

ITEM NUMBER	ITEM DESCRIPTION	NOTES	UNIT	TOTAL PROJECT QUANTITIES ESTIMATED
2021.501	MOBILIZATION		LUMP SUM	1
2104.501	REMOVE PIPE CULVERTS		LF	49
2104.505	REMOVE CONCRETE DRIVEWAY PAVEMENT	4	SY	82
2104.505	REMOVE BITUMINOUS PAVEMENT		SY	62
2104.509	REMOVE PIPE APRON		EACH	2
2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)		LF	30
2104.513	SAWING BIT PAVEMENT (FULL DEPTH)		LF	49
2211.501	AGGREGATE BASE CLASS 5	1	TON	14
2221.501	SHOULDER BASE AGGREGATE CLASS 5	2	TON	849
2232.501	MILL BITUMINOUS SURFACE (2.0")	3	SY	165
2357.502	BITUMINOUS MATERIAL FOR TACK COAT		GAL	2178
2360.501	TYPE SP 12.5 WEARING COURSE MX (3,B)	4	TON	105
2360.501	TYPE SP 12.5 WEARING COURSE MX (4,E)		TON	4918
2501.515	18" CS PIPE APRON		EACH	2
2503.603	18" HDPE PIPE SEWER		LF	65
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	4	SY	82
2540.602	MAIL BOX SUPPORT	5	EACH	36
2563.601	TRAFFIC CONTROL	6, 7	LS	1
2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	8	UDAY	14
2573.502	SILT FENCE, TYPE MS		LF	86
2574.525	COMMON TOPSOIL BORROW	12	CY	20
2575.523	EROSION CONTROL BLANKETS CATEGORY 0	9	SY	64
2581.501	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	10	LF	653
2582.502	4" SOLID LINE WHITE-EPOXY	11	LF	32310
2582.502	4" SOLID LINE YELLOW-EPOXY	11	LF	3390
2582.502	4" BROKEN LINE YELLOW-EPOXY	11	LF	1948
2582.502	4" DOUBLE SOLID LINE YELLOW-EPOXY	11	LF	6820

CONSTRUCTION NOTES	
1	GRAVEL BASE FOR CONCRETE DRIVEWAYS, AND CULVERT PATCHES.
2	ITEM INCLUDES 7 TONS FOR EACH GRAVEL ENTRANCE AND GRAVEL STREET APPROACH.
3	ITEM INCLUDES 2" DEEP MILL AT BEGINNING AND END OF PROJECT, ALL PAVED ST APPROACHES, AND DRIVEWAYS; SEE DETAILS FOR DIMENSION.
4	CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION. ITEM FOR PAVED ST, APPR. AND DRIVEWAYS.
5	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.
6	DO NOT PASS, PASS WITH CARE AND NO CENTER STRIPE SIGNS TO BE INPLACE DURING MILLING, RECLAIMING OR PAVING OPERATIONS.
7	DETOUR IS INCIDENTAL TO TRAFFIC CONTROL.
8	2 MESSAGE BOARDS, ONE ON THE EACH END OF PROJECT WILL BE INSTALLED 7 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.
9	TYPE 1 FERTILIZER AND TYPE 25-121 SEED ARE INCIDENTAL TO THIS ITEM. 4" OF TOPSOIL IS INCIDENTAL TO ALL TURF ESTABLISHMENT.
10	CENTERLINE AND LANE DESIGNATION SKIPS TO BE APPLIED AS SOON AS POSSIBLE ON EACH NEW LIFT OF PAVEMENT; SKIPS MUST BE INPLACE BEFORE THE CONTRACTOR LEAVES FOR THE DAY. CONTRACTOR IS TO REMOVE PRIOR TO FINAL PAINT STRIPING.
11	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING.
12	ITEM USED TO BLEND SLOPES AROUND CULVERT REPLACEMENT.

2357.502	BITUMINOUS MATERIAL FOR TACK COAT	0.05 GAL / SQ YD
2211.501	AGGREGATE BASE CLASS 5	1.8 TONS / CU YD
2360.501	ALL BITUMINOUS PAVEMENT	115 LBS / SQ YD / IN THICKNESS
2581.501	REMOVABLE PREFORM PAVEMENT MARKING TAPE	2' AT 50' INTERVALS

NO	DATE	BY	CKD	APPR	REVISION	
	03/19/2015					10:42:54 AM

NAME: P:\15-01-00\CR_74(SandyDr-213thAve)\Base\PROPOSED\TEMPLATE_PLAN.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: MATTHEW J. JOHN

SIGNATURE: *[Signature]*

DATE: 4/2/15 LICENSE NO. 51639

DRAWN BY: SRK DATE: 02/10/2015

DESIGN BY: SRK DATE: 02/10/2015

CHECKED BY: MJJ DATE: 03/13/2015



ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT 15-24-74

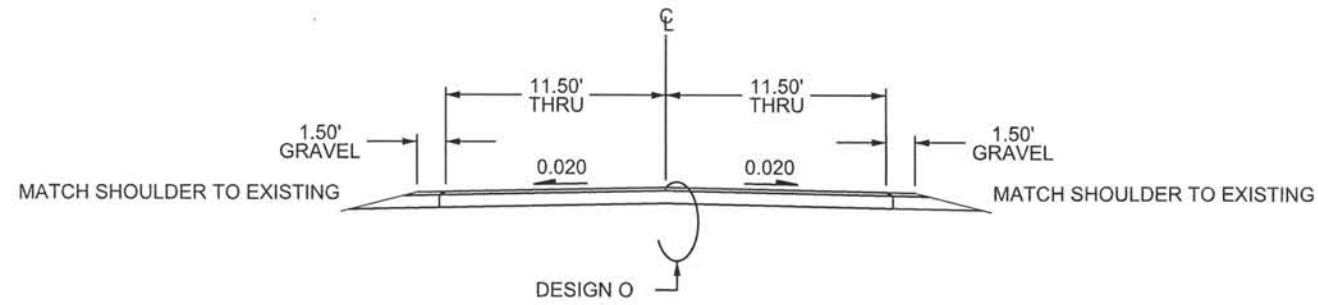
STATEMENT OF ESTIMATED QUANTITIES

Sheet 2 of 22 Sheets

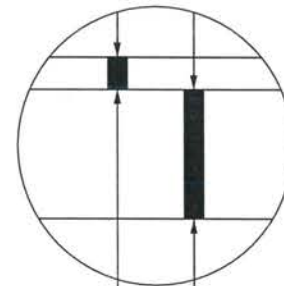
mjohn

CR 74 (221ST AVE NE) (EXISTING/PROPOSED) SECTION

11+13 - 174+41



DESIGN O OVERLAY SECTION



2.0" BITUMINOUS WEAR (SPWEB440E)
EXISTING BITUMINOUS

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	03/19/2015					10:42:55 AM

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ANOKA COUNTY
HIGHWAY DEPT.

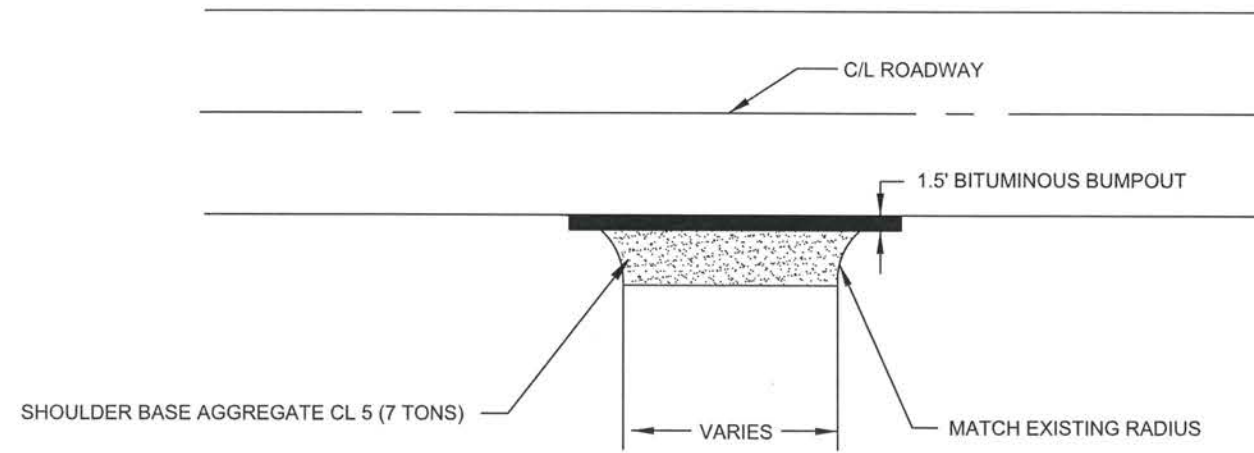
COUNTY PROJECT 15-24-74

TYPICAL SECTIONS
Sheet 3 of 22 Sheets

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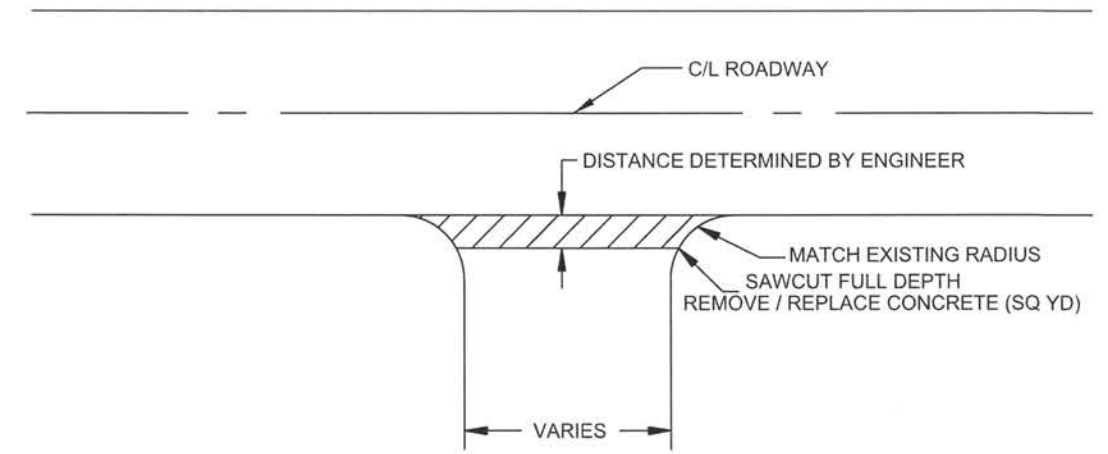
DRIVEWAY DETAIL

GRAVEL / FIELD ENTRANCE



DRIVEWAY DETAIL

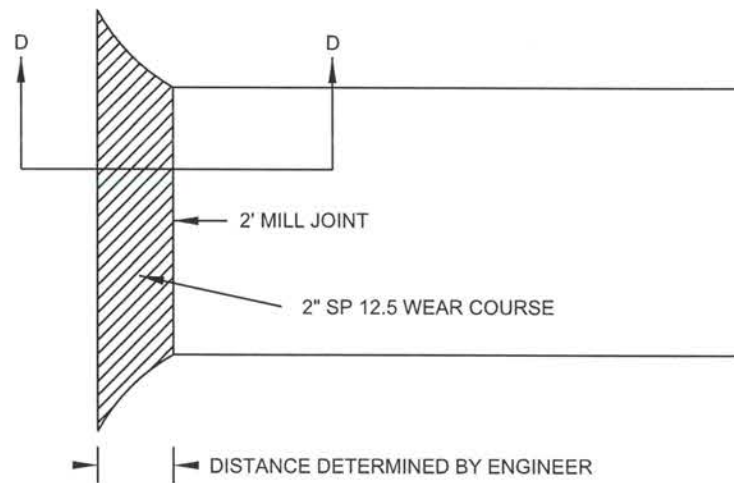
CONCRETE DRIVEWAY



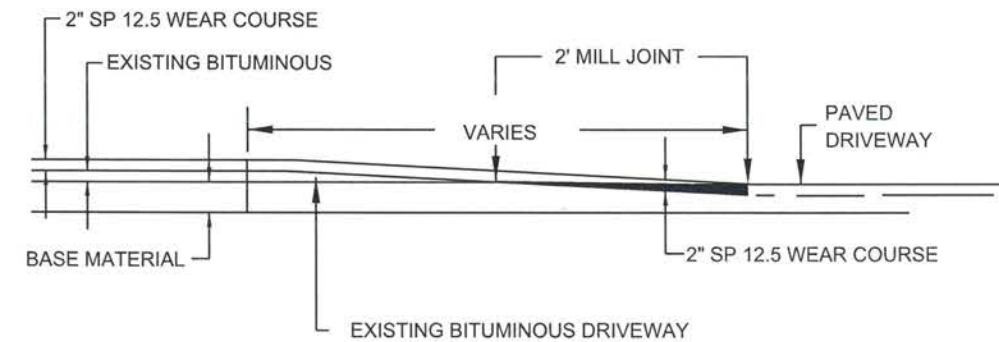
DRIVEWAY DETAIL

BITUMINOUS DRIVEWAY

PLAN VIEW



SECTION D - D



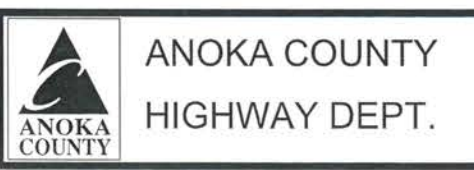
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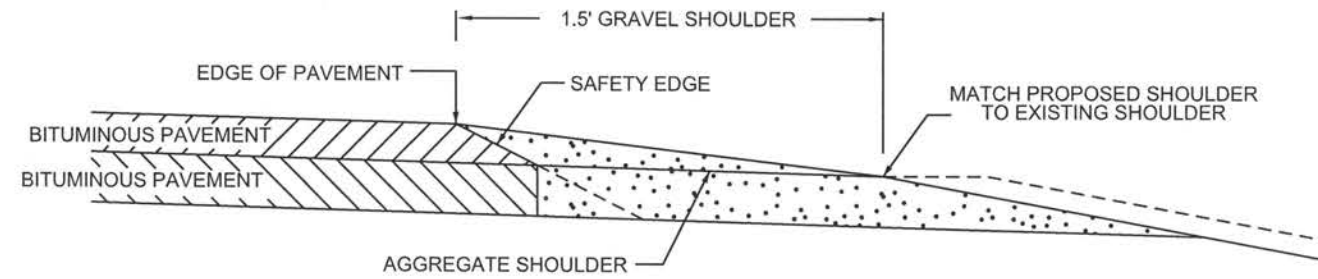
COUNTY PROJECT 15-24-74

DETAILS
 Sheet 4 of 22 Sheets

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SHOULDER DETAIL

BITUMINOUS SAFETY EDGE
GRAVEL SHOULDER



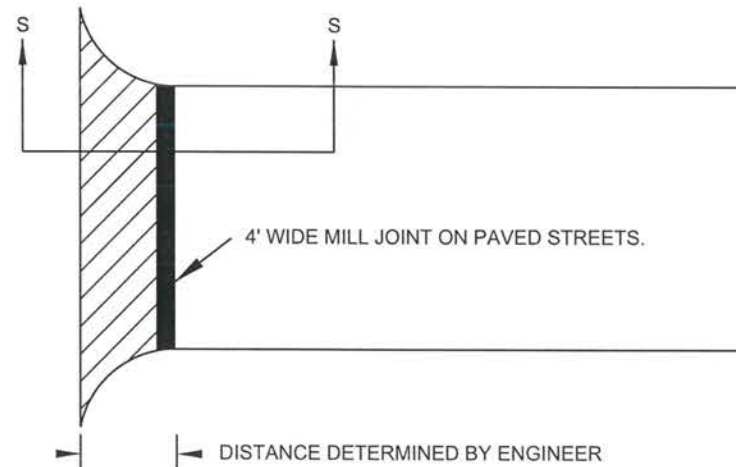
SAFETY EDGE TO BE USED IN ALL NON-CURB AREAS ON SHOULDER.

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

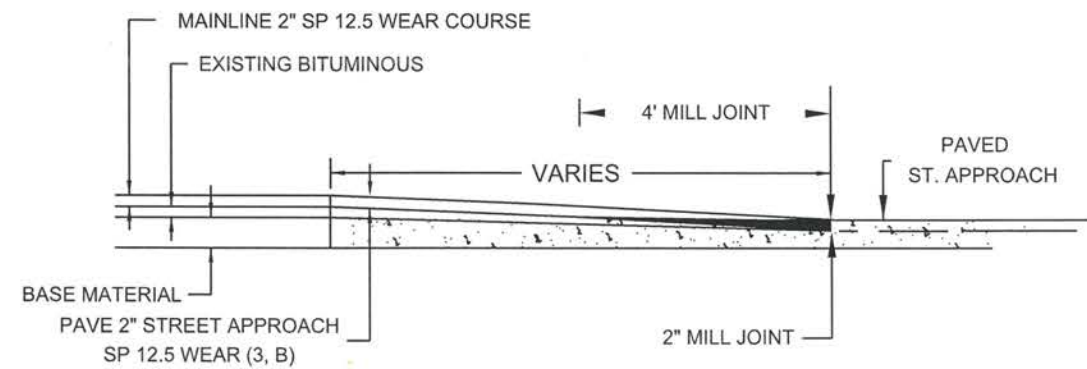
STREET APPROACH DETAIL

BITUMINOUS STREET

PLAN VIEW



SECTION S - S



NO	DATE	BY	CKD	APPR	REVISION	
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NAME: P:\15-01-00\CR_74(SandyDr-213thAve)\Base\PROPOSED\TEMPLATE_PLAN.dgn

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ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT 15-24-74

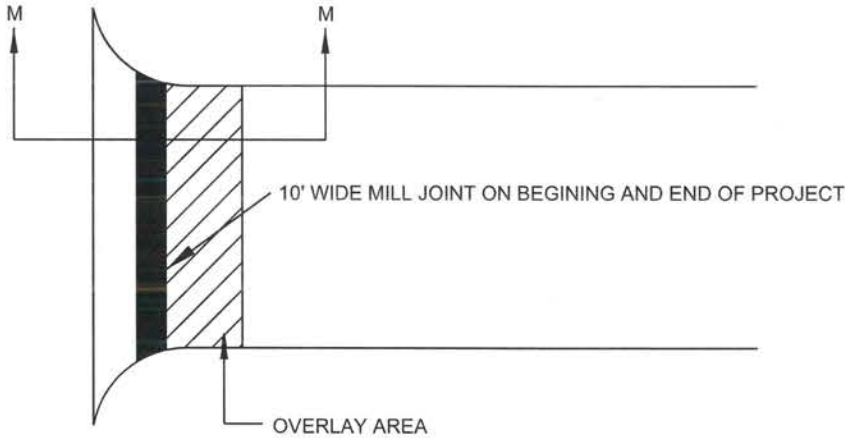
DETAILS

Sheet 5 of 22 Sheets

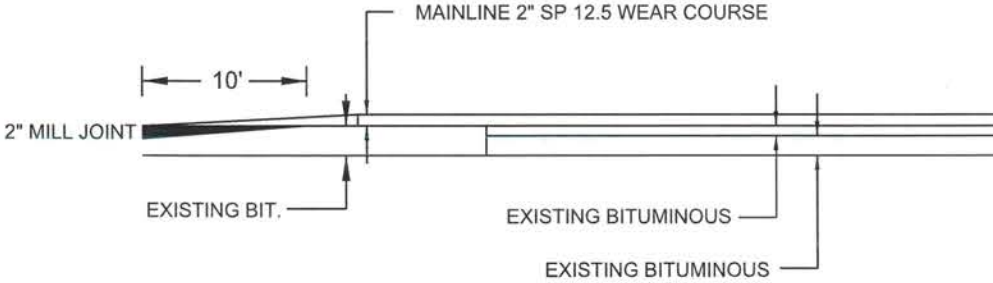
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MAINLINE JOINT DETAIL

PLAN VIEW



SECTION M - M



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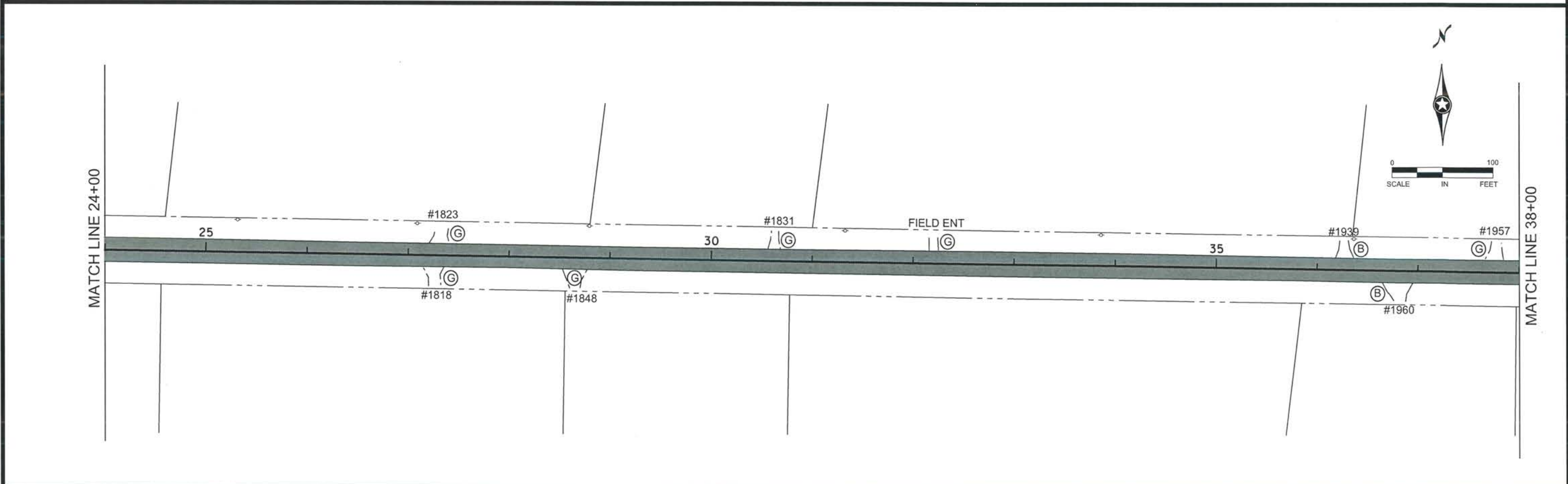
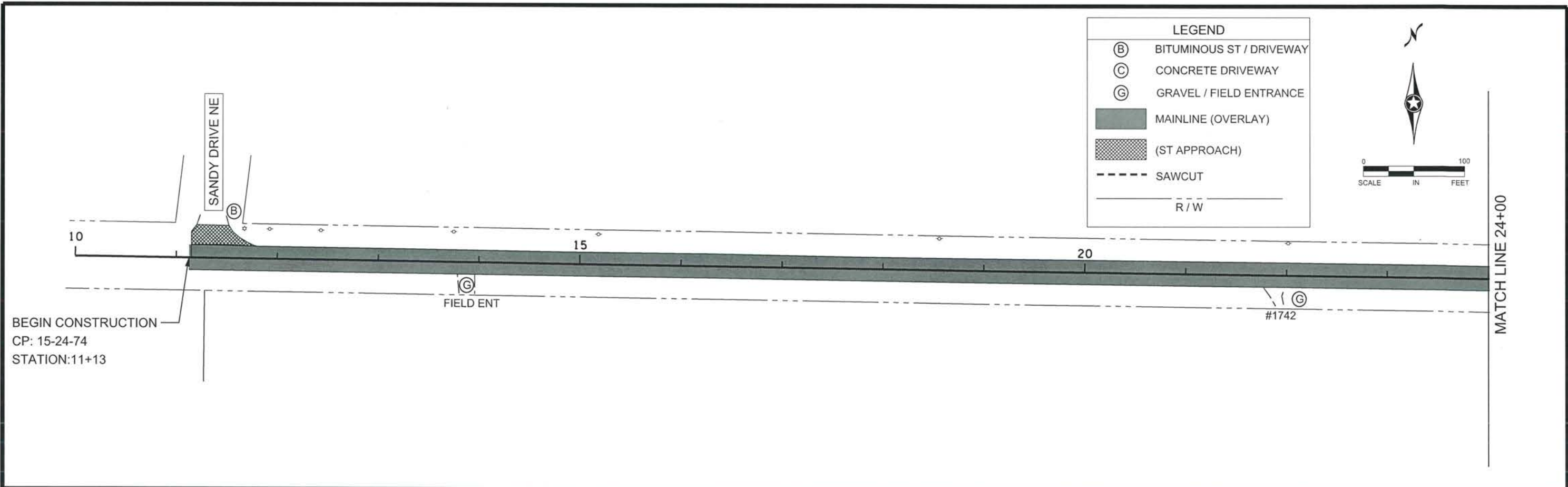


ANOKA COUNTY
 HIGHWAY DEPT.

COUNTY PROJECT 15-24-74

DETAILS
 Sheet 6 of 22 Sheets

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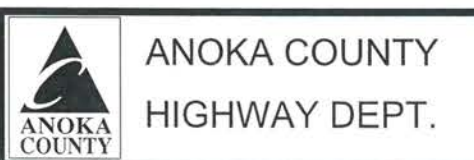
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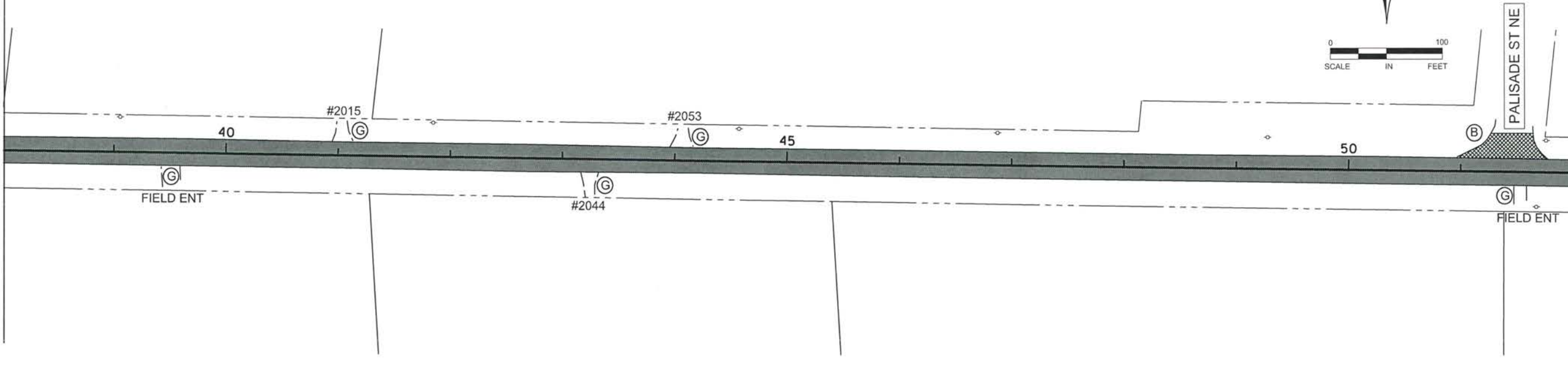


ANOKA COUNTY
 HIGHWAY DEPT.
 COUNTY PROJECT 15-24-74

CONSTRUCTION PLAN
 STA 11+13 TO 38+00
 Sheet 7 of 22 Sheets

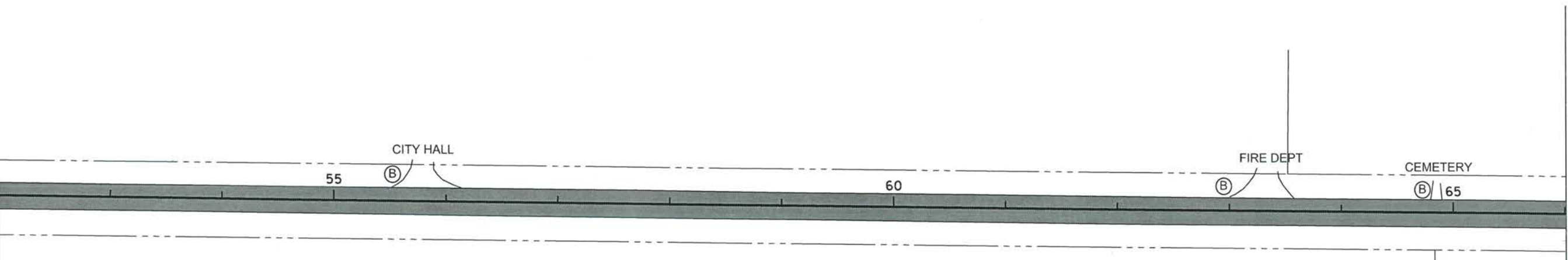
mjohn

MATCH LINE 38+00



MATCH LINE 52+00

MATCH LINE 52+00



MATCH LINE 66+00

LEGEND

- (B) BITUMINOUS ST / DRIVEWAY
- (C) CONCRETE DRIVEWAY
- (G) GRAVEL / FIELD ENTRANCE
- █ MAINLINE (OVERLAY)
- ▨ (ST APPROACH)
- - - SAWCUT
- R / W

NO	DATE	BY	CKD	APPR	REVISION	

NAME: P:\15-01-00\CR_74(SandyDr-213thAve)\Base\PROPOSED\TEMPLATE_PLAN.dgn

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ANOKA COUNTY
HIGHWAY DEPT.

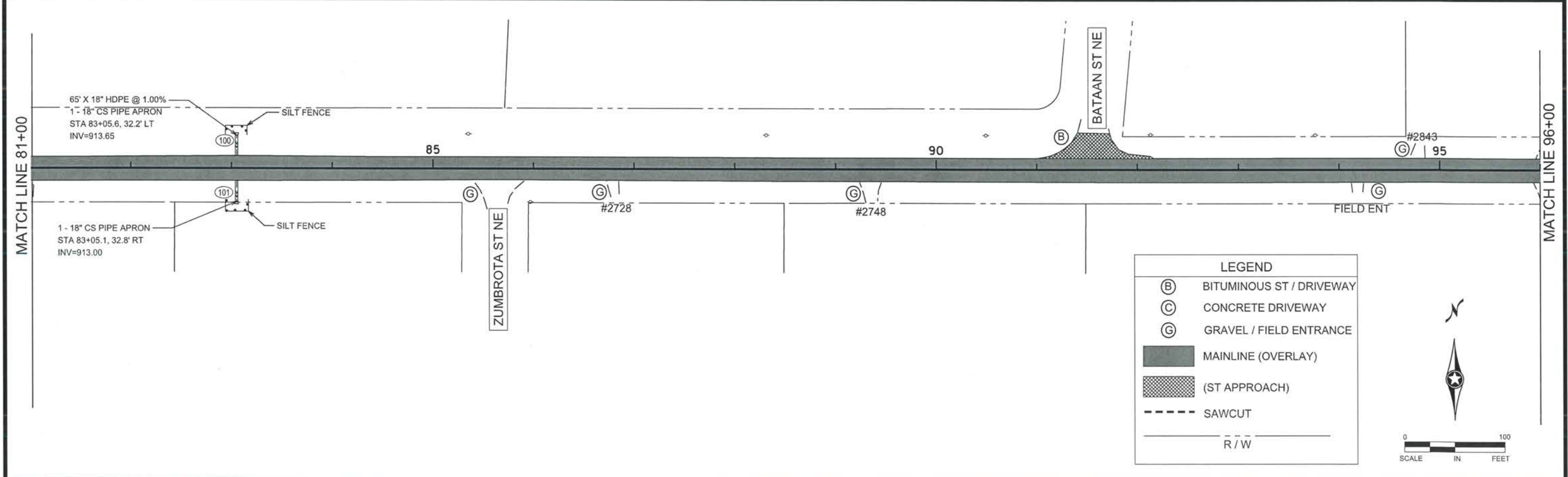
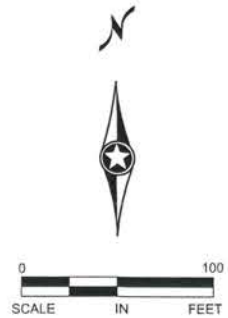
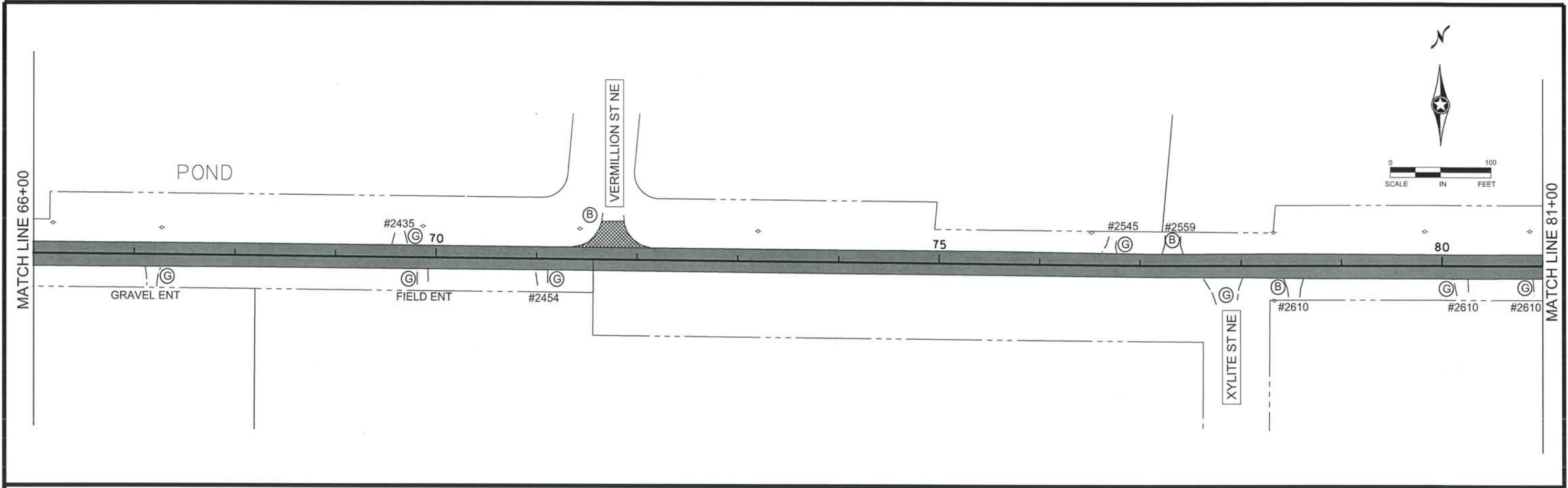
COUNTY PROJECT 15-24-74

CONSTRUCTION PLAN

STA 38+00 TO 66+00

Sheet 8 of 22 Sheets

mjohn



LEGEND	
(B)	BITUMINOUS ST / DRIVEWAY
(C)	CONCRETE DRIVEWAY
(G)	GRAVEL / FIELD ENTRANCE
[Solid Grey Box]	MAINLINE (OVERLAY)
[Hatched Box]	(ST APPROACH)
[Dashed Line]	SAWCUT
[Thin Line]	R / W

NO	DATE	BY	CKD	APPR	REVISION	03/19/2015	10:43:02 AM
NAME: P:\15-01-00\CR_74(SandyDr-213thAve)\Base\PROPOSED\TEMPLATE_PLAN.dgn							

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 CHECKED BY: MJJ DATE: 03/13/2015

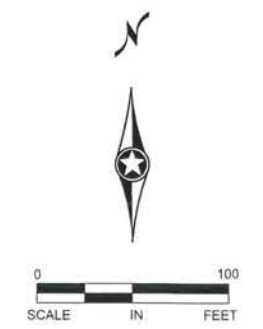
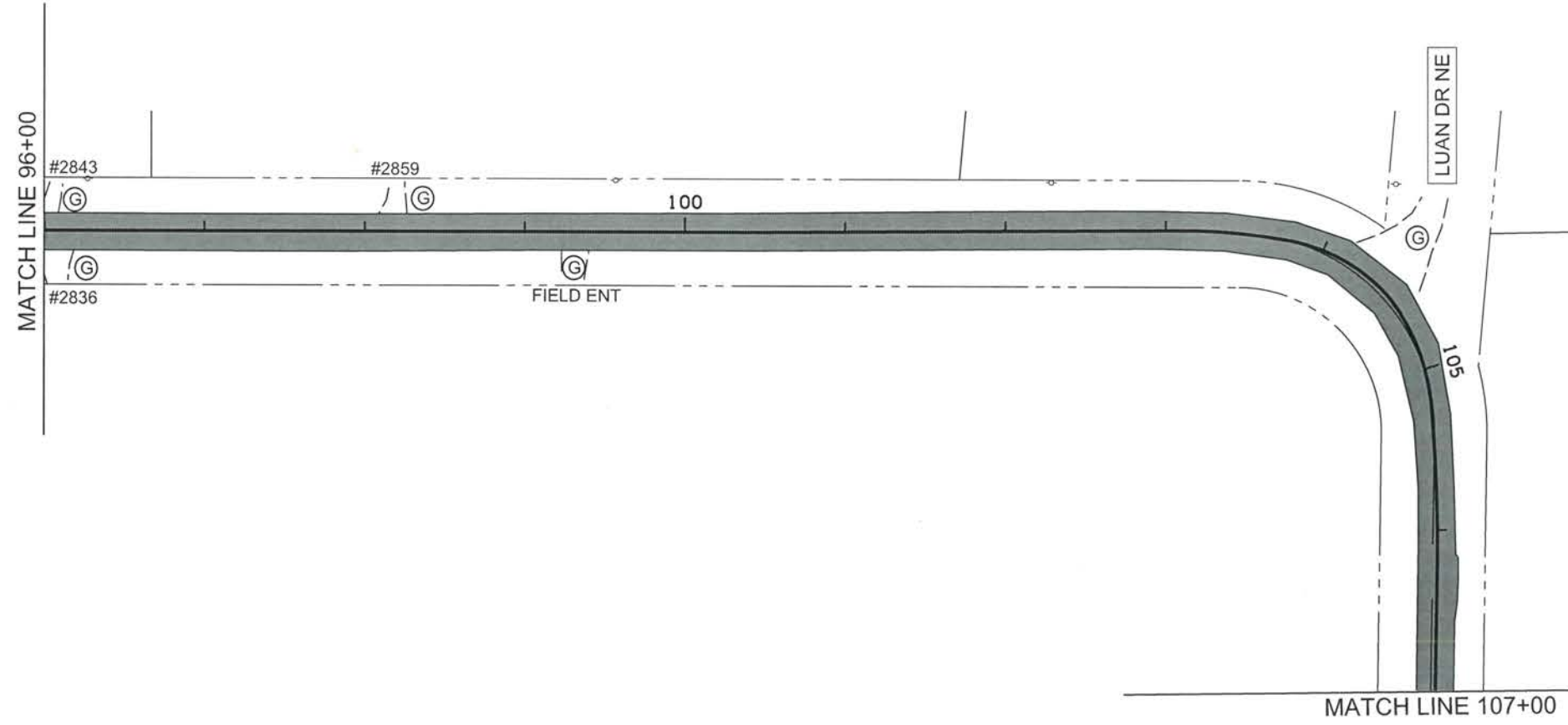


ANOKA COUNTY
 HIGHWAY DEPT.

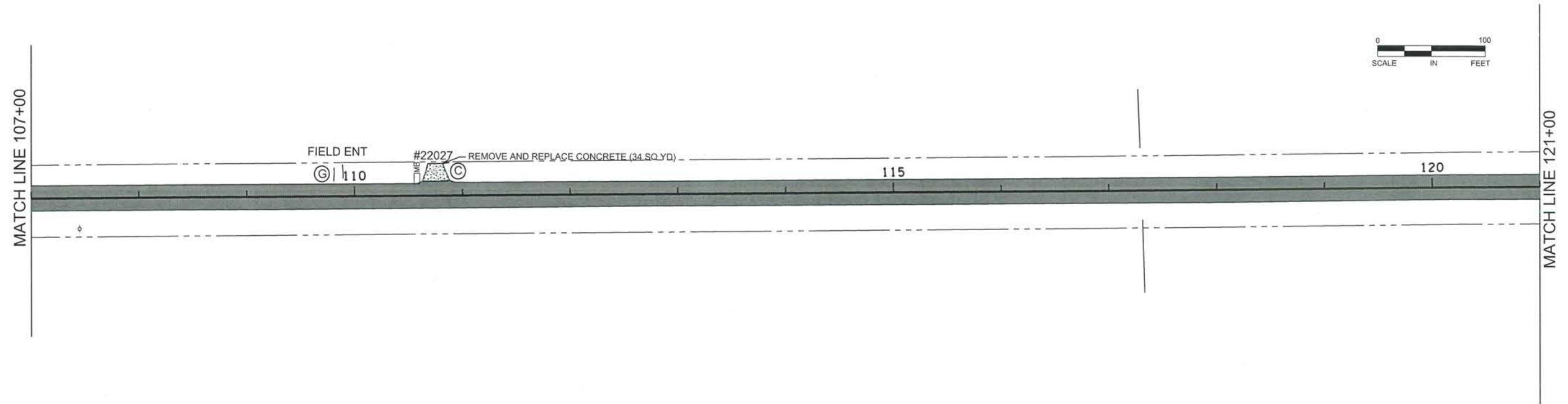
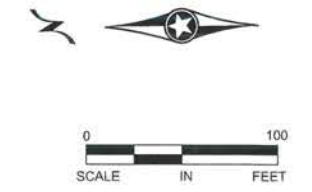
COUNTY PROJECT 15-24-74

CONSTRUCTION PLAN
 STA 66+00 TO 96+00
 Sheet 9 of 22 Sheets

mjohn



LEGEND	
(B)	BITUMINOUS ST / DRIVEWAY
(C)	CONCRETE DRIVEWAY
(G)	GRAVEL / FIELD ENTRANCE
	MAINLINE (OVERLAY)
	(ST APPROACH)
	SAWCUT
	R/W



NO	DATE	BY	CKD	APPR	REVISION	
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NAME: P:\15-01-00\CR_74(SandyDr-213thAve)\Base\PROPOSED\TEMPLATE_PLAN.dgn

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**ANOKA COUNTY
HIGHWAY DEPT.**

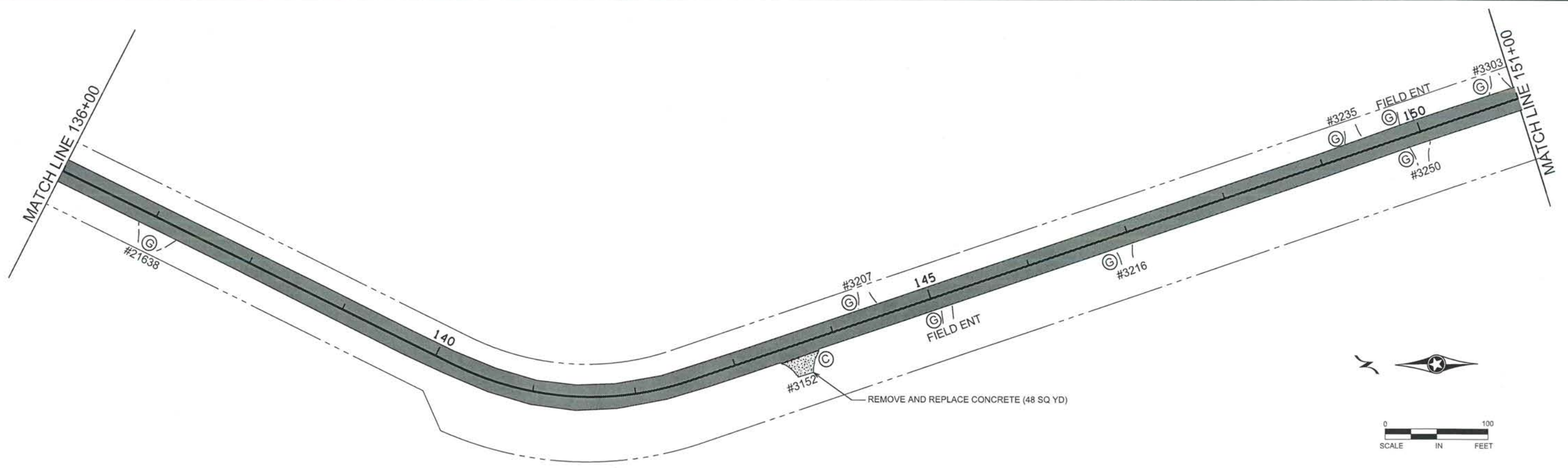
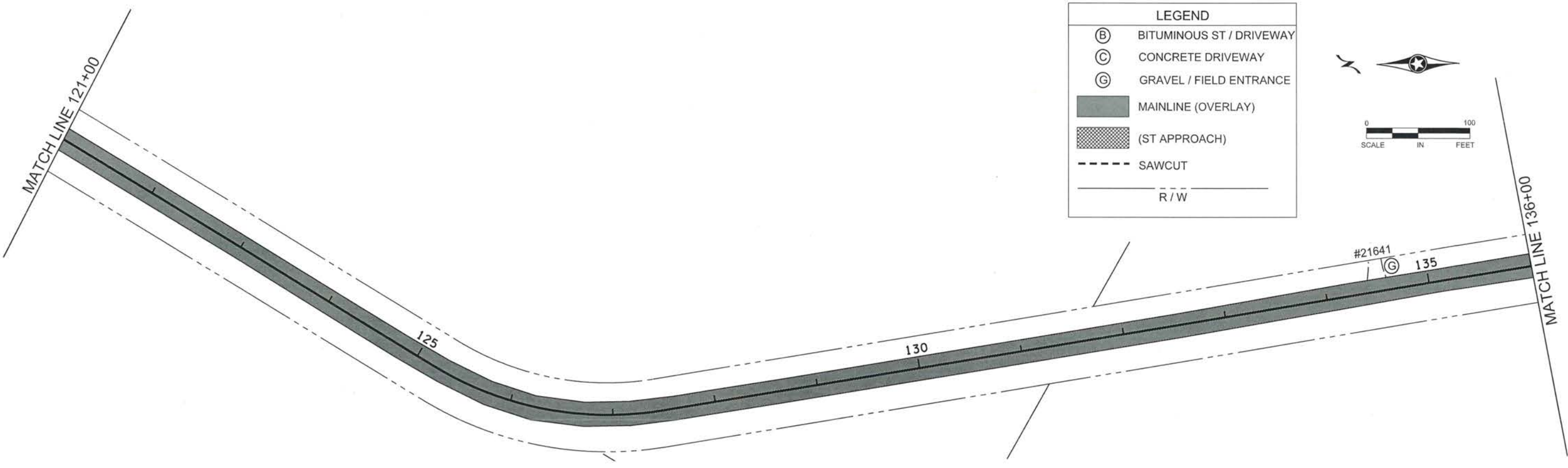
COUNTY PROJECT 15-24-74

CONSTRUCTION PLAN
 STA 96+00 TO 121+00
 Sheet 10 of 22 Sheets

mjohn

LEGEND

- (B) BITUMINOUS ST / DRIVEWAY
- (C) CONCRETE DRIVEWAY
- (G) GRAVEL / FIELD ENTRANCE
- MAINLINE (OVERLAY)
- (ST APPROACH)
- SAWCUT
- R / W



NO	DATE	BY	CKD	APPR	REVISION	03/19/2015	10:43:04 AM
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**ANOKA COUNTY
HIGHWAY DEPT.**

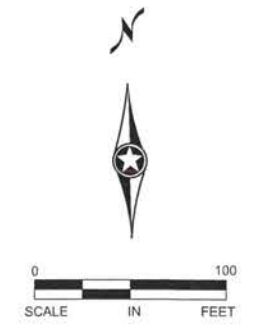
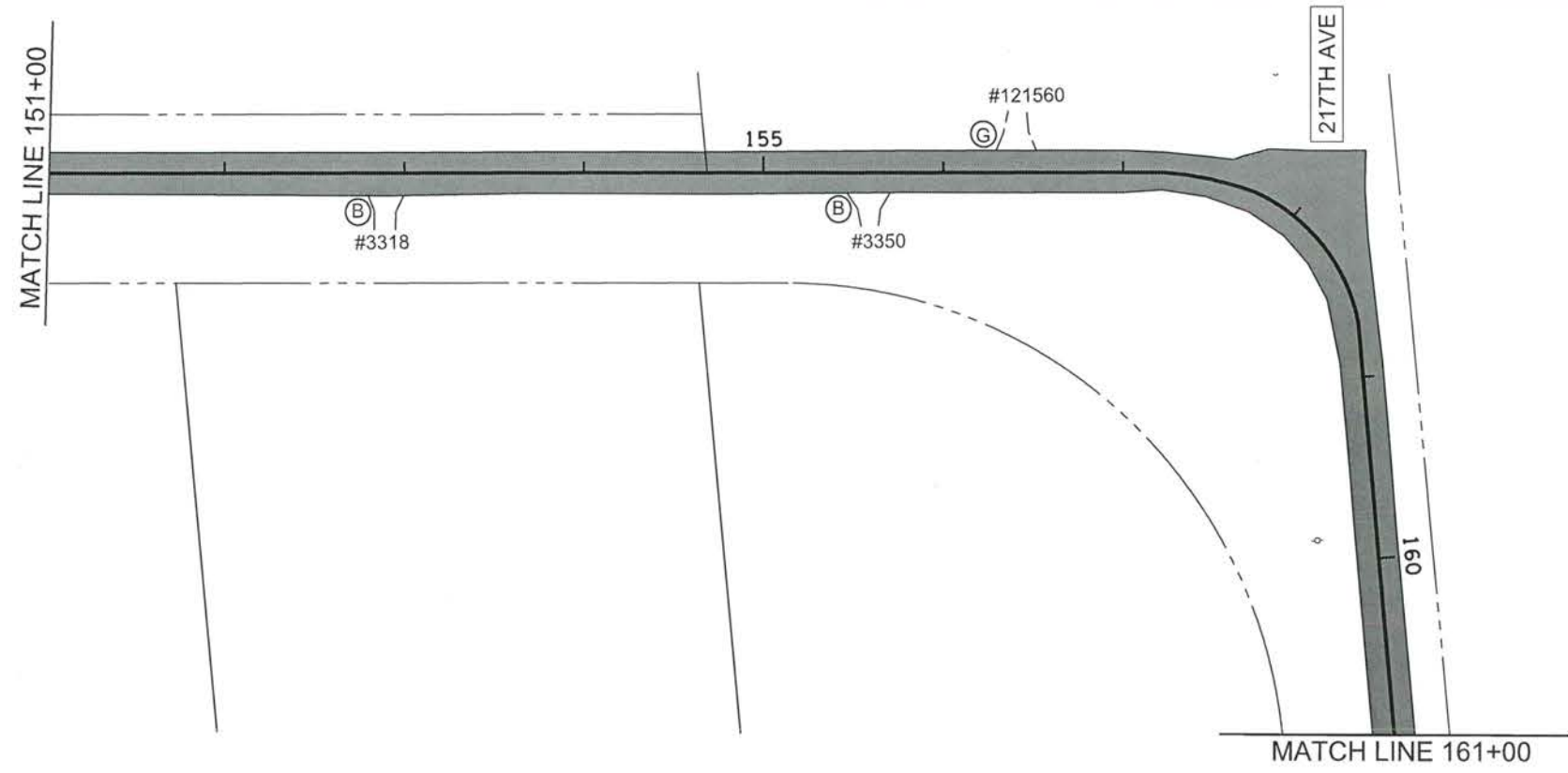
COUNTY PROJECT 15-24-74

CONSTRUCTION PLAN

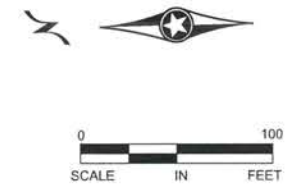
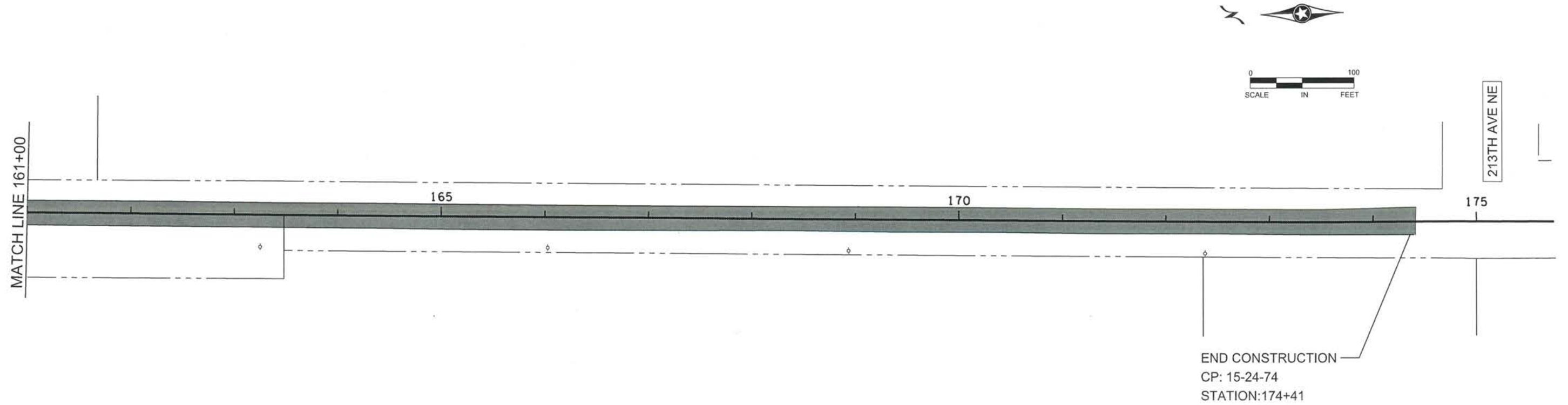
STA 121+00 TO 151+00

Sheet 11 of 22 Sheets

mjohn



LEGEND	
(B)	BITUMINOUS ST / DRIVEWAY
(C)	CONCRETE DRIVEWAY
(G)	GRAVEL / FIELD ENTRANCE
	MAINLINE (OVERLAY)
	(ST APPROACH)
	SAWCUT
	R / W



NO	DATE	BY	CKD	APPR	REVISION	
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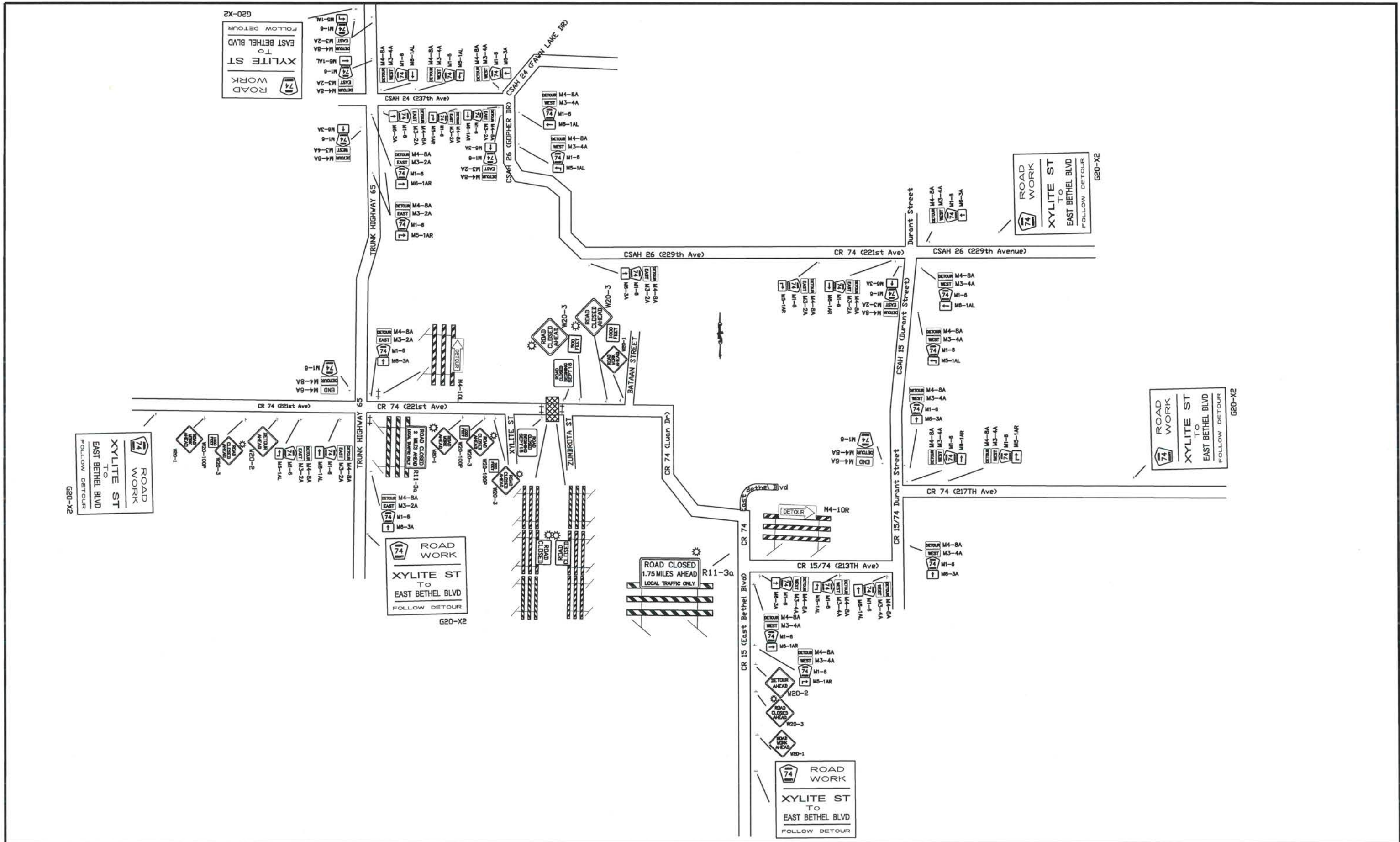
CHECKED BY: MJJ DATE: 03/13/2015



**ANOKA COUNTY
HIGHWAY DEPT.**

COUNTY PROJECT 15-24-74

CONSTRUCTION PLAN
STA 151+00 TO 174+41
Sheet 12 of 22 Sheets



NO	DATE	BY	CKD	APPR	REVISION

NAME: H:\Traffic\DETOURS\2006\ .dwg

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DRAWN BY: JJS DATE: 1/30/15
 DESIGN BY: JJS DATE: 1/30/15
 CHECKED BY: RLB DATE: 1/30/15

ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-24-74

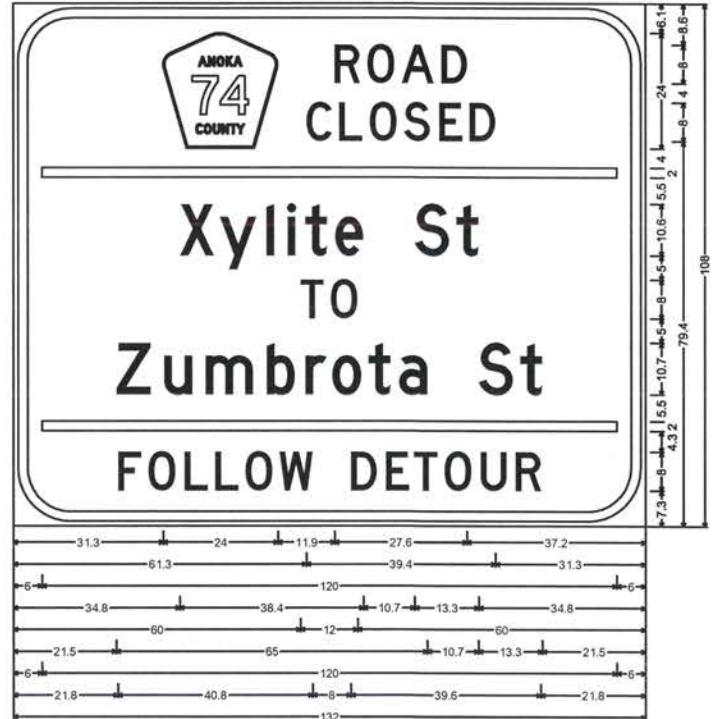
DETOUR
 CR 74
 Sheet 13 of 22 Sheets

M. U. T. C. D. CODE	SIZE	INSERT	QUANTITY	M. U. T. C. D. CODE	SIZE	INSERT	QUANTITY
W20-1	48' x 48'		• 3	G20-X2	132' x 108'		• 3
W20-2	48' x 48'		• 2	G20-X2	132' x 108'		• 3
W20-3	48' x 48'		• 6				
W20-100p	24' x 18'		• 3				
W20-100p	24' x 18'		• 2				
M4-10R	48' x 18'		SEE NOTE ②	M4-8A	24' x 12'		• 3
TYPE III	8 FOOT		• 1	M3-2A	24' x 12'		• 3
M4-10L	48' x 18'		SEE NOTE ②	M1-6A	24' x 24'		• 3
TYPE III	8 FOOT		• 1		21' x 15'		• 2
							• 6
R11-3a	48' x 30'		SEE NOTE ②	M4-8A	24' x 12'		• 2
TYPE III	8 FOOT		• 1	M3-4A	24' x 12'		• 2
				M1-6A	24' x 24'		• 4
					21' x 15'		• 4
							• 6
R11-3a	48' x 30'		SEE NOTE ②	M4-6A	24' x 12'		• 2
TYPE III	8 FOOT		• 1	M4-8A	24' x 12'		• 2
				M1-6A	24' x 24'		• 4
							• 4
							• 6
R11-2	48' x 30'		• 2	G20-X1	60' x 48'		• 2
TYPE III	8 FOOT		SEE NOTE ②				
			• 2				

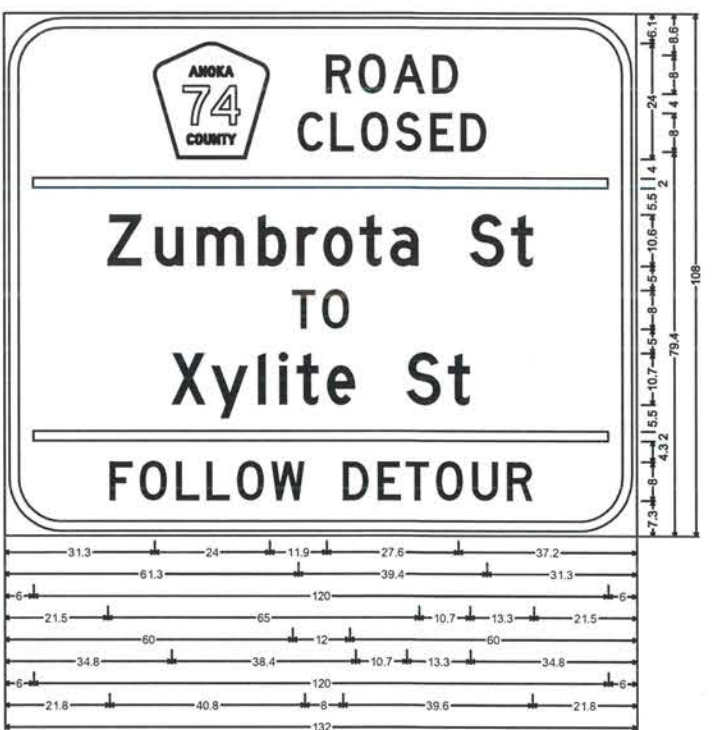
NOTES:

- 1) ALL BARRICADES SHALL BE PROPERLY WEIGHTED WITH SANDBAGS.
- 2) ALL BARRICADES SHALL HAVE REFLECTIVE MATERIAL ON BOTH SIDES.
- 3) ALL BARRICADE MARKINGS SHALL BE SLANTED IN ACCORDANCE WITH THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE FIELD MANUAL DATED JANUARY, 2014
- 4) ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE FIELD MANUAL DATED JANUARY, 2014
- 5) ADDITIONS OR CHANGES TO THIS PLAN MAY BE MADE AS DETERMINED BY THE ENGINEER.

G20-X1 SIGN TO BE INSTALLED A MINIMUM OF SEVEN DAYS PRIOR TO ACTUAL CLOSING DATE OF ROAD CLOSURE AND IMPLEMENTATION OF DETOUR SIGNING. SIGNS TO BE REMOVED AT TIME OF DETOUR INSTALLATION.



G20-X2_132x108; 12.0" Radius, 2.0" Border, 1.0" Indent, Black on Orange; [ROAD] D; [CLOSED] D; [Xylite St] D; [TO] D; [Zumbrota St] D; [FOLLOW] D; [DETOUR] D;



G20-X2_132x108; 12.0" Radius, 2.0" Border, 1.0" Indent, Black on Orange; [ROAD] D; [CLOSED] D; [Zumbrota St] D; [TO] D; [Xylite St] D; [FOLLOW] D; [DETOUR] D;

NO	DATE	BY	CKD	APPR	REVISION

NAME: T:\Traffic\dwg\CSAH 21 (Centerville Rd)\Detour for culvert replacement.dwg

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

PRINT NAME: MATTHEW J. JOHN
 SIGNATURE: *[Signature]*
 DATE: 4/2/15 REG. NO. 51639

DRAWN BY: JJS DATE: 1/30/15
 DESIGN BY: JJS DATE: 1/30/15
 CHECKED BY: JR DATE: 4/17/14



ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-24-74

DETOUR QUANTITY _____
 Sheet 14 of 22 Sheets

**PERMANENT PAVEMENT MARKING PLAN
NOTES AND GUIDELINES**

GENERAL INFORMATION:

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.

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.

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.

EPOXY:

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 EPOXY PAVEMENT MARKINGS.

THE EPOXY MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING. GLASS BEANS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE EPOXY RESIN LINE TO PROVIDE AN IMMEDIATE NO-TRACK SYSTEM.

AN EPOLY RESIN LINE 4" WIDE AND 15 MILL THICKNESS (WET), REQUIRES AN APPLICATION RATE OF ONE (1) GALLON OF COMPONENTS FOR 320 FEET OF LINE. GLASS BEADS SHALL BE APPLIED AT A POUND PER GALLON RATE SUFFICIENT TO ACHIEVE AN ACCEPTABLE NO-TRACK SYSTEM.

OPERATIONS SHALL BE CONDUCTED ONLY WHEN THE ROAD PAVEMENT SURFACE TEMPERATURES ARE 50 DEGREES FAHRENHEIT OR GREATER.

PERMANENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS.

PREFORMED THERMOPLASTIC:

THE PREFORMED THERMOPLASTIC MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS ON CLEAN AND DRY SURFACES. SEE SPECIAL PROVISIONS FOR PREFORMED THERMOPLASTIC MARKING SPECIFICATIONS.

PAINT:

AT THE TIME OF APPLYING THE MARKING MATERIAL, THE APPLICATION AREA SHALL BE FREE OF CONTAMINATION. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE PRIOR TO THE LINE APPLICATION IN A MANNER AND TO THE EXTENT REQUIRED BY THE ENGINEER.

GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE PAINT LINE.

EXCEPT WHEN USED AS A TEMPORARY MARKING, PAVEMENT MARKINGS SHALL ONLY BE APPLIED IN SEASONABLE WEATHER WHEN AIR TEMPERATURE IS 50 DEGREES FARHENHEIT 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.

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.

SYMBOLS & MATERIALS LEGEND

■ CROSSWALK BLOCK WHITE PREFORMED THERMOPLASTIC

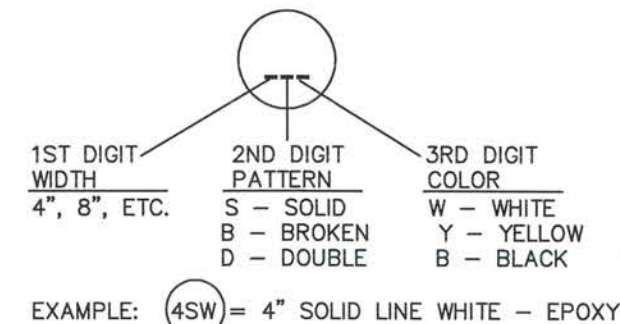
↩ PAVEMENT MESSAGE (LEFT ARROW) PREFORMED THERMOPLASTIC

STRIPING KEY

○ CIRCLE - EPOXY □ SQUARE PREFORMED THERMOPLASTIC

△ TRIANGLE - PAINT

⬠ PENTAGON - REMOVABLE PREFORMED PLASTIC MARKING



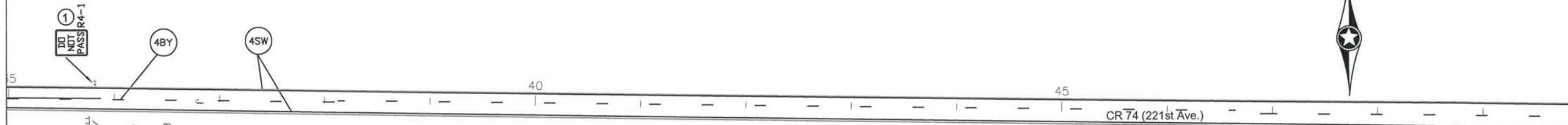
EXAMPLE: (4SW) = 4" SOLID LINE WHITE - EPOXY

PERMANENT MARKING QUANTITIES		
ITEM	UNIT	TOTAL QUANTITY
4" SOLID LINE WHITE - EPOXY PAINT	LIN FT	32310
4" SOLID LINE YELLOW - EPOXY PAINT	LIN FT	3390
4" BROKEN LINE YELLOW - EPOXY PAINT	LIN FT	1948
4" DOUBLE SOLID LINE YELLOW - EPOXY PAINT	LIN FT	6820

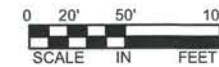
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: MATTHEW J. JOHN SIGNATURE: <i>Matthew J. John</i> DATE: 4/2/15 LICENSE NO. 51639					DRAWN BY: RLB DATE: 2/14/14 DESIGN BY: RLB DATE: 2/14/14 CHECKED BY: JR DATE: 2/14/14		ANOKA COUNTY HIGHWAY DEPT.		STATE PROJECT NO. _____ STATE AID PROJECT NO. _____ STATE AID PROJECT NO. _____ COUNTY PROJECT NO. 15-24-74		PERMANENT MARKING TABULATION Sheet 15 of 22 Sheets	
NO	DATE	BY	CKD	APPR	REVISION				NAME: P:\13-01-00\CSAH 18\Bases\TRAFFIC\Perm pvmt mrkg guide notes_guidelines.dwg			

STATION 35+00

STATION 50+00



- SIGN NOTES:
- ① TEMPORARY TRAFFIC CONTROL SIGN
 - ② F & I PERMANENT SIGN
 - ③ SALVAGE PERMANENT SIGN
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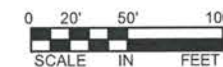
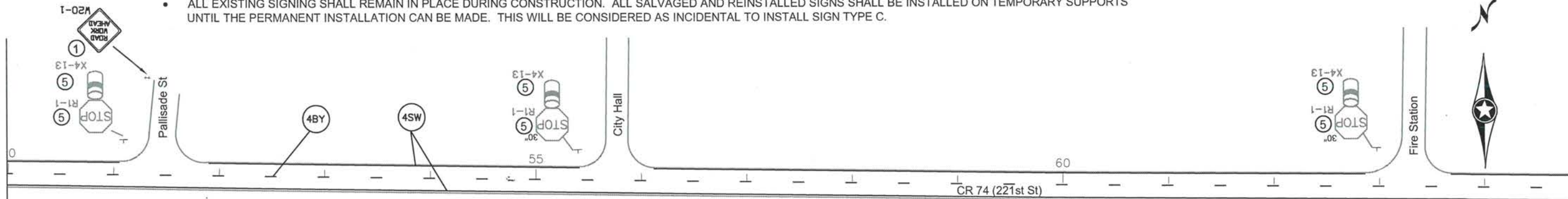


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STATION 50+00

STATION 65+00



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PRINT NAME: MATTHEW J. JOHN

SIGNATURE: *Matthew J. John*

DATE: 4/2/15 REG. NO. 51639

DRAWN BY: RLB DATE: 1/7/14

DESIGN BY: RLB DATE: 1/7/14

CHECKED BY: JR DATE: 1/7/14



ANOKA COUNTY
HIGHWAY DEPT.

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STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

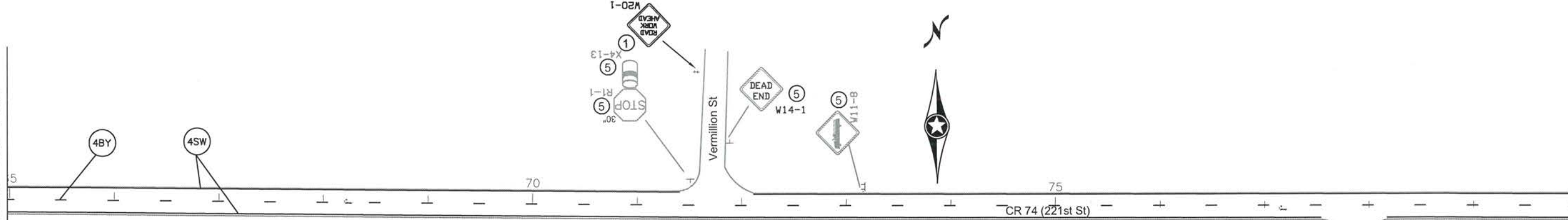
COUNTY PROJECT NO. 15-24-74

TEMPORARY SIGNING,
PERMANENT SIGNING
AND STRIPING

Sheet 17 of 22 Sheets

STATION 65+00

STATION 80+00

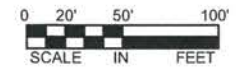


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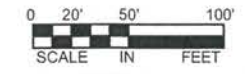
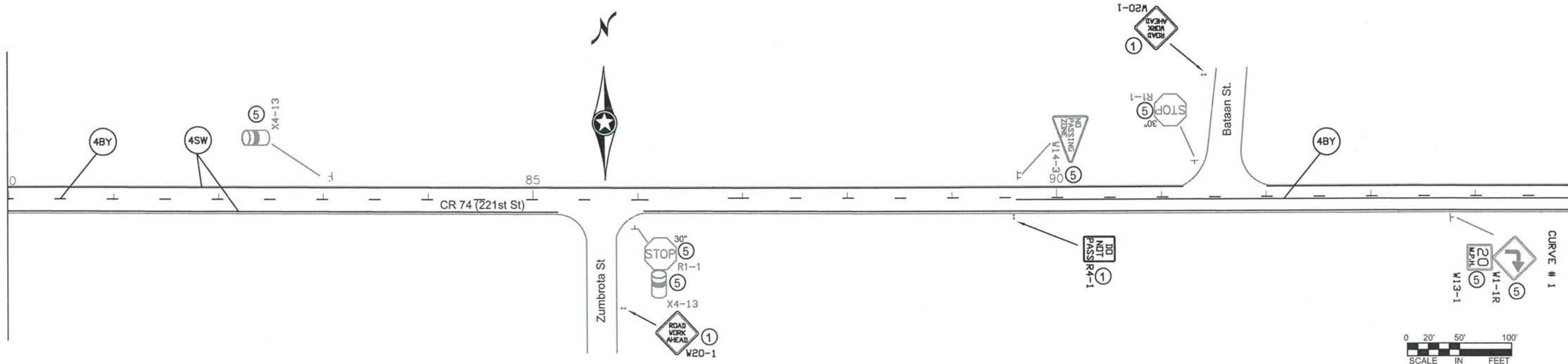
SIGN NOTES:

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- ⑤ RETAIN INPLACE SIGN



STATION 80+00

STATION 95+00



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 PRINT NAME: MATTHEW J. JOHN
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ANOKA COUNTY
 HIGHWAY DEPT.

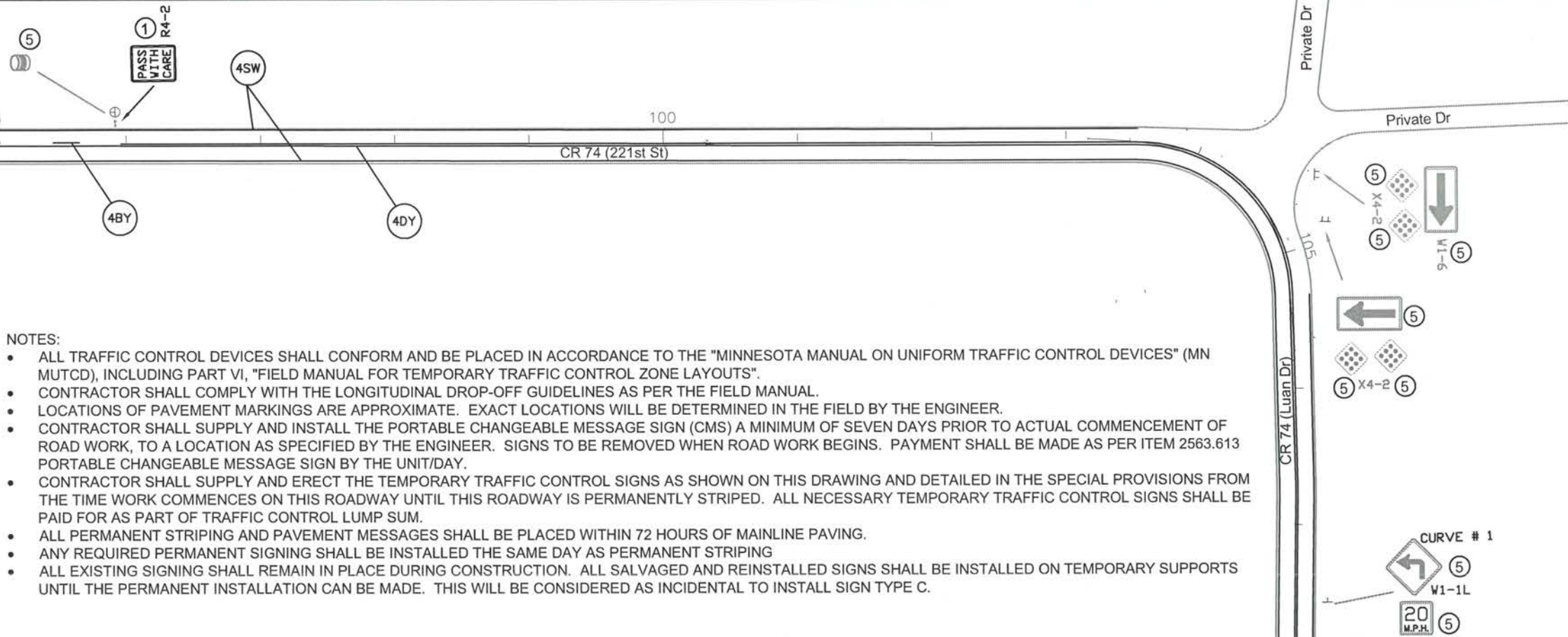
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-24-74

TEMPORARY SIGNING,
 PERMANENT SIGNING
 AND STRIPING
 Sheet 18 of 22 Sheets

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\02-617-19\base\Traffic\Curves from CSAH 18 to CSAH 22.dwg

STATION 95+00



NOTES:

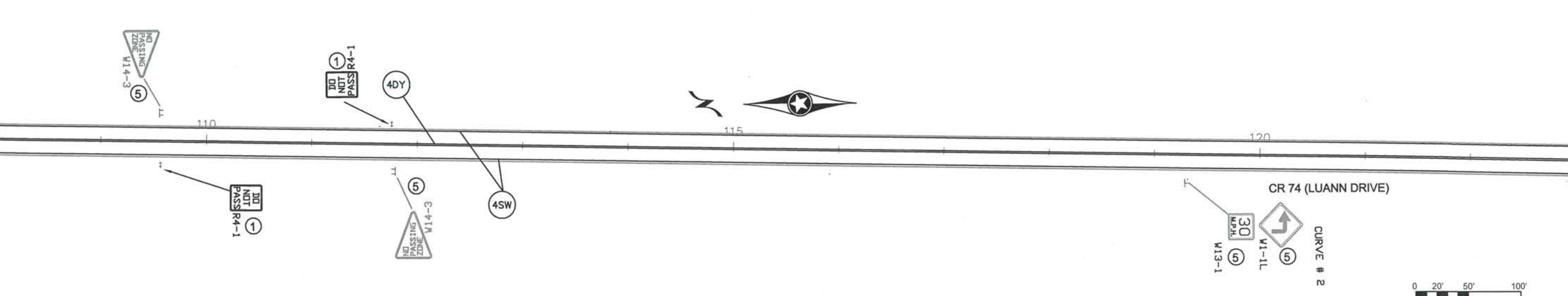
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- ⑤ RETAIN INPLACE SIGN

STATION 108+00

STATION 108+00



STATION 123+00

NO	DATE	BY	CKD	APPR	REVISION

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ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

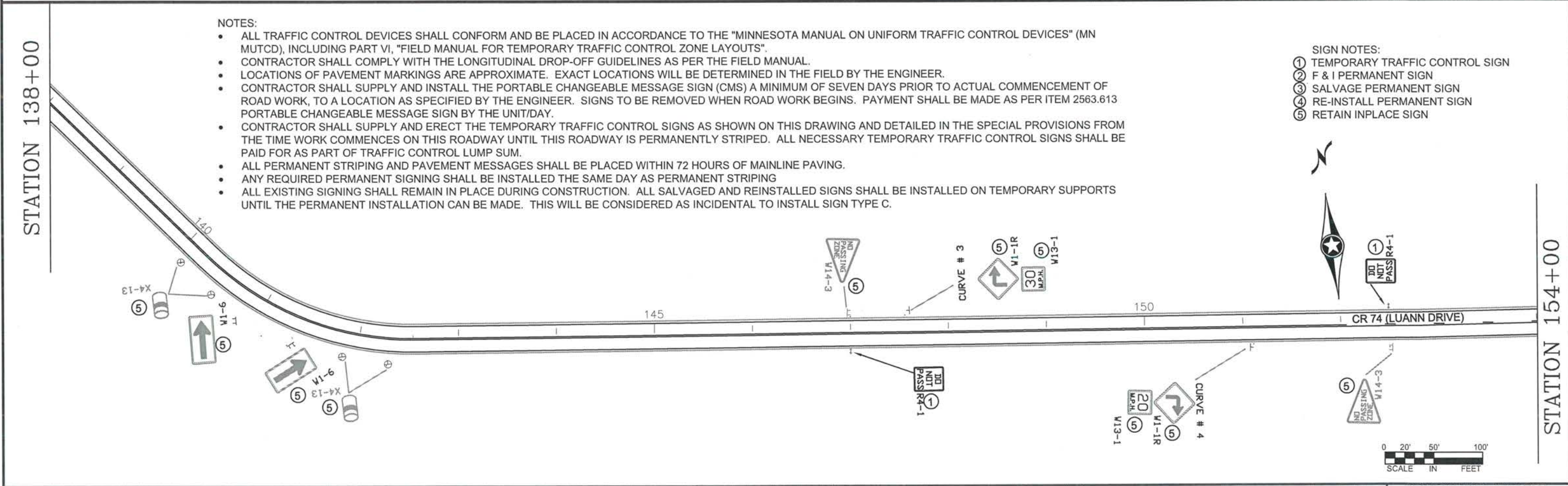
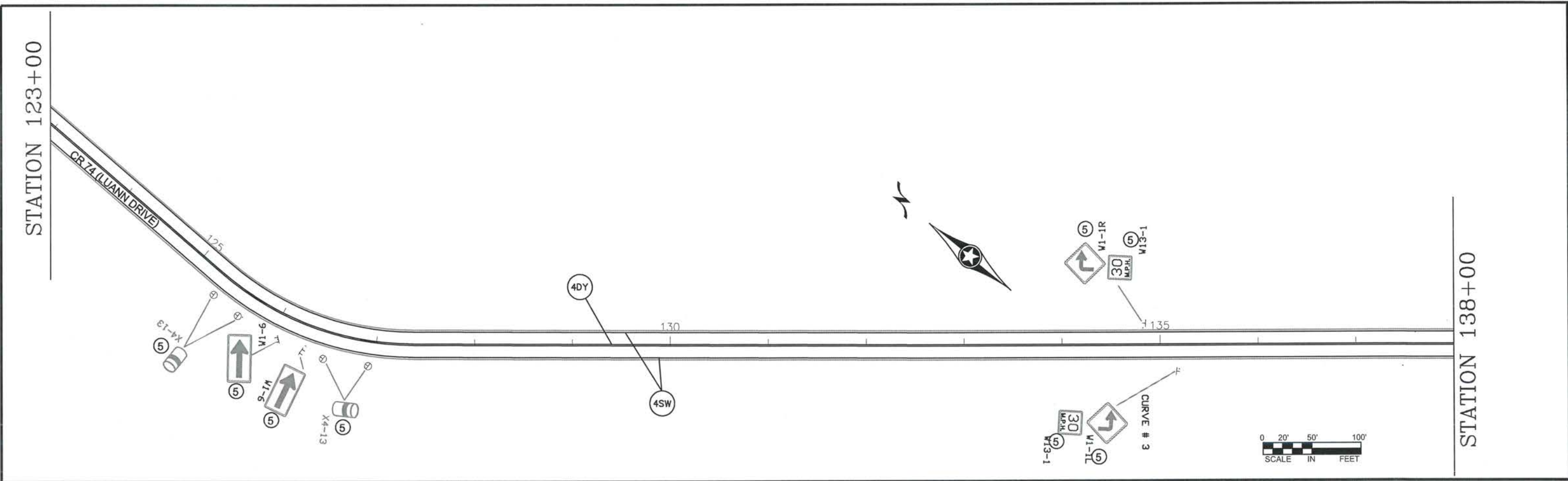
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COUNTY PROJECT NO. 15-24-74

TEMPORARY SIGNING,
PERMANENT SIGNING
AND STRIPING

Sheet 19 of 22 Sheets



- NOTES:
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- SIGN NOTES:
- ① TEMPORARY TRAFFIC CONTROL SIGN
 - ② F & I PERMANENT SIGN
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NO	DATE	BY	CKD	APPR	REVISION

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

PRINT NAME: MATTHEW J. JOHN
 SIGNATURE: *Matthew J. John*
 DATE: 4/2/15 REG. NO. 51639

DRAWN BY: RLB DATE: 1/7/14
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 CHECKED BY: JR DATE: 1/7/14

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TEMPORARY SIGNING,
 PERMANENT SIGNING
 AND STRIPING

Sheet 20 of 22 Sheets

TEMPORARY TRAFFIC CONTROL SIGNS

M.U.T.C.D. CODE	SIZE	PANEL AREA FT. ²	INSERT	QUANTITY		MOUNTING HEIGHT (TO PAVEMENT EDGE) FT.
					No. POST	
W8-12	48" x 48"	16.00		2	2	7.0'
R4-1	24" x 30"	5.00		10	1	7.0'
R4-2	24" x 30"	5.00		5	1	7.0'
G20-2A	48" x 24"	8.00		4	2	7.0'
W8-1A	48" x 48"	16.00		AS NEEDED		
W8-1A	48" x 48"	16.00		AS NEEDED		
W8-8	48" x 48"	16.00		AS NEEDED		
W8-9	48" x 48"	16.00		AS NEEDED		
	48" x 48"	16.00		AS NEEDED		
W8-11	48" x 48"	16.00		AS NEEDED		
W20-1	48" x 48"	16.00		AS NEEDED (ESTIMATED 10)		
CMS sign to be installed a minimum of seven days prior to actual commencement of road work. Signs to be removed when road work begins.				2		

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- ANY REQUIRED PERMANENT SIGNING SHALL BE INSTALLED THE SAME DAY AS PERMANENT STRIPING
- ALL EXISTING SIGNING SHALL REMAIN IN PLACE DURING CONSTRUCTION. ALL 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.

CHANGEABLE MESSAGE BOARD - 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	T
		D	E	L	A	Y	S

CMS sign to be installed a minimum of seven days prior to actual commencement of road work. Signs to be removed when road work begins.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: MATTHEW J. JOHN
 SIGNATURE:
 DATE: 4/2/15 REG. NO. 51639

DRAWN BY: RLB DATE 1/7/14
 DESIGN BY: RLB DATE 1/7/14
 CHECKED BY: JR DATE 1/7/14



ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-24-74

TRAFFIC CONTROL
 QUANTITY