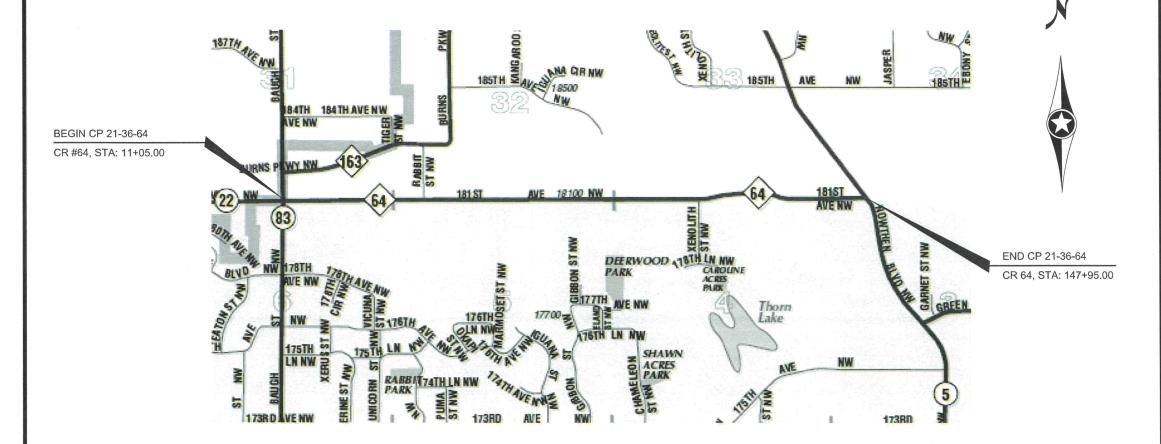
MINNESOTA DEPARTMENT OF TRANSPORTATION **ANOKA COUNTY**

BITUMINOUS SURFACING AND BITUMINOUS RECLAMATION CONSTRUCTION PLAN FOR

> LOCATED ON CR 64 (181ST AVE NW) BETWEEN BAUGH STREET NW NOWTHEN BLVD NW AND

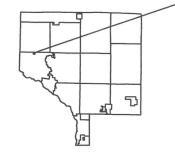
> > CR 64

13,690.00 FEET 0.00 FEET 13,690.00 FEET **GROSS LENGTH EXCEPTIONS-LENGTH**



PROJECT LOCATION

DESIGN DESIGNATION (CR 64) ESAL 20 FUNCTIONAL CLASSIFICATION R VALUE NO. OF TRAFFIC LANES 2 NO. OF PARKING LANES 0 2500 DESIGN SPEED 55 MPH ADT (2023) 2500 STOPPING SIGHT DISTANCE BASED ON: PROJ. ADT (2043) 148 HEIGHT OF EYE 3.5' HEIGHT OF OBJECT 2.0' PROJ. HCADT (2043) N/A SOIL FACTOR DESIGN SPEED NOT ACHIEVED AT: TON DESIGN



CITY OF RAMSEY & NOWTHEN ANOKA COUNTY MN/DOT TRANSPORTATION DISTRICT - METRO SECTION 4, 5, 6, 31, 32, 33 TOWNSHIP 32, 33 NORTH RANGE 25 WEST

ANOKA COUNTY ENGINEER

BY CKD APPR REVISION DATE: 12-16-2022 NAME: P:\23-01-00\CR 64 (Baugh-Nowthen Blvd)\Base\Proposed\CR64_TITLE.dgn

OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY
LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA PRINT NAME:

DRAWN BY ____MAR___ DATE_01/04/202 DESIGN BY MAR DATE 01/04/202

HECKED BY ____CO ___ DATE _12/06/2022



ANOKA COUNTY HIGHWAY DEPT.

TITLE SHEET

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE "SUPPLEMENTAL

THIS PLAN CONTAINS 18 SHEETS

INDEX

TITLE SHEET

DETAILS

TYPICAL SECTIONS

CONSTRUCTION PLAN

DESCRIPTION

STATEMENT OF ESTIMATED QUANTITIES

SUPERELEVATION TABULATIONS

SIGNING AND STRIPING PLANS

SHEET NO.

7-11

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE

21-36-64 COUNTY PROJECT _

Sheet __1_ of __18_ Sheets

	STATEMENT OF ESTIMATED QUANTITIES								
				TOTAL PROJECT QUANTITIES					
NOTES	ITEM NUMBER	ITEM DESCRIPTION	UNIT	ESTIMATED					
	2021.501	MOBILIZATION	LUMP SUM	1					
1,2	2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	43					
1,2	2104.503	SAWING BIT PAVEMENT (FULL DEPTH)	LIN FT	195					
2	2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	123					
3	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	606					
3	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	162					
4,5	2123.510	MOTOR GRADER	HOUR	12					
	2130.523	WATER	M GALLON	277					
6	2211.509	AGGREGATE BASE CLASS 5	TON	169					
	2215.504	FULL DEPTH RECLAMATION	SQ YD	39549					
4,5	2215.504	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	174					
7	2221.509	SHOULDER BASE AGGREGATE CLASS 5	TON	4335					
8	2232.604	MILL BITUMINOUS PAVEMENT (SPECIAL)	SQ YD	95					
9	2301.602	DRILL & GROUT DOWEL BAR (EPOXY COATED)	EACH	25					
	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	1986					
10	2360.509	TYPE SP 9.5 WEARING COURSE MIX (3;B)	TON	70					
11	2360.509	TYPE SP 12.5 WEARING COURSE MIX (4;C)	TON	37					
	2360.509	TYPE SP 12.5 WEARING COURSE MIX (4;C)	TON	9096					
	2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	123					
12	2540.602	MAIL BOX SUPPORT	EACH	40					
13	2563.601	TRAFFIC CONTROL	LUMP SUM	1					
14	2563.602	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	20					
	2574.507	COMMON TOPSOIL BORROW	CU YD	53					
	2575.508	HYDRAULIC REINFORCED FIBER MATRIX	POUND	1774					
15	2581.503	REMOVABLE PREFORM PAVEMENT MARKING TAPE	LIN FT	548					
16	2582.503	4" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	32290					
16	2582.503	4" BROKEN LINE MULTI-COMPONENT GROUND IN	LIN FT	1760					
16	2582.503	4" DOUBLE SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	4600					

	CONSTRUCTION NOTES
1	REFERENCE DETAILS FOR REMOVAL DETAILS.
2	CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
3	ITEM FOR BITUMINOUS DRIVEWAYS AND STREET APPROACHES. CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION
4	ITEM FOR SUPERELEVATION / GRADE CORRECTION.
5	ITEM USED TO MOVE EXCESS RECLAIM MATERIAL AT THE RECLAIM AREA LIMITS TO CREATE A SMOOTH TRANSITION BETWEEN THE PROPOSED AND EXISTING PAVEMENT.
6	GRAVEL BASE FOR CONCRETE AND BITUMINOUS STREET APPROACHES AND DRIVEWAYS.
7	ITEM INCLUDES 7 TONS FOR EACH GRAVEL ENTRANCE AND GRAVEL STREET APPROACH.
8	ITEM INCLUDES 2" DEEP MILL AT BEGINNING AND END OF PROJECT, ALL PAVED STREET APPROACHES, AND DRIVEWAYS; SEE DETAILS FOR DIMENSIONS.
9	ITEM USED FOR CONCRETE DRIVEWAYS
10	ITEM FOR BITUMINOUS DRIVEWAYS. DRIVEWAYS SHALL BE PAVED AFTER MAINLINE AND BEFORE FINAL STRIPING.
11	ITEM FOR STREET APPROACHES. STREET APPROACHES SHALL BE PAVED AFTER MAINLINE, AND BEFORE FINAL STRIPING. SEE BIT SUMMARY
12	MAILBOXES ARE TO BE INSTALLED AT THE EXISTING MAILBOX LOCATION OR AS DIRECTED BY THE LOCAL POST AUTHORITY, CONTRACTOR IS RESPONSIBLE FOR CONTRACTING. MAILBOX REMOVAL AND ALL MATERIALS ARE INCIDENTAL TO INSTALLATION.
13	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.
14	2 MESSAGE BOARDS, ONE ON EACH END OF PROJECT, SHALL BE INSTALLED 10 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.
15	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.
16	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING.

BITUMINOUS STREET SUMMARY					
	BITUMINOUS				
LOCATION	2360 TYPE SP 12.5 WEAR (4,C)	NOTES			
	TON				
Rabbit ST NW	21	[1]			
Xenolith ST NW	17	[1]			
PROJECT TOTAL	37				

BITUMINOUS SUMMARY NOTES:
[1] QUANTITY ESTIMATED FOR 2 LIFTS

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

	MNDOT STANDARD PLATES
PLATE NO.	DESCRIPTION
8000J	CHANNELIZERS
9350A	MAILBOX SUPPORT (SWING-AWAY TYPE)

	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						

								THEREBY CERTIFY THAT THE
								OR UNDER MY DIRECT SUP LICENSED PROFESSIONAL
								THE STATE OF MINNESOTA
								PRINT NAME:
								SIGNATURE:
NO	DATE	BY	CKD	APPR	REVISION	02/28/2023	11:10:25 AM	40.40.0000
NAME:	DATE:12-16-2022							

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 AUGE JR.
SIGNATURE:
DATE: 12-16-2022 LICENSE NO. 26511

DRAWN BY <u>MAR</u> DATE <u>01/04/2021</u>

DESIGN BY <u>MAR</u> DATE <u>01/04/2021</u>

CHECKED BY <u>CO</u> DATE <u>12/06/2022</u>



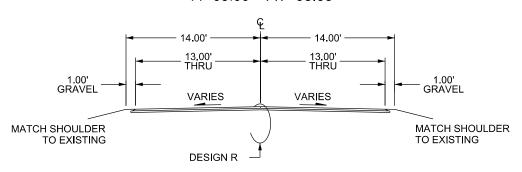
ANOKA COUNTY HIGHWAY DEPT. STATEMENT OF ESTIMATED QUANTITIES

COUNTY PROJECT 21-36-64

Sheet 2 of 18 Sheets

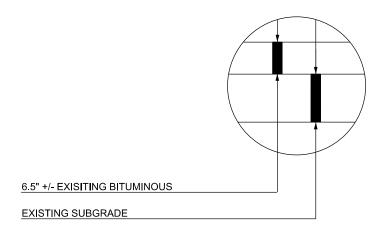
CR 64 - 181ST AVE NW EXISTING / PROPOSED SECTION

11+05.00 - 147+95.00

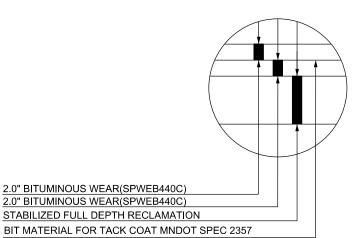


NOTE: 1' BUMPOUT AT LOW END OF SUPER

EXISTING SECTION



DESIGN R RECLAIM SECTION



								I HEREBY CERTIFY THAT OR UNDER MY DIRECT S LICENSED PROFESSION, THE STATE OF MINNESO PRINT NAME:
NO	DATE	BY	CKD	APPR	REVISION	01/11/2023	11:21:43 AM	SIGNATURE:
NAME:	DATE: <u>12-16-2022</u>							

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME
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PRINT NAME: GERALD J. AUGE JR.

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DATE: 12-16-2022 LICENSE NO. 26511

DRAWN BY MAR DATE 01/04/202*

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CHECKED BY CO DATE 12/06/2022



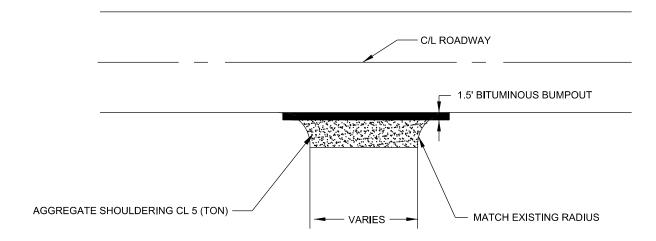
ANOKA COUNTY HIGHWAY DEPT. TYPICAL SECTIONS

COUNTY PROJECT 21-36-64

Sheet 3 of 18 Sheets

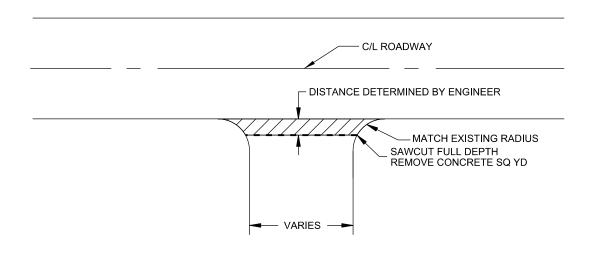
DRIVEWAY DETAIL

GRAVEL / FIELD ENTRANCE



DRIVEWAY DETAIL

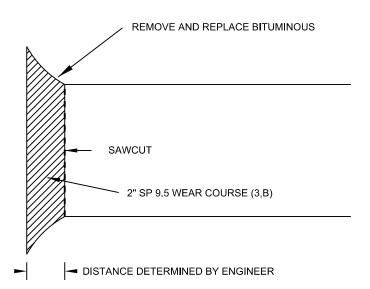
CONCRETE DRIVEWAY



RECLAIM AREA - DRIVEWAY DETAIL

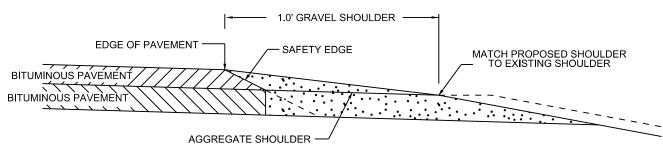
BITUMINOUS

PLAN VIEW



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

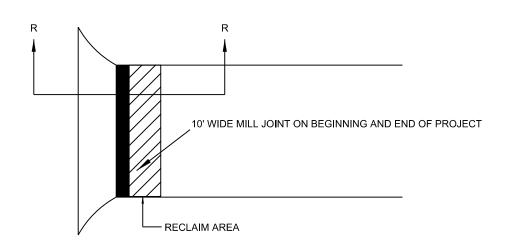
		I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	DRAWN BY DATE	ANOKA COUNTY		DETAILS
		PRINT NAME: GERALD J AUGE JR.	DESIGN BYMAR DATE	LUCLIMAN DEDT		
NO NAME:	DATE BY CKD APPR REVISION 01/11/2023 11:21:44 P:\23-01-00\CR_64_(Baugh-Nowthen Blvd)\Base\Proposed\CR64_DETAILS.dgn	SIGNATURE:	CHECKED BY CO DATE 12/06/2022 ANOKA COUNTY	HIGHWAY DEPT.	COUNTY PROJECT21-36-64	Sheet 4 of 18 Sheets

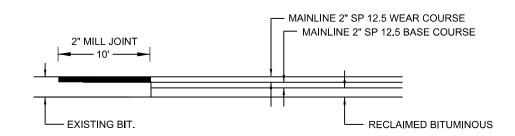
STREET APPROACH DETAIL (RECLAIM)

BITUMINOUS STREET

PLAN VIEW

SECTION R - R



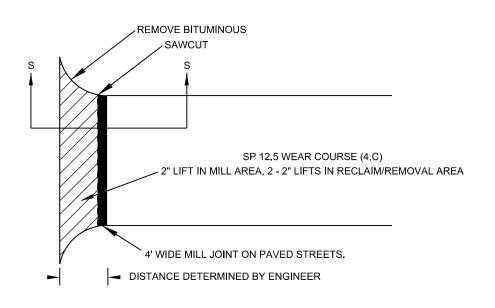


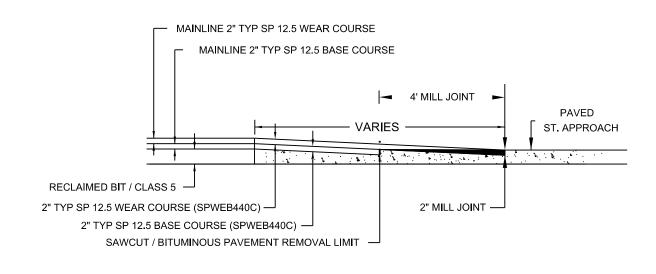
STREET APPROACH DETAIL (RECLAIM)

BITUMINOUS STREET

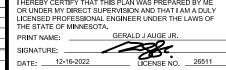
PLAN VIEW

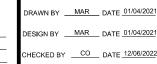
SECTION S - S





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ANOKA COUNTY HIGHWAY DEPT.

COUNTY PROJECT _____21-36-64

DETAILS

<u>21-36-64</u> Sheet <u>5</u> of <u>18</u> Sheets

SUPERELEVATION CORRECTION TAB CURVE 1&2							
STATION	POINT	LEFT GRADE	RIGHT GRADE				
106+00		-2.0%	-2.0%				
106+50	BEGIN LT/RT TRANS	-2.0%	-2.0%				
107+00		-2.5%	-1.2%				
107+50		-3.0%	-0.4%				
108+00		-3.5%	0.4%				
108+50	PC & BEGIN FULL SUPER LT	-4.0%	1.2%				
109+00	BEGIN FULL SUPER RT	-4.0%	2.0%				
109+50		-4.0%	2.0%				
110+00		-4.0%	2.0%				
110+50	END FULL SUPER LT/RT	-4.0%	2.0%				
111+00		-3.0%	1.0%				
111+50		-2.0%	0.0%				
112+00		-1.0%	-1.0%				
112+50	PC	0.0%	-2.0%				
113+00		1.0%	-3.0%				
113+50	BEGIN FULL SUPER LT/RT	2.0%	-4.0%				
114+00		2.0%	-4.0%				
114+50		2.0%	-4.0%				
115+00	END FULL SUPER LT	2.0%	-4.0%				
115+50	PT & END FULL SUPER RT	1.3%	-4.0%				
116+00		0.7%	-3.7%				
116+50		0.0%	-3.3%				
117+00		-0.7%	-3.0%				
117+50		-1.3%	-2.7%				
118+00	END LT TRANS	-2.0%	-2.3%				
118+50	END RT TRANS	-2.0%	-2.0%				
119+00		-2.0%	-2.0%				

SUPERELEVATION CORRECTION TAB CURVE 3&4							
STATION	POINT	LEFT GRADE	RIGHT GRADE				
119+50	BEGIN LT TRANS	-2.0%	-2.0%				
120+00	BEGIN RT TRANS	-1.0%	-2.0%				
120+50		0.0%	-2.8%				
121+00		1.0%	-3.5%				
121+50		2.0%	-4.3%				
122+00	PC & BEGIN FULL SUPER LT/RT	3.0%	-5.0%				
122+50		3.0%	-5.0%				
123+00		3.0%	-5.0%				
123+50		3.0%	-5.0%				
124+00		3.0%	-5.0%				
124+50		3.0%	-5.0%				
125+00	END FULL SUPER	3.0%	-5.0%				
125+50	PT & END FULL SUPER RT	1.6%	-5.0%				
126+00		0.2%	-3.6%				
126+50		-1.2%	-2.2%				
127+00	PC	-2.6%	-0.8%				
127+50	BEGIN FULL SUPER LT	-4.0%	0.6%				
128+00	BEGIN FULL SUPER RT	-4.0%	2.0%				
128+50		-4.0%	2.0%				
129+00		-4.0%	2.0%				
129+50	END FULL SUPER RT	-4.0%	2.0%				
130+00	PT	-4.0%	1.2%				
130+50	END FULL SUPER LT	-4.0%	0.4%				
131+00		-3.5%	-0.4%				
131+50		-3.0%	-1.2%				
132+00	END RT TRANS	-2.5%	-2.0%				
132+50	END LT TRANS	-2.0%	-2.0%				
133+00		-2.0%	-2.0%				

								I HEREBY CERTIFY THAT TH OR UNDER MY DIRECT SUP LICENSED PROFESSIONAL THE STATE OF MINNESOTA
								PRINT NAME:
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NO	DATE	BY	CKD	APPR	REVISION	01/11/2023	11:21:44 AM	DATE: 12-16-2022
NAME: P:\23-01-00\CR 64 (Baugh-Nowthen Blvd)\Base\Proposed\CR64 DETAILS.dgn								DATE: 12-16-2022

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

PRINT NAME: GERALD J AUGE JR.

SIGNATURE:

DATE: 12-16-2022 LICENSE NO. 26511

 DRAWN BY
 MAR
 DATE
 01/04/2021

 DESIGN BY
 MAR
 DATE
 01/04/2021

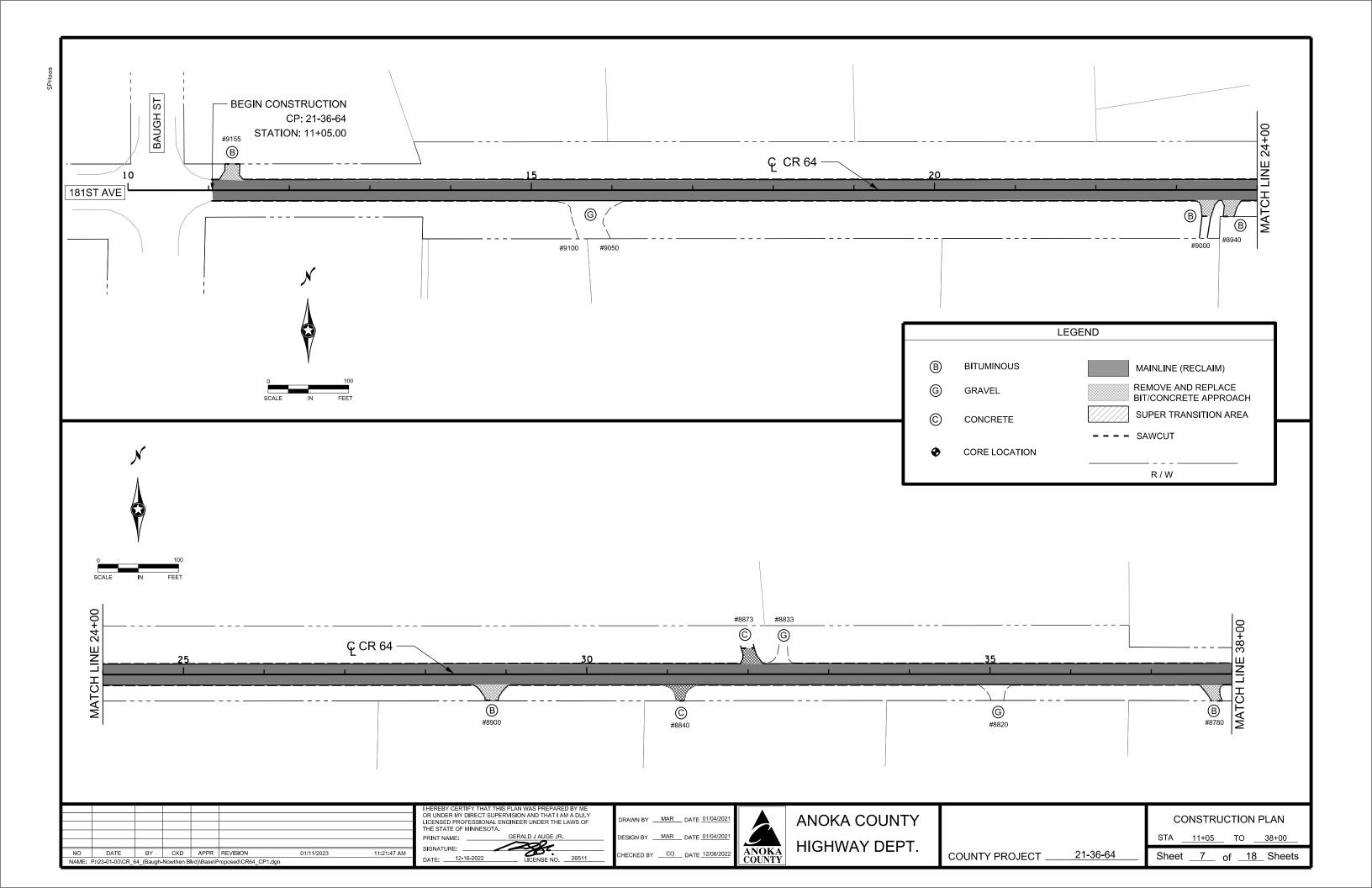
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 DATE
 12/06/2022

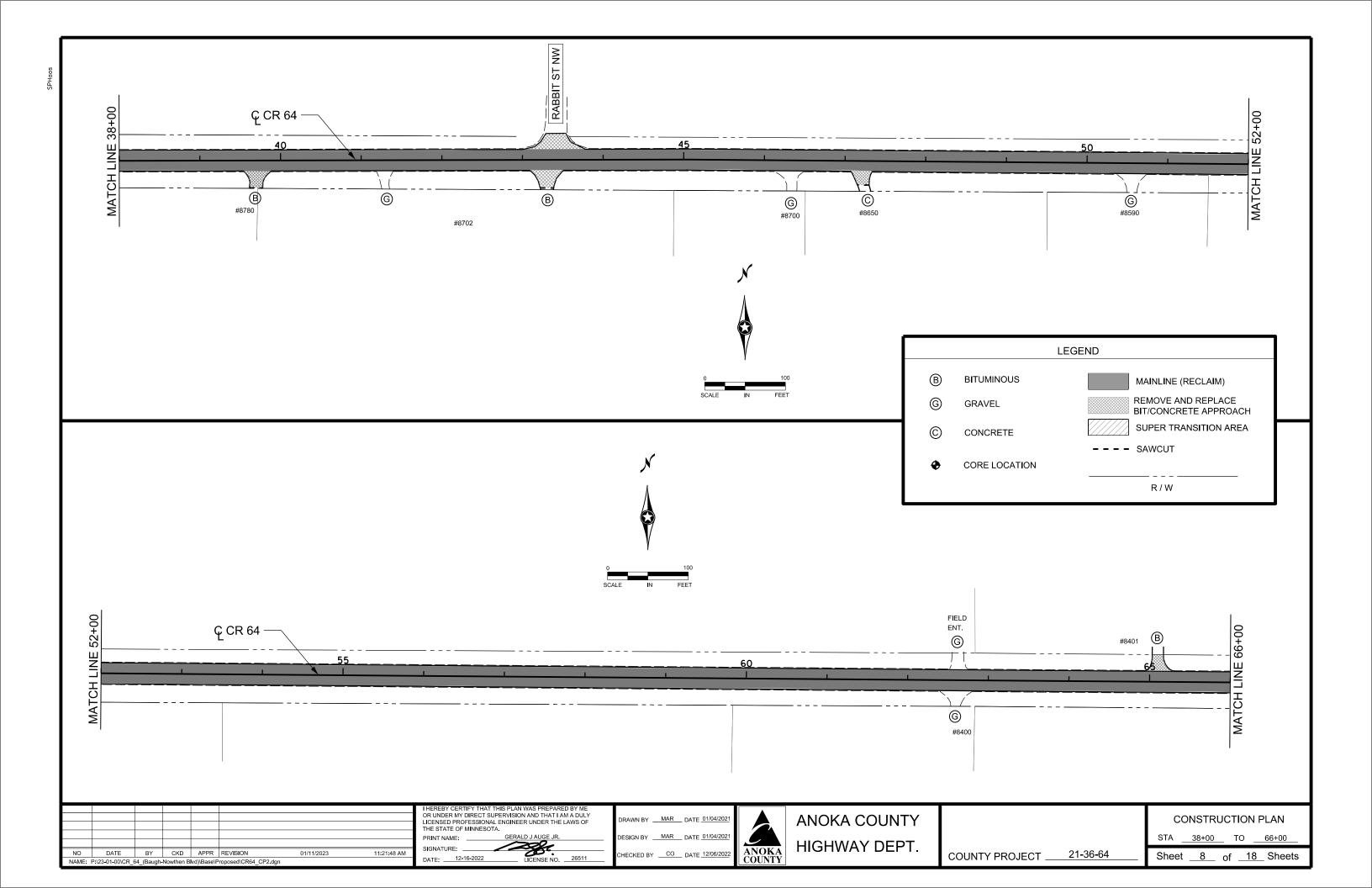


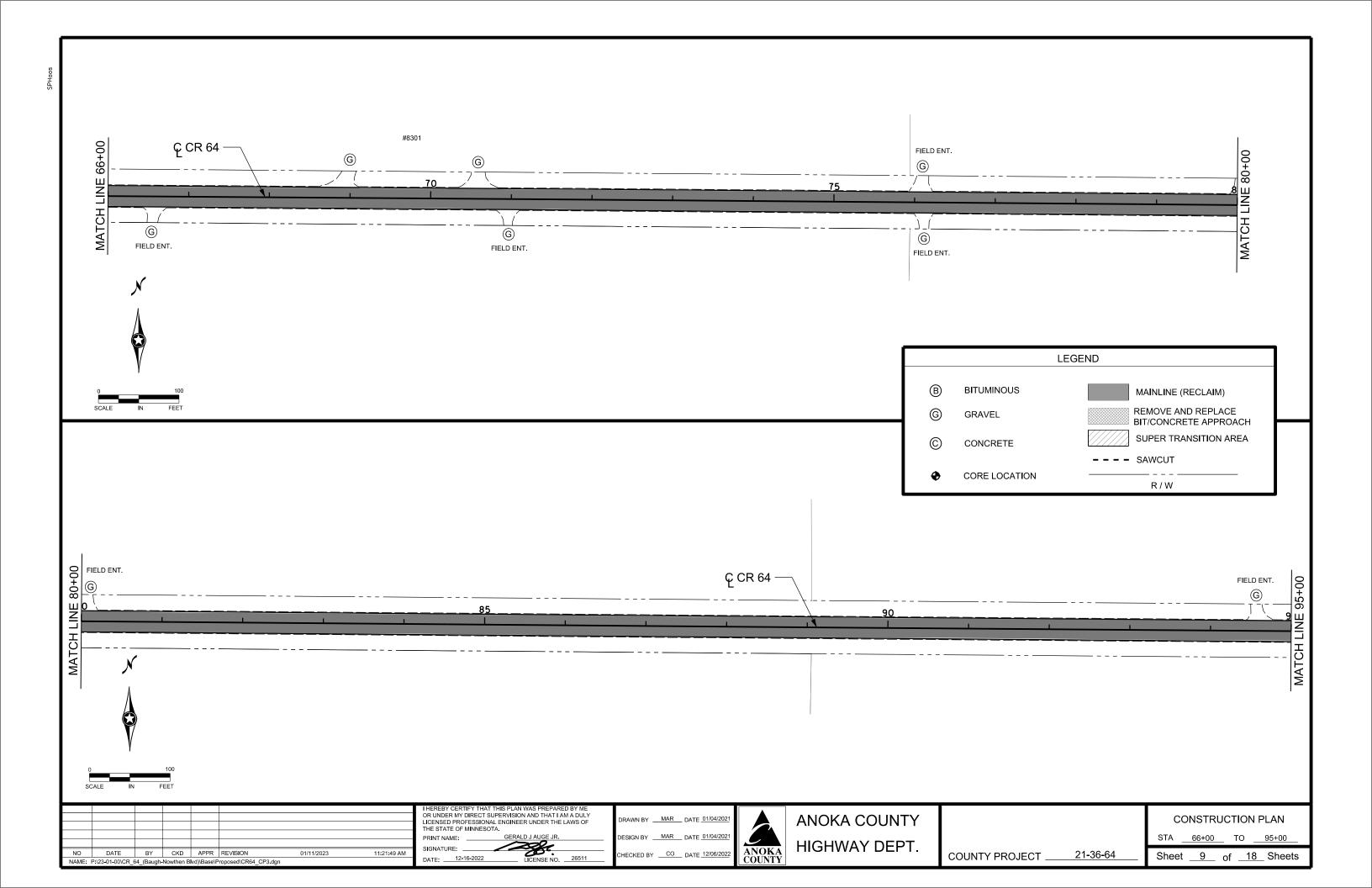
ANOKA COUNTY HIGHWAY DEPT. SUPERELEVATION TABULATIONS

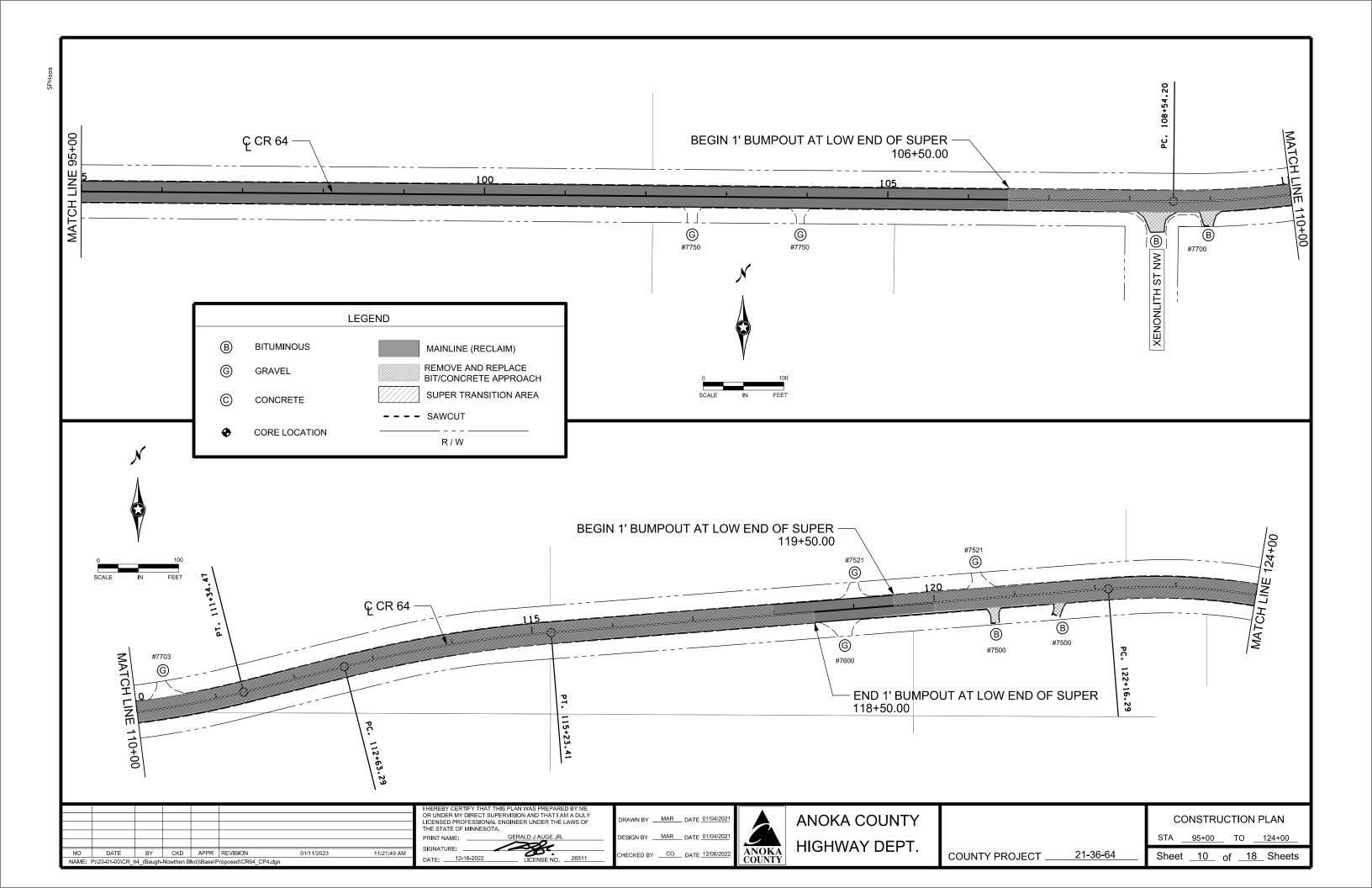
COUNTY PROJECT 21-36-64

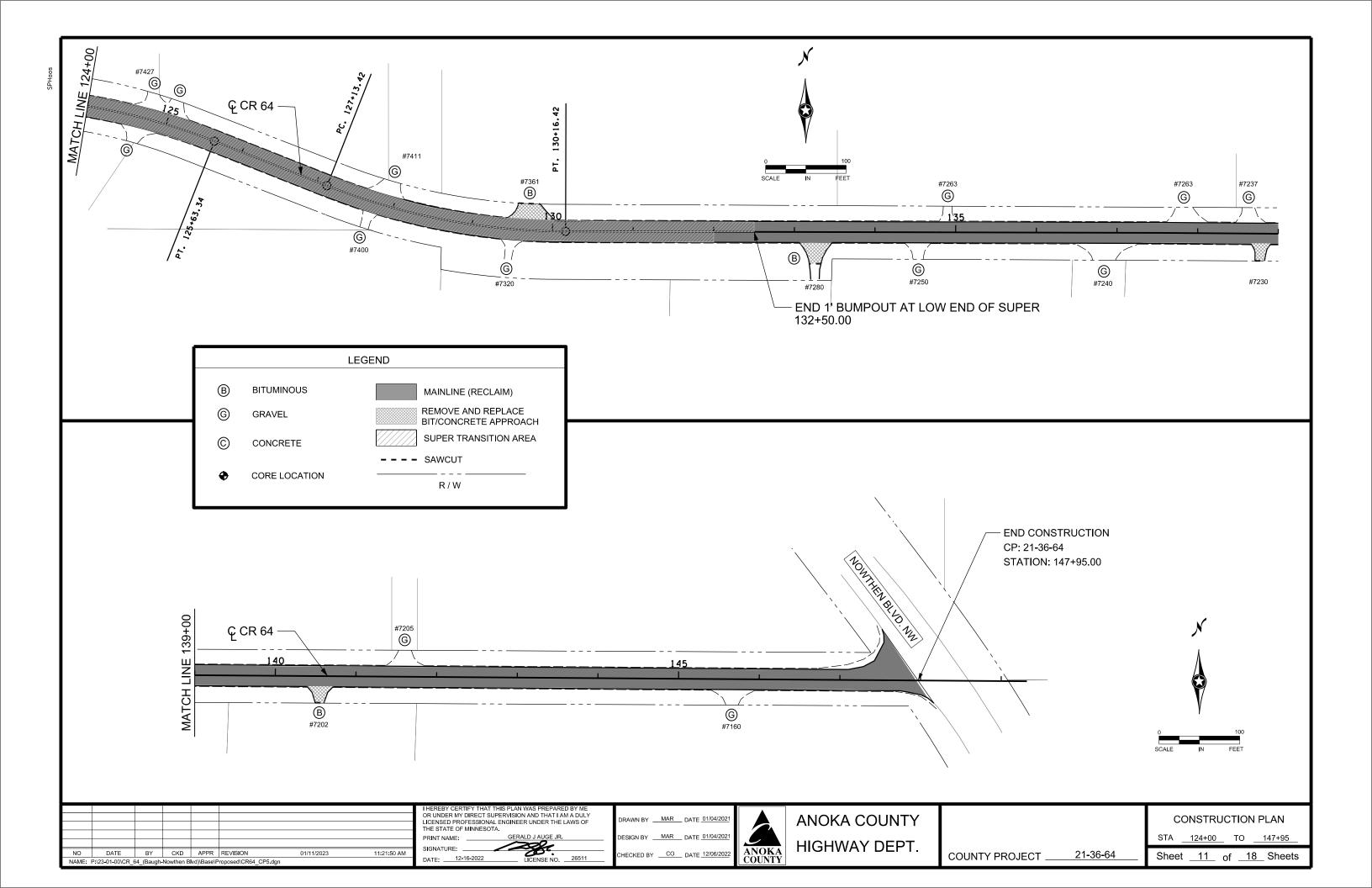
Sheet 6 of 18 Sheets











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 $\frac{1}{4}$ INCH UNDER OR $\frac{1}{4}$ 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.

MULTI COMPONENT (MULTI COMP):

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.

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.

A MULTI COMP LINE SHALL BE APPLIED WITH A MINIMUM THICKNESS OF 20 MILS (WET) AND 4" WIDE . GLASS BEADS SHALL BE APPLIED AT A MINIMUM RATE OF 25LBS POUNDS 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:

BY

CKD APPR

NAME: P:\23-01-00\CR_64_(Baugh-Nowthen Blvd)\Base\Traffic\Perm Pvmt Mrkg Guide Notes 2021.dwg

NO

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.

REVISION

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 APPLICAITON 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 FILD 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.

PAVEMENT MARKING TABULATION						
ITEM	UNIT	TOTAL QUANTITY	NOTES			
4" SOLID LINE MULTICOMP GROUND IN (WHITE)	LIN FT	27350				
4" SOLID LINE MULTICOMP GROUND IN (YELLOW)	LIN FT	4940				
4" BROKEN LINE MULTI COMP GROUND IN (YELLOW)	LIN FT	1760	1			
4" SOLID DBL LINE MULTICOMP GROUND IN (YELLOW) LIN FT 4600						

1 10' STRIPE, 40' GAP

SYMBOLS & MATERIALS LEGEND

CROSSWALK BLOCK WHITE - POLY PREFORM

PAVEMENT MESSAGE (LEFT ARROW)
POLY PREFORM

STRIPING KEY

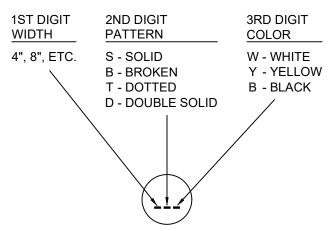
CIRCLE - MULTI COMP GROUND IN

TRIANGLE - PAINT

SQUARE - POLY PREFORM THERMOPLASTIC



PENTAGON - REMOVABLE PREFORMED PLASTIC MARKING



EXAMPLE: (4SW) = SOLID LINE WHITE - MULTI COMP

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

DOTTED LINE - 15' CYCLE (3' LINE, 12' GAP)
UNLESS SHOWN OTHERWISE IN THE PLAN

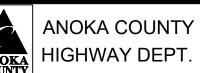
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

JORGE R. BERNALDELGADO DATE: _02-28-23
LICENSE NO. 572

DRAWN BY ____TMV_ DATE __09/22/22

DESIGN BY ____TMV_ DATE __09/22/22

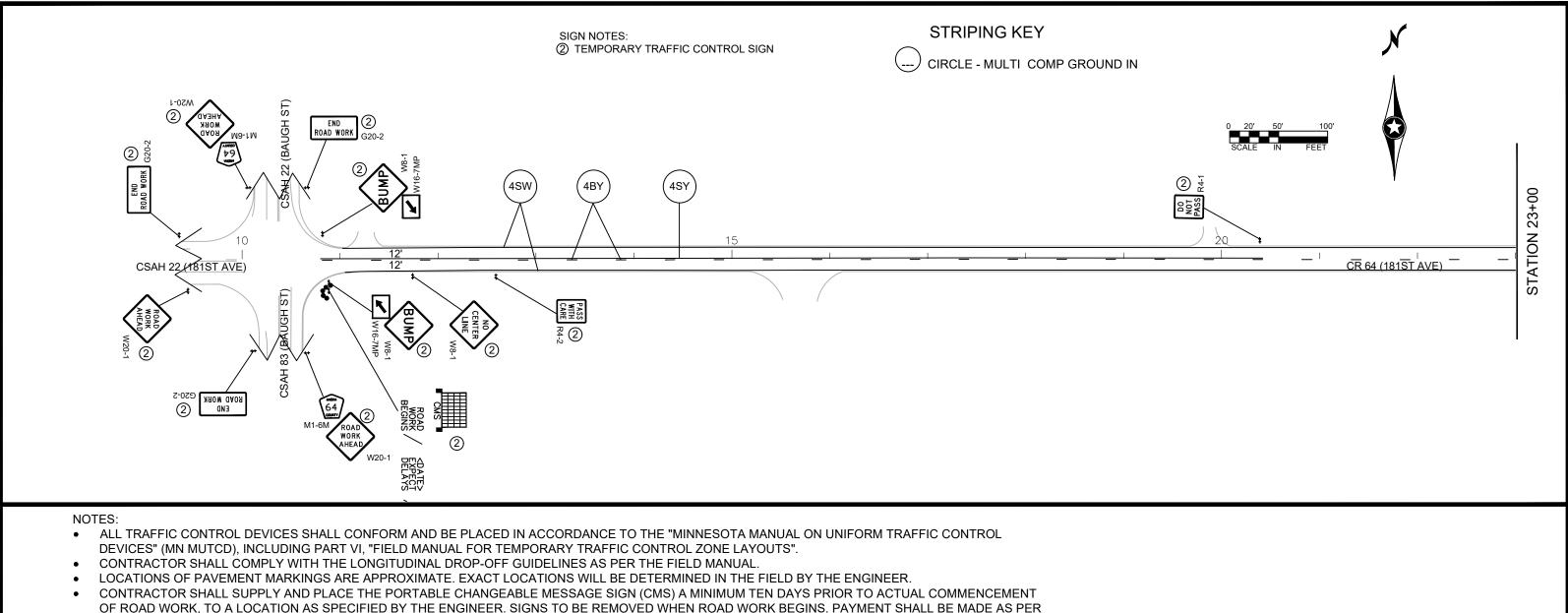
CHECKED BY __JRB__ DATE __10/24/22



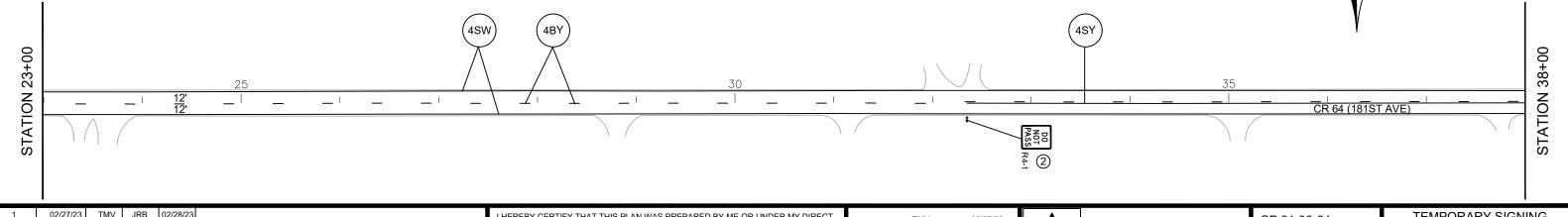
CP 21-36-64

PERMANENT PAVEMENT MARKING PLAN DETAILS

SHEET 12A OF 18 SHEETS



- 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.



BY CKD APPR REVISION NAME: P:\22-01-00\CR_64_(Baugh-Nowthen Blvd)\Base\Traffic\Signing & Striping.dwg

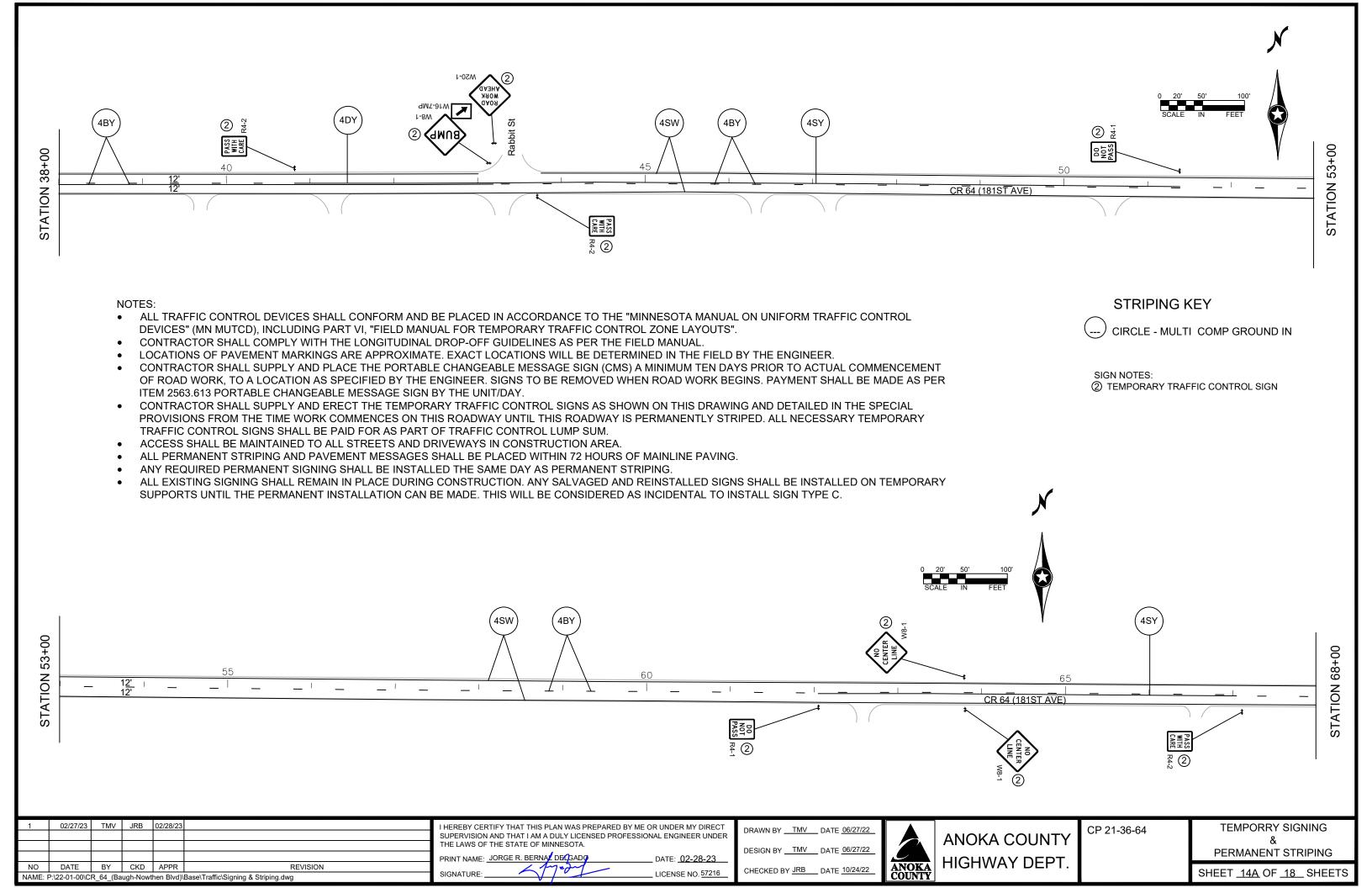
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER

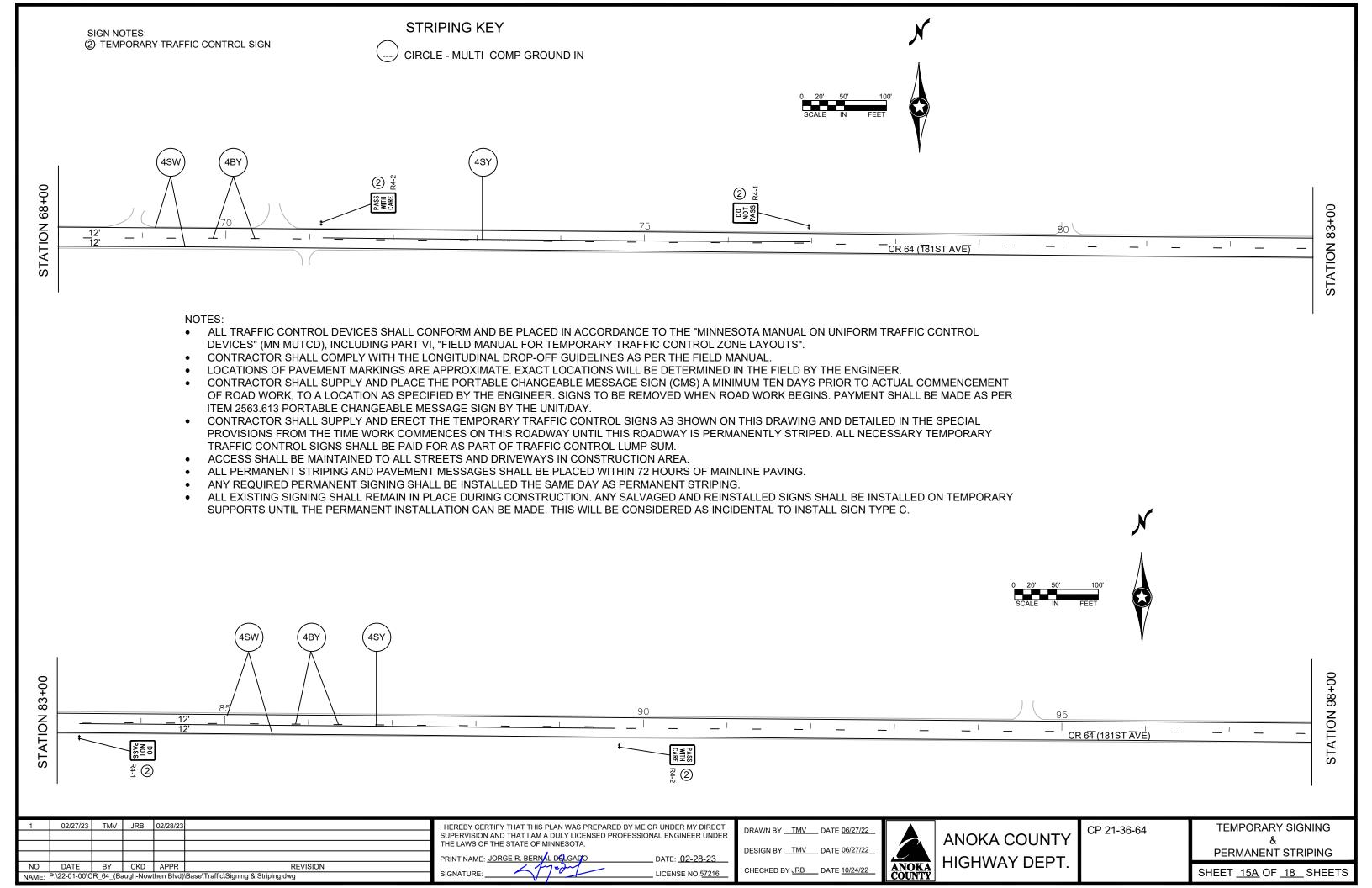
DRAWN BY ___TMV __ DATE <u>06/27/22</u> DESIGN BY TMV DATE 06/27/22 CHECKED BY JRB DATE 10/24/22

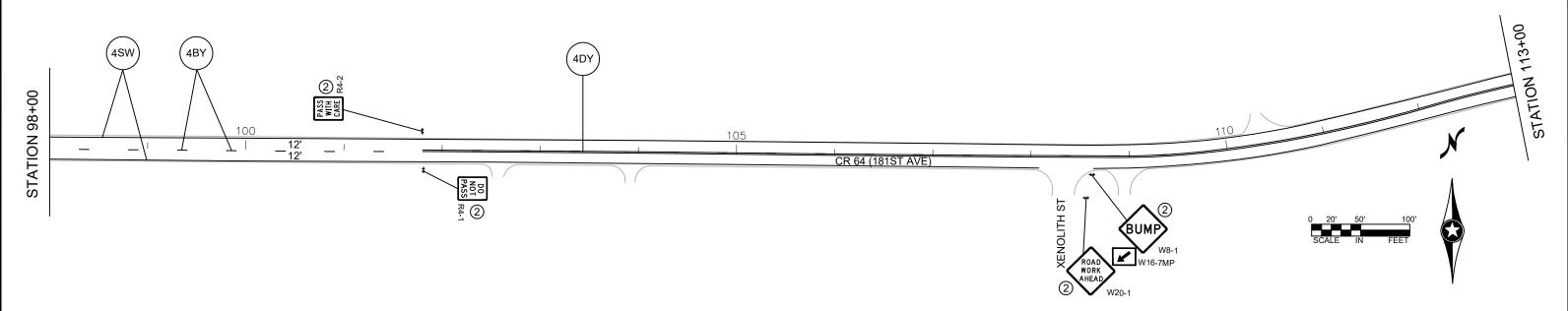
ANOKA COUNTY HIGHWAY DEPT.

CP 21-36-64

TEMPORARY SIGNING PERMANENT STRIPING SHEET <u>13A</u> OF <u>18</u> SHEETS

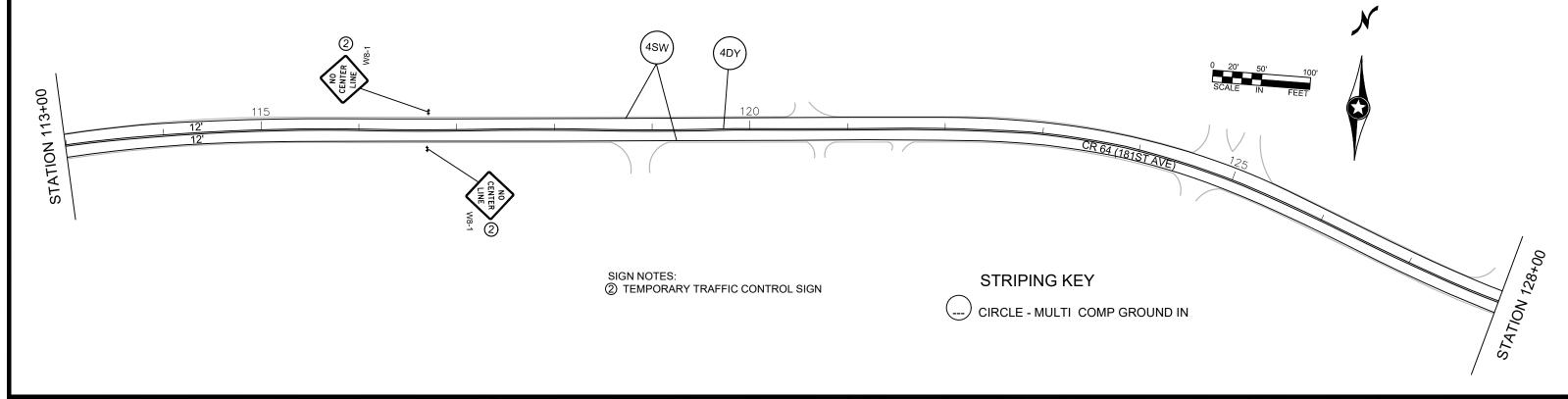






NOTES

- 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".
- 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 (CMS) 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.
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LICENSE NO. 57216

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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 MINISOTA.

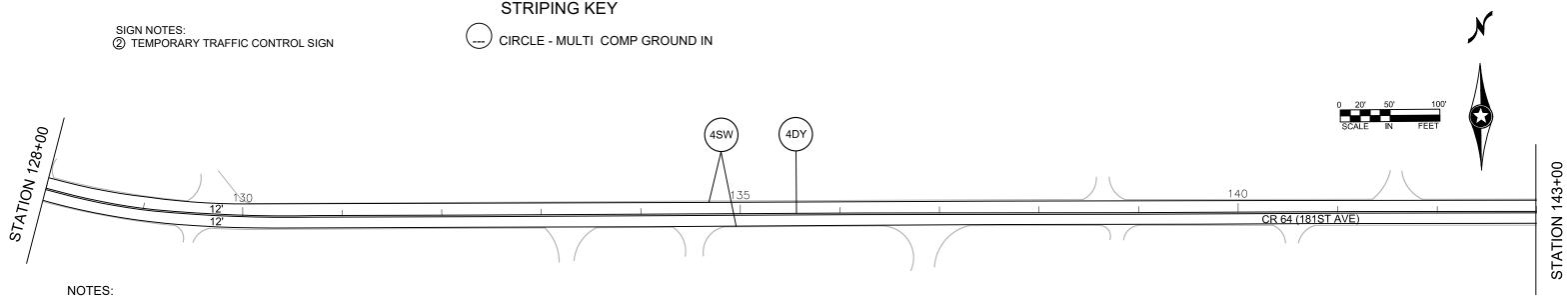
DRAWN BY ___TMV __ DATE _06/27/22

ANOKA COUNTY
HIGHWAY DEPT.

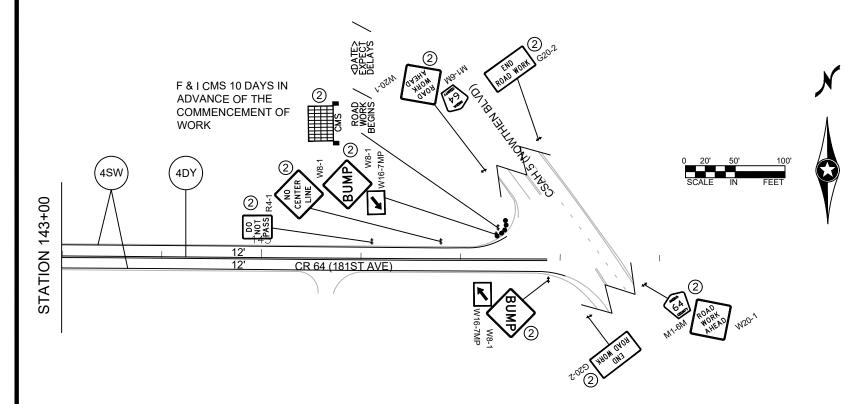
CP 21-36-64

1-36-64 TEMPORARY SIGNING & PERMANENT STRIPING

SHEET <u>16A</u> OF <u>18</u> SHEETS



- 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".
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1	02/27/23	TMV	JRB	02/28/23			
NO	DATE	BY	CKD	APPR	REVISION		
NAME:	NAME: P:\22-01-00\CR 64 (Baugh-Nowthen Blyd)\Base\Traffic\Signing & Striping.dwg						

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

DESIGN BY TMV DATE 06/27/22 DATE: 02-28-23 CHECKED BY JRB DATE 10/24/22

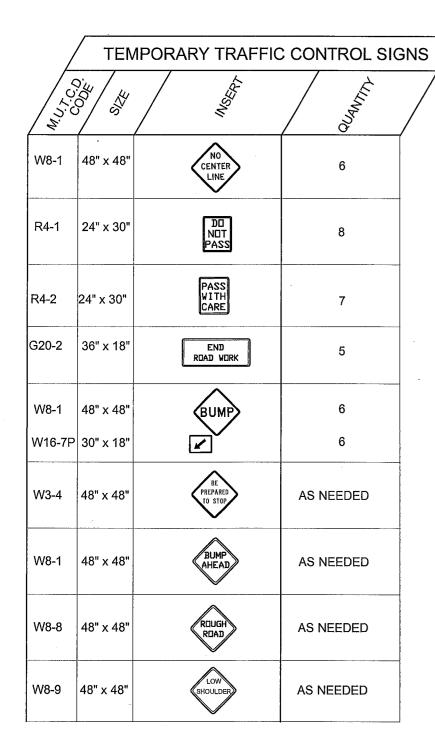
DRAWN BY ___TMV __ DATE _06/27/22



ANOKA COUNTY HIGHWAY DEPT

CP 21-36-64

TEMPORARY SIGNING PERMANENT STRIPING SHEET 17A OF 18 SHEETS



TEMPORARY TRAFFIC CONTROL SIG								
77.77			MSERY		SUMMITS			
W8-11	48" x 48"		JNEVEN LANES	AS	NEEDED			
W8-23	48" x 48"	(s	NO HOULDER	AS	NEEDED			
M1-6M W20-1	24" x 24" 48" x 48"	64 0000000	RUAD		4 EEDED IMATED 6)			
W20-4	48" x 48"		ONE LANE ROAD AHEAD		NEEDED			
W20-7	48" x 48"	<	(1)	AS	NEEDED			
REFLECTORIZED REBOUNDABLE DRUM AS NEEDED (ESTIMATED 10)								
CMS sign to be placed a minimum of ten days prior to actual commencement of road work. Signs to be removed when road work begins.								

CHANGEABLE MESSAGE BOARD - MESSAGE SEQUENCE LAYOUT

		R	0	Α	D		
		W	0	R	K		
	В	Е	G	I	N	S	

<	D	Α	Т	Е	^	
Е	Х	Р	Е	C	Т	
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CMS SIGN TO BE PLACED A MINIMUM OF TEN DAYS PRIOR TO ACTUAL COMMENCEMENT OF ROAD WORK. SIGNS TO BE REMOVED WHEN ROAD WORK BEGINS.

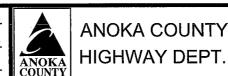
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DRAWN BY <u>TMV</u> DATE <u>06/27/22</u>

DESIGN BY <u>TMV</u> DATE <u>06/27/22</u>

CHECKED BY <u>JRB</u> DATE <u>10/24/22</u>



CP 21-36-64

TEMPORARY SIGNING
&
PERMANENT STRIPING
SHEET 18 OF 18 SHEETS