

MINNESOTA DEPARTMENT OF TRANSPORTATION

ANOKA COUNTY

CONSTRUCTION PLAN FOR _____ BITUMINOUS SURFACING, CURB & GUTTER, AND BITUMINOUS RECLAMATION

LOCATED ON CR 140 BETWEEN 20TH AVENUE AND EAST COUNTY LINE

GOVERNING SPECIFICATIONS

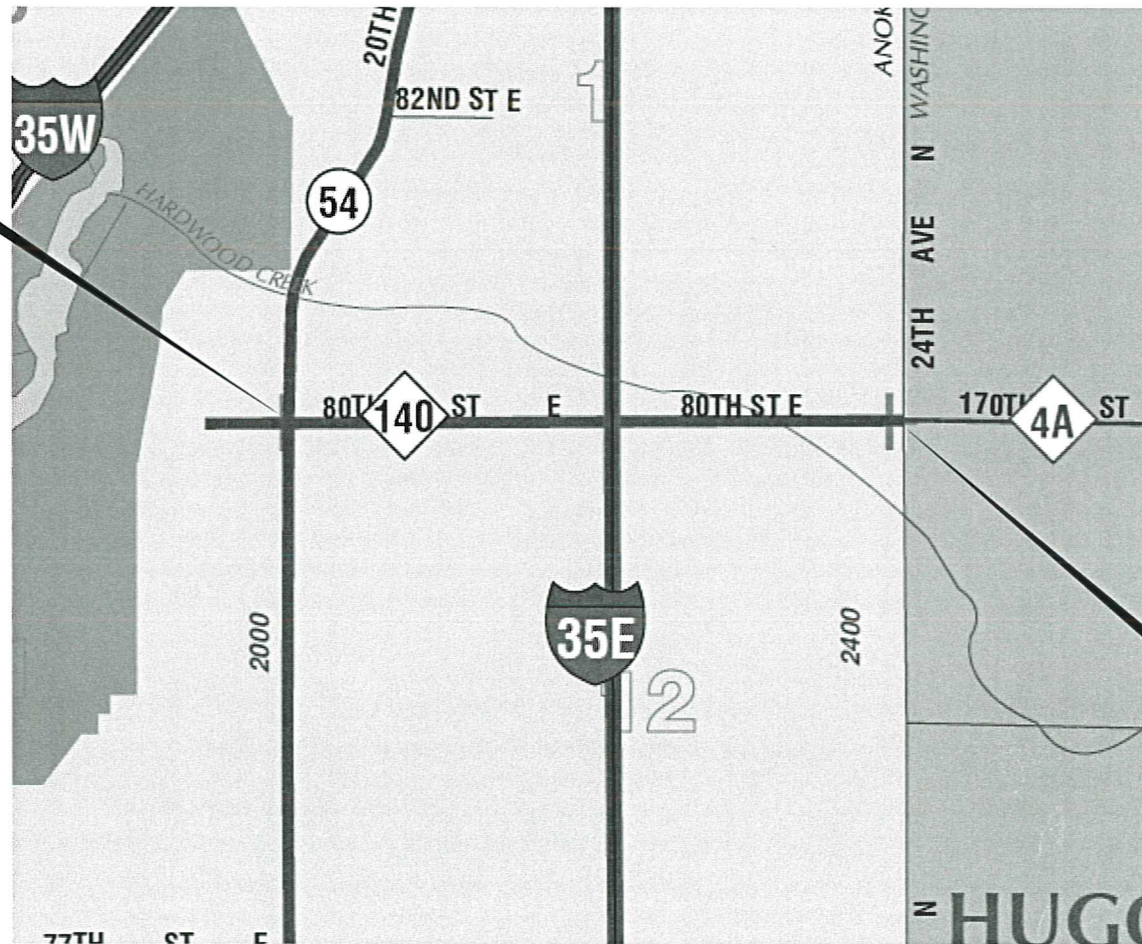
THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE INSTALLED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MNMUTCD), AND PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."

THIS PLAN CONTAINS 12 SHEETS

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3-4	TYPICAL SECTIONS
5-6	DETAILS
7-8	CONSTRUCTION PLAN
9-12	SIGNING AND STRIPING PLANS

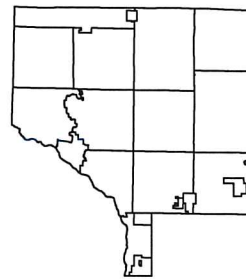
BEGIN CP 18-22-140
CR 140, STA: 10+00.00



END CP 18-22-140
CR 140, STA: 63+50.00

PROJECT LOCATION

CR #140	
GROSS LENGTH	5333 FEET = 1.01 MILES
EXCEPTIONS-LENGTH	275 FEET = 0.050 MILES
NET LENGTH	5333 FEET = 1.01 MILES
DESIGN SPEED	55 MPH
CURRENT ADT	1,294



CITY OF LINO LAKES
ANOKA COUNTY
MN/DOT TRANSPORTATION DISTRICT - METRO
SECTION 1
TOWNSHIP 31 NORTHWEST
RANGE 22 WEST

Approved

[Signature] 4/19/18
ANOKA COUNTY ENGINEER

NO	DATE	BY	CKD	APPR	REVISION	TIME

NAME: P:\18-01-00\CR_140_(20thAve-ECountyLine)\Base\PROPOSED\PROPOSED.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: JOSEPH J. MACPHERSON
SIGNATURE: *[Signature]*
DATE: 4/19/18 LICENSE NO. 46732

DRAWN BY BRM DATE 1/16/2018
DESIGN BY BRM DATE 1/16/2018
CHECKED BY HG DATE 04/12/2018



ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT 18-22-140

TITLE SHEET

Sheet 1 of 12 Sheets

STATEMENT OF ESTIMATED QUANTITIES				
NOTES	ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL PROJECT QUANTITIES ESTIMATED
	2021.501	MOBILIZATION	LUMP SUM	1
	2104.502	REMOVE BITUMINOUS FLUME	EACH	3
1	2104.505	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	152
	2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	293
	2104.523	SALVAGE PIPE APRON	EACH	1
13	2105.602	CONSTRUCT TURN LANE (24TH AVE)	EACH	1
13	2105.602	CONSTRUCT TURN LANE (20TH AVE)	EACH	1
	2105.504	GEOTEXTILE FABRIC TYPE IV	SQ YD	50
2	2123.503	MOTOR GRADER	HOUR	10
14	2123.509	DOZER	HOUR	10
	2130.501	WATER	MGAL	80
3	2211.501	AGGREGATE BASE CLASS 5	TON	72
17	2215.501	FULL DEPTH RECLAMATION	SQ YD	11466
4	2215.502	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	90
	2221.501	SHOULDER BASE AGGREGATE CLASS 5	TON	465
	2232.501	MILL BITUMINOUS SURFACE (2.0")	SQ YD	260
	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL	573
1,5,6	2360.501	TYPE SP 12.5 WEARING COURSE MIXTURE (4,C)	TON	4351
	2501.502	INSTALL CONCRETE APRON	EACH	1
	2503.503	15" RCP PIPE SEWER CLIII	LIN FT	8
	2511.507	RANDOM RIPRAP CLASS II	CU YD	25
	2531.503	CONCRETE CURB AND GUTTER DESIGN B412	LIN FT	940
	2531.604	CONCRETE DRAINAGE FLUME	SQ YD	21
11	2540.602	MAIL BOX SUPPORT	EACH	7
7	2563.601	TRAFFIC CONTROL	LUMP SUM	1
8	2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	UNIT DAY	20
12	2574.525	COMMON TOPSOIL BORROW (LV)	CU YD	30
15,16	2575.523	EROSION CONTROL BLANKETS CATEGORY 0	SQ YD	500
9	2581.501	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	LIN FT	212
10	2582.502	4" SOLID LINE MULTI COMP	LIN FT	12780
10	2582.502	4" BROKEN LINE MULTI COMP	LIN FT	930
10	2582.502	4" DOUBLE SOLID LINE MULTI COMP	LIN FT	625

MNDOT STANDARD PLATES	
PLATE NUMBER	DESCRIPTION
7100H	CONCRETE CURB AND GUTTER (DESIGN B & V)
8000J	CHANNELIZERS (3 SHEETS)
9350A	MAILBOX SUPPORT (SWING-AWAY TYPE)

CONSTRUCTION NOTES	
1	CONTRACTOR IS RESPONSIBLE FOR CONTACTING PROPERTY OWNER 48 HOURS BEFORE STARTING OPERATION.
2	ITEM USED TO MOVE EXCESS RECLAIM MATERIAL AT THE RECLAIM AREA LIMITS, AND AT BRIDGE ENDS, TO CREATE A SMOOTH TRANSITION BETWEEN THE PROPOSED AND EXISTING PAVEMENT.
3	GRAVEL BASE FOR CONCRETE / BITUMINOUS DRIVEWAYS, AND BITUMINOUS STREET APPROACHES ALSO 7 TONS FOR EACH GRAVEL ENTRANCE
4	MATERIAL SHOULD BE HAULED FROM TRANSITION AREAS AND USED FOR TURN LANE AREAS. EXCESS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
5	24 TONS FOR DRIVEWAYS TO BE INCLUDED IN THIS ITEM. DRIVEWAYS SHALL BE PAVED AFTER MAINLINE PAVING AND BEFORE FINAL STRIPING.
6	ITEM FOR BITUMINOUS DRIVEWAY AND STREET APPROACHES. DRIVEWAY AND STREET APPROACHES SHALL BE PAVED AFTER MAINLINE PAVING AND BEFORE FINAL STRIPING.
7	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 PAVEMENT MARKINGS ARE NOT PRESENT.
8	2 MESSAGE BOARDS, ONE ON EACH END OF PROJECT, WILL BE INSTALLED 10 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.
9	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.
10	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING.
11	MAILBOXES SHALL BE INSTALLED AT THE EXISTING MAILBOX LOCATION OR AS DIRECTED BY THE LOCAL POSTAL AUTHORITY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE LOCAL POSTAL AUTHORITY. MAILBOX REMOVAL AND ALL MATERIALS NECESSARY FOR INSTALLATION ARE INCIDENTAL TO THIS ITEM.
12	ITEM USED AT ENGINEER'S DISCRETION FOR RESTORATION OF DISTURBED AREAS ALONG DRIVEWAYS, STREET APPROACHES AND BEHIND CURB
13	ITEMS INCLUDED IN THE TURNLANE BY THE EACH ARE - COMMON EXCAVATION, SELECT GRANULAR BORROW, TOPSOIL, AGG BASE CL-5 AND REMOVE AND REPLACE TRAFFIC SIGNS.
14	ITEM USED FOR DITCH GRADING FOLLOWING CONSTRUCTION OF RIGHT TURN LANES. ITEM SHALL BE USED ONLY AS NECESSARY AS DETERMINED BY THE ENGINEER.
15	ITEM FOR RESTORATION ALONG PROFILE, CROSS-SLOPE AND / OR TURNLANE AREAS.
16	TYPE 1 FERTILIZER AND TYPE 25-121 SEED ARE INCIDENTAL TO THIS ITEM. SEE "BASIS OF PLANNED QUANTITIES" FOR APPLICATION RATES
17	BITUMINOUS CURB REMOVAL INCIDENTAL TO FULL DEPTH RECLAMATION.

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
2574	FERTILIZER TYPE 1	350 LBS / ACRE
2575	SEED MIXTURE TYPE 25-121	61 LBS / ACRE
2581	REMOVABLE PREFORM PAVEMENT MARKING TAPE	2' AT 50' INTERVALS

NO	DATE	BY	CKD	APPR	REVISION	04/19/2018	8:13:48 AM
NAME: P:\18-01-00\CR_140_(20thAve-ECountyLine)\Base\PROPOSED\PROPOSED.dgn							

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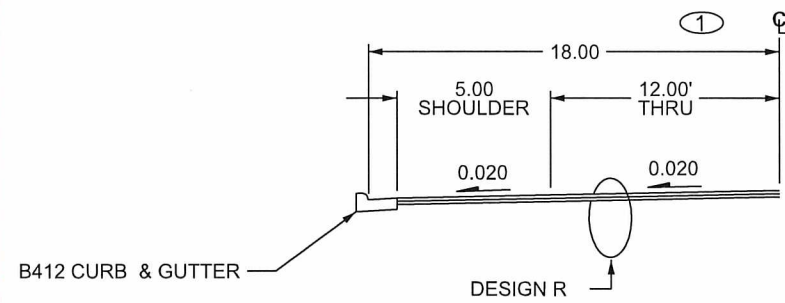
ANOKA COUNTY
 HIGHWAY DEPT.

COUNTY PROJECT 18-22-140

STATEMENT OF ESTIMATED QUANTITIES
 Sheet 2 of 12 Sheets

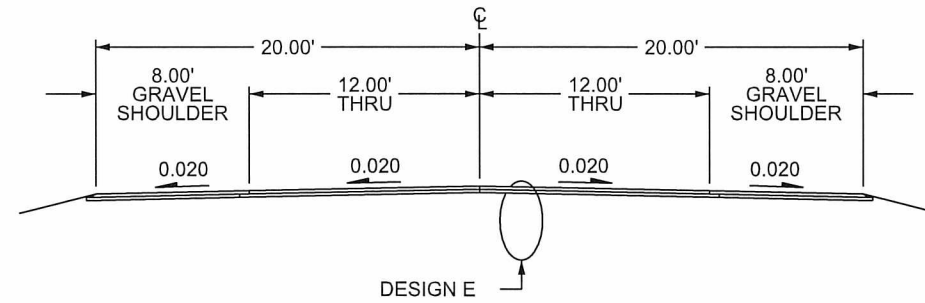
80TH STREET - CR 140
(PROPOSED) SECTION

58+35 - 63+80



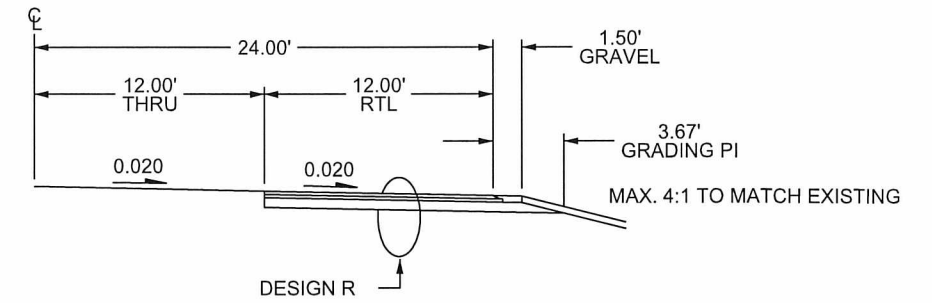
CR140- 80TH STREET
(EXISTING) SECTION

10+00 - 63+80



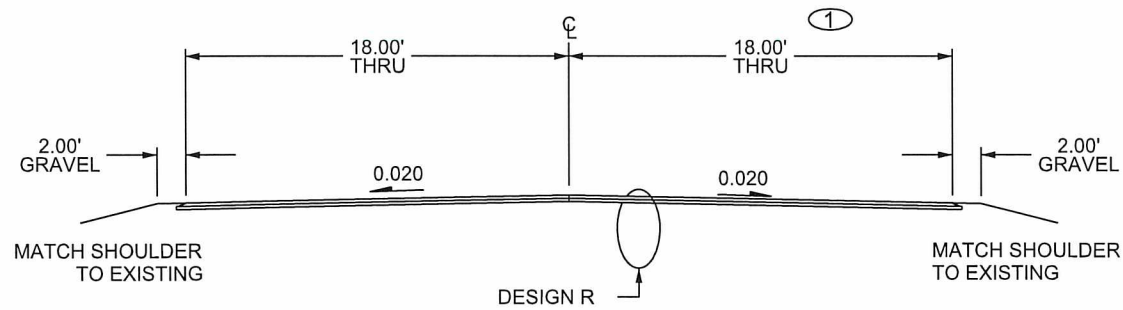
80TH STREET - CR 140
RIGHT TURN LANE

59+00 - 63+80



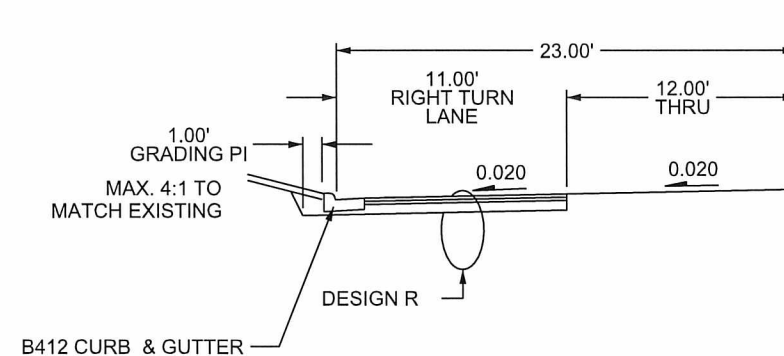
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(PROPOSED) SECTION

10+61-63+50

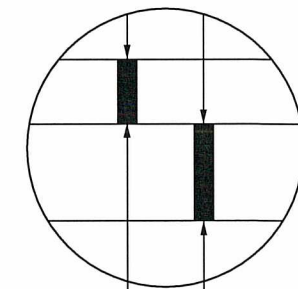


80TH STREET - CR 140
RIGHT TURN LANE

10+61 - 15+75

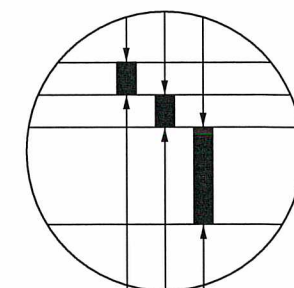


DESIGN E
EXISTING SECTION



5 1/4" EXISTING BITUMINOUS
6" EXISTING AGGREGATE BASE

DESIGN R
RECLAIM SECTION



2.0" BITUMINOUS WEAR(SPWEB440C)
2.0" BITUMINOUS WEAR(SPWEB440C)
RECLAIMED BITUMINOUS

① TO BE PAVED FULL 18' WIDTH.
NO PAVING JOINTS ALLOWED.

CONSTRUCTION NOTE:
ALL PAVING SHALL BE PULLED IN THE SAME
DIRECTION AS TRAFFIC FOR THAT LANE OF
TRAVEL.

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CHECKED BY: HG DATE: 04/12/2018



ANOKA COUNTY
HIGHWAY DEPT.

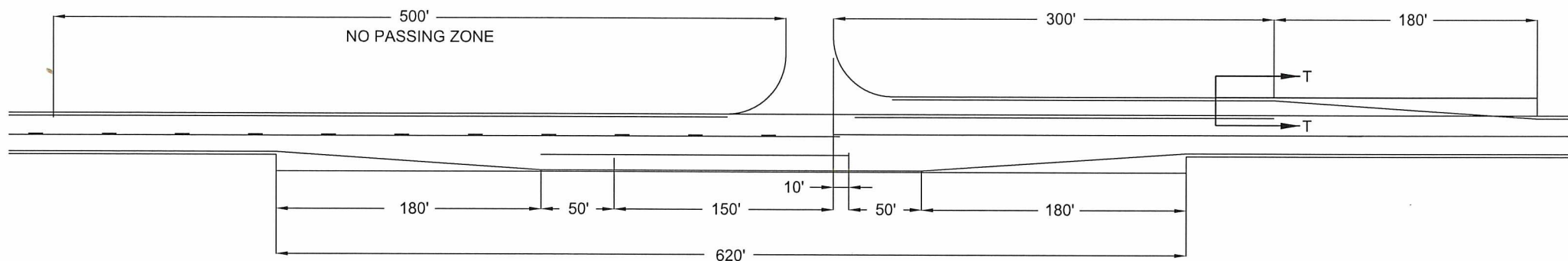
COUNTY PROJECT 18-22-140

TYPICAL SECTIONS

Sheet 3 of 12 Sheets

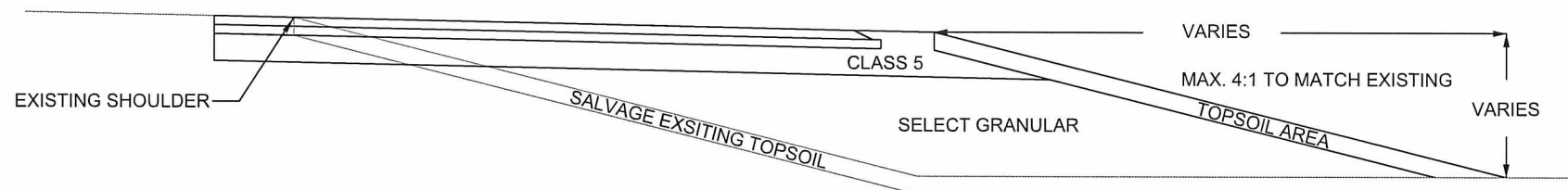
RIGHT TURN AND BYPASS LANE

GENERAL LAYOUT
PLAN VIEW



RIGHT TURN AND BYPASS LANE

SECTION T - T



RIGHT TURN LANE AND BYPASS LANE TAB

STREET	STATION RANGE	RTL / BYPASS	COMMON EXCAVATION (CU YDS)	GRANULAR BORROW (CV) (CU YDS)	TOPSOIL BORROW (LV) (CU YDS)	CLASS 5 (TON)
20th Ave	11+25 - 15+75	RTL	80	75	40	40
24th Ave	59+00-63+80	RTL	117	100	50	80
TOTALS:			197	175	90	120

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 DESIGN BY: BRM DATE: 1/16/2018
 CHECKED BY: HG DATE: 2/27/2018



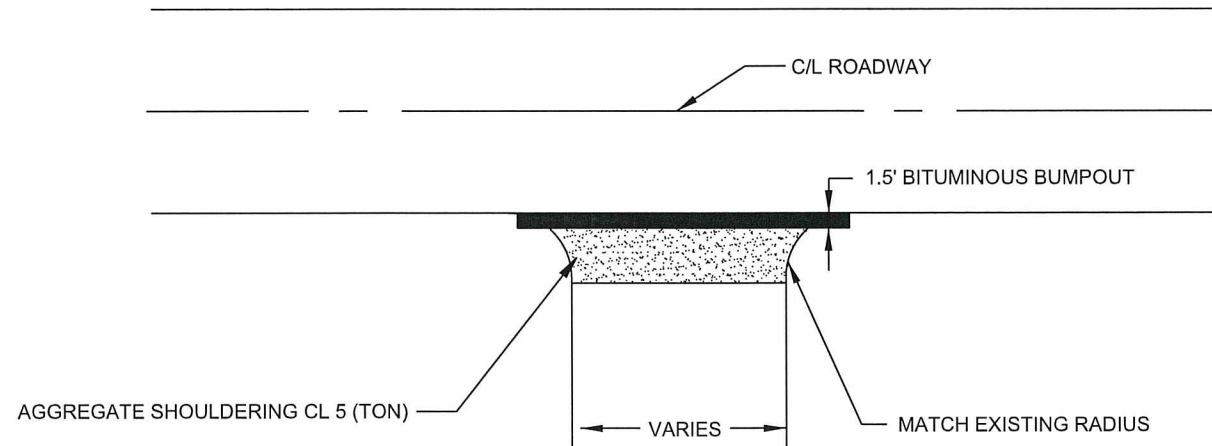
ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT 18-22-140

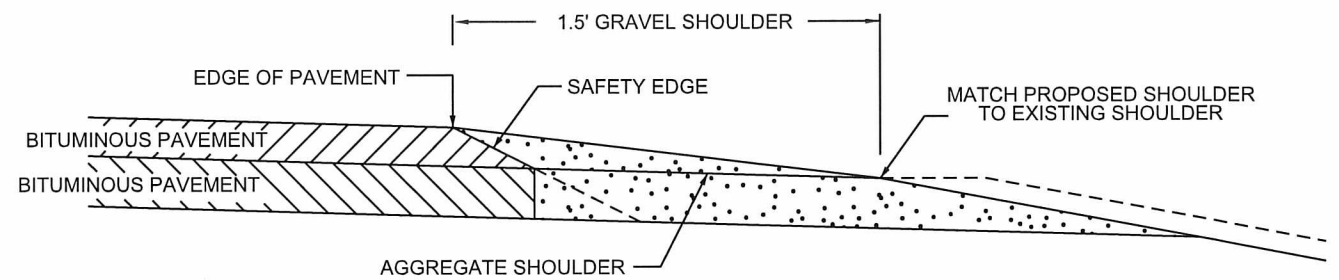
TYPICAL SECTIONS
Sheet 4 of 12 Sheets

DRIVEWAY DETAIL
GRAVEL / FIELD ENTRANCE

PLAN VIEW



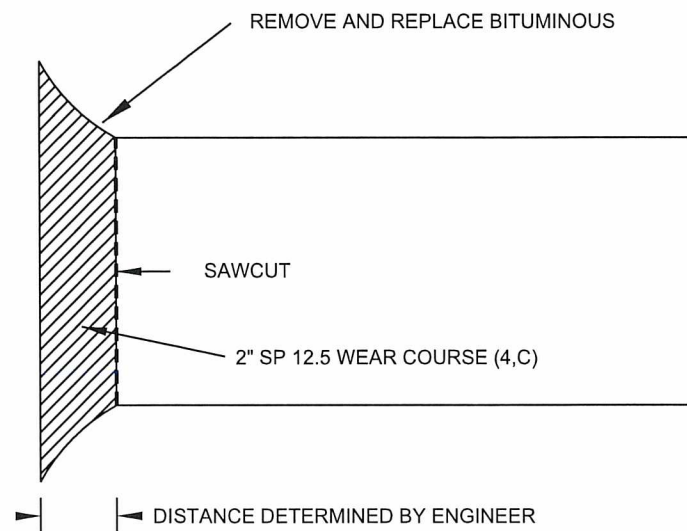
SHOULDER DETAIL
BITUMINOUS SAFETY EDGE
GRAVEL SHOULDER



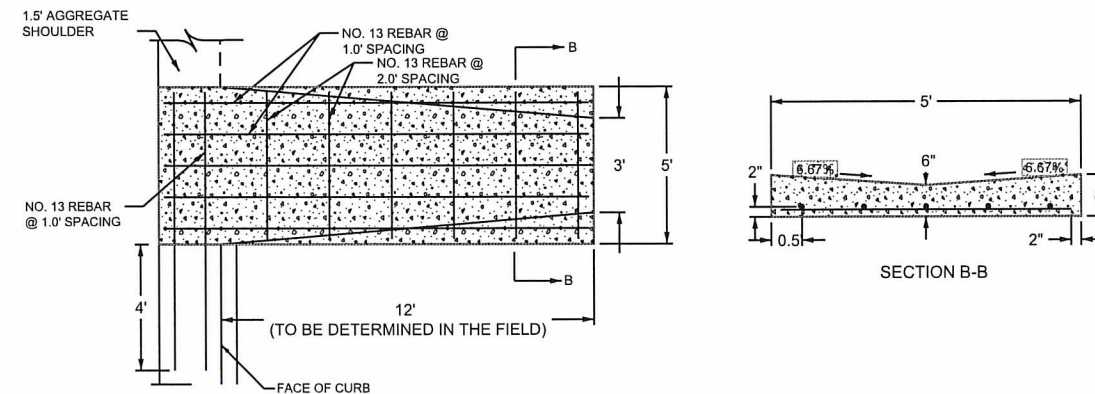
SAFETY EDGE TO BE USED IN ALL NON-CURB AREAS ON SHOULDER.
OPTIONAL DESIGN EXTENDS SAFETY EDGE DEEPER THAN 6" AND WIDER THAN 10.5". SEE SPECIAL PROVISIONS.

RECLAIM AREA - DRIVEWAY DETAIL
BITUMINOUS

PLAN VIEW



CONCRETE DRAINAGE FLUME DETAIL



NO	DATE	BY	CKD	APPR	REVISION	04/19/2018	8:15:20 AM

NAME: P:\18-01-00\CR_140_(20thAve-ECountyLine)\Base\PROPOSED\PROPOSED.dgn

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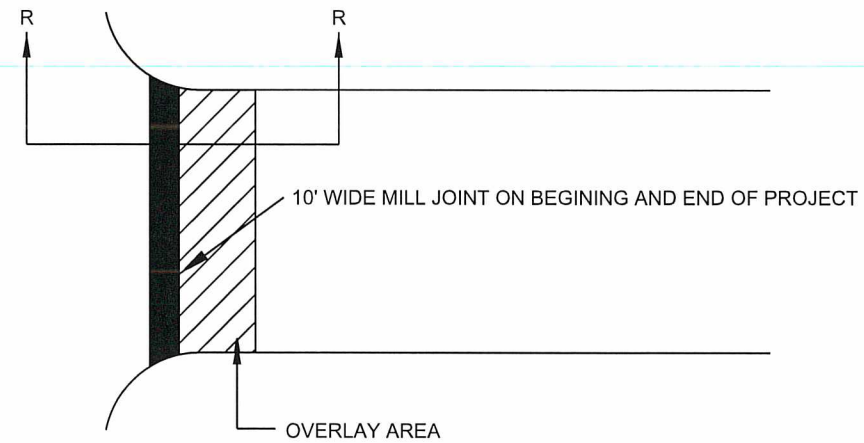
COUNTY PROJECT 18-22-140

DETAILS

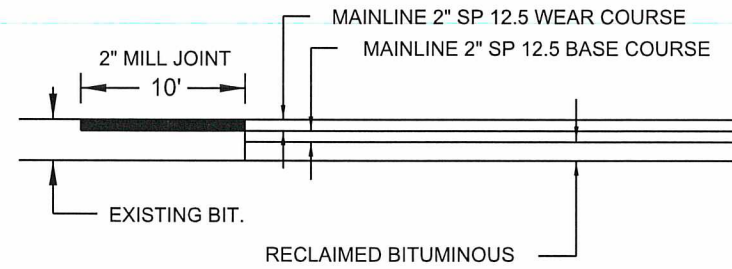
Sheet 5 of 12 Sheets

MAINLINE JOINT DETAIL (RECLAIM)

PLAN VIEW



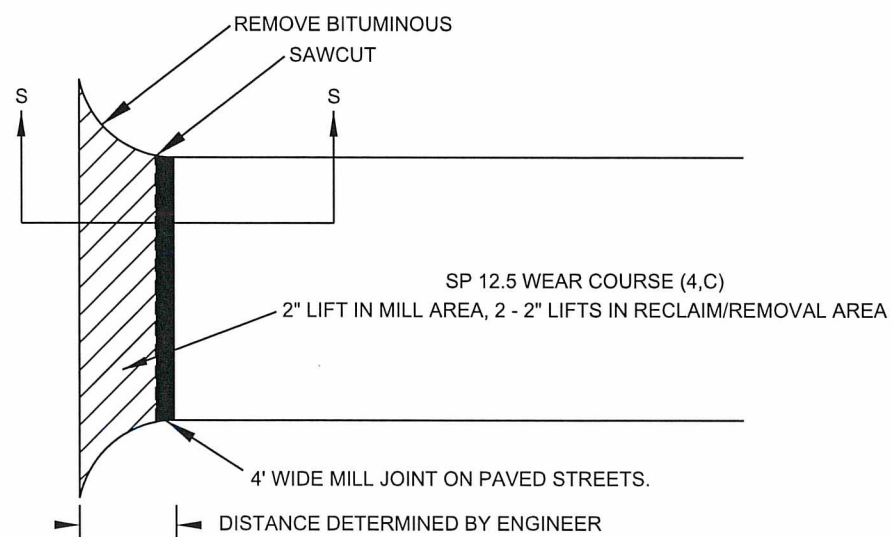
SECTION R - R



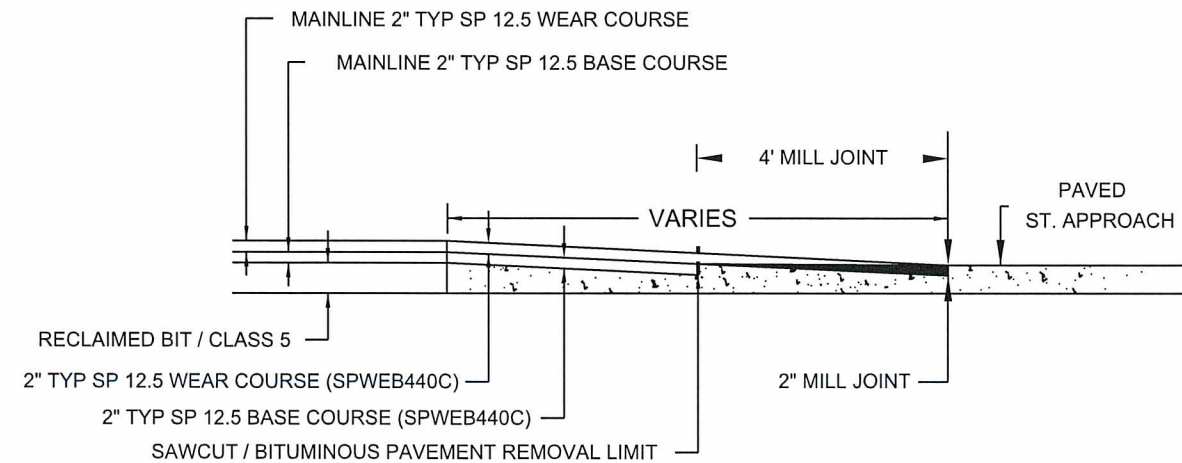
STREET APPROACH DETAIL (RECLAIM)

BITUMINOUS STREET

PLAN VIEW



SECTION S - S



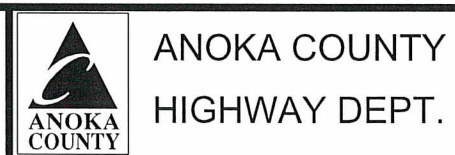
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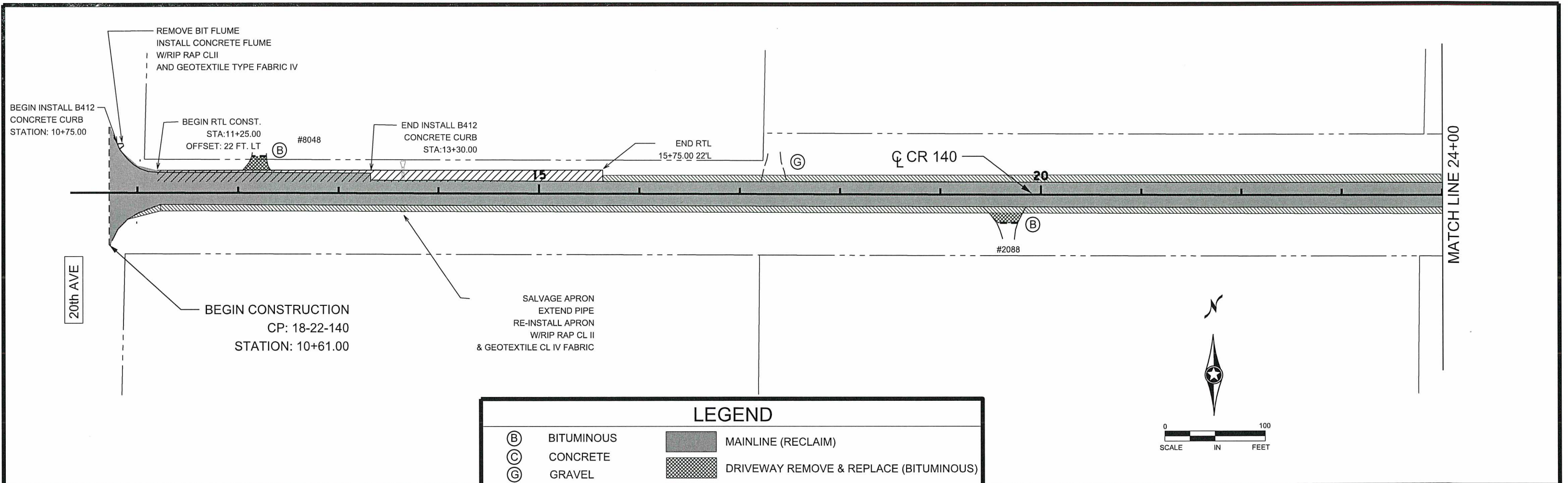
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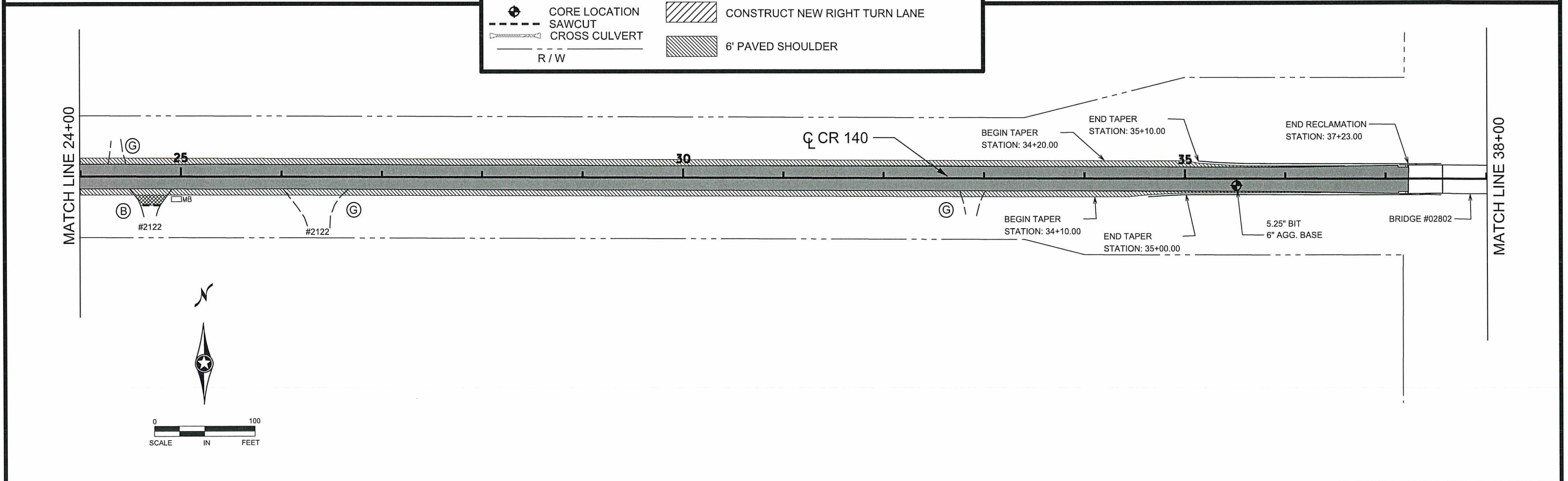


COUNTY PROJECT 18-22-140

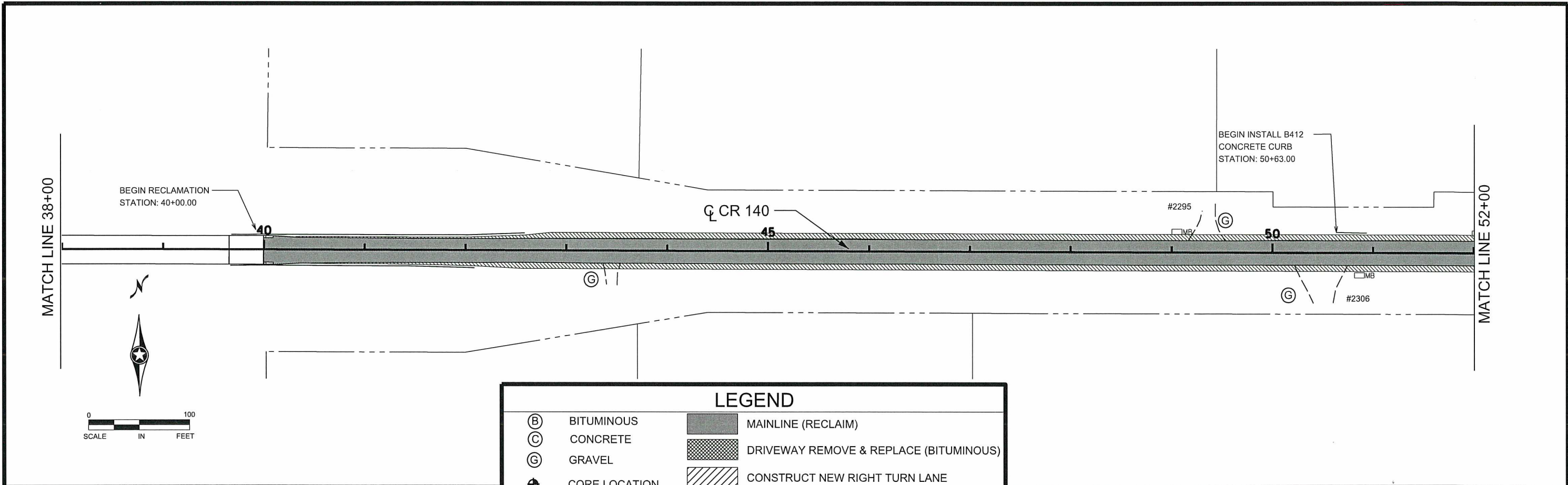
DETAILS
 Sheet 6 of 12 Sheets



LEGEND			
(B)	BITUMINOUS	[Pattern]	MAINLINE (RECLAIM)
(C)	CONCRETE	[Pattern]	DRIVEWAY REMOVE & REPLACE (BITUMINOUS)
(G)	GRAVEL	[Pattern]	CONSTRUCT NEW RIGHT TURN LANE
(*)	CORE LOCATION	[Pattern]	6' PAVED SHOULDER
(- - -)	SAWCUT		
(- - -)	CROSS CULVERT		
(- - -)	R / W		

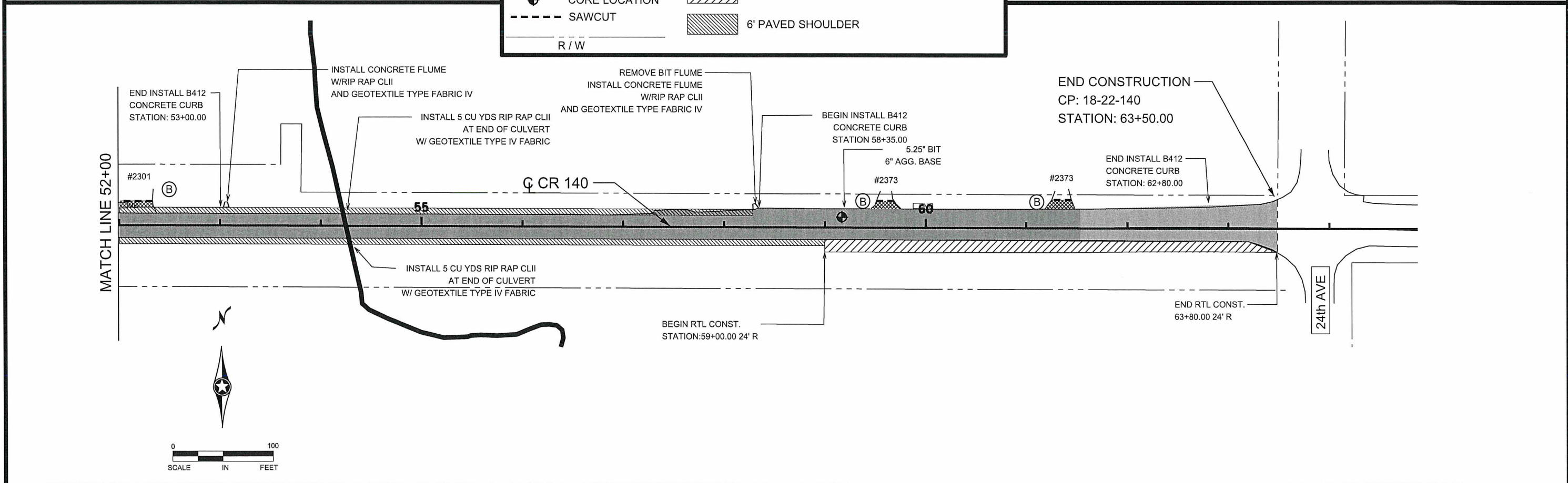


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LEGEND

(B)	BITUMINOUS	[Solid Grey Box]	MAINLINE (RECLAIM)
(C)	CONCRETE	[Cross-hatched Box]	DRIVEWAY REMOVE & REPLACE (BITUMINOUS)
(G)	GRAVEL	[Diagonal Hatched Box]	CONSTRUCT NEW RIGHT TURN LANE
⊕	CORE LOCATION	[Diagonal Hatched Box]	6' PAVED SHOULDER
- - -	SAWCUT		
- - -	R/W		



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CHECKED BY: HG DATE: 04/12/2018

**ANOKA COUNTY
HIGHWAY DEPT.**

COUNTY PROJECT 18-22-140

CONSTRUCTION PLAN

STA 38+00 TO 63+50

Sheet 8 of 12 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 BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE EPOXY RESIN LINE TO PROVIDE AN IMMEDIATE NO-TRACK SYSTEM.

AN EPOXY 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.

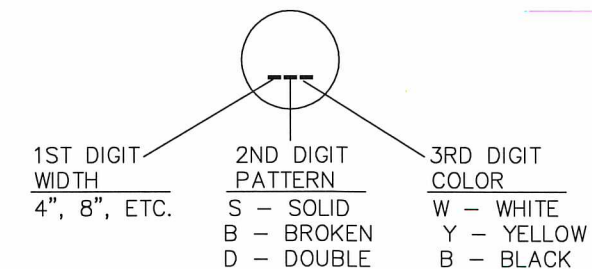
PERMANENT MARKING QUANTITIES		
ITEM	UNIT	TOTAL QUANTITY
4" SOLID LINE WHITE - EPOXY PAINT	LIN FT	10510
4" SOLID LINE YELLOW - EPOXY PAINT	LIN FT	2270
4" BROKEN LINE YELLOW - EPOXY PAINT	LIN FT	930
4" DOUBLE SOLID LINE YELLOW - EPOXY PAINT	LIN FT	625

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

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 LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: DOUGLAS W. FISCHER
 SIGNATURE: *[Signature]*
 DATE: 4/19/18 LICENSE NO. 20235

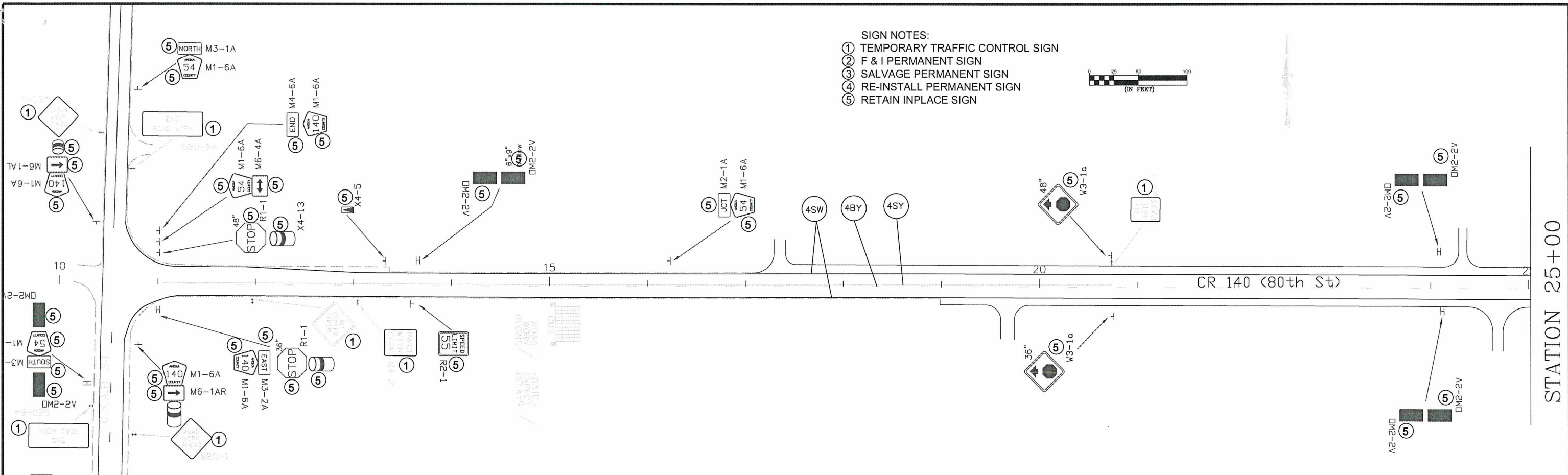
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 DESIGN BY: RLB DATE: 1/30/18
 CHECKED BY: JR DATE: 1/30/18



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 STATE AID PROJECT NO. _____
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 COUNTY PROJECT NO. 18-22-140

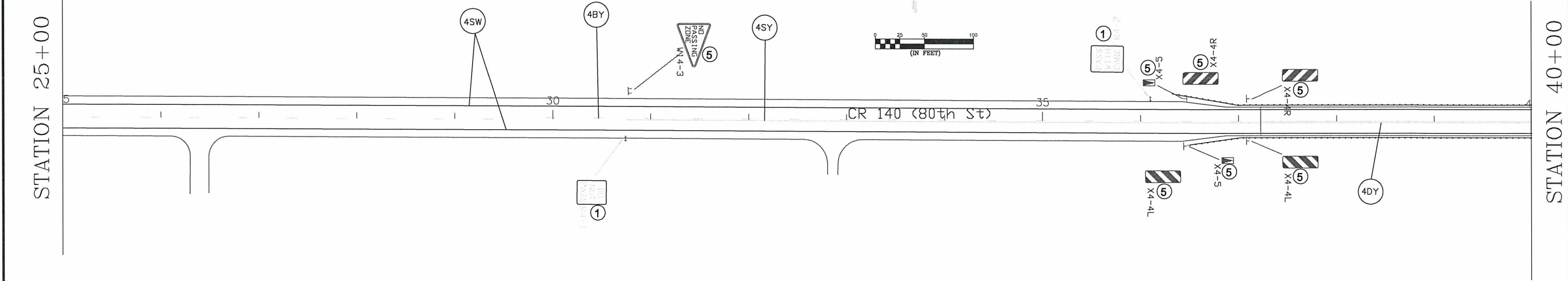
PERMANENT MARKING
TABULATION
 Sheet 9 of 12 Sheets



- SIGN NOTES:
- ① TEMPORARY TRAFFIC CONTROL SIGN
 - ② F & I PERMANENT SIGN
 - ③ SALVAGE PERMANENT SIGN
 - ④ RE-INSTALL PERMANENT SIGN
 - ⑤ RETAIN INPLACE SIGN

NOTES:

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NO	DATE	BY	CKD	APPR	REVISION

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PRINT NAME: DOUGLAS W. FISCHER

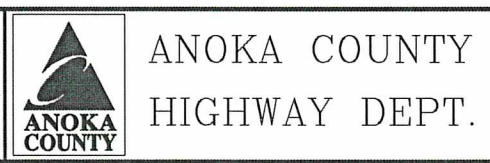
SIGNATURE: *Douglas W. Fischer*

DATE: 4/19/18 REG. NO. 20235

DRAWN BY: RLB DATE 1/30/18

DESIGN BY: RLB DATE 1/30/18

CHECKED BY: JR DATE 1/30/18



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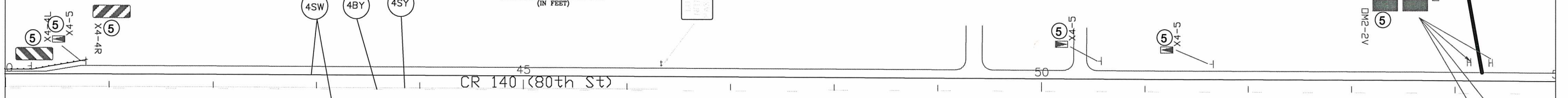
COUNTY PROJECT NO. 18-22-140

TEMPORARY SIGNING,
PERMANENT SIGNING
AND STRIPING

Sheet 10 of 12 Sheets

STATION 40+00

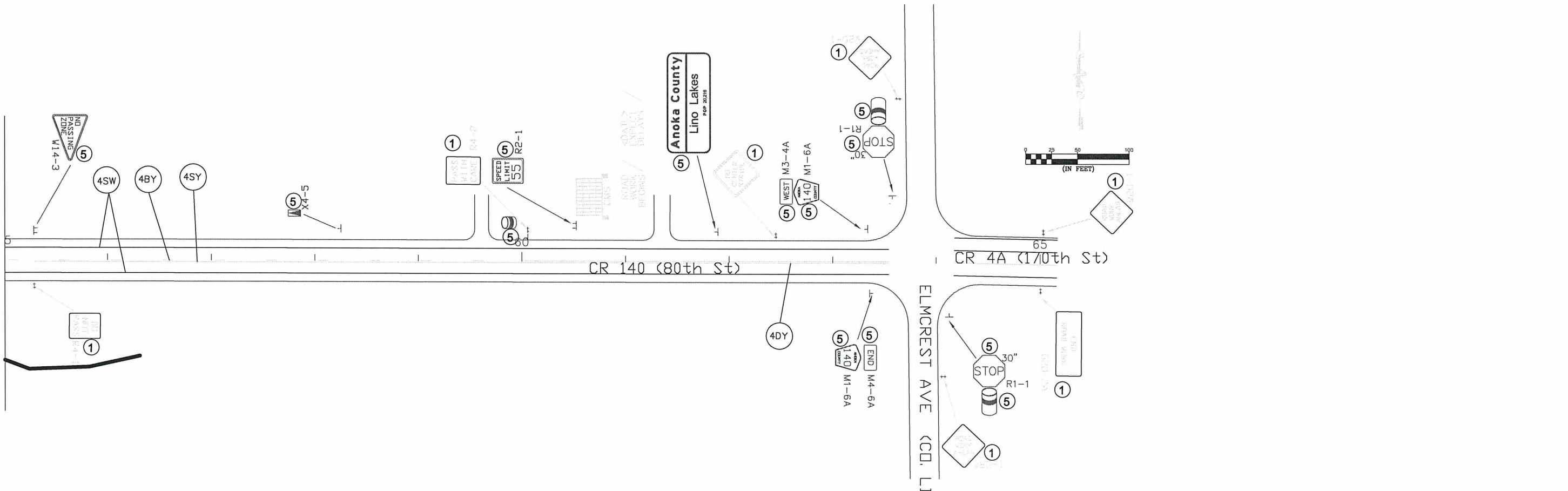
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STATION 55+00



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PRINT NAME: DOUGLAS W. FISCHER

SIGNATURE: *[Signature]*

DATE: 4/19/18 REG. NO. 20235

DRAWN BY: RLB DATE: 1/30/18

DESIGN BY: RLB DATE: 1/30/18

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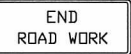








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COUNTY PROJECT NO. 18-22-140

TEMPORARY SIGNING,
PERMANENT SIGNING
AND STRIPING

Sheet 11 of 12 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		4	1	7.0'
R4-2	24" x 30"	5.00		4	1	7.0'
G20-2A	48" x 24"	8.00		3	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 5)		
CMS sign to be installed a minimum of ten days prior to actual commencement of road work. Signs to be removed when road work begins.				2		

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CHANGEABLE MESSAGE BOARD - MESSAGE SEQUENCE LAYOUT

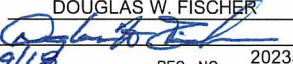
		R	O	A	D		
		W	O	R	K		
		B	E	G	I	N	S

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

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

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\16-01-00\CR 60\base\Traffic\Signing_Striping.dwg

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TRAFFIC CONTROL
 QUANTITY