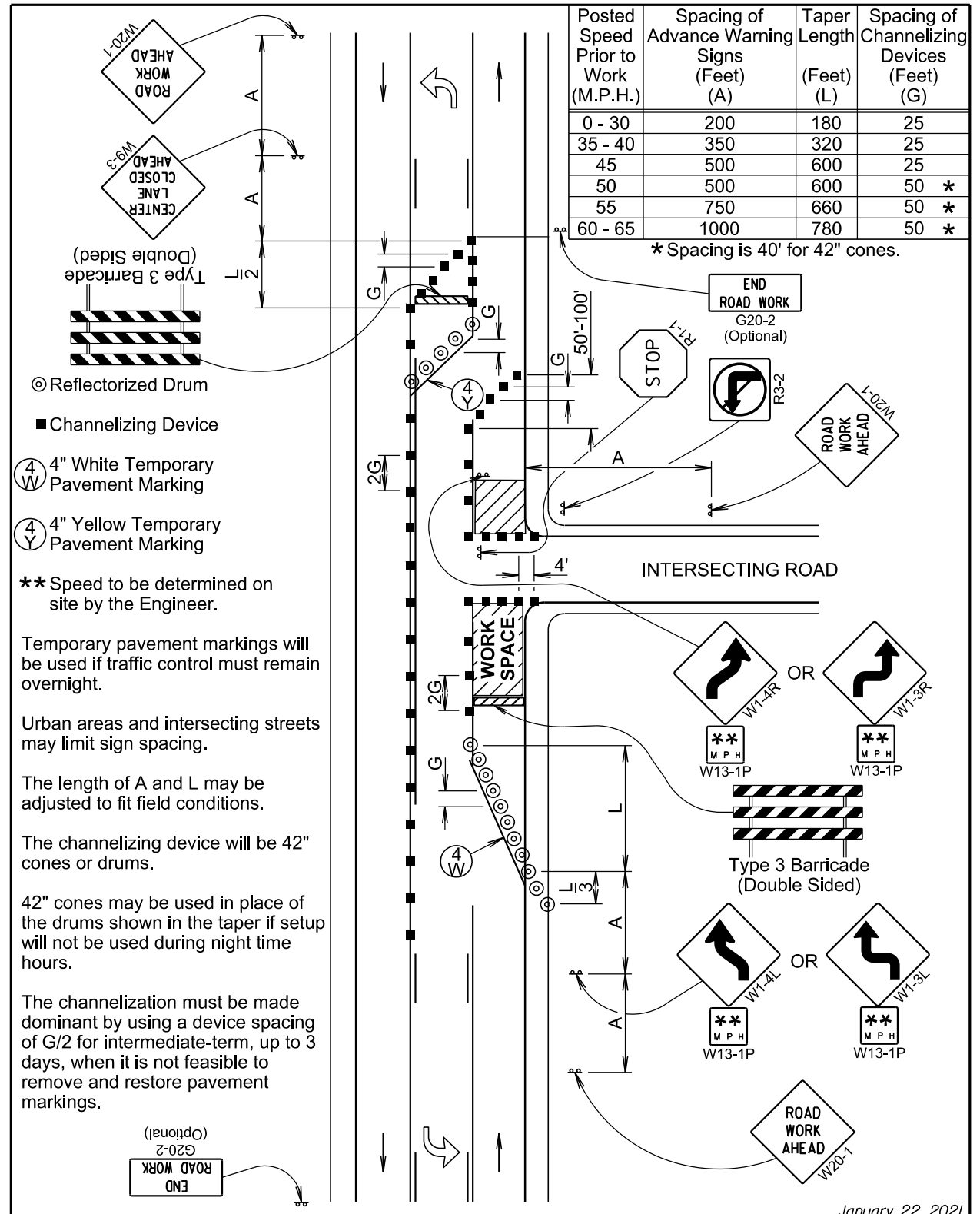
Use opposing left lane closure only when work may encroach in that lane. If closure is not required use only the ROAD WORK AHEAD sign for opposing traffic and center line channelizing markers.

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

PLOTTED FROM - TRAB17882



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



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

Urban areas and intersecting streets may limit sign spacing.

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

The channelizing devices will be 42" cones or drums.

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

Urban areas and intersecting streets may limit sign spacing.

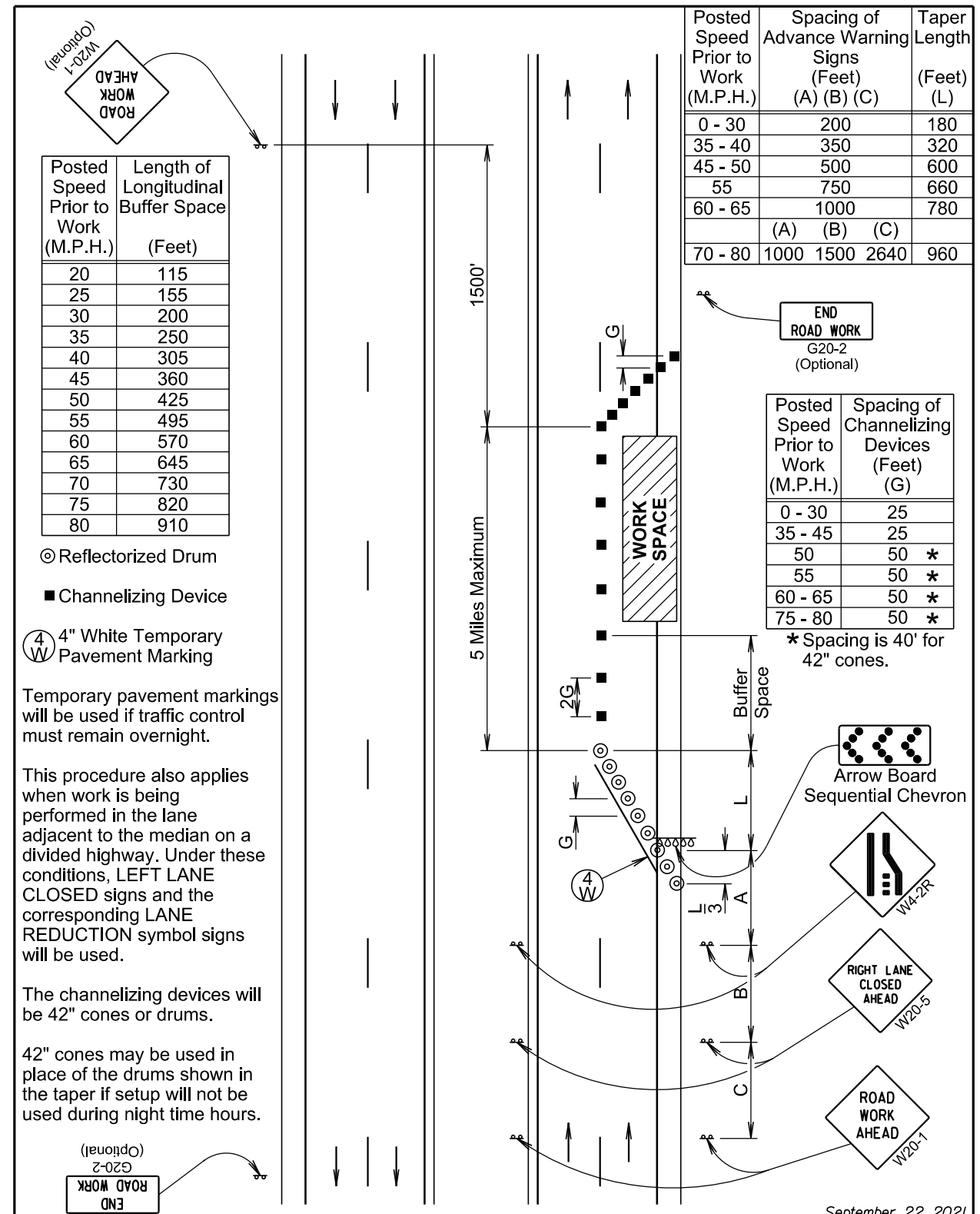
The length of A and L may be adjusted to fit field conditions.

The channelizing device will be 42" cones or drums.

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

The channelization must be made dominant by using a device spacing of G/2 for intermediate-term, up to 3 days, when it is not feasible to remove and restore pavement markings.

PLOTTED FROM - TRAB17882



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
70	730
75	820
80	910

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)			Taper Length (Feet) (L)
	(A)	(B)	(C)	
0 - 30	200			180
35 - 40	350			320
45 - 50	500			600
55	750			660
60 - 65	1000			780
	(A)	(B)	(C)	
70 - 80	1000	1500	2640	960

Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	25
35 - 45	25
50	50 *
55	50 *
60 - 65	50 *
75 - 80	50 *

- ⊙ Reflectorized Drum
- Channelizing Device
- ④ 4" White Temporary Pavement Marking

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

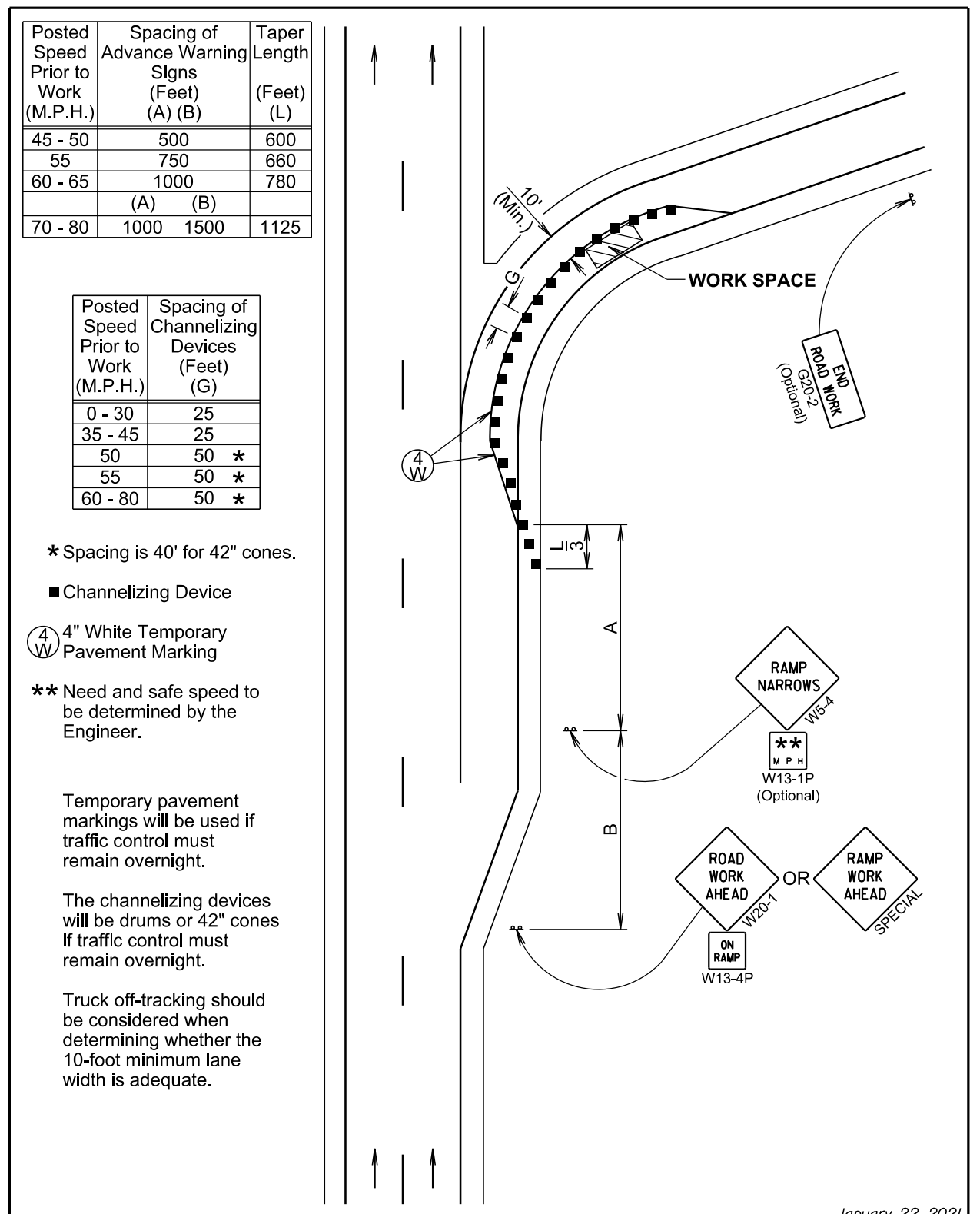
This procedure also applies when work is being performed in the lane adjacent to the median on a divided highway. Under these conditions, LEFT LANE CLOSED signs and the corresponding LANE REDUCTION symbol signs will be used.

The channelizing devices will be 42" cones or drums.

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

September 22, 2021

Published Date: 2024	S D D O T	LANE CLOSURE WITHOUT BARRIER	PLATE NUMBER 634.64
			Sheet 1 of 1



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)		Taper Length (Feet) (L)
	(A)	(B)	
45 - 50	500		600
55	750		660
60 - 65	1000		780
	(A)	(B)	
70 - 80	1000	1500	1125

Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	25
35 - 45	25
50	50 *
55	50 *
60 - 80	50 *

- * Spacing is 40' for 42" cones.
- Channelizing Device
- ④ 4" White Temporary Pavement Marking
- ** Need and safe speed to be determined by the Engineer.

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

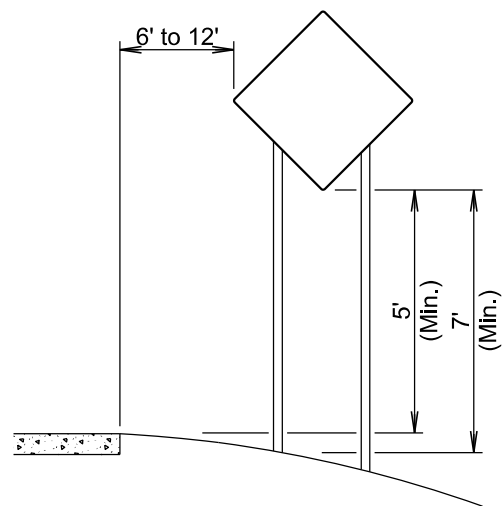
The channelizing devices will be drums or 42" cones if traffic control must remain overnight.

Truck off-tracking should be considered when determining whether the 10-foot minimum lane width is adequate.

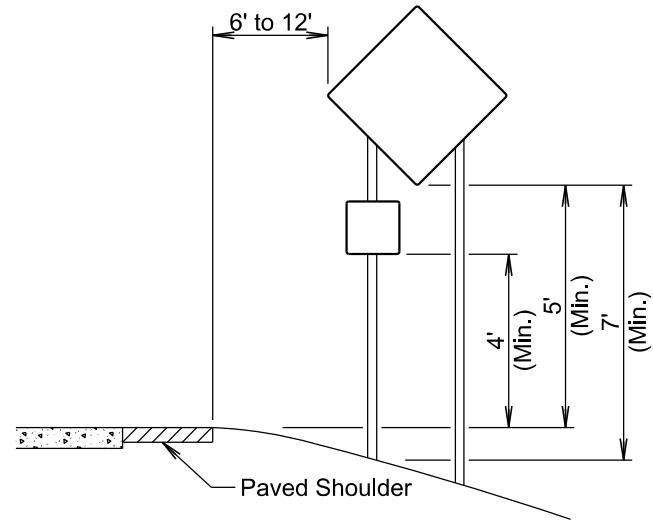
January 22, 2021

Published Date: 2024	S D D O T	PARTIAL EXIT RAMP CLOSURE	PLATE NUMBER 634.69
			Sheet 1 of 1

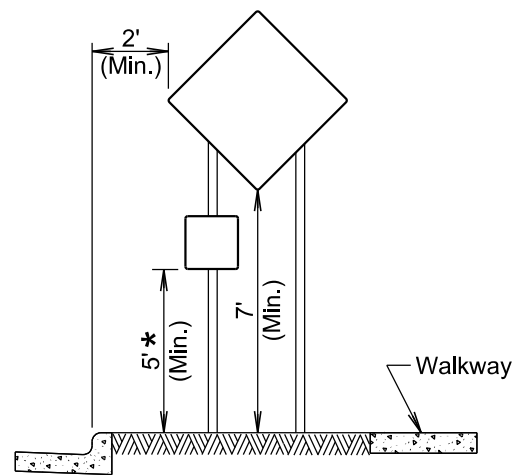
PLOTTED FROM - TRAB17882



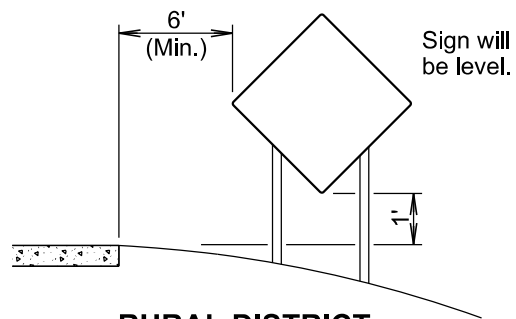
RURAL DISTRICT



**RURAL DISTRICT WITH
SUPPLEMENTAL PLATE**



URBAN DISTRICT

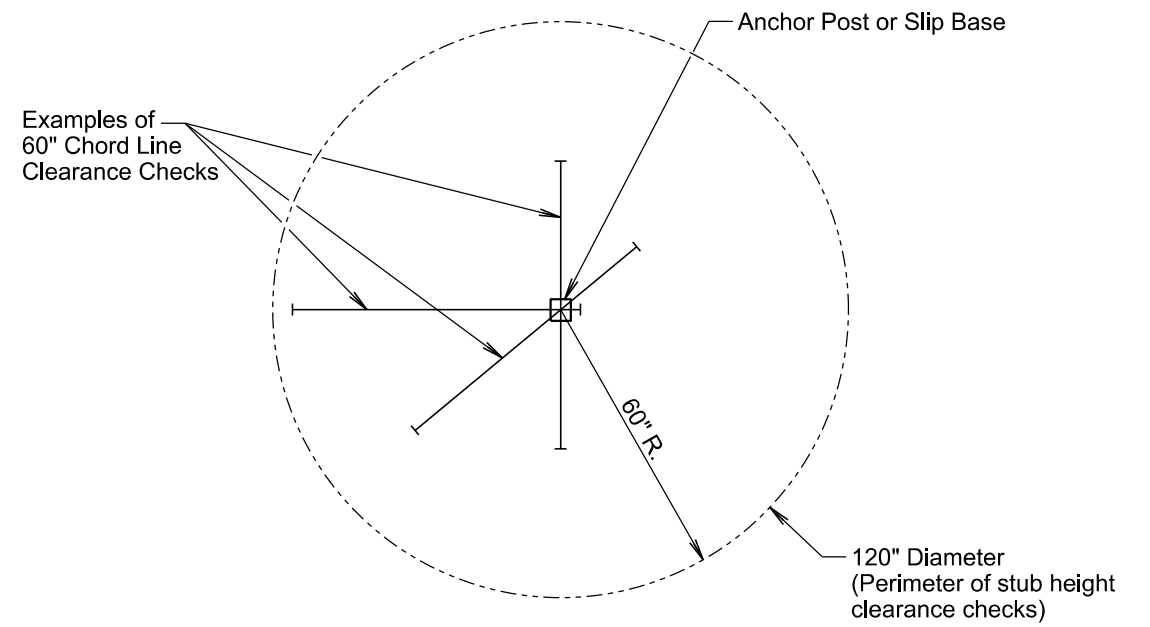


**RURAL DISTRICT
3 DAY MAXIMUM**
(Not applicable to regulatory signs)

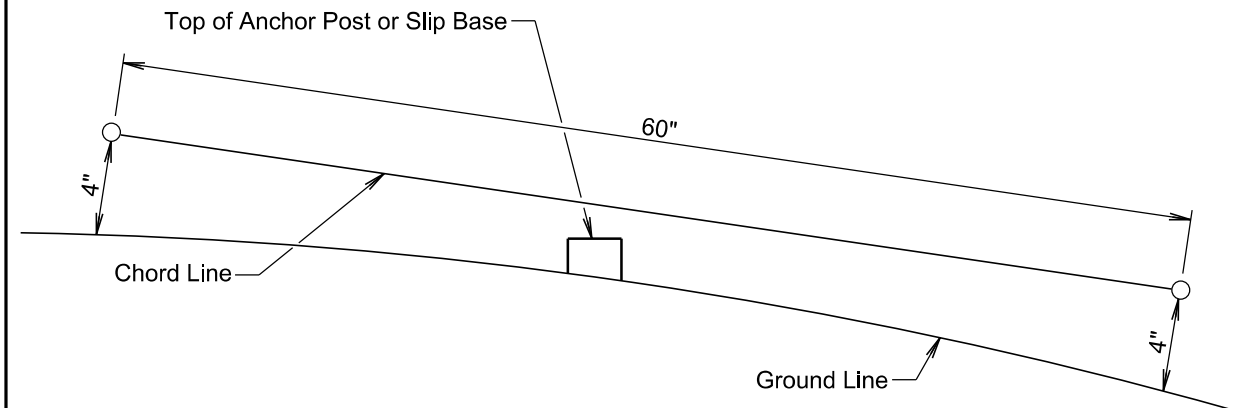
* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

January 22, 2021

Published Date: 2024	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

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: 2024	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENTS 1 & 16-19 (SD 10)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-6	TRUCK CROSSING	2	48" x 48"	16.0	32.0
W8-7	LOOSE GRAVEL	2	48" x 48"	16.0	32.0
W13-1P	ADVISORY SPEED (plaque)	2	30" x 30"	6.3	12.6
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
W20-7	FLAGGER (symbol)	6	48" x 48"	16.0	96.0
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
G20-1	ROAD WORK NEXT <u>1</u> MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					350.6

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENTS 2 (SD 10)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-6	TRUCK CROSSING	2	48" x 48"	16.0	32.0
W8-7	LOOSE GRAVEL	4	48" x 48"	16.0	64.0
W13-1P	ADVISORY SPEED (plaque)	2	30" x 30"	6.3	12.6
W20-1	ROAD WORK AHEAD	4	48" x 48"	16.0	64.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	4	48" x 48"	16.0	64.0
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
G20-1	ROAD WORK NEXT <u>1</u> MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					350.6

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENT 3 (US 12)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
W21-2	FRESH OIL	8	48" x 48"	16.0	128.0
W21-5	SHOULDER WORK	1	48" x 48"	16.0	16.0
G20-1	ROAD WORK NEXT <u>20</u> MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
SPECIAL	ON SHOULDER	8	30" x 24"	5.0	40.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					266.0

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENTS 4,5,7,22,23 (SD 20)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W4-2	LEFT or RIGHT LANE ENDS (symbol)	2	48" x 48"	16.0	32.0
W8-7	LOOSE GRAVEL	4	48" x 48"	16.0	64.0
W13-1P	ADVISORY SPEED (plaque)	4	30" x 30"	6.3	25.2
W20-1	ROAD WORK AHEAD	10	48" x 48"	16.0	160.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
W21-2	FRESH OIL	6	48" x 48"	16.0	96.0
W21-5	SHOULDER WORK	2	48" x 48"	16.0	32.0
G20-1	ROAD WORK NEXT <u>8</u> MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					523.2

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENT 6 (SD 20)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-7	LOOSE GRAVEL	6	48" x 48"	16.0	96.0
W13-1P	ADVISORY SPEED (plaque)	6	30" x 30"	6.3	37.8
W20-1	ROAD WORK AHEAD	4	48" x 48"	16.0	64.0
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
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
G20-1	ROAD WORK NEXT <u>10</u> MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
SPECIAL	WAIT FOR PILOT CAR	4	30" x 18"	3.8	15.2
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					359.0

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENT 8 (SD 20)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-6	TRUCK CROSSING	2	48" x 48"	16.0	32.0
W8-7	LOOSE GRAVEL	10	48" x 48"	16.0	160.0
W13-1P	ADVISORY SPEED (plaque)	2	30" x 30"	6.3	12.6
W20-1	ROAD WORK AHEAD	10	48" x 48"	16.0	160.0
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
W21-2	FRESH OIL	2	48" x 48"	16.0	32.0
G20-1	ROAD WORK NEXT <u>12</u> MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
SPECIAL	WAIT FOR PILOT CAR	10	30" x 18"	3.8	38.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					516.6

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS
SEGMENT 9 (SD 22)**

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	48	72

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-7	LOOSE GRAVEL	6	48" x 48"	16.0	96.0
W13-1P	ADVISORY SPEED (plaque)	6	30" x 30"	6.3	37.8
W20-1	ROAD WORK AHEAD	8	48" x 48"	16.0	128.0
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
W21-2	FRESH OIL	2	48" x 48"	16.0	32.0
G20-1	ROAD WORK NEXT 12 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
SPECIAL	WAIT FOR PILOT CAR	6	30" x 18"	3.8	22.8
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					398.6

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS
SEGMENT 10 (SD 25)**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-7	LOOSE GRAVEL	4	48" x 48"	16.0	64.0
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
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
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
G20-1	ROAD WORK NEXT 11 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					306.0

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENTS 11 & 12 (SD 22)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-6	TRUCK CROSSING	2	48" x 48"	16.0	32.0
W8-7	LOOSE GRAVEL	4	48" x 48"	16.0	64.0
W13-1P	ADVISORY SPEED (plaque)	2	30" x 30"	6.3	12.6
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	6	48" x 48"	16.0	96.0
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
SPECIAL	WAIT FOLLOW PILOT CAR	4	30" x 18"	3.8	15.2
G20-1	ROAD WORK NEXT 12 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					429.8

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS
SEGMENT 13 (SD 106)**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-7	LOOSE GRAVEL	4	48" x 48"	16.0	64.0
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
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
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
G20-1	ROAD WORK NEXT 5 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					306.0

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS
SEGMENT 14 (SD 123)**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-7	LOOSE GRAVEL	8	48" x 48"	16.0	128.0
W13-1P	ADVISORY SPEED (plaque)	8	30" x 30"	6.3	50.4
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
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
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
G20-1	ROAD WORK NEXT 11 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
SPECIAL	WAIT FOR PILOT CAR	6	30" x 18"	3.8	22.8
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					443.2

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS
SEGMENT 15 (SD 127)**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W8-7	LOOSE GRAVEL	12	48" x 48"	16.0	192.0
W13-1P	ADVISORY SPEED (plaque)	12	30" x 30"	6.3	75.6
W20-1	ROAD WORK AHEAD	12	48" x 48"	16.0	192.0
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
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
G20-1	ROAD WORK NEXT 38 MILES	2	36" x 18"	4.5	9.0
G20-1	ROAD WORK NEXT 13 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
SPECIAL	WAIT FOR PILOT CAR	8	30" x 18"	3.8	30.4
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					645.0

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENTS 20 & 21 (US14)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W21-2	FRESH OIL	4	48" x 48"	16.0	64.0
W21-5	SHOULDER WORK	2	48" x 48"	16.0	32.0
G20-1	ROAD WORK NEXT 3 MILES	4	36" x 18"	4.5	18.0
G20-2	END ROAD WORK	4	36" x 18"	4.5	18.0
SPECIAL	ON SHOULDER	4	48" x 48"	16.0	64.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					228.0

Revised 3-20-24 MAW

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENTS 24 & 33 (I29)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	4	48" x 48"	16.0	64.0
W21-2	FRESH OIL	36	48" x 48"	16.0	576.0
W21-5	SHOULDER WORK	36	48" x 48"	16.0	576.0
G20-2	END ROAD WORK	4	36" x 18"	4.5	18.0
SPECIAL	ON SHOULDER	4	48" x 48"	16.0	64.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					1298.0

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS SEGMENTS 25-32 & 34-41 (I29 Ramps)

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W5-4	RAMP NARROWS	16	48" x 48"	16.0	256.0
W8-7	LOOSE GRAVEL	16	48" x 48"	16.0	256.0
W13-1P	ADVISORY SPEED (plaque)	16	30" x 30"	6.3	100.8
W13-4P	ON RAMP (plaque)	16	36" x 36"	9.0	144.0
W20-1	ROAD WORK AHEAD	16	48" x 48"	16.0	256.0
W21-2	FRESH OIL	16	48" x 48"	16.0	256.0
G20-2	END ROAD WORK	16	36" x 18"	4.5	72.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					1340.8

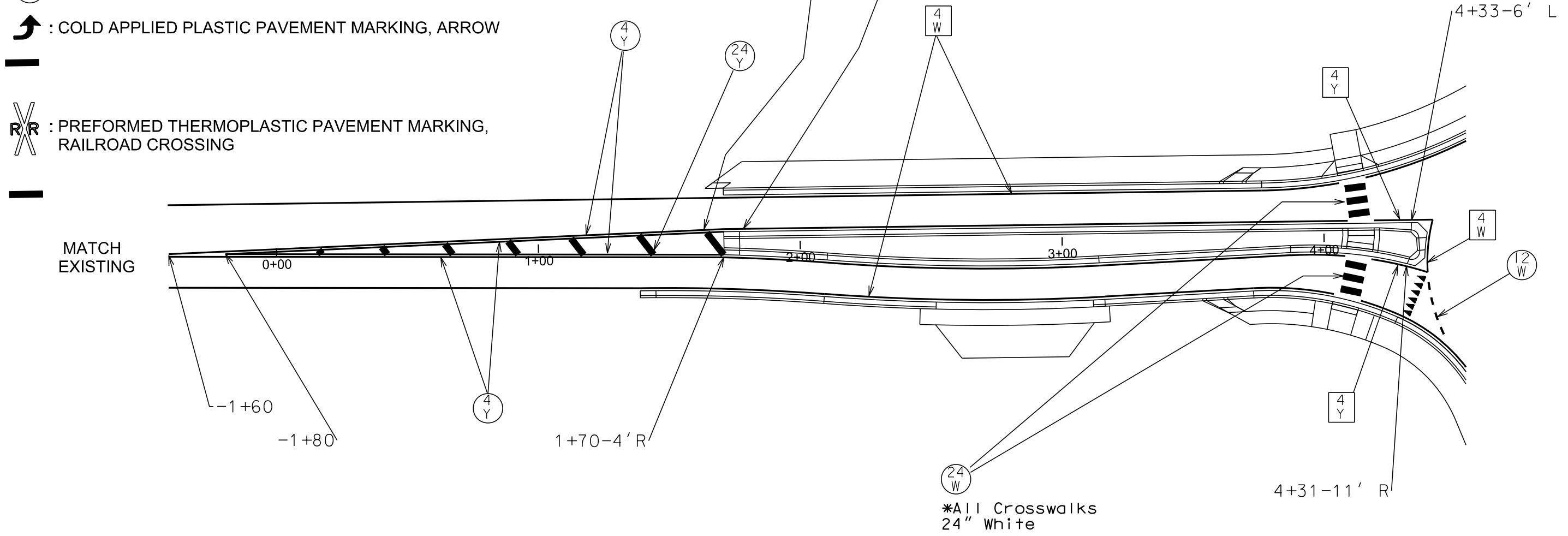
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	50	72
Plotting Date:			

PAVEMENT MARKING LAYOUT

SD HWY 10

- (4 Y) : PAVEMENT MARKING PAINT, 4" YELLOW
- (4 W) : PAVEMENT MARKING PAINT, 4" WHITE
- (8 W) : PAVEMENT MARKING PAINT, 8" WHITE
- [4 Y] : COLD APPLIED PLASTIC PAVEMENT MARKING, 4" YELLOW
- [4 W] : COLD APPLIED PLASTIC PAVEMENT MARKING, 4" WHITE
- (12 W) : PREFORMED THERMOPLASTIC PAVEMENT MARKING, 12" WHITE
- (24 Y) : COLD APPLIED PLASTIC PAVEMENT MARKING, 24" YELLOW
- (24 W) : PREFORMED THERMOPLASTIC PAVEMENT MARKING, 24" WHITE
- ↗ : COLD APPLIED PLASTIC PAVEMENT MARKING, ARROW

Note: 4" Lines in the roundabout are Cold Plastic Applied Plastic. These and other plastic pavement marking will be masked as listed in Estimate of Quantities. These layouts are for Information Only.



PLOT SCALE - 1:40

PLOTTED FROM - TRAB10100

PLOT NAME - 1

FILE - ... \ROB1028\SECTION M\000PM.DGN

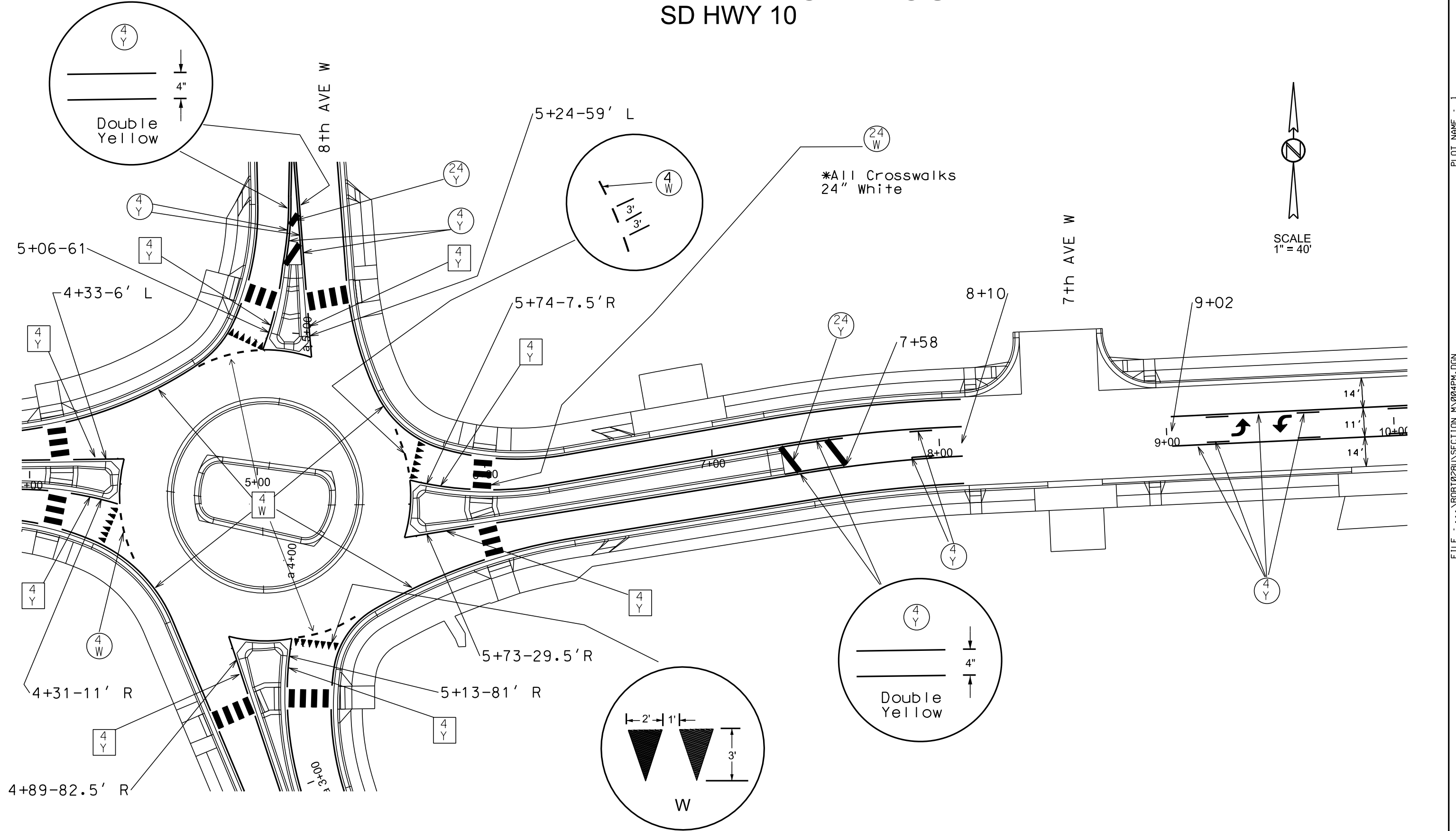
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	51	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 1



PLOTTED FROM - TRAB10100

FILE - ... \ROB1028\SECTION M\004PM.DGN

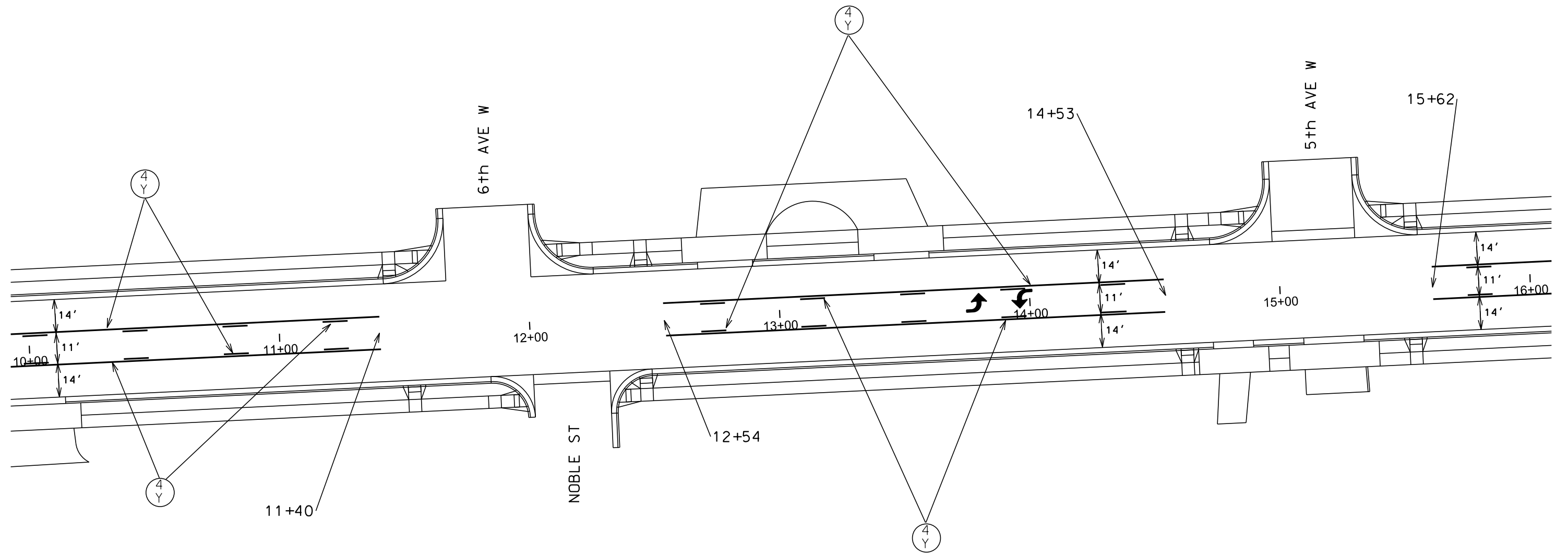
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012 (315)	52	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

SD HWY 10



SCALE
1" = 40'



PLOT SCALE - 1:40

PLOTTED FROM - TRAB10100

PLOT NAME - 5

FILE - ... \ROBT028\SECTION M\010PM.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012 (315)	53	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

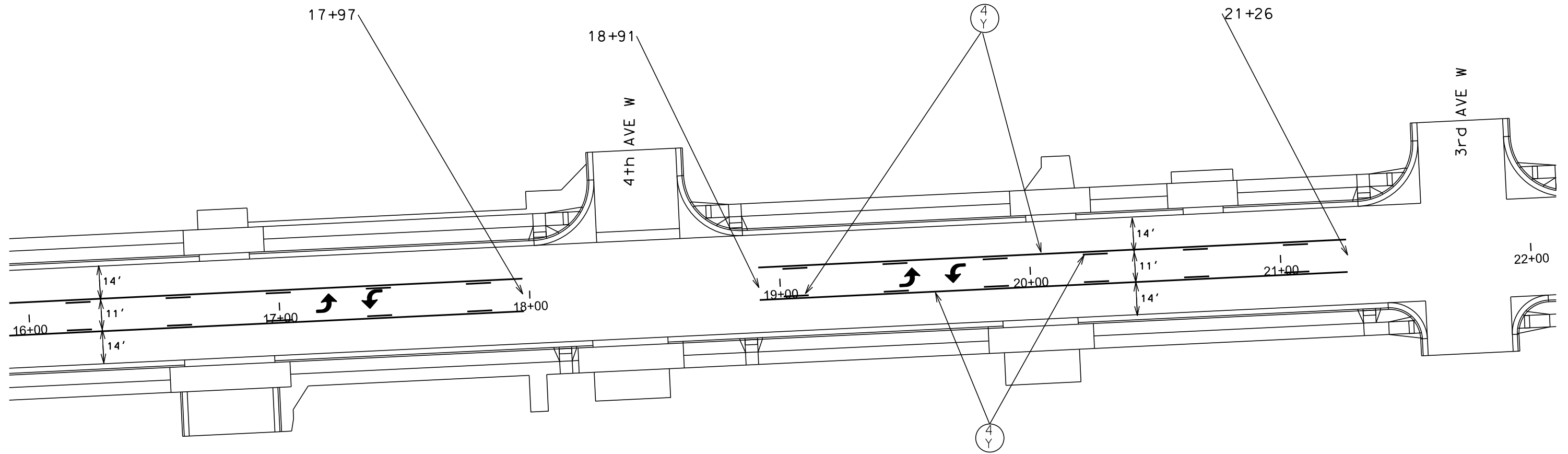
SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 6



SCALE
1" = 40'



PLOTTED FROM - TRAB10100

FILE - ... \ROB1028\SECTION M\016PM.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	54	72
Plotting Date: 10/12/2018			

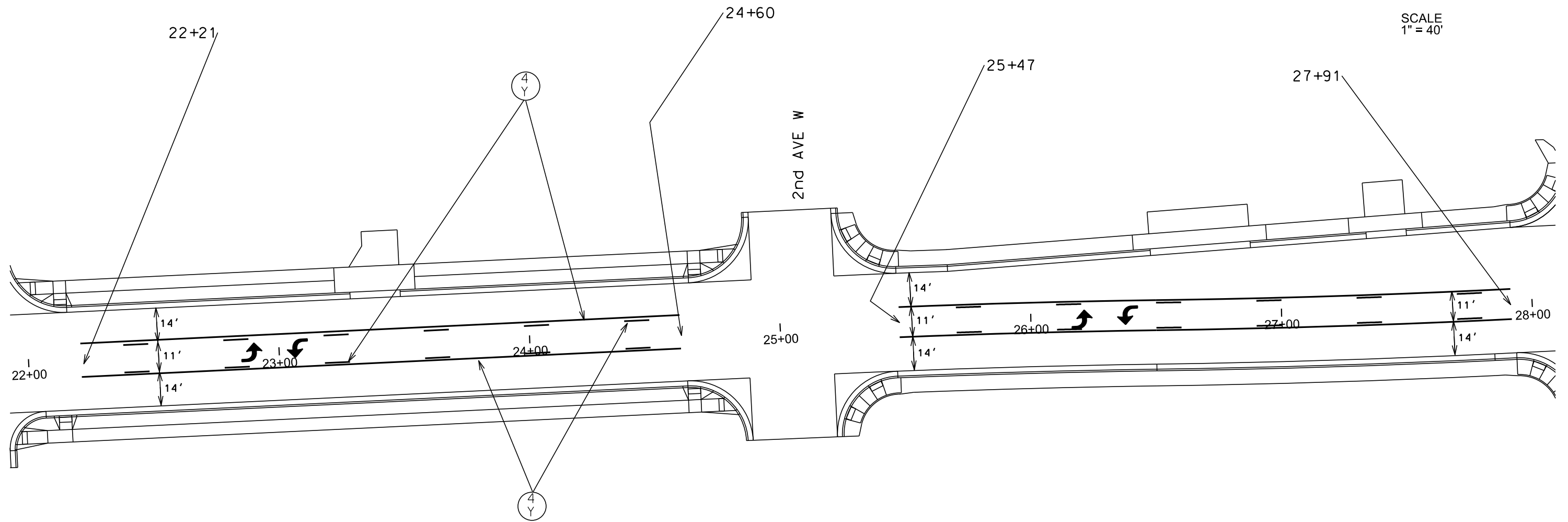
PAVEMENT MARKING LAYOUT SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 7



SCALE
1" = 40'



PLOTTED FROM - TRAB10100

FILE - ... \ROBT028\SECTION M\022PM.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	55	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

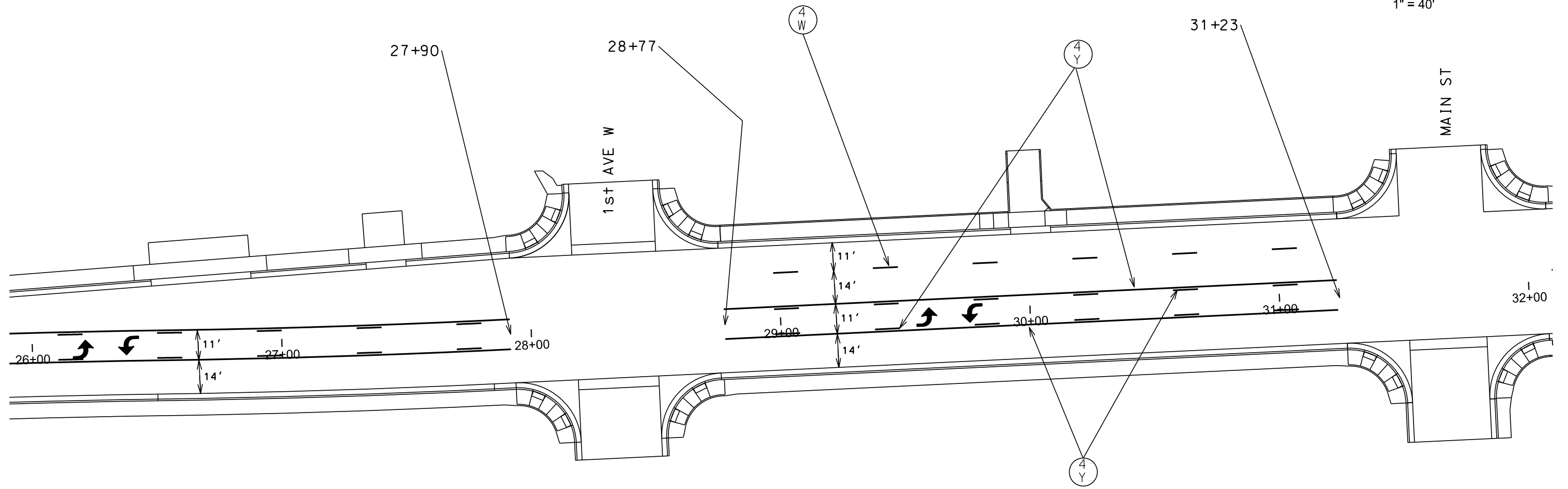
SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 8



SCALE
1" = 40'



PLOTTED FROM - TRAB10100

FILE - ... \ROBT028\SECTION M\026PM.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	56	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

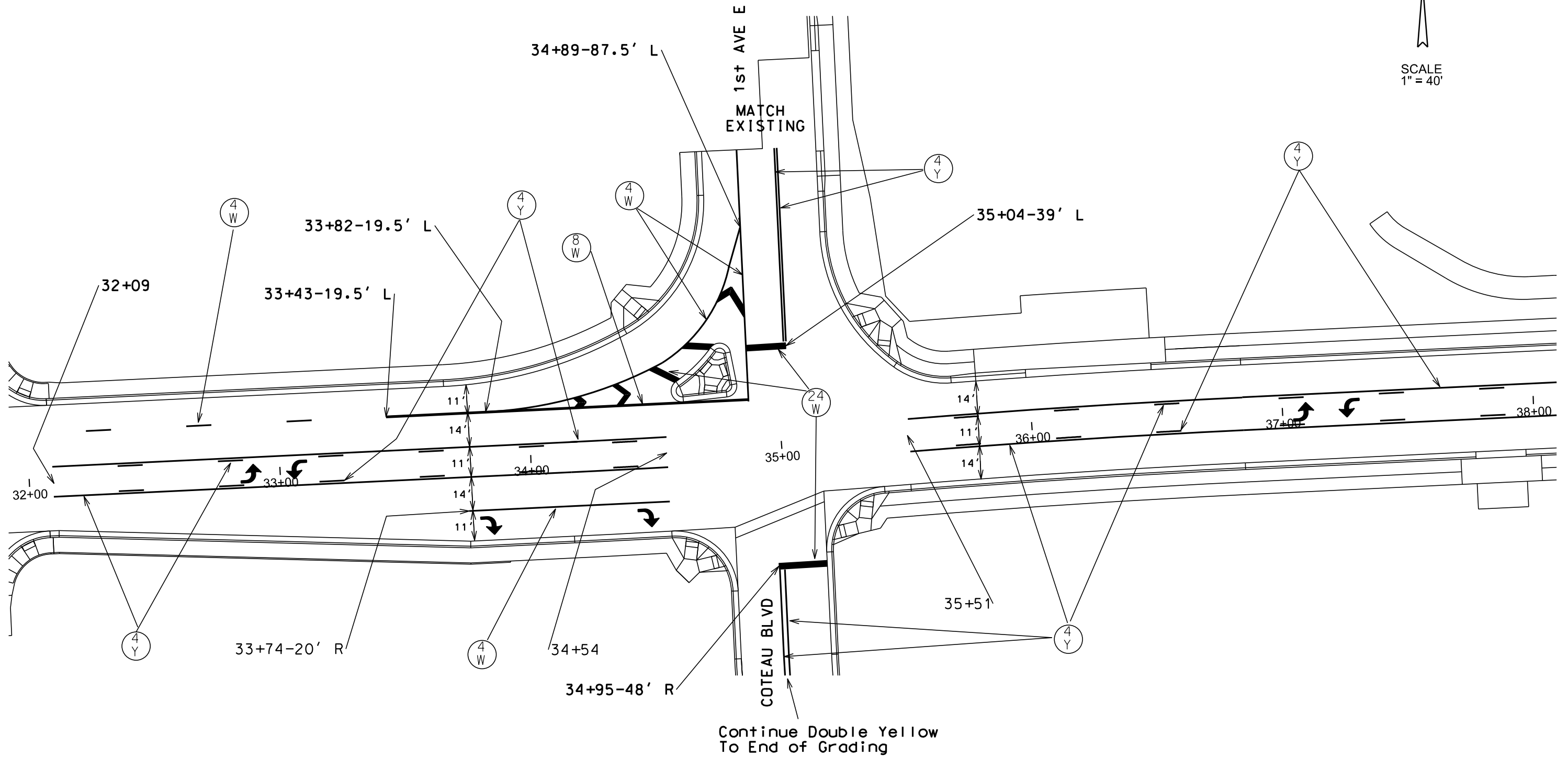
SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 9



SCALE
1" = 40'



PLOTTED FROM - TRAB10100

FILE - ... \ROBT028\SECTION M\032PM.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	57	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

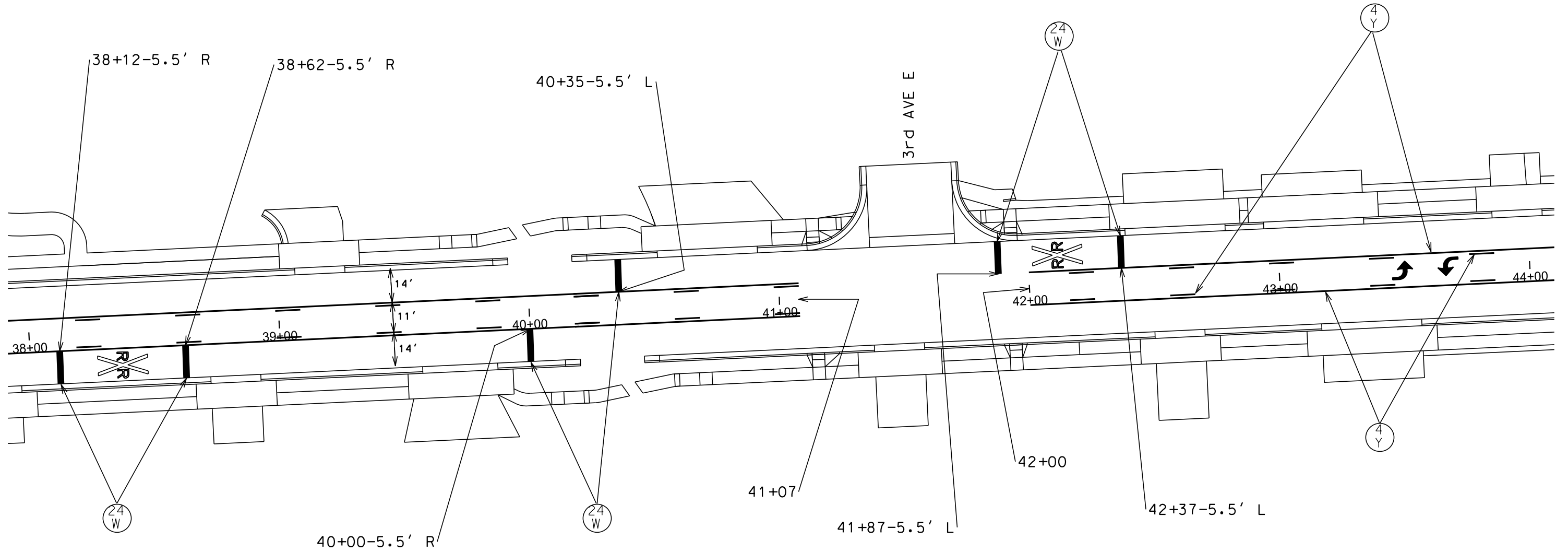
SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 10



SCALE
1" = 40'



PLOTTED FROM - TRAB10100

FILE - ... \ROB1028\SECTION M\038PM.DGN

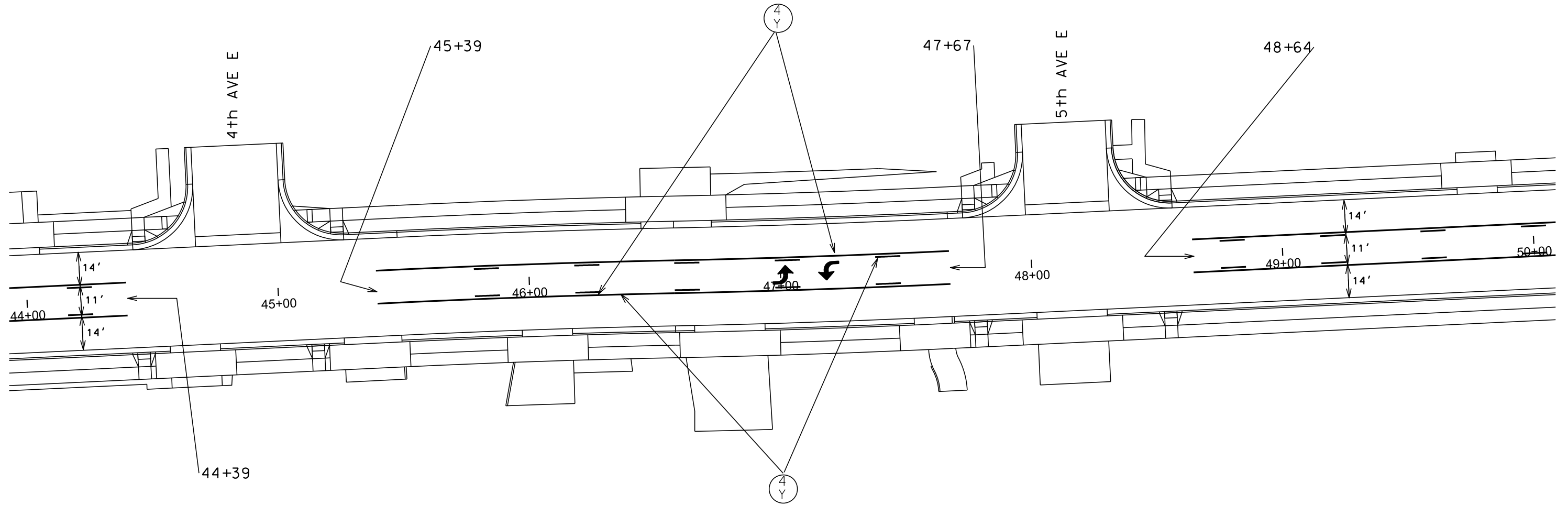
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	58	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

SD HWY 10



SCALE
1" = 40'



PLOT SCALE - 1:40

PLOTTED FROM - TRAB10100

PLOT NAME - 11

FILE - ... \ROB1028\SECTION M\044PM.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	59	72
Plotting Date:			

PAVEMENT MARKING LAYOUT

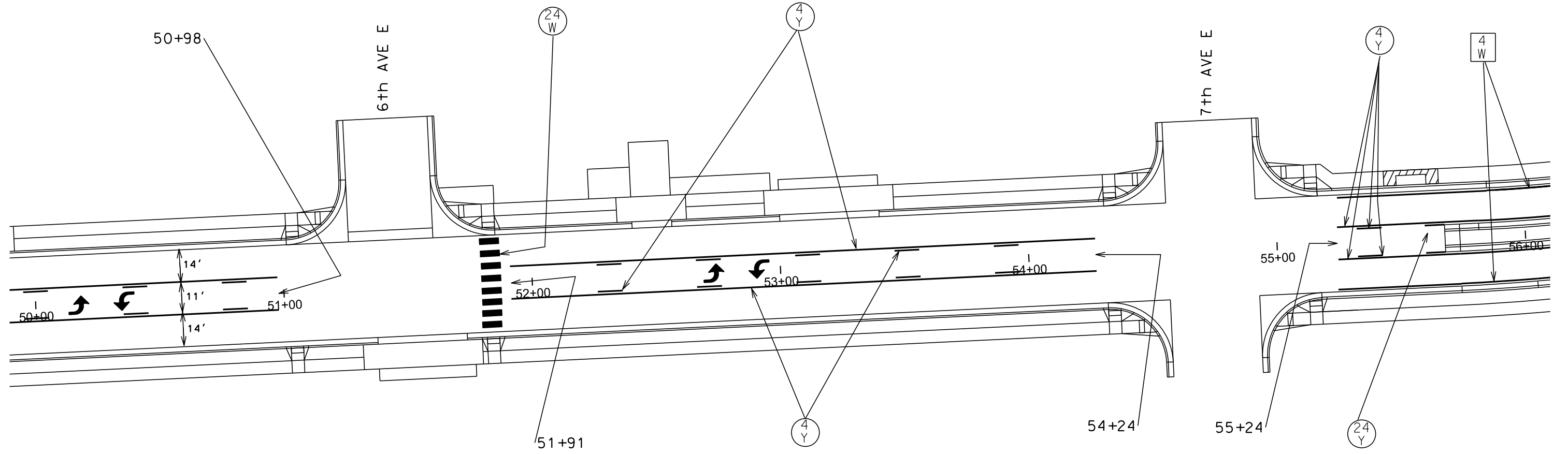
SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 12



SCALE
1" = 40'



PLOTTED FROM - TRAB10100

FILE ... \ROBT028\SECTION M\050PM.DGN

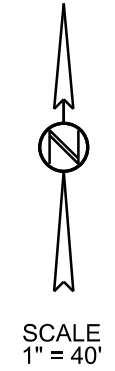
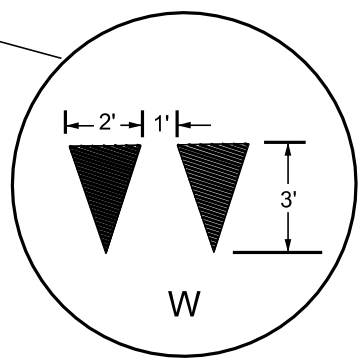
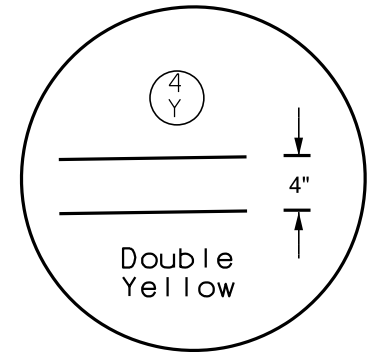
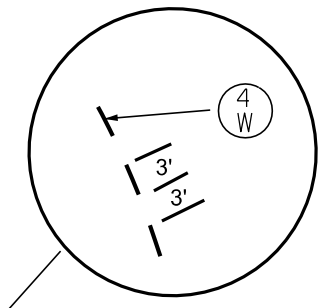
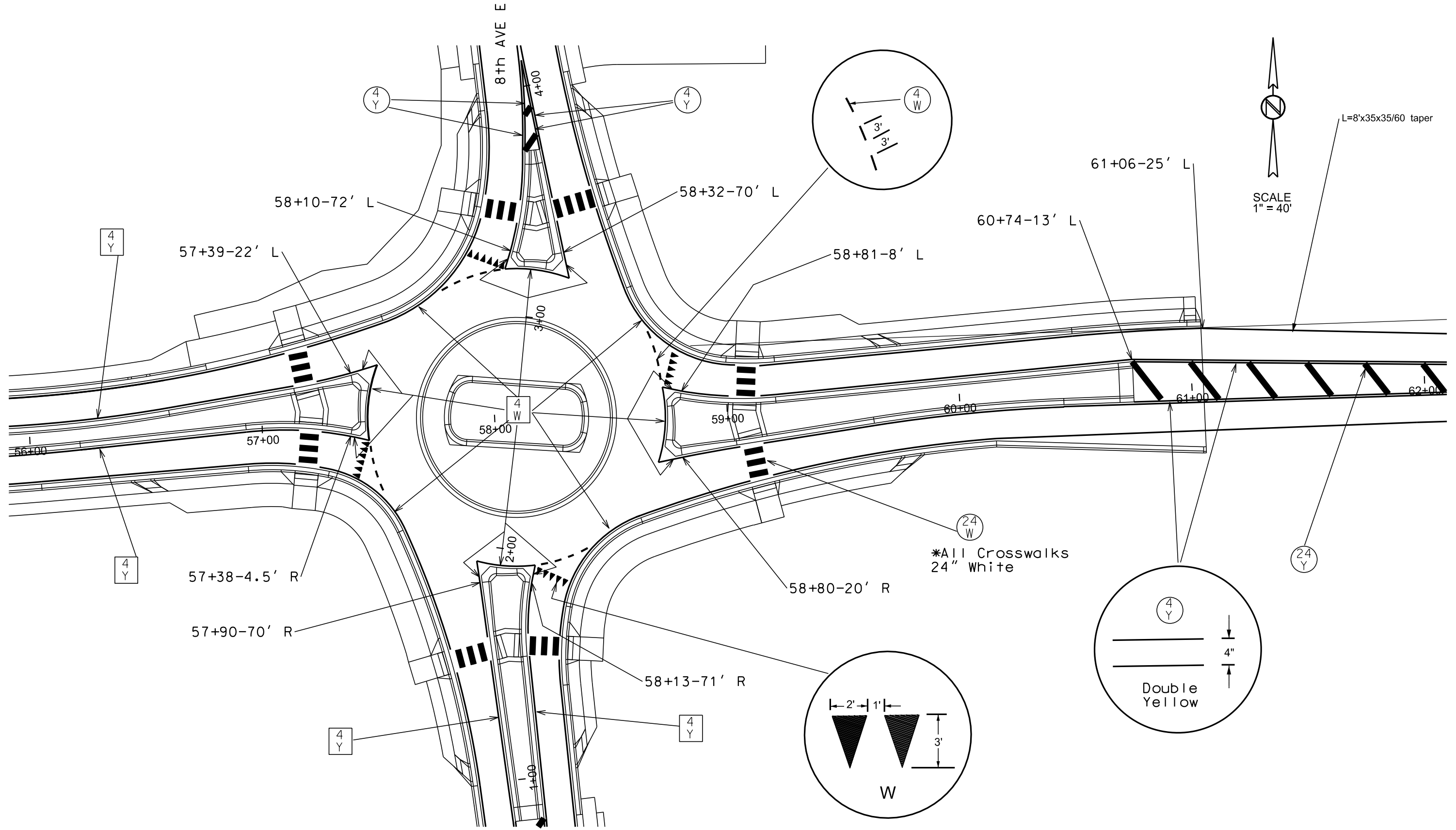
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	60	72
Plotting Date:			

PAVEMENT MARKING LAYOUT

SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 13



PLOTTED FROM - TRAB10100

FILE - ... \ROBT028\SECTION M\056PM.DGN

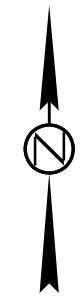
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	61	72
Plotting Date:			

PAVEMENT MARKING LAYOUT

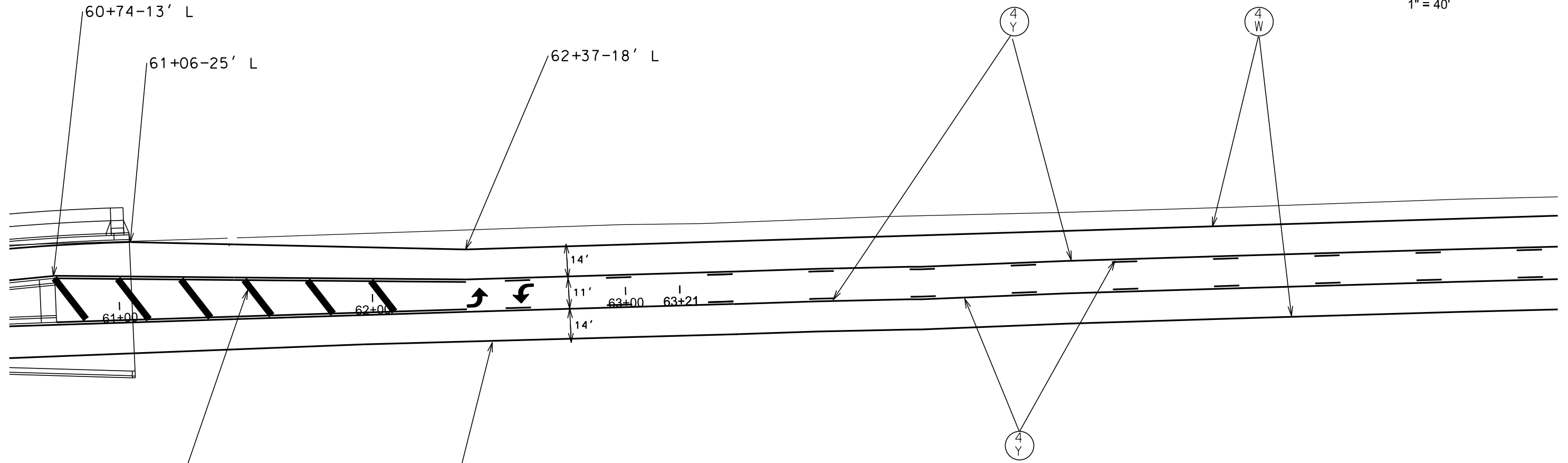
SD HWY 10

PLOT SCALE - 1"=40'

PLOT NAME - 1



SCALE
1" = 40'



*Continue 3 Lane Typical to East of SD 127. Place Double Arrows Approximately Every 400 Ft.

PLOTTED FROM - TRAB10100

FILE - ... \ROBT028\SECTION M\062PM.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	62	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

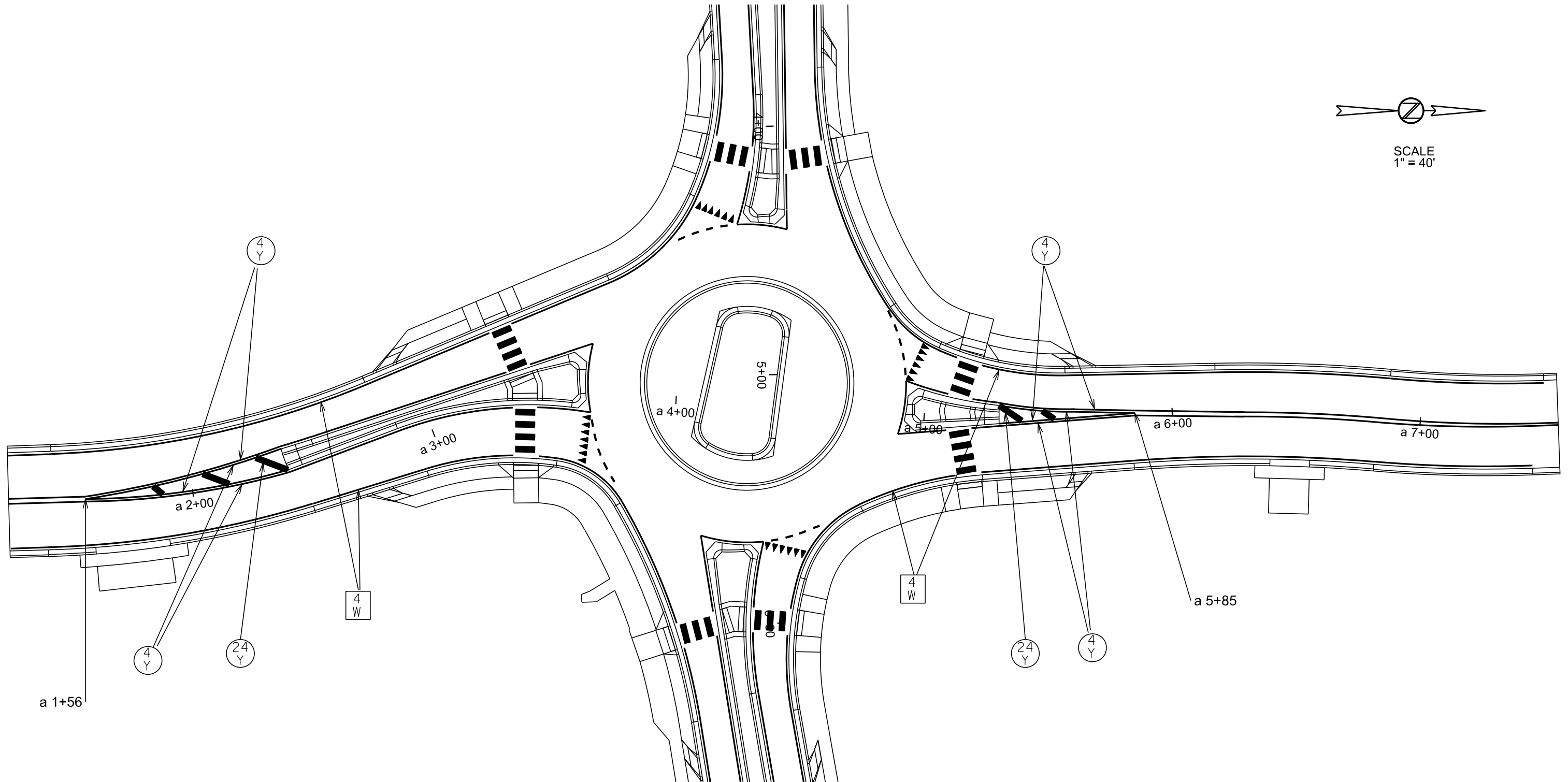
8th Ave W / 457th Ave

PLOT SCALE - 1"=40'

PLOT NAME - 4



SCALE
1" = 40'



PLOTTED FROM - TRAB10100

FILE - ... \SECTION M&THAVE\PM.DGN

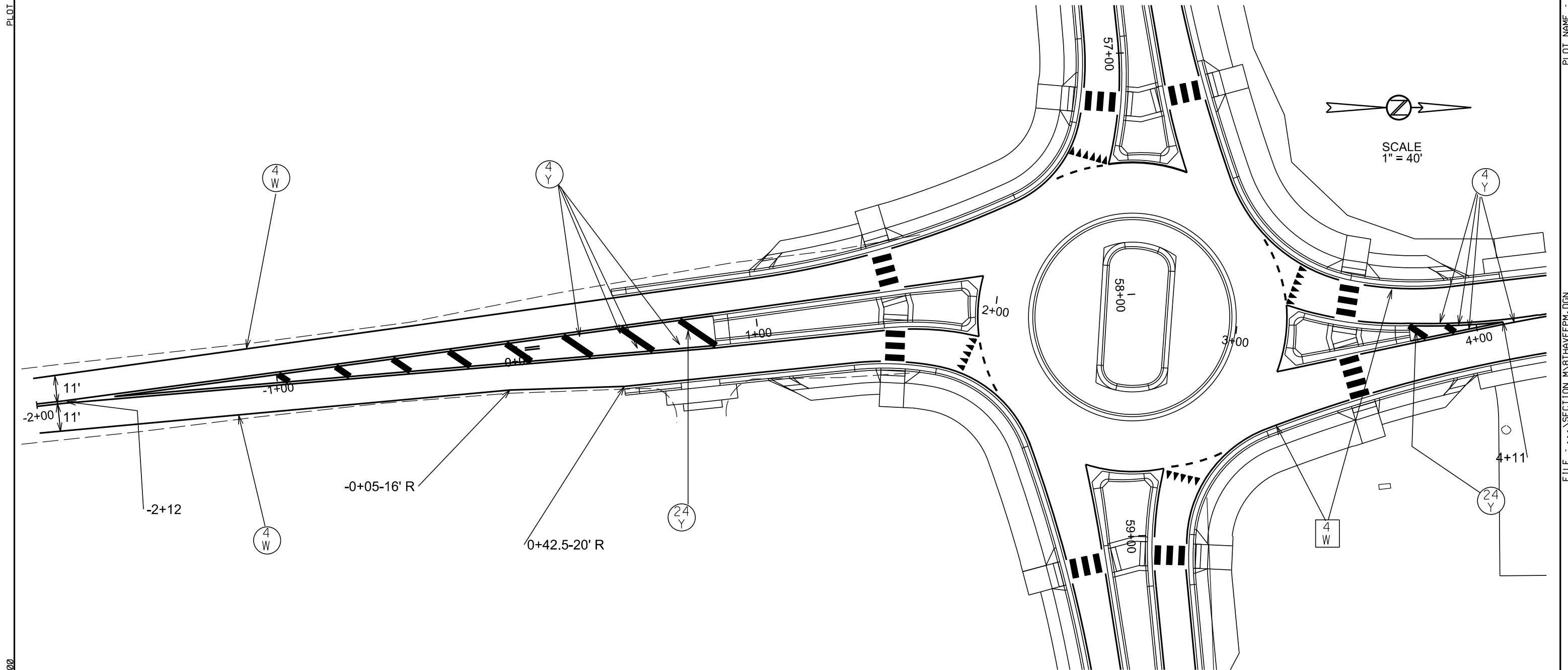
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012 (315)	63	72
Plotting Date: 10/12/2018			

PAVEMENT MARKING LAYOUT

8th Ave E / 458th Ave

PLOT SCALE - 1:40

PLOT NAME - 3



PLOTTED FROM - TRAB10100

FILE - ... \SECTION M&THAVEEPM.DGN

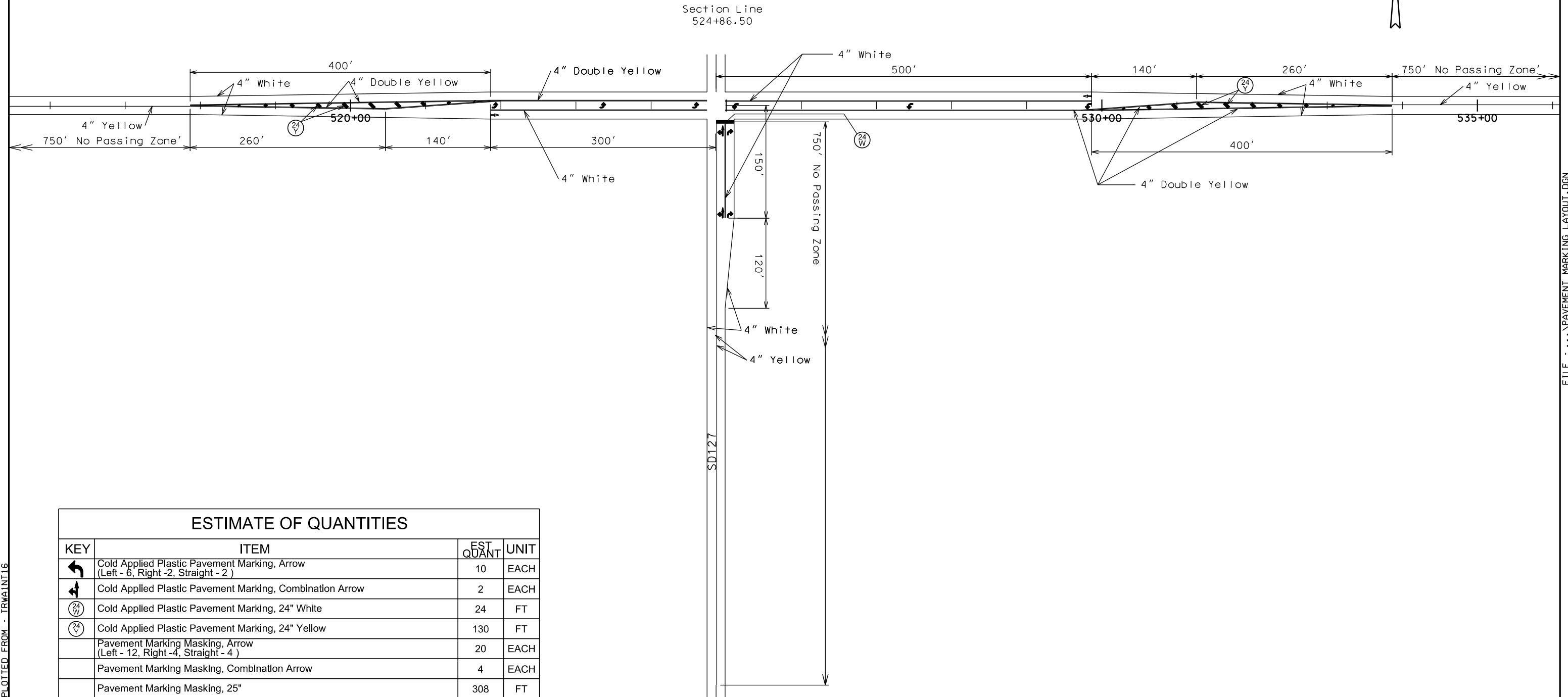
PAVEMENT MARKING LAYOUT

SD127 & SD106 JCT



PLOT SCALE - 1:129.111

PLOT NAME - 1



ESTIMATE OF QUANTITIES

KEY	ITEM	EST QUANT	UNIT
	Cold Applied Plastic Pavement Marking, Arrow (Left - 6, Right - 2, Straight - 2)	10	EACH
	Cold Applied Plastic Pavement Marking, Combination Arrow	2	EACH
	Cold Applied Plastic Pavement Marking, 24" White	24	FT
	Cold Applied Plastic Pavement Marking, 24" Yellow	130	FT
	Pavement Marking Masking, Arrow (Left - 12, Right - 4, Straight - 4)	20	EACH
	Pavement Marking Masking, Combination Arrow	4	EACH
	Pavement Marking Masking, 25"	308	FT

All 4" White and Yellow Lines will be Waterborne Pavement Marking Paint

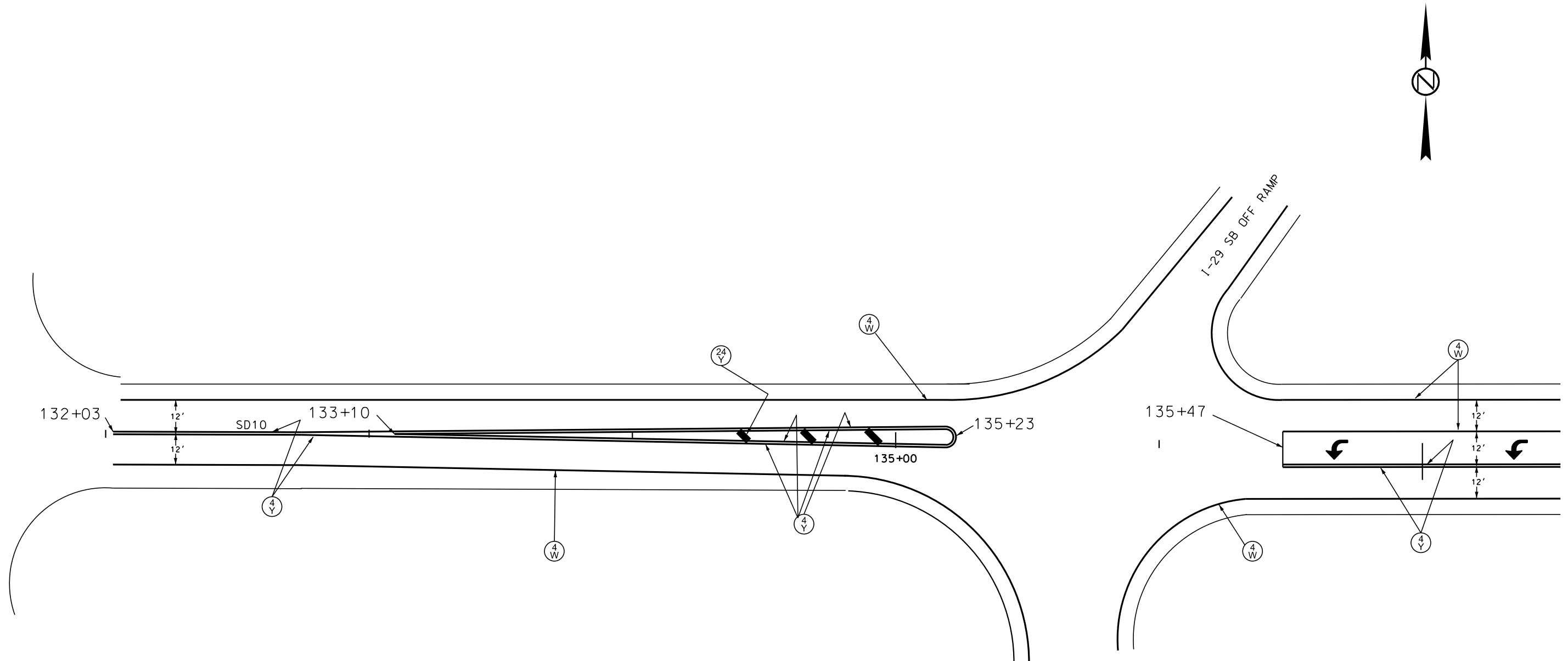
PLOTTED FROM - TRWAINT16

FILE - ... \PAVEMENT MARKING LAYOUT.DGN

(Sheet 1 of 3)

PAVEMENT MARKING LAYOUT

SD10 & I29



ESTIMATE OF QUANTITIES

KEY	ITEM	EST QUANT	UNIT
↩	PAVEMENT MARKING MASKING, ARROW	12	EACH
Ⓞ 24 Y	PAVEMENT MARKING MASKING, 25"	480	FT

All 4" White and Yellow Line will be Waterborne Pavement Marking Paint

PLOT SCALE - 1:40

PLOTTED FROM - TRAB17882

PLOT NAME - 1

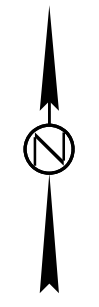
FILE - ... \PAVEMENT LAYOUTS.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	66	72
Plotting Date: 02/21/2024			

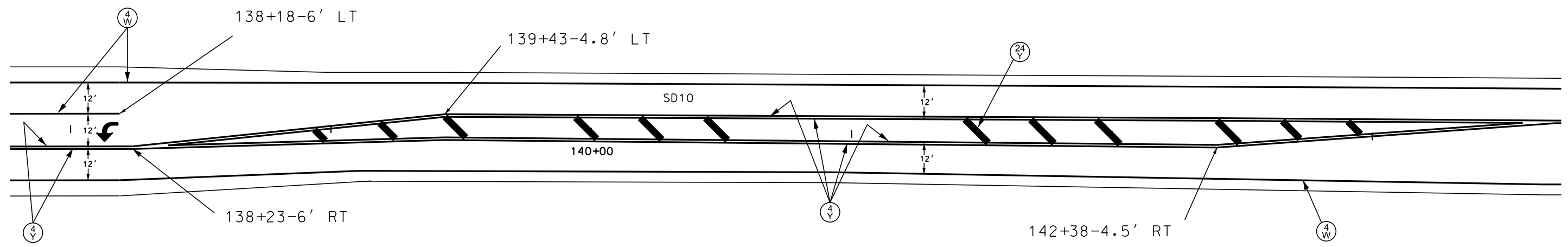
(Sheet 2 of 3)

PAVEMENT MARKING LAYOUT

SD10 & I29



SCALE
1" = 40'



PLOT SCALE - 1:40

PLOT NAME - 2

FILE - ... \PAVEMENT LAYOUTS 2.DGN

PLOTTED FROM - TRAB17882

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	67	72
Plotting Date: 02/21/2024			

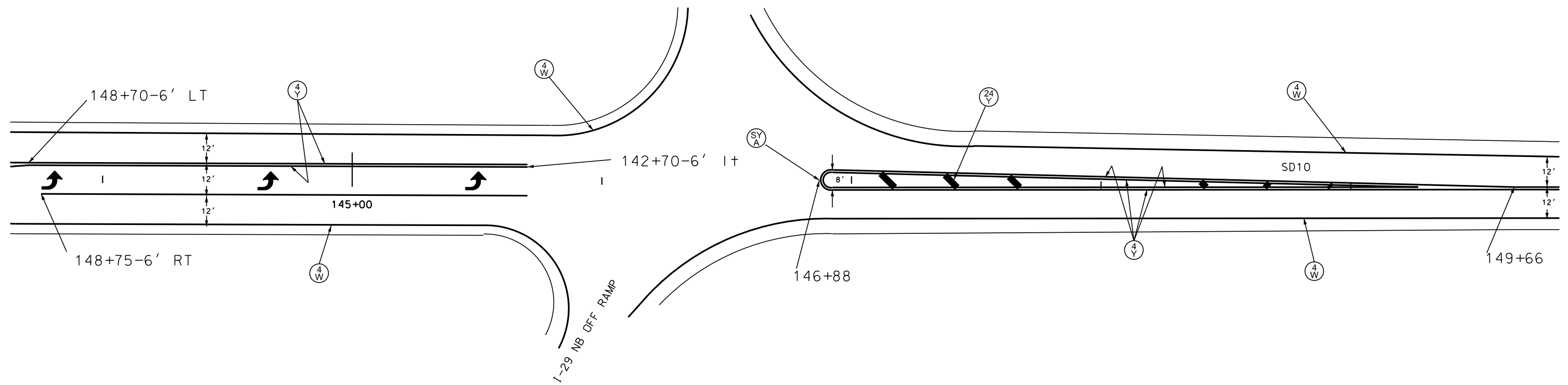
(Sheet 3 of 3)

PAVEMENT MARKING LAYOUT

SD10 & I29



SCALE
1" = 40'



PLOT SCALE - 1:40

PLOT NAME - 3

FILE - ... \PAVEMENT LAYOUTS 3.DGN

PLOTTED FROM - TRAB17882

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	68	72

Plotting Date: 02/21/2024

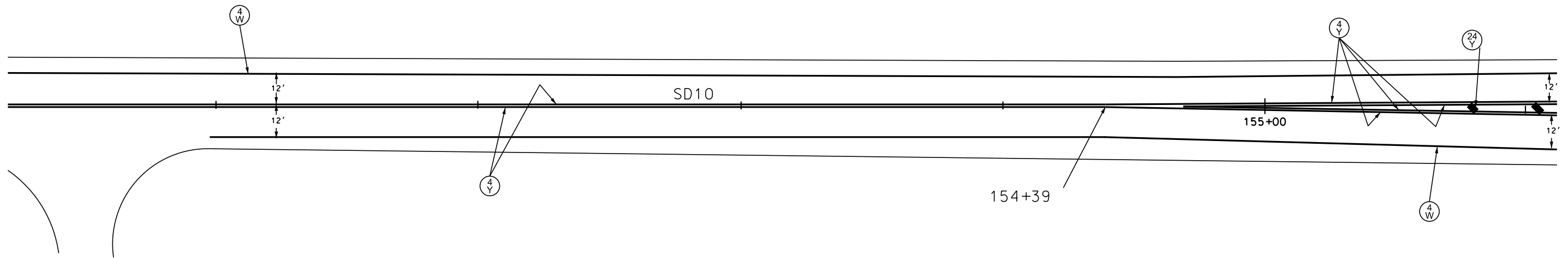
(Sheet 1 of 3)

PAVEMENT MARKING LAYOUT

SD10 & 461 AVE



SCALE
1" = 40'



ESTIMATE OF QUANTITIES

KEY	ITEM	EST QUANT	UNIT
↩	PAVEMENT MARKING MASKING, ARROW	12	EACH
(24 Y)	PAVEMENT MARKING MASKING, 25"	210	FT

All 4" White and Yellow Line will be Waterborne Pavement Marking Paint

PLOT SCALE - 1:40

PLOTTED FROM - TRAB17882

PLOT NAME - 4

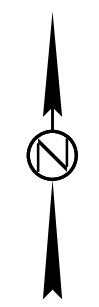
FILE - ... \PAVEMENT LAYOUTS 4.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	69	72
Plotting Date: 02/21/2024			

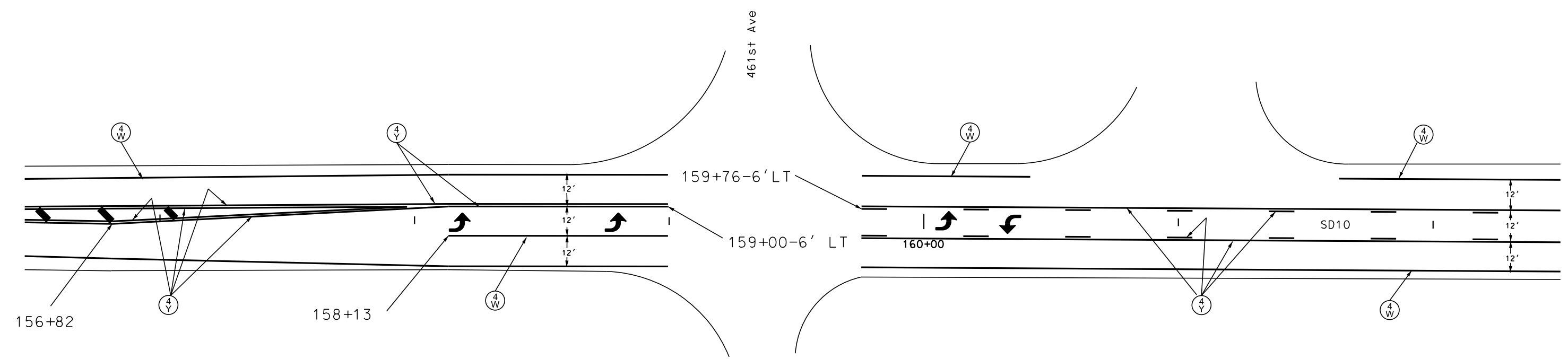
(Sheet 2 of 3)

PAVEMENT MARKING LAYOUT

SD10 & 461 AVE



SCALE
1" = 40'



PLOT SCALE - 1:40

PLOT NAME - 5

FILE - ... \PAVEMENT LAYOUTS 5.DGN

PLOTTED FROM - TRAB17882

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM-NH-P 0012(315)	70	72
Plotting Date: 02/21/2024			

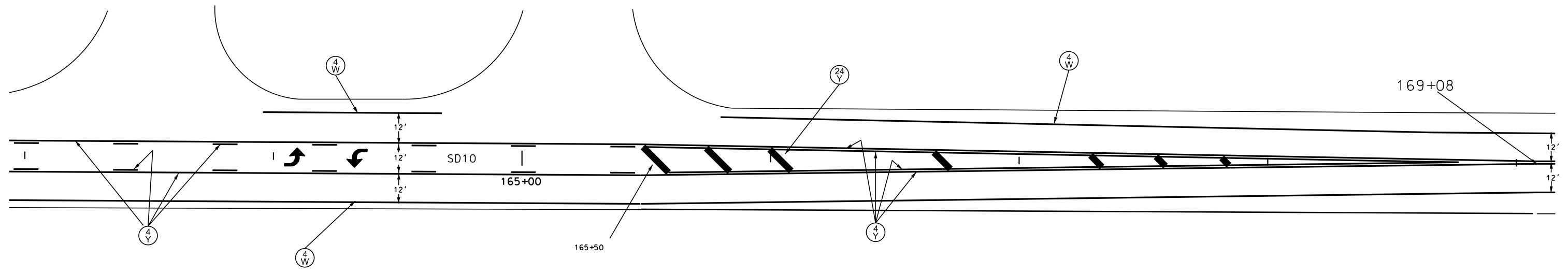
PAVEMENT MARKING LAYOUT

SD10 & 461 AVE

(Sheet 3 of 3)



SCALE
1" = 40'



PLOT SCALE - 1:40

PLOT NAME - 6

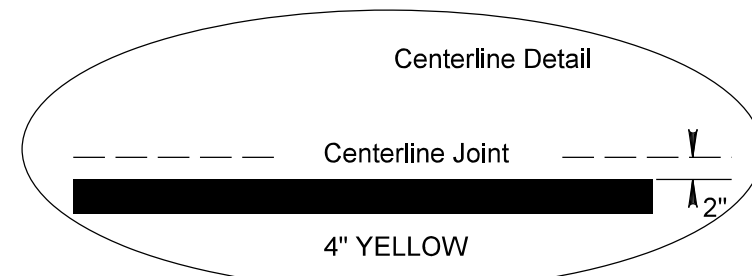
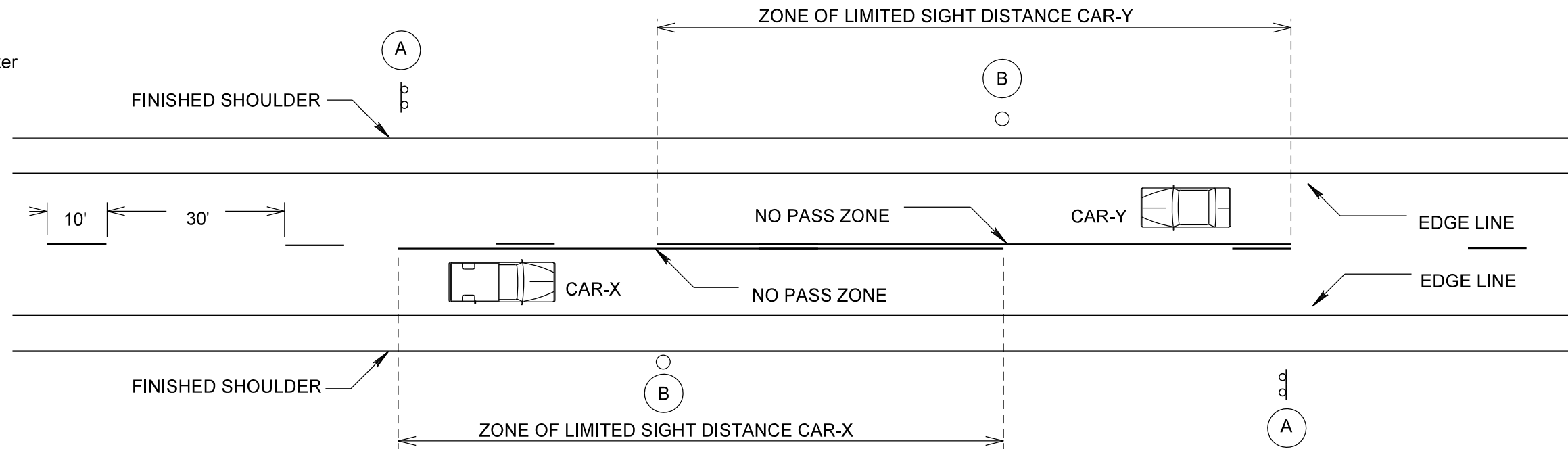
FILE - ... \PAVEMENT LAYOUTS 6.DGN

PLOTTED FROM - TRAB17882

TYPICAL PAVEMENT MARKING LAYOUT

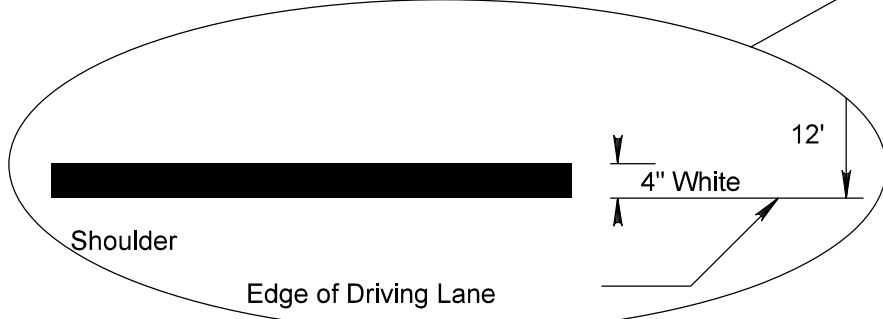
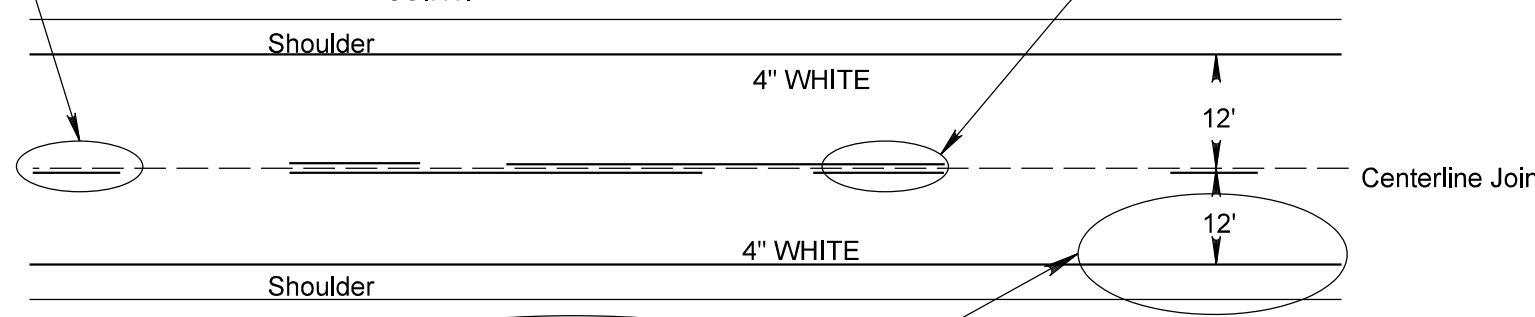
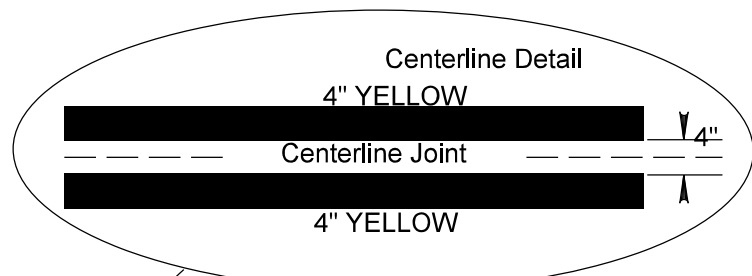


B End of Zone Marker



NOTE: A TWO "GUN" SYSTEM WILL BE USED TO OBTAIN THIS PATTERN.

WHEN A SINGLE SKIP LINE EXISTS, THE SKIP WILL BE PLACED TO THE SOUTH OR EAST OF THE CENTERLINE JOINT.



FURNISHING AND APPLYING HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

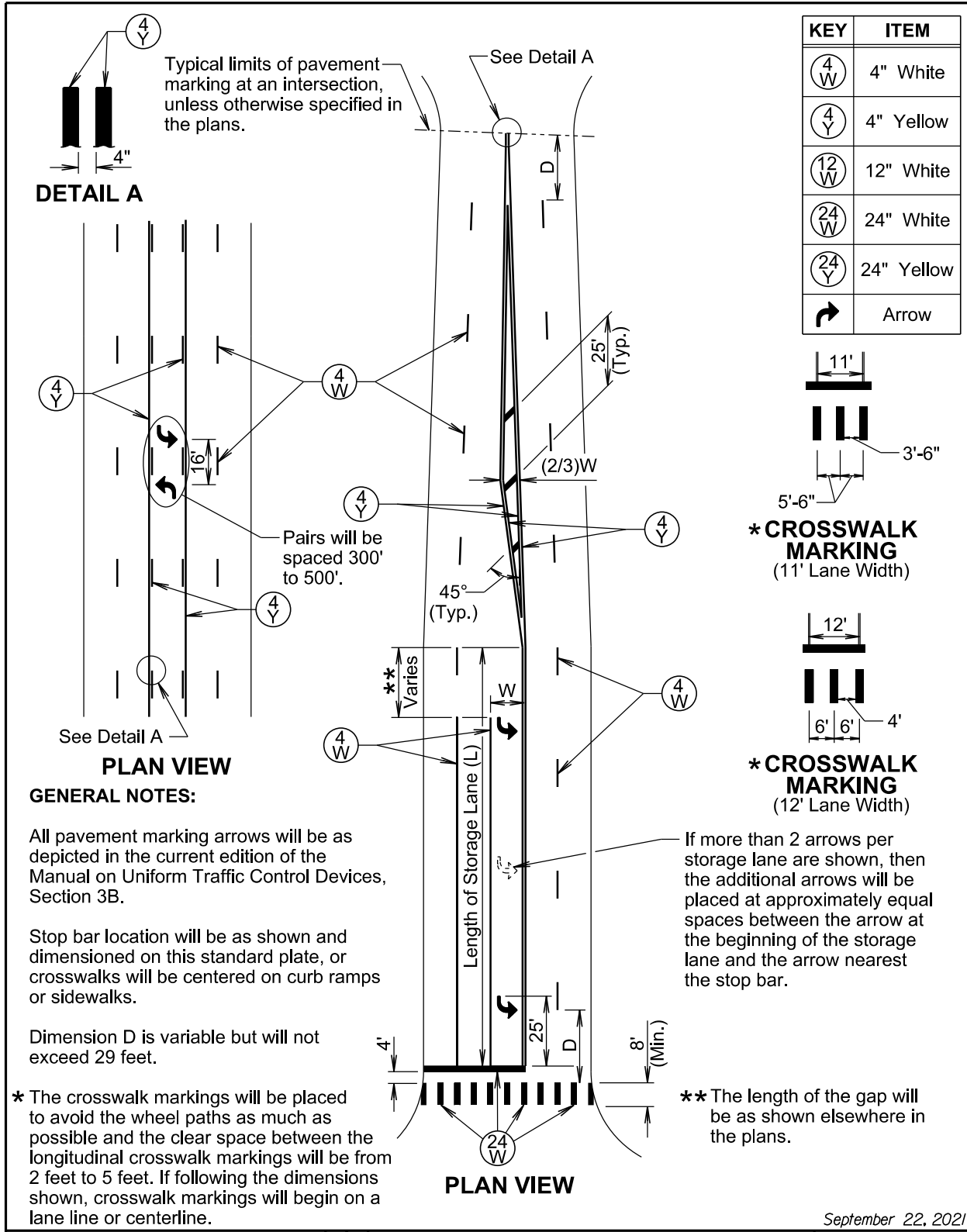
1. The approximate paint application rates will be as follows:

- Undivided Roadway
- Dashed 4" line
7.6 Gallons/Pass-Mile
- Solid 4" line
27.8 Gallons/Pass-Mile

2. The typical pavement markings as shown on this sheet will be applied throughout the entire length of the project.

3. Exact location of the NO PASSING ZONE lines will be determined in the field by the Engineer. A dash of white paint will mark the beginning and end of all no passing zones. NO PASSING ZONE signs and the ending post in fence lines, if present, will not be used as the beginning and ending NO PASSING ZONE lines.

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



GENERAL NOTES:

All pavement marking arrows will be as depicted in the current edition of the Manual on Uniform Traffic Control Devices, Section 3B.

Stop bar location will be as shown and dimensioned on this standard plate, or crosswalks will be centered on curb ramps or sidewalks.

Dimension D is variable but will not exceed 29 feet.

* The crosswalk markings will be placed to avoid the wheel paths as much as possible and the clear space between the longitudinal crosswalk markings will be from 2 feet to 5 feet. If following the dimensions shown, crosswalk markings will begin on a lane line or centerline.

If more than 2 arrows per storage lane are shown, then the additional arrows will be placed at approximately equal spaces between the arrow at the beginning of the storage lane and the arrow nearest the stop bar.

** The length of the gap will be as shown elsewhere in the plans.

Published Date: 2024

**S
D
D
O
T**

PAVEMENT MARKINGS FOR ADJACENT INTERSECTIONS AND CENTER TURN LANE

September 22, 2021

PLATE NUMBER
633.01

Sheet 1 of 1