

STATEMENT OF ESTIMATED QUANTITIES

Notes	Item Number	Code	ITEM DESCRIPTION	Unit	TOTAL PROJECT QUANTITIES ESTIMATED
	2021.501	00010	MOBILIZATION	LUMP SUM	1
1	2104.503	00205	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	27
1,2	2104.504	00110	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	117
3	2123.510	00020	MOTOR GRADER	HOUR	20
4	2130.523	00010	WATER	M GALLON	20
5	2211.509	00070	AGGREGATE BASE CLASS 5	TON	242
6	2215.504	00010	FULL DEPTH RECLAMATION	SQ YD	12914
7	2215.507	00010	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	90
8	2221.509	00080	SHOULDER BASE AGGREGATE CLASS 5	TON	376
9	2232.604	00470	MILL BITUMINOUS PAVEMENT (SPECIAL)	SQ YD	58
	2357.506	00010	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	734
10	2360.509	13200	TYPE SP 9.5 WEARING COURSE MIXTURE (3;B)	TON	12
11	2360.509	24300	TYPE SP 12.5 WEARING COURSE MIXTURE (4;C)	TON	3379
12	2540.602	00150	MAIL BOX SUPPORT	EACH	12
	2563.601	00001	TRAFFIC CONTROL SUPERVISOR	LUMP SUM	1
13,14	2563.601	00010	TRAFFIC CONTROL	LUMP SUM	1
15	2563.613	01100	PORTABLE CHANGEABLE MESSAGE SIGN	UNIT DAY	20
19	2574.507	00100	COMMON TOPSOIL BORROW	CU YD	495
16	2575.508	40003	HYDRAULIC REINFORCED FIBER MATRIX	POUND	147
17	2581.503	00010	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	LIN FT	188
18	2582.503	30104	4" SOLID LINE MULTI-COMPONENT	LIN FT	11555
18	2582.503	30204	4" BROKEN LINE MULTI-COMPONENT	LIN FT	829
18	2582.503	30404	4" DOUBLE SOLID LINE MULTI-COMPONENT	LIN FT	505

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

MNDOT STANDARD PLATES	
PLATE NO.	DESCRIPTION
8000K	TEMPORARY CHANNELIZERS (3 SHEETS)
9350B	MAILBOX SUPPORT - SWING-AWAY TYPE

CONSTRUCTION NOTES

1	REFERENCE DETAILS (PAGE 4-5) FOR REMOVAL DETAILS
2	ITEM FOR BITUMINOUS DRIVEWAYS AND STREET APPROACHES. CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
3	ITEM USED TO MOVE EXCESS RECLAIM MATERIAL AT THE RECLAIM AREA LIMITS TO CREATE A SMOOTH TRANSITION BETWEEN THE PROPOSED AND EXISTING PAVEMENT AND FOR SUPER ELEVATION/GRADE CORRECTION AREAS.
4	WATER TO BE USED FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.
5	GRAVEL BASE FOR CONCRETE AND BITUMINOUS STREET APPROACHES AND DRIVEWAYS. ITEM ALSO FOR SUPERELEVATION / GRADE CORRECTION.
6	THIS WORK INCLUDES SPREADING, WATERING, COMPACTING, SHAPING, AND MAINTAINING THE BLENDED RECLAIMED MATERIAL TO THE SPECIFIC PROFILE AND CROSS SECTION.
7	ITEM USED TO HAUL EXCESS RECLAIM FROM TIE-IN POINTS AND REUSED ON SITE.
8	ITEM INCLUDES 7 TONS FOR EACH GRAVEL ENTRANCE AND GRAVEL STREET APPROACH.
9	TO BE USED FOR MILLING STREET APPROACHES AND/OR DETAIL MILLING AREAS AS IDENTIFIED IN THE PLAN.
10	ITEM FOR BITUMINOUS DRIVEWAYS. DRIVEWAYS SHALL BE PAVED AFTER MAINLINE AND BEFORE FINAL STRIPING.
11	CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
12	MAILBOXES ARE TO BE INSTALLED AT THE EXISTING MAILBOX LOCATION OR AS DIRECTED BY THE LOCAL POSTAL AUTHORITY, CONTRACTOR IS RESPONSIBLE FOR CONTACTING. MAILBOX REMOVAL AND ALL MATERIALS ARE INCIDENTAL TO INSTALLATION.
13	CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY SIGNAGE WHENEVER EXISTING SIGNAGE IS REMOVED. TEMPORARY SIGNAGE SHALL BE INCIDENTAL TO TRAFFIC CONTROL.
14	ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO, AND BE INSTALLED IN ACCORDANCE WITH, THE MOST CURRENT REVISION OF THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". "DO NOT PASS, PASS WITH CARE, NO CENTER STRIPE, AND STOP HERE ON RED SIGNS SHALL BE INPLACE WHENEVER PERMANENT PAVEMENT MARKINGS ARE NOT PRESENT.
15	2 MESSAGE BOARDS, ONE ON THE EACH END OF PROJECT, SHALL BE INSTALLED 10 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.
16	TYPE 3 FERTILIZER AND TYPE 25-121 SEED ARE INCIDENTAL TO THIS ITEM. SEE "BASIS OF PLANNED QUANTITIES" FOR APPLICATION RATES.
17	CENTERLINE AND LANE DESIGNATION SKIPS TO BE APPLIED AS SOON AS POSSIBLE ON MILLED SURFACE AND EACH NEW LIFT OF PAVEMENT; SKIPS MUST BE INPLACE BEFORE THE CONTRACTOR LEAVES FOR THE DAY. CONTRACTOR IS TO REMOVE PRIOR TO FINAL STRIPING.
18	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING. CANNOT BE INSTALLED SOONER THAN 48 HOURS.
19	ITEM USED FOR INSLOPE SHAPING FROM GRAVEL SHOULDER TO DITCH BOTTOM AS DIRECTED BY THE ENGINEER.

SUPERELEVATION CORRECTION TAB 1

STATION	POINT	LEFT GRADE	RIGHT GRADE
10+65	MATCH EXISTING	-1.2%	-0.7%
11+00		-0.1%	-0.7%
11+25	BEG RT TRANS	0.7%	-0.7%
11+50		1.4%	-1.4%
12+00		3.0%	-3.0%
12+05	PC	3.2%	-3.2%
12+50	BEG LT/RT FULL SUPER	4.5%	-4.5%
13+00		4.5%	-4.5%
13+50		4.5%	-4.5%
14+00		4.5%	-4.5%
14+50		4.5%	-4.5%
15+00		4.5%	-4.5%
15+50		4.5%	-4.5%
16+00	END LT/RT FULL SUPER	4.5%	-4.5%
16+20	PT	3.9%	-3.9%
16+50		3.0%	-3.0%
16+85	END RT TRANS	2.0%	-2.0%
17+00		1.5%	-2.0%
17+50		0.0%	-2.0%
18+00		-1.5%	-2.0%
18+15	END LT TRANS	-2.0%	-2.0%
18+50		-2.0%	-2.0%

SUPERELEVATION CORRECTION TAB 2

STATION	POINT	LEFT GRADE	RIGHT GRADE
53+50	BEG RT TRANS	-2.0%	-2.0%
54+00		-2.0%	-0.5%
54+50		-2.0%	1.0%
54+80	BEG LT TRANS	-2.0%	2.0%
55+00		-2.5%	2.5%
55+15	PC	-3.0%	3.0%
55+50	BEG LT/RT FULL SUPER	-4.0%	4.0%
56+00		-4.0%	4.0%
56+50	END LT/RT FULL SUPER	-4.0%	4.0%
57+00		-2.5%	2.5%
57+50		-1.0%	1.0%
57+58	PT	-0.9%	0.7%
57+65	MATCH EXISTING	-0.8%	0.4%

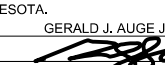
BASIS OF PLANNED QUANTITIES

2357	BITUMINOUS MATERIAL FOR TACK COAT	0.05 GAL / SQ YD
2211	AGGREGATE BASE CLASS 5	1.8 TONS / CU YD
2360	ALL BITUMINOUS PAVEMENT	115 LBS / SQ YD / IN THICKNESS
2581	REMOVABLE PREFORM PAVEMENT MARKING TAPE	2' AT 50' INTERVALS
2575	SEED MIXTURE 25-121	61 LBS / ACRE
2574	FERTILIZER TYPE 3	350 LBS / ACRE
2575	HYDRAULIC REINFORCED FIBER MATRIX	3900 LBS / ACRE

NO	DATE	BY	CKD	APPR	REVISION	01/09/2024	4:11:19 PM
NAME: P:\24-01-00\CR_66_(NORRIS LAKE RD TO 4300 S. NORRIS LAKE RD)\Base\Proposed\SEQ.dgn							

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: GERALD J. AUGER JR.

SIGNATURE: 

DATE: 12-08-2023 LICENSE NO. 26511

DRAWN BY DBK DATE 12/15/2023

DESIGN BY DBK DATE 12/15/2023

CHECKED BY CO DATE 12/15/2023



**ANOKA COUNTY
HIGHWAY DEPT.**

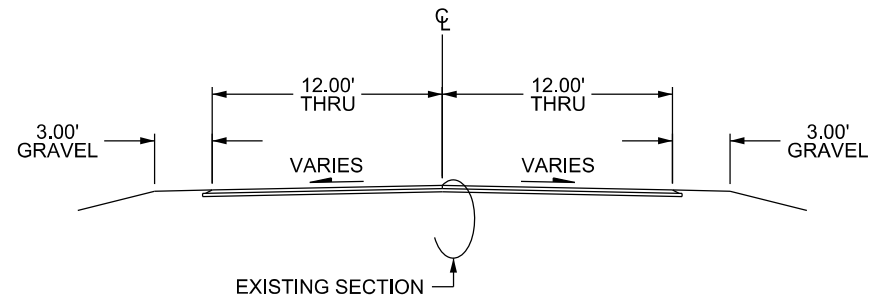
COUNTY PROJECT 24-16-66

STATEMENT OF ESTIMATED QUANTITIES

Sheet 2 of 11 Sheets

CR66 - Cleary Rd NW EXISTING SECTION

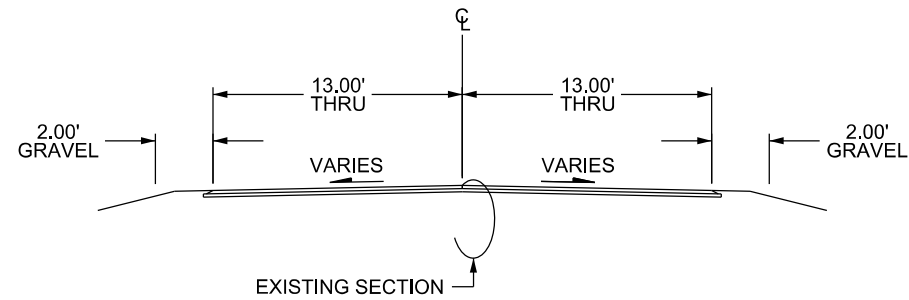
10+65.00 - 13+86.00



EXISTING SECTION

CR66 - Cleary Rd NW EXISTING SECTION

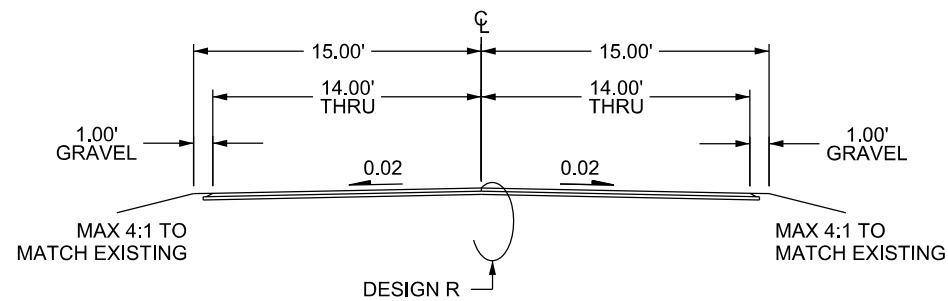
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EXISTING SECTION

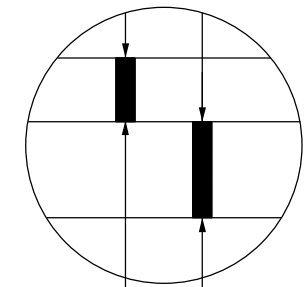
CR66 - Cleary Rd NW PROPOSED SECTION

10+65.00 - 57+65.22



DESIGN R

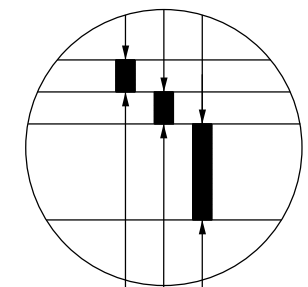
EXISTING SECTION



4" EXISTING BITUMINOUS

EXISTING AGGREGATE BASE

DESIGN R RECLAIM SECTION



2.0" BITUMINOUS WEAR(SPWEB440C)

2.0" BITUMINOUS WEAR(SPWEB440C)

RECLAIMED BITUMINOUS

NO	DATE	BY	CKD	APPR	REVISION	12/15/2023	12:20:31 PM
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PRINT NAME: GERALD J. AUGER JR.

SIGNATURE:

DATE: 12-08-2023 LICENSE NO. 26511

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CHECKED BY CO DATE 12/15/2023

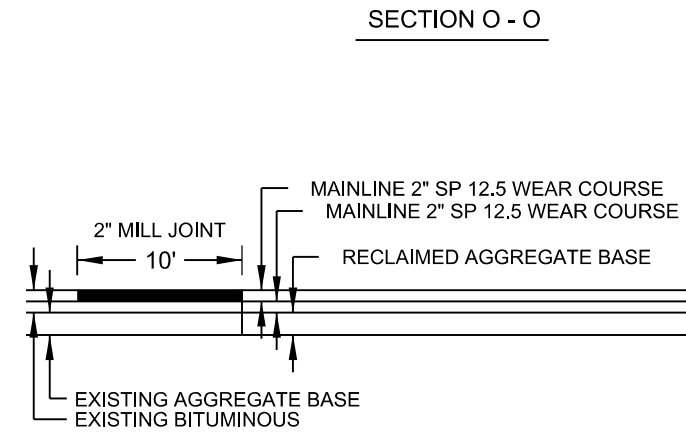
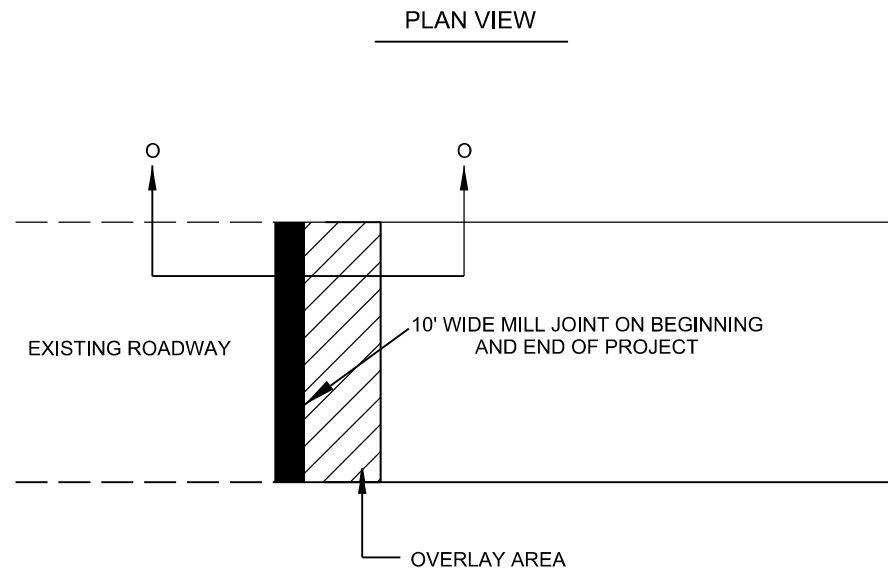
**ANOKA COUNTY
HIGHWAY DEPT.**

COUNTY PROJECT 24-16-66

TYPICAL SECTIONS

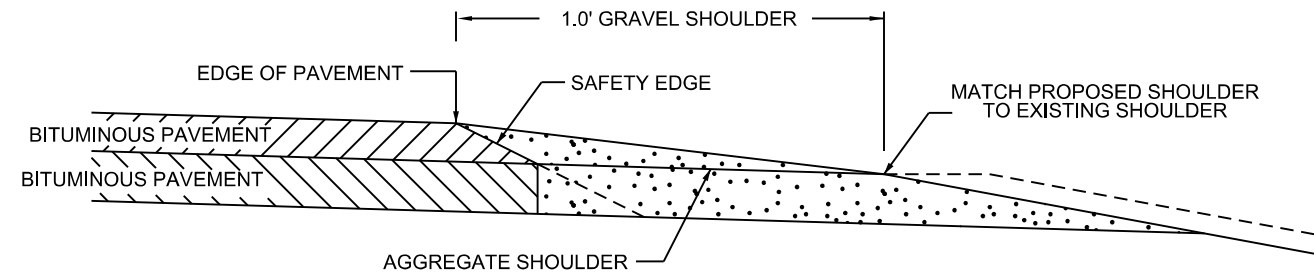
Sheet 3 of 11 Sheets

MAINLINE JOINT DETAIL (RECLAIM)



SHOULDER DETAIL

BITUMINOUS SAFETY EDGE
GRAVEL SHOULDER



SAFETY EDGE TO BE USED IN ALL NON-CURB AREAS ON SHOULDER.

OPTIONAL DESIGN EXTENDS SAFETY EDGE DEEPER THAN 6" AND WIDER THAN 10.5". SEE SPECIAL PROVISIONS .

NO	DATE	BY	CHKD	APPR	REVISION	12/15/2023	12:20:32 PM
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PRINT NAME: GERALD J. AUGER JR.

SIGNATURE:

DATE: 12-08-2023 LICENSE NO. 26511

DRAWN BY DBK DATE 12/15/2023

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CHECKED BY CO DATE 12/15/2023

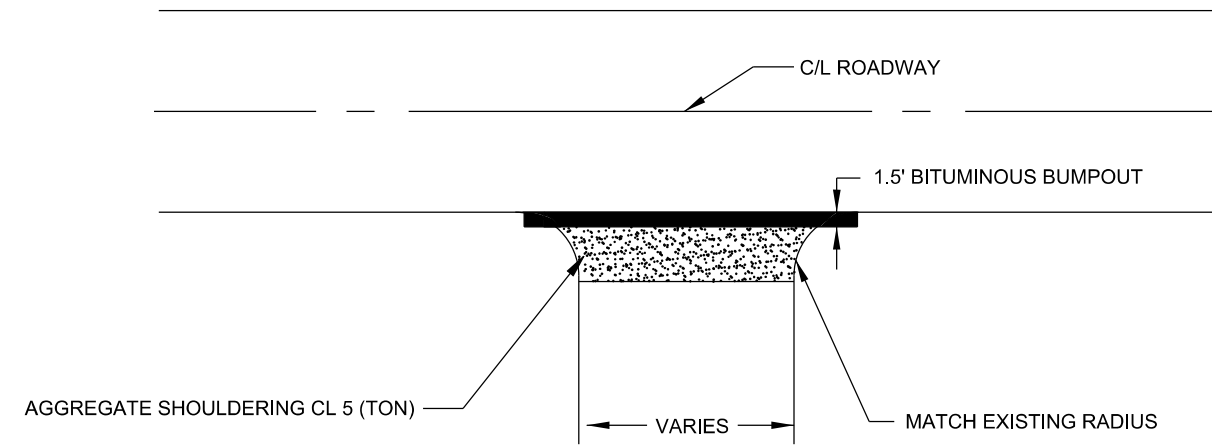
ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT 24-16-66

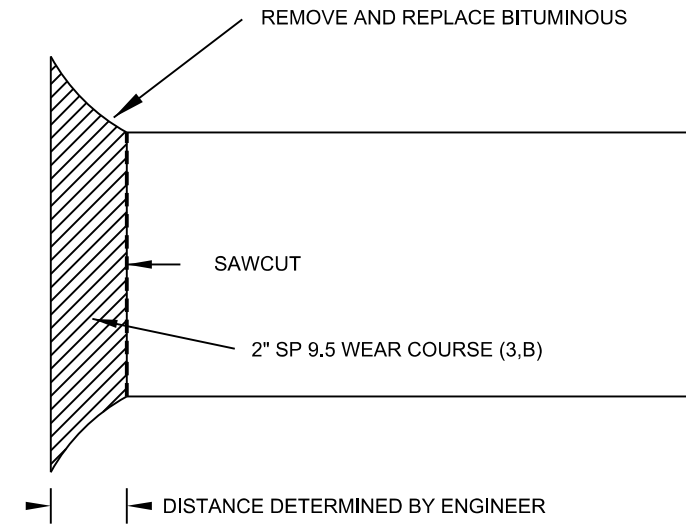
DETAILS

Sheet 4 of 11 Sheets

DRIVEWAY DETAIL GRAVEL / FIELD ENTRANCE



RECLAIM AREA - DRIVEWAY DETAIL BITUMINOUS PLAN VIEW



NO	DATE	BY	CKD	APPR	REVISION	12/15/2023	12:20:32 PM
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PRINT NAME: GERALD J. AUGER JR.

SIGNATURE:

DATE: 12-08-2023 LICENSE NO. 26511

DRAWN BY DBK DATE 12/15/2023

DESIGN BY DBK DATE 12/15/2023

CHECKED BY CO DATE 12/15/2023

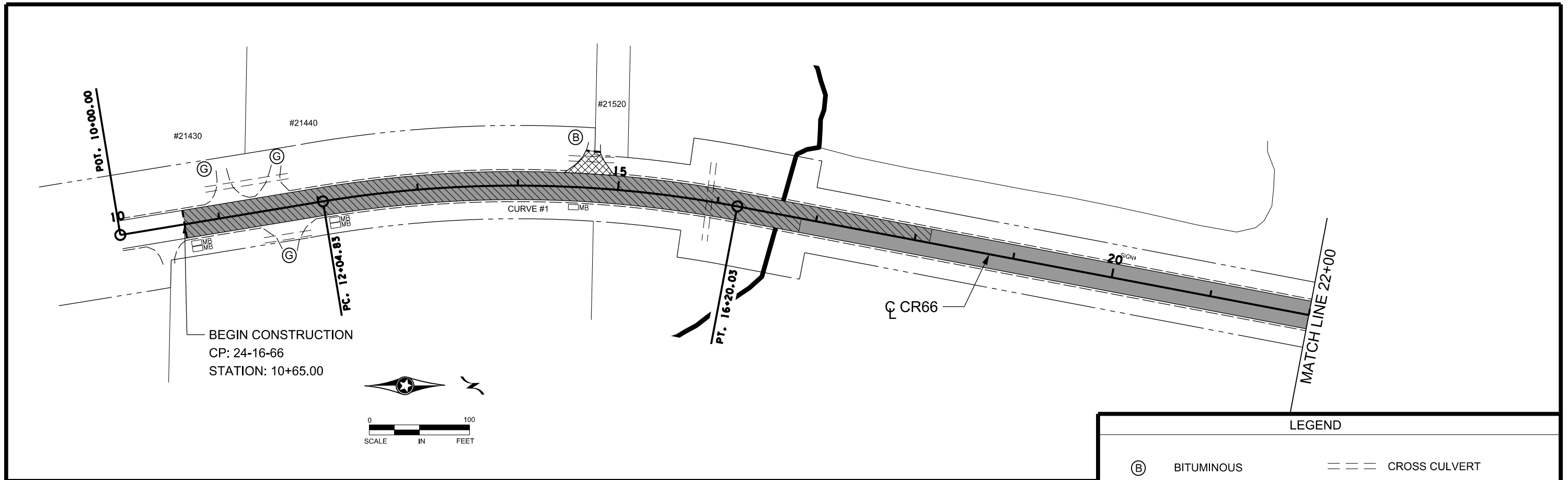


**ANOKA COUNTY
HIGHWAY DEPT.**

COUNTY PROJECT 24-16-66

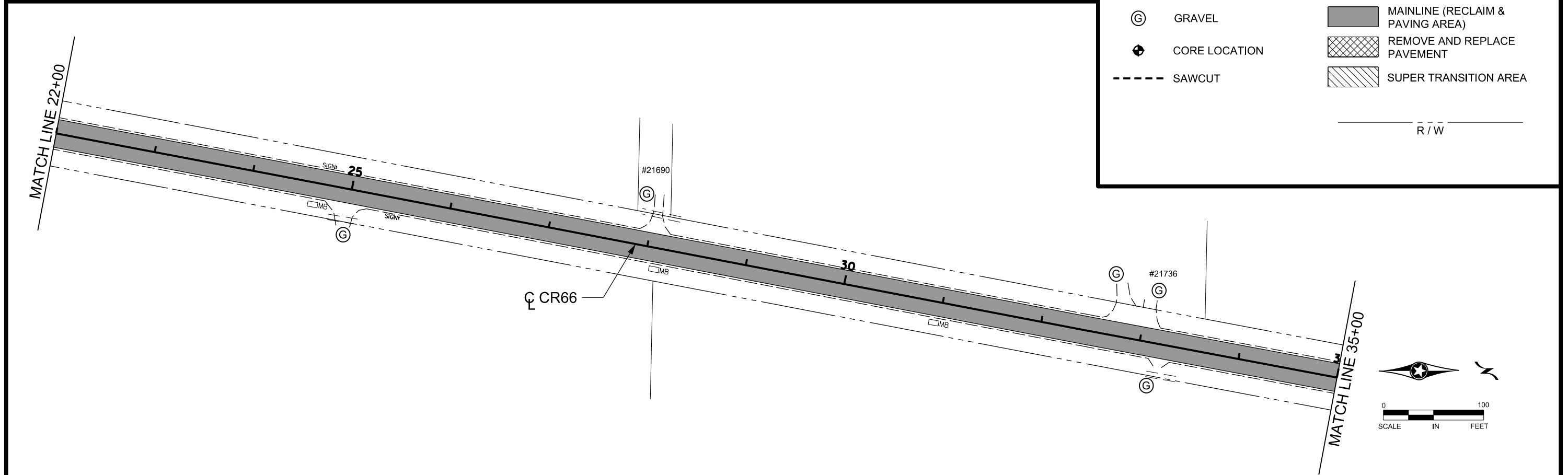
DETAILS

Sheet 5 of 11 Sheets



LEGEND

(B)	BITUMINOUS	---	CROSS CULVERT
(G)	GRAVEL	[Solid Gray Box]	MAINLINE (RECLAIM & PAVING AREA)
(C)	CORE LOCATION	[Cross-hatched Box]	REMOVE AND REPLACE PAVEMENT
---	SAWCUT	[Diagonal-hatched Box]	SUPER TRANSITION AREA
		---	R/W



NO	DATE	BY	CKD	APPR	REVISION	12/15/2023	12:20:33 PM

NAME: P:\24-01-00\CR_66_(NORRIS LAKE RD TO 4300 S. NORRIS LAKE RD)\Base\Proposed\CP1.dgn

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: GERALD J. AUGER JR.

SIGNATURE: *[Signature]*

DATE: 12-08-2023 LICENSE NO. 26511

DRAWN BY DBK DATE 12/15/2023

DESIGN BY DBK DATE 12/15/2023

CHECKED BY CO DATE 12/15/2023

**ANOKA COUNTY
HIGHWAY DEPT.**

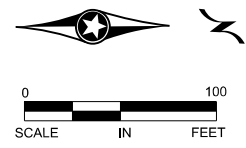
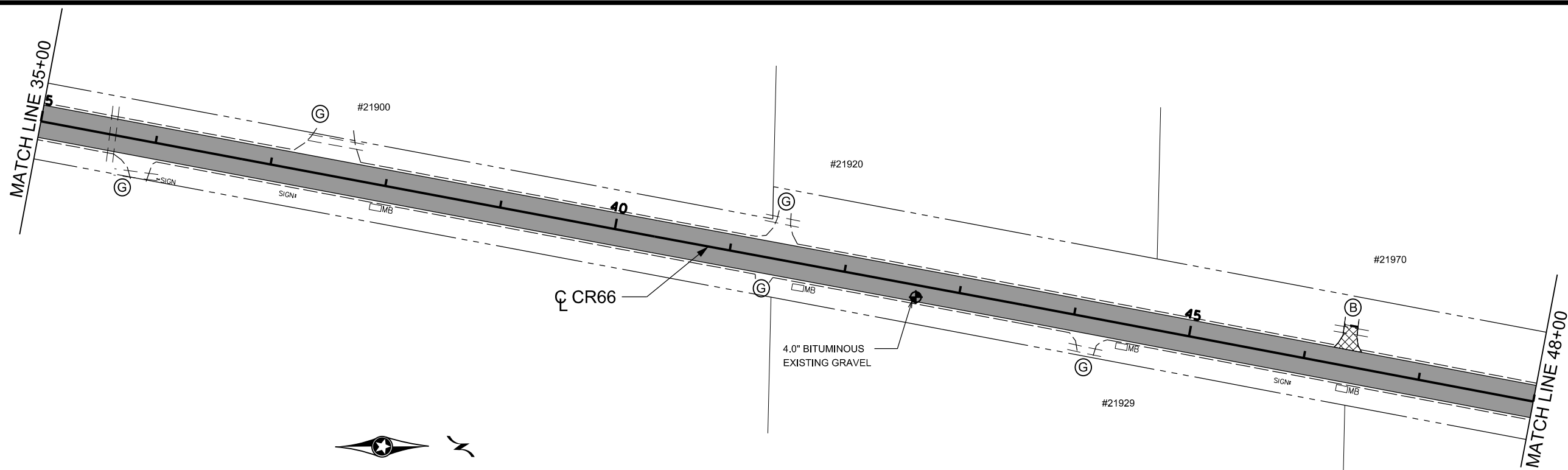
COUNTY PROJECT 24-16-66

CONSTRUCTION PLAN

STA 10+65.00 TO 35+00.00

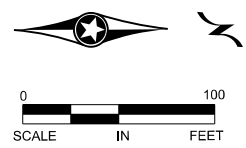
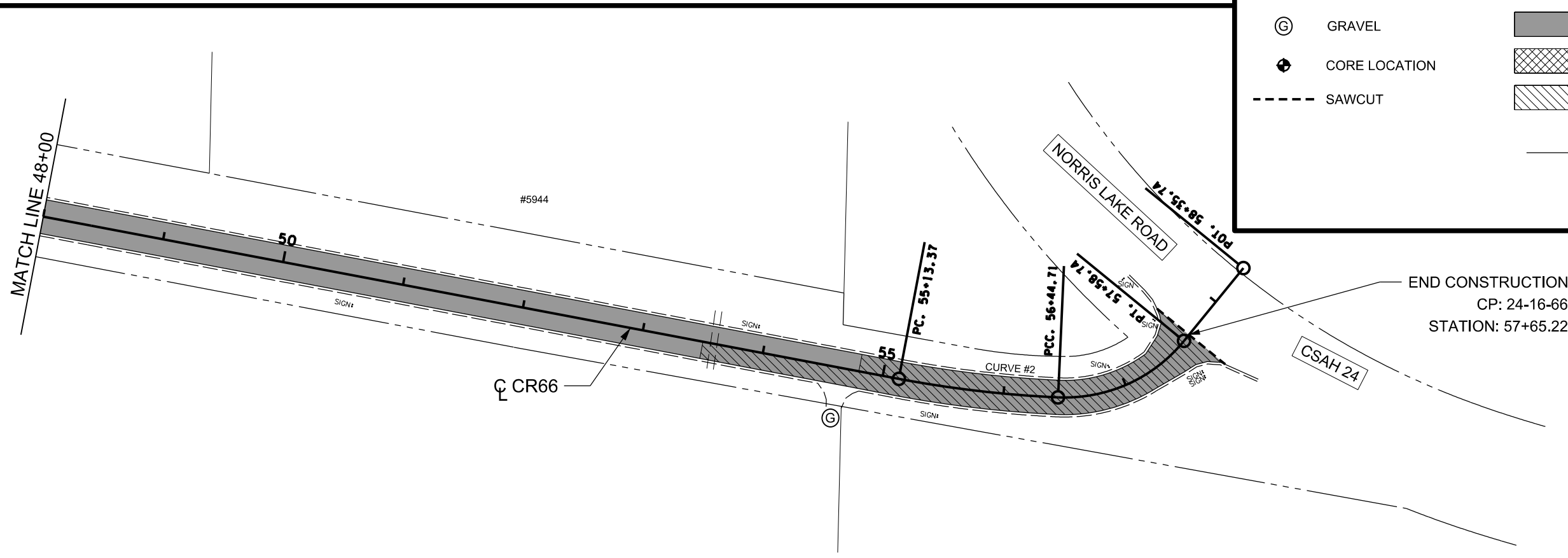
Sheet 6 of 11 Sheets

DBKost



LEGEND

(B)	BITUMINOUS	---	CROSS CULVERT
(G)	GRAVEL	[Solid Grey Box]	MAINLINE (RECLAIM & PAVING AREA)
[Diamond with Dot]	CORE LOCATION	[Cross-hatched Box]	REMOVE AND REPLACE PAVEMENT
---	SAWCUT	[Diagonal-hatched Box]	SUPER TRANSITION AREA
		---	R/W



END CONSTRUCTION
 CP: 24-16-66
 STATION: 57+65.22

NO	DATE	BY	CKD	APPR	REVISION	12/15/2023	12:20:34 PM

NAME: P:\24-01-00\CR_66_(NORRIS LAKE RD TO 4300 S. NORRIS LAKE RD)\Base\Proposed\CP2.dgn

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: GERALD J. AUGER JR.
 SIGNATURE: *[Signature]*
 DATE: 12-08-2023 LICENSE NO. 26511

DRAWN BY DBK DATE 12/15/2023
 DESIGN BY DBK DATE 12/15/2023
 CHECKED BY CO DATE 12/15/2023

**ANOKA COUNTY
 HIGHWAY DEPT.**

COUNTY PROJECT 24-16-66

CONSTRUCTION PLAN
 STA 35+00.00 TO 57+65.22
 Sheet 7 of 11 Sheets

PERMANENT PAVEMENT MARKING PLAN
NOTES & GUIDELINES

GENERAL INFORMATION:

1. THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. ANOKA COUNTY HIGHWAY DEPARTMENT WILL PLACE NECESSARY "SPOTTING" AT APPROPRIATE POINTS TO PROVIDE HORIZONTAL CONTROL FOR STRIPING AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS. LONGITUDINAL JOINTS, PAVEMENT EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.
2. EDGE LINES AND LANE LINES ARE TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES OR CROSSWALKS.
3. A TOLERANCE OF 1/4 INCH UNDER OR 1/4 INCH OVER THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. BROKEN LINE SEGMENTS MAY VARY UP TO ONE-HALF FOOT FROM THE SPECIFIED LENGTHS PROVIDED THE OVER AND UNDER VARIATIONS ARE REASONABLY COMPENSATORY. ALIGNMENT DEVIATIONS FROM THE CONTROL GUIDE SHALL NOT EXCEED 1 INCH. MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS. ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE PLANNED DIMENSIONS.
4. PERMANENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS.
5. THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF MATERIAL.

MULTI-COMPONENT (MULTI-COMP):

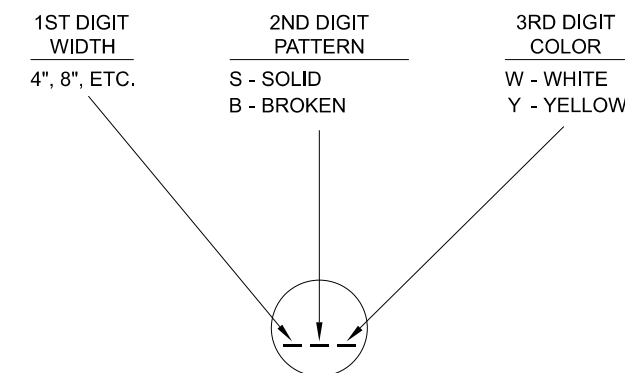
1. THE ROAD SURFACE SHALL BE CLEANED AT THE DIRECTION OF THE ENGINEER JUST PRIOR TO APPLICATION. PAVEMENT CLEANING SHALL CONSIST OF AT LEAST BRUSHING WITH A ROTARY BROOM (NON-METALLIC) OR AS RECOMMENDED BY THE MATERIAL MANUFACTURER AND ACCEPTABLE TO THE ENGINEER. NEW PORTLAND CEMENT CONCRETE SURFACES SHALL BE SANDBLAST CLEANED TO REMOVE ANY SURFACE TREATMENT AND/OR LAITANCE ON LOW SPEED (SPEED LIMIT 35 MPH OR LESS) URBAN PORTLAND CEMENT CONCRETE ROADWAYS. SANDBLAST CLEANING SHALL BE USED FOR ALL MULTI-COMP PAVEMENT MARKINGS.
2. THE MULTI-COMP MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING. GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE MULTI-COMP LINE TO PROVIDE AN IMMEDIATE NO-TRACK SYSTEM.
3. A MULTI-COMP LINE SHALL BE APPLIED WITH A MINIMUM THICKNESS OF 20 MILS (WET) AND 4" WIDE . GLASS BEADS SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.
4. PAVEMENT MARKINGS SHALL ONLY BE APPLIED IN SEASONABLE WEATHER WHEN AIR AND PAVEMENT SURFACE TEMPERATURES ARE 40° OR HIGHER AND SHALL NOT BE APPLIED WHEN THE WIND OR OTHER CONDITIONS CAUSE A FILM OR DUST TO BE DEPOSITED ON THE PAVEMENT SURFACE AFTER CLEANING AND BEFORE THE MARKING MATERIAL CAN BE APPLIED.

PERMANENT STRIPING

PERMANENT PAVEMENT MARKING TABULATION			
ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	
		WHITE	YELLOW
4" SOLID LINE MULTI-COMP	LIN FT	9362	2193
4" SOLID DOUBLE LINE, MULTI-COMP	LIN FT		505
4" BROKEN LINE MULTI-COMP	LIN FT		829

PAVEMENT MARKING SYMBOLS & MATERIALS LEGEND

— — BROKEN LINE - 50' CYCLE (10' LINE, 40' GAP)



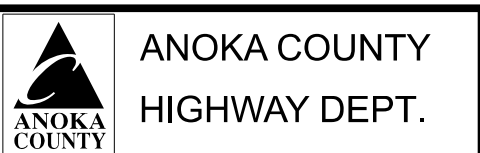
EXAMPLE: $\textcircled{4SW}$ = 4" SOLID LINE WHITE MULTI-COMP

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\24-01-00\CR_66_(NORRIS LAKE RD TO 4300 S. NORRIS LAKE RD)\Base\Traffic\CR 66 - Signing & Striping

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: SEAN R. THIEL
 SIGNATURE: *Sean R. Thiel*
 DATE: 1/12/2024 LICENSE NO. 45129

DRAWN BY ALS DATE 11/17/23
 DESIGN BY ALS DATE 11/17/23
 CHECKED BY DATE



CP 24-16-66

PERMANENT PAVEMENT MARKING NOTES AND TABULATIONS

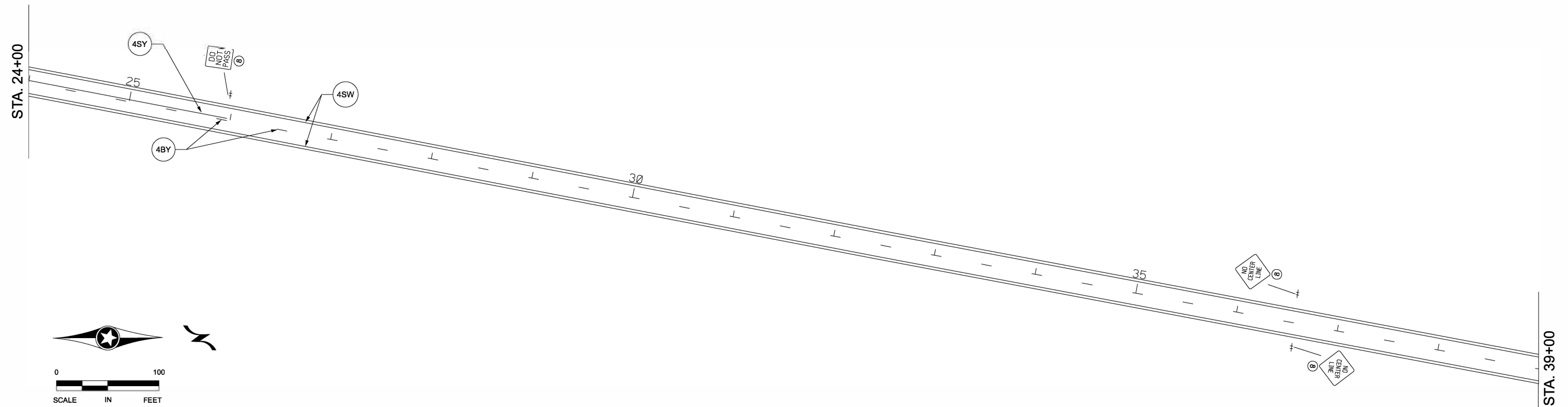
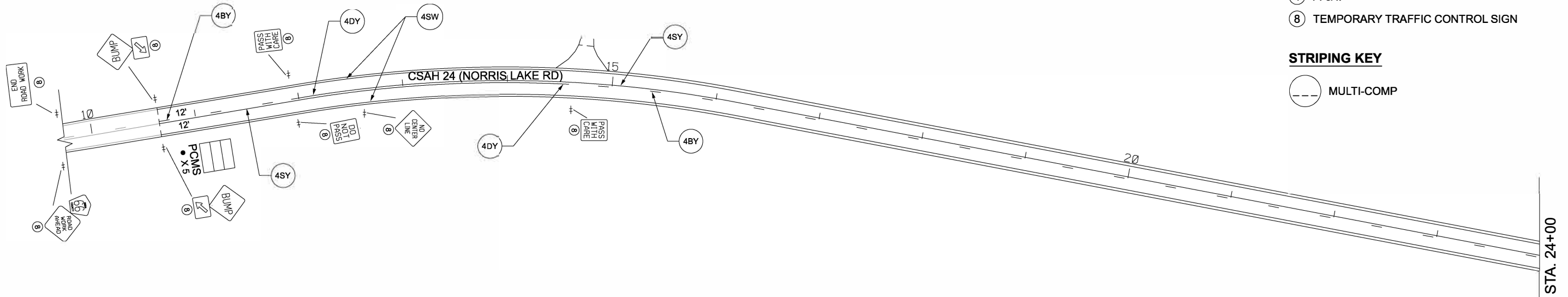
Sheet 8 of 11 Sheets

SIGNING NOTES

- ① F. & I.
- ⑧ TEMPORARY TRAFFIC CONTROL SIGN

STRIPING KEY

- MULTI-COMP

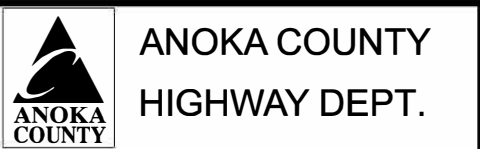


NO	DATE	BY	CKD	APPR	REVISION

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PRINT NAME: SEAN R. THIEL
 SIGNATURE: *Sean R. Thiel*
 DATE: 1/12/2024 LICENSE NO. 45129

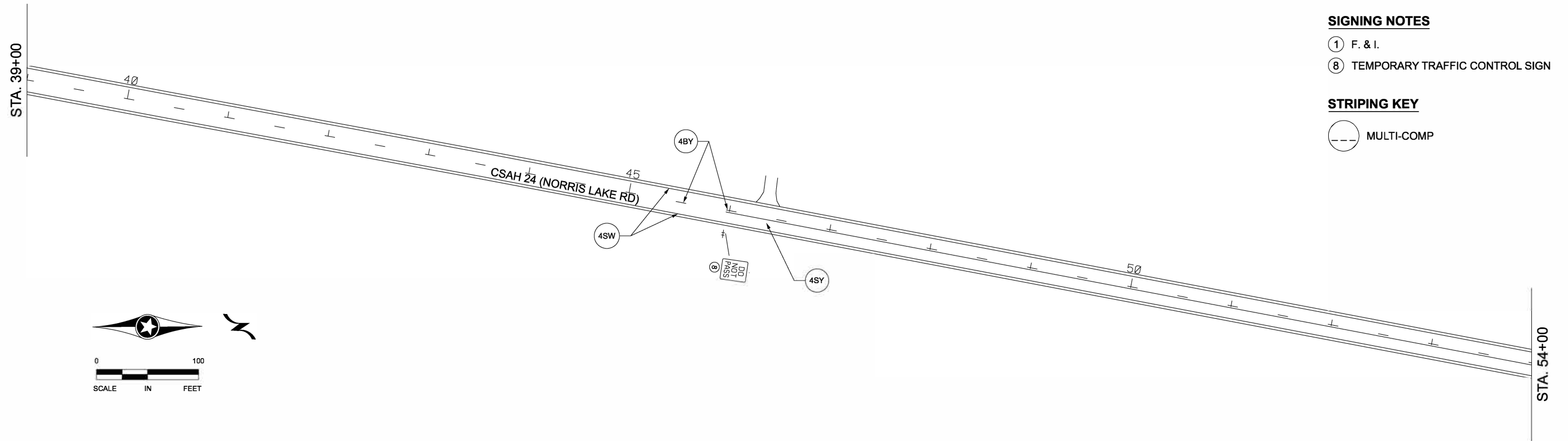
DRAWN BY: ALS DATE: 11/20/23
 DESIGN BY: ALS DATE: 11/20/23
 CHECKED BY: _____ DATE: _____



CP 24-16-66

TEMPORARY SIGNING AND PERMANENT STRIPING

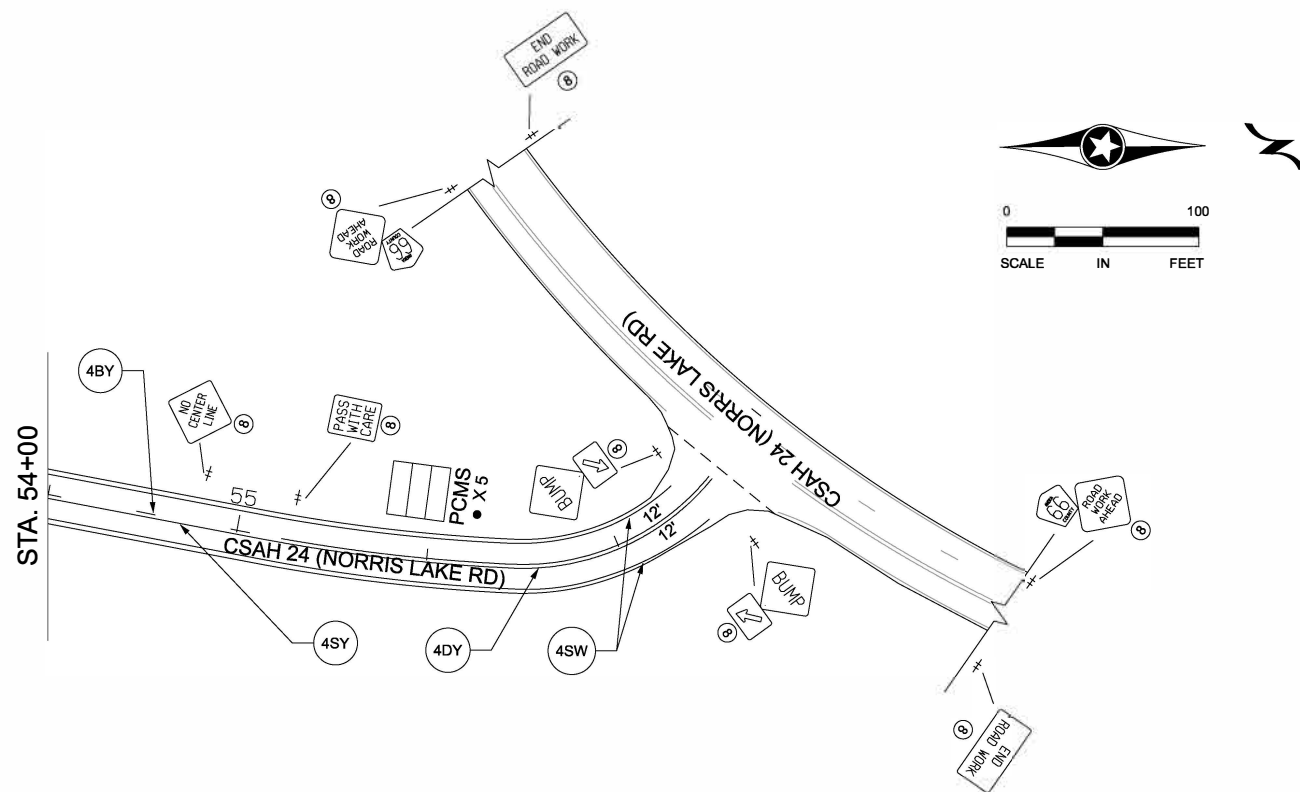
Sheet 9 of 11 Sheets



SIGNING NOTES

- ① F. & I.
- ⑧ TEMPORARY TRAFFIC CONTROL SIGN

STRIPING KEY



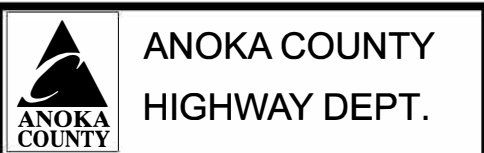
NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\24-01-00\CR_66 (NORRIS LAKE RD TO 4300 S. NORRIS LAKE RD)\Base\Traffic\CR 66 - Signing and Striping

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

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TEMPORARY SIGNING AND PERMANENT STRIPING

Sheet 10 of 11 Sheets

TEMPORARY TRAFFIC CONTROL SIGNS AND DEVICES

"W" SERIES				
SIGN	MUTCD CODE	COLOR	SIZE	QUANTITY
	W3-4	BLACK ON ORANGE	48" X 48"	AS NEEDED
	W8-1	BLACK ON ORANGE	48" X 48"	4
	W16-7PL	BLACK ON ORANGE	30" X 18"	4
	W8-8	BLACK ON ORANGE	48" X 48"	AS NEEDED
	W8-9	BLACK ON ORANGE	48" X 48"	AS NEEDED
	W8-11	BLACK ON ORANGE	48" X 48"	AS NEEDED
	W8-12	BLACK ON ORANGE	48" X 48"	4
	W8-23	BLACK ON ORANGE	48" X 48"	AS NEEDED
	W20-1	BLACK ON ORANGE	48" X 48"	AS NEEDED (ESTIMATED 3)
	W20-4	BLACK ON ORANGE	48" X 48"	AS NEEDED
	W20-7	BLACK ON ORANGE	48" X 48"	AS NEEDED

"R" SERIES				
SIGN	MUTCD CODE	COLOR	SIZE	QUANTITY
	R4-1	BLACK ON WHITE	24" X 30"	4
	R4-2	BLACK ON WHITE	24" X 30"	3

"M" SERIES				
SIGN	MUTCD CODE	COLOR	SIZE	QUANTITY
	M1-6M	WHITE AND YELLOW ON BLUE	24 X 24	3

"G" SERIES				
SIGN	MUTCD CODE	COLOR	SIZE	QUANTITY
	G20-2	BLACK ON ORANGE	48" X 24"	3

DEVICES		
ITEM	MUTCD CODE	QUANTITY
	DRUM	AS NEEDED (ESTIMATED 10)
	TYPE C	2 (10 DAYS EACH)

PCMS - MESSAGE SEQUENCE LAYOUT

	R	O	A	D	
	W	O	R	K	
	B	E	G	I	N
	S				

<	D	A	T	E	>
	E	X	P	E	C
	D	E	L	A	Y
	S				

NOTES:

- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), INCLUDING PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."
- ALL TYPE III BARRICADES SHALL BE REFLECTORIZED ON BOTH SIDES. BARRICADE MARKINGS SHALL BE SLANTED IN ACCORDANCE WITH THE MN MUTCD.
- CONTRACTOR SHALL COMPLY WITH THE LONGITUDINAL DROP-OFF GUIDELINES AS PER THE FIELD MANUAL.
- LOCATIONS OF PAVEMENT MARKINGS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- CONTRACTOR SHALL SUPPLY AND PLACE THE PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) A MINIMUM TEN DAYS PRIOR TO ACTUAL COMMENCEMENT OF ROAD WORK, TO A LOCATION AS SPECIFIED BY THE ENGINEER. SIGNS TO BE REMOVED WHEN ROAD WORK BEGINS. PAYMENT SHALL BE MADE AS PER ITEM 2563.613 PORTABLE CHANGEABLE MESSAGE SIGN BY THE UNIT/DAY.
- CONTRACTOR SHALL SUPPLY AND ERECT THE TEMPORARY TRAFFIC CONTROL SIGNS AS SHOWN ON THIS DRAWING AND DETAILED IN THE SPECIAL PROVISIONS FROM THE TIME WORK COMMENCES ON THIS ROADWAY UNTIL THIS ROADWAY IS PERMANENTLY STRIPED. ALL NECESSARY TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE PAID FOR AS PART OF TRAFFIC CONTROL LUMP SUM.
- ACCESS SHALL BE MAINTAINED TO ALL STREETS AND DRIVEWAYS IN CONSTRUCTION AREA.
- ALL PERMANENT STRIPING AND PAVEMENT MESSAGES SHALL BE PLACED WITHIN 72 HOURS OF MAINLINE PAVING.
- ANY REQUIRED PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING.
- ALL EXISTING SIGNING SHALL REMAIN IN PLACE DURING CONSTRUCTION. ANY SALVAGED AND REINSTALLED SIGNS SHALL BE INSTALLED ON TEMPORARY SUPPORTS UNTIL THE PERMANENT INSTALLATION CAN BE MADE. THIS WILL BE CONSIDERED AS INCIDENTAL TO INSTALL SIGN TYPE C.

SIGNING NOTES

- ① F. & I.
- ⑧ TEMPORARY TRAFFIC CONTROL SIGN

TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

SYMBOL DESCRIPTION

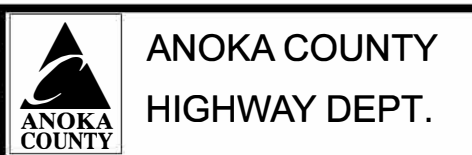
- ± TRAFFIC CONTROL SIGN (SINGLE POST)
- ++ TRAFFIC CONTROL SIGN (TEMPORARY)
- DRUM-LIKE CHANNELIZER TYPE B =
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

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