

SECTION M: PAVEMENT MARKING PLANS

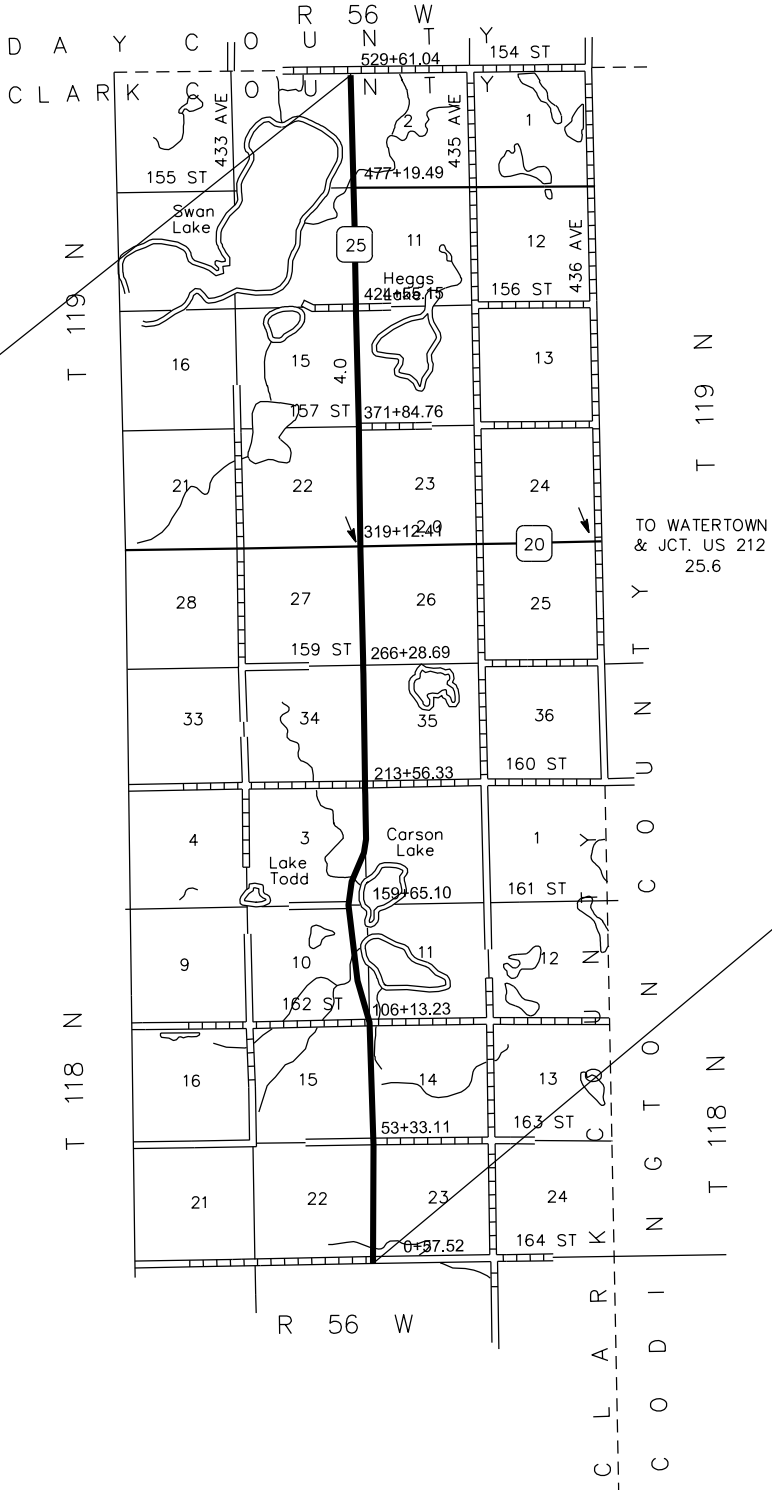
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 0025(112)158	M1	M6

Plotting Date: 02/10/2025

INDEX OF SHEETS	
M1	General Layout with Index
M2	Estimate of Quantities & Notes
M3-M5	Layouts & Details
M6	Standard Plates

END P 0025(112)158
END SURFACING

Station 529+20
Located at northwest corner of Section 2 - Township
119 North - Range 56 West of the 5th PM
MRM 168.84+0.000



BEGIN P 0025(112)158
BEGIN SURFACING

Station 0+50
Located at the southeast corner of Section 22 -
Township 118 North - Range 56 West of the 5th PM
MRM 158.00+0.834

SECTION M ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0030	Cold Applied Plastic Pavement Marking, 24"	300	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	6	Each
633E1200	High Build Waterborne Pavement Marking Paint, White	450	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	168	Gal
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	300	Ft
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	6	Each

PAVEMENT MARKING PAINT

The Contractor will advise the Engineer a minimum of 3 weeks prior to the application of the permanent pavement marking to allow the State to check and mark the location of no passing zones

COLD APPLIED PLASTIC PAVEMENT MARKING

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

An additional 90’ feet of Cold Applied Plastic Pavement Marking, 24” has been set up in the Estimate of Quantities for placing stop bars on SD 20. This marking should be 24” White.

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

HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

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

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

RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

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

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

RETROREFLECTIVITY FOR PAVEMENT MARKING PAINT

The Department may take retroreflectivity readings on the pavement marking lines after 14 days and within 42 days of the line application using either a portable or mobile retroreflectometer that conforms to 30-meter geometry. If the Department chooses to take retroreflectivity readings, three retroreflectivity readings will be taken on each line at each test location. The three readings will be averaged and become the reading for that test location.

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

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

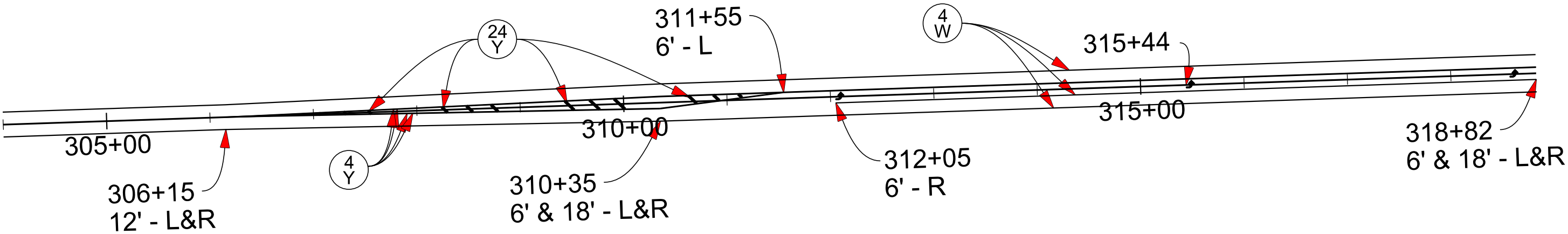
GROOVING FOR COLD APPLIED PLASTIC PAVEMENT MARKING

The Contractor will establish a positive means for the removal of the grinding and/or grooving residue. Residue from dry grooving will be vacuumed. Solid residue will be removed from the pavement surfaces before being blown by traffic action or wind. The Contractor will conduct this work to control and minimize airborne dust and similar debris that may become a hazard to motor vehicle operation or nuisance to property owners. Residue from wet grooving will not be permitted to flow across lanes being used by public traffic or into gutter or drainage facilities. Residue, whether in solid or slurry form, will be disposed of in a manner that will prevent it from reaching any waterway in a concentrated state. The cleaning of the residue for grooving will be to the satisfaction of the Engineer and may require more than one pass to adequately remove material. All costs for removal of grinding and/or grooving residue will be included in the contract unit price per foot or each for “Grooving for Cold Applied Plastic Pavement Marking” contract items.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 0025(112)158	M2	M6

PAVEMENT MARKING LAYOUT
SD 25 & SD 20 INTERSECTION - SOUTH LEG

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0025(112)158	M3	M6
Plotting Date: 02/10/2025			

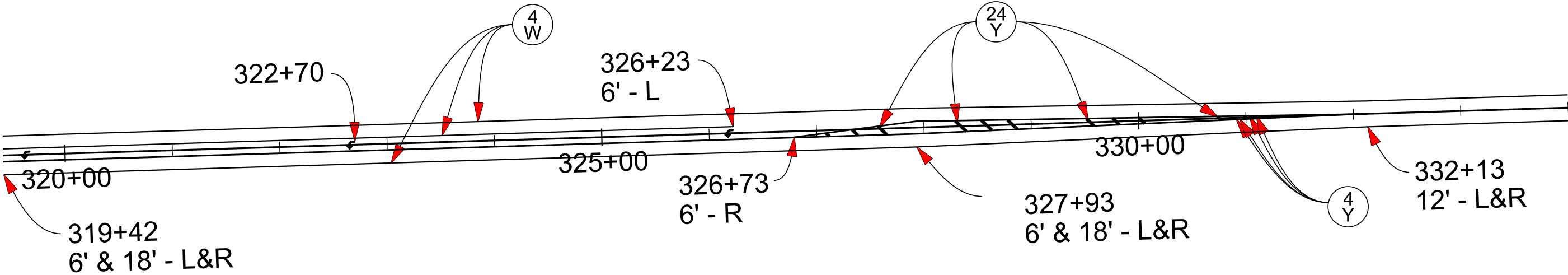


All 4" lane lines will be High Build Waterborne Paint in either yellow or white.
All 24" Yellow diagonal pavement markings and the 3 arrows will be grooved in
Cold Applied Plastic Pavement Markings.

Spacing for the 24" Yellow markings will be 25' between each in the group
of 3 then a space of 75' between the next grouping.

PAVEMENT MARKING LAYOUT
SD 25 & SD 20 INTERSECTION - NORTH LEG

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0025(112)158	M4	M6
Plotting Date: 02/10/2025			



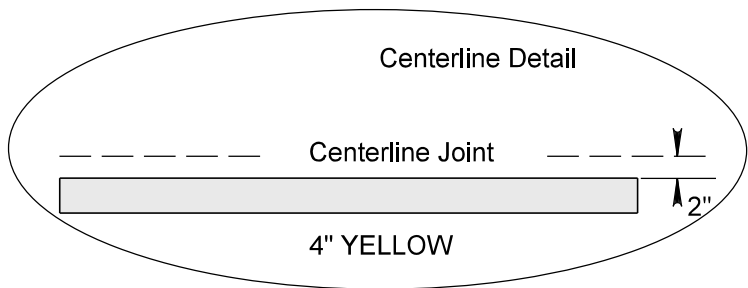
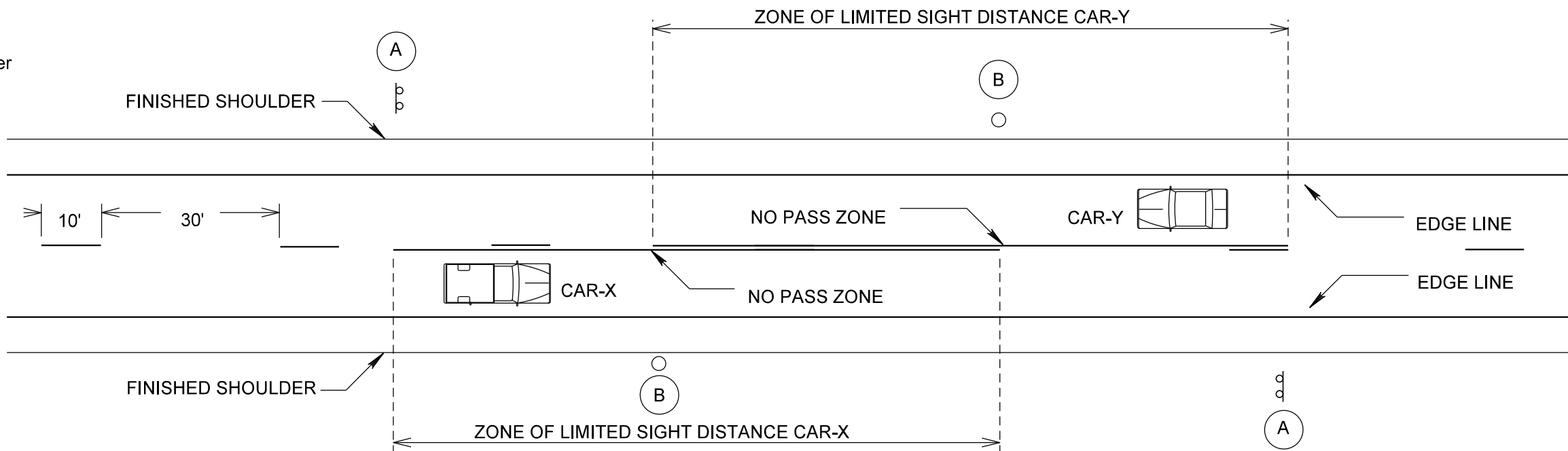
All 4" lane lines will be High Build Waterborne Paint in either yellow or white.
All 24" Yellow diagonal pavement markings and the 3 arrows will be grooved in
Cold Applied Plastic Pavement Markings.

Spacing for the 24" Yellow markings will be 25' between each in the group
of 3 then a space of 75' between the next grouping.

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.

