

MINNESOTA DEPARTMENT OF TRANSPORTATION

ANOKA COUNTY

CONSTRUCTION PLAN FOR _____ MILL BITUMINOUS, BITUMINOUS SURFACING, CURB & GUTTER, AND SEWER REPAIRS _____

LOCATED ON _____ (CSAH 30) BETWEEN _____ 50' WEST OF 6TH AVENUE _____ AND _____ 7TH AVENUE _____

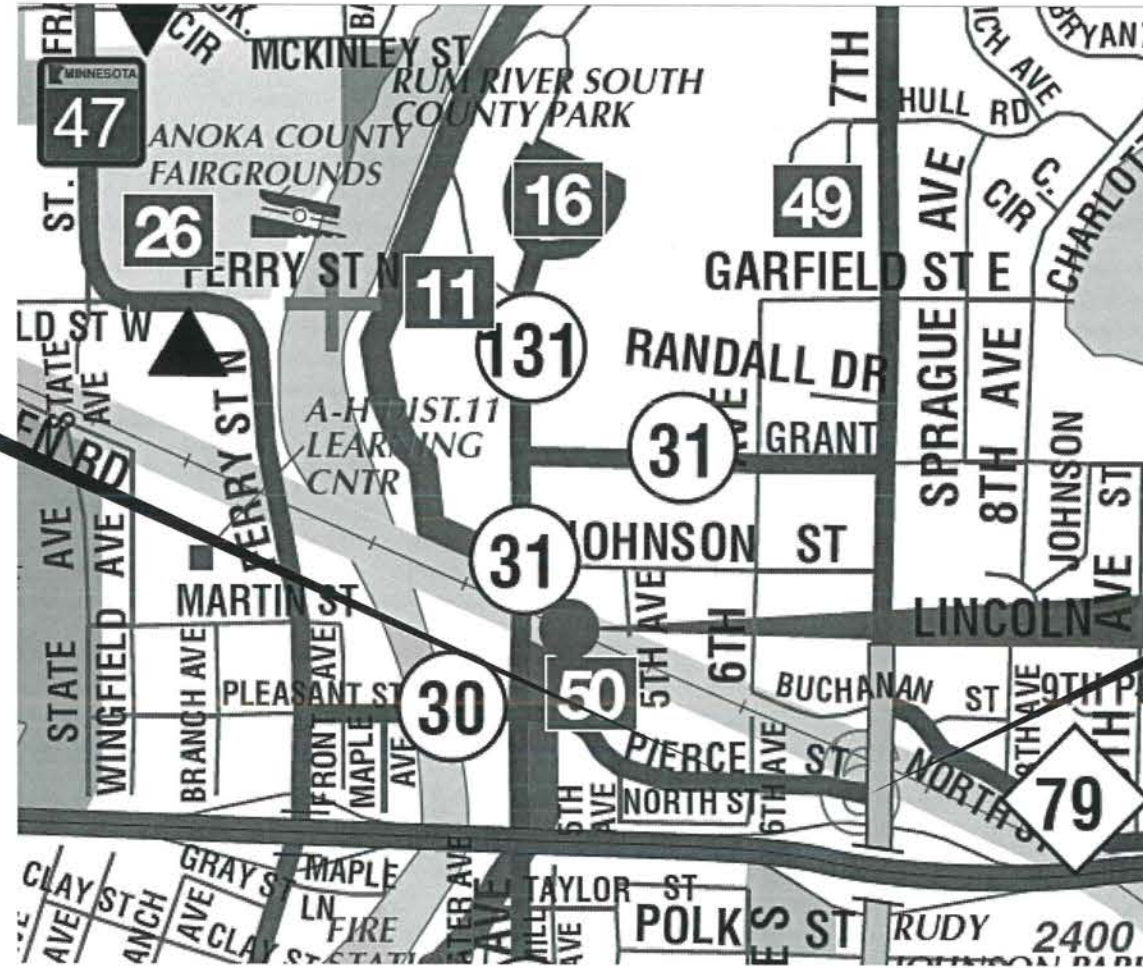
GOVERNING SPECIFICATIONS

THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE 2014 EDITION OF THE "MATERIALS LAB SUPPLEMENTAL 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 8 SHEETS

INDEX

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



BEGIN CP 15-21-30
CSAH 30, STA: 10+49

END CP 15-21-30
CSAH 30, STA: 17+42

PROJECT LOCATION



CSAH 30	
GROSS LENGTH	693 FEET 0.131 MILES
EXCEPTIONS-LENGTH	0.00 FEET 0.000 MILES
NET LENGTH	693 FEET 0.131 MILES
DESIGN SPEED	30 MPH
CURRENT ADT	2561

CITY OF ANOKA
ANOKA COUNTY
MN/DOT TRANSPORTATION DISTRICT - METRO
SECTION 1
TOWNSHIP 31 NORTH
RANGE 25 WEST

Approved: 4/2/15
ANOKA COUNTY ENGINEER

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\15-01-00\CSAH_30(4thAve-7thAve)\Base\PROPOSED\15-21-30 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: MATTHEW J. JOHN
SIGNATURE:
DATE: 4/2/15 LICENSE NO. 51639

DRAWN BY: MJJ DATE: 02/11/2015
DESIGN BY: MJJ DATE: 02/11/2015
CHECKED BY: CSO DATE: 02/12/2015



**ANOKA COUNTY
HIGHWAY DEPT.**

COUNTY PROJECT 15-21-30

TITLE SHEET

Sheet 1 of 8 Sheets

mjohn

STATEMENT OF ESTIMATED QUANTITIES					
ITEM NUMBER	(CODE)	ITEM DESCRIPTION	NOTES	UNIT	TOTAL PROJECT QUANTITIES ESTIMATED
2021.501	00010	MOBILIZATION		LUMP SUM	1
2104.501	00022	REMOVE CURB AND GUTTER	1	LIN FT	340
2104.503	00020	REMOVE CONCRETE SIDEWALK	1	SQ FT	570
2104.505	00120	REMOVE BITUMINOUS PAVEMENT	1	SQ YD	80
2104.509	00105	REMOVE CASTING	1	EACH	1
2104.511	00011	SAWING CONCRETE PAVEMENT (FULL DEPTH)	1	LIN FT	65
2104.513	00011	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	1	LIN FT	360
2211.501	00050	AGGREGATE BASE CLASS 5	2	TON	20
2232.501	00050	MILL BITUMINOUS SURFACE (2.0")	3	SQ YD	2960
2232.604	00010	MILL BITUMINOUS PAVEMENT (SPECIAL)	4	SQ YD	197
2357.502	00010	BITUMINOUS MATERIAL FOR TACK COAT		GALLON	160
2360.501	23200	TYPE SP 12.5 WEARING COURSE MIX (3,B)	5	TON	19
2360.501	24500	TYPE SP 12.5 WEARING COURSE MIX (4,E)		TON	350
2360.505	20100	TYPE SP 12.5 BITUMINOUS MIXTURE FOR PATCHING	6	TON	10
2504.602	00033	ADJUST GATE VALVE	7	EACH	2
2506.516	00010	CASTING ASSEMBLY	8	EACH	1
2506.602	00003	GROUT CATCH BASIN OR MANHOLE	9	EACH	1
2561.501	00060	6" CONCRETE WALK		SQ FT	740
2531.501	02120	CONCRETE CURB AND GUTTER DESIGN B424		LIN FT	36
2531.501	02315	CONCRETE CURB AND GUTTER DESIGN B618		LIN FT	255
2531.501	02320	CONCRETE CURB AND GUTTER DESIGN B624		LIN FT	43
2531.618	00010	TRUNCATED DOMES		SQ FT	40
2563.601	00010	TRAFFIC CONTROL	10	LUMP SUM	1
2563.613	01100	PORTABLE CHANGEABLE MESSAGE SIGN	11	UNIT DAY	14
2573.530	00010	STORM DRAIN INLET PROTECTION	12	EACH	4
2575.505	00050	SODDING TYPE SALT TOLERANT	13	SQ YD	110
2575.523	00009	EROSION CONTROL BLANKETS CATEGORY 0	14	SQ YD	280
2581.501	00010	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	15	LN FT	56
2582.502	41104	4" SOLID LINE WHITE-EPOXY	16	LN FT	1260
2582.502	42404	4" DOUBLE SOLID LINE YELLOW-EPOXY	16	LN FT	630

CONSTRUCTION NOTES	
1	REFERENCE DETAILS (PAGE 5) FOR REMOVAL DETAILS
2	ITEM TO BE USED AS BASE FOR NEW CONCRETE WALK
3	DETAIL MILLING AROUND MANHOLES, CATCH BASINS, GATE VALVES, AND ALONG CURB LINE IS INCIDENTAL TO THIS ITEM.
4	TO BE USED FOR MILLING STREET APPROACHES AND/OR DETAIL MILLING AREAS AS IDENTIFIED IN THE PLAN. DETAIL MILLING AROUND MANHOLES, CATCH BASINS, GATE VALVES, AND ALONG CURB LINE IS INCIDENTAL TO THIS ITEM.
5	STREET APPROACH QUANTITY. TO BE PAVED AFTER MAINLINE PAVING BUT BEFORE FINAL STRIPING.
6	ITEM INCLUDES BITUMINOUS PATCHING AROUND NEW CURB, STORM STRUCTURE REPAIRS, AND ANY POTHOLES.
7	GATE VALVES TO BE ADJUSTED AS NEEDED AS DETERMINED BY THE ENGINEER.
8	ITEM INCLUDES FULL REPLACEMENT OF CASTING ADJUSTMENT RINGS. SEE STORM TABULATIONS FOR RING HEIGHTS.
9	ITEM INCLUDES GROUTING OF INVERTS, DOGHOUSES, RINGS, AND CASTINGS AS REQUIRED (SEE DRAINAGE TAB, PAGE 3).
10	DO NOT PASS, PASS WITH CARE AND NO CENTER STRIPE SIGNS TO BE INPLACE DURING MILLING, RECLAIMING OR PAVING OPERATIONS.
11	2 MESSAGE BOARDS, ONE ON THE EACH END OF PROJECT WILL BE INSTALLED 7 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.
12	ALL DRAINAGE STRUCTURES AFFECTED BY THIS PROJECT MUST HAVE INLET PROTECTION.
13	4" OF TOPSOIL IS INCIDENTAL TO ALL TURF ESTABLISHMENT.
14	TYPE 1 FERTILIZER AND TYPE 25-121 SEED ARE INCIDENTAL TO THIS ITEM. 4" OF TOPSOIL IS INCIDENTAL TO ALL TURF ESTABLISHMENT.
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 PAINT STRIPING.
16	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING.

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	3' AT 50' INTERVALS

MNDOT STANDARD PLATES	
PLATE NUMBER	DESCRIPTION
4026A	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
4035N	CONCRETE WALK
4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
4110F	COVER CASTING FOR MANHOLE
7038A	DETECTABLE WARNING SURFACE
7100H	CONCRETE CURB AND GUTTER

NO	DATE	BY	CKD	APPR	REVISION
	03/19/2015				9:02:58 AM

NAME: P:\15-01-00\CSAH_30(4thAve-7thAve)\Base\PROPOSED\15-21-30 Proposed.dgn

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ANOKA COUNTY
 HIGHWAY DEPT.

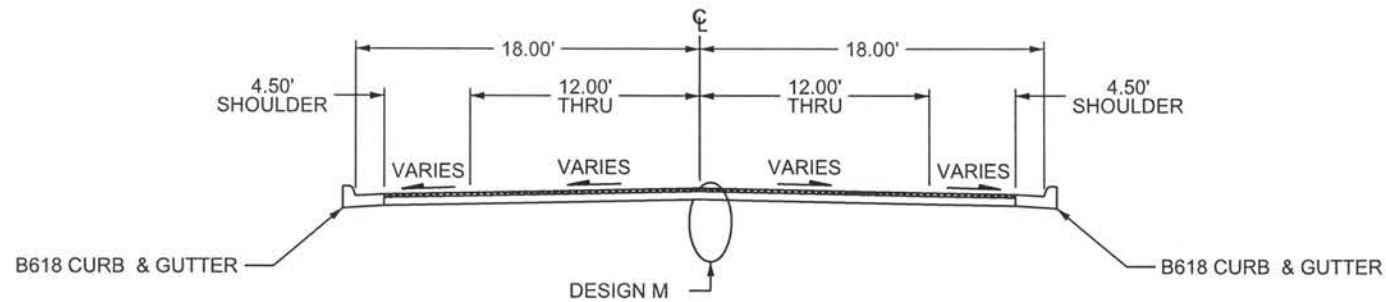
COUNTY PROJECT 15-21-30

STATEMENT OF ESTIMATED QUANTITIES
 Sheet 2 of 8 Sheets

mjohn

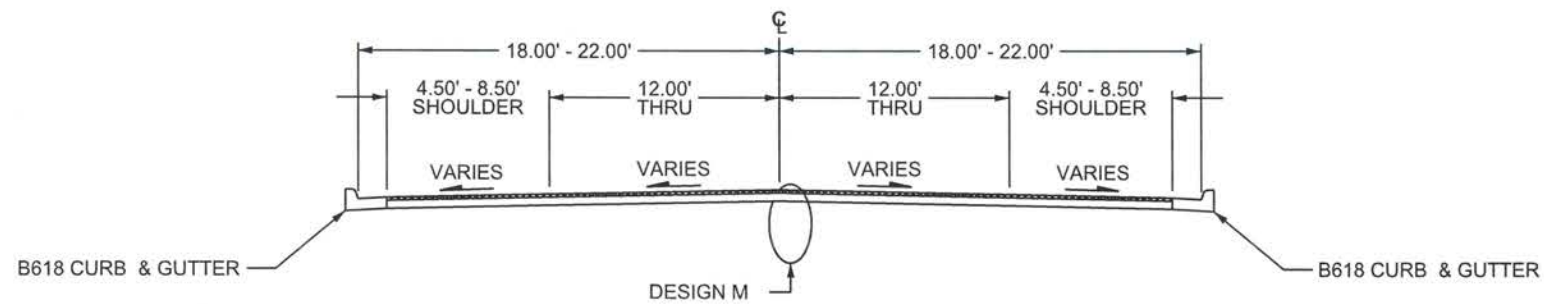
PIERCE STREET (CSAH 30) TYPICAL MAIN LINE SECTION

10+49 - 13+34



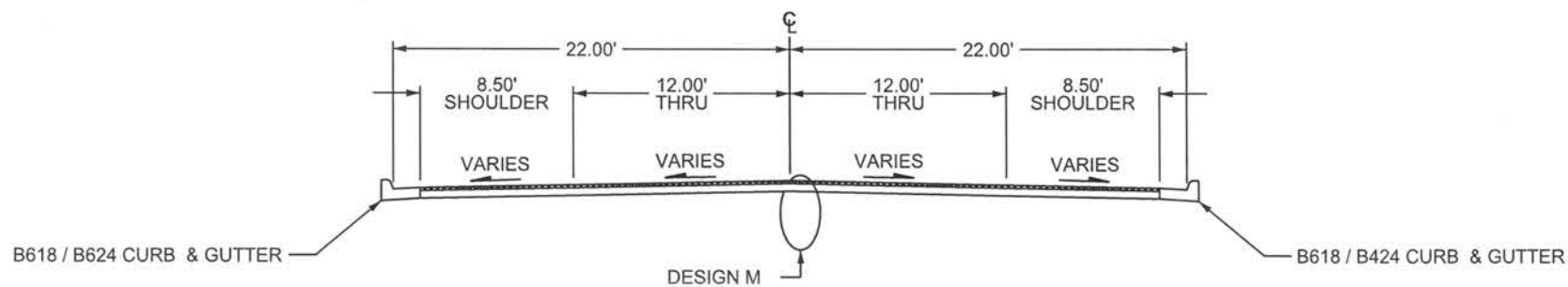
PIERCE STREET (CSAH 30) TYPICAL MAIN LINE SECTION

13+34 - 14+22

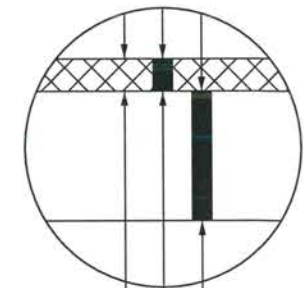


PIERCE STREET (CSAH 30) TYPICAL MAIN LINE SECTION

14+22 - 17+42



DESIGN M MILL SECTION



2.0" MILL BITUMINOUS
 2.0" BITUMINOUS WEAR(SPWEB440E)
 REMAINING BITUMINOUS

NO	DATE	BY	CKD	APPR	REVISION	03/19/2015	9:02:59 AM
NAME: P:\115-01-00\CSAH_30(4thAve-7thAve)\Base\PROPOSED\15-21-30 Proposed.dgn							

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ANOKA COUNTY
 HIGHWAY DEPT.

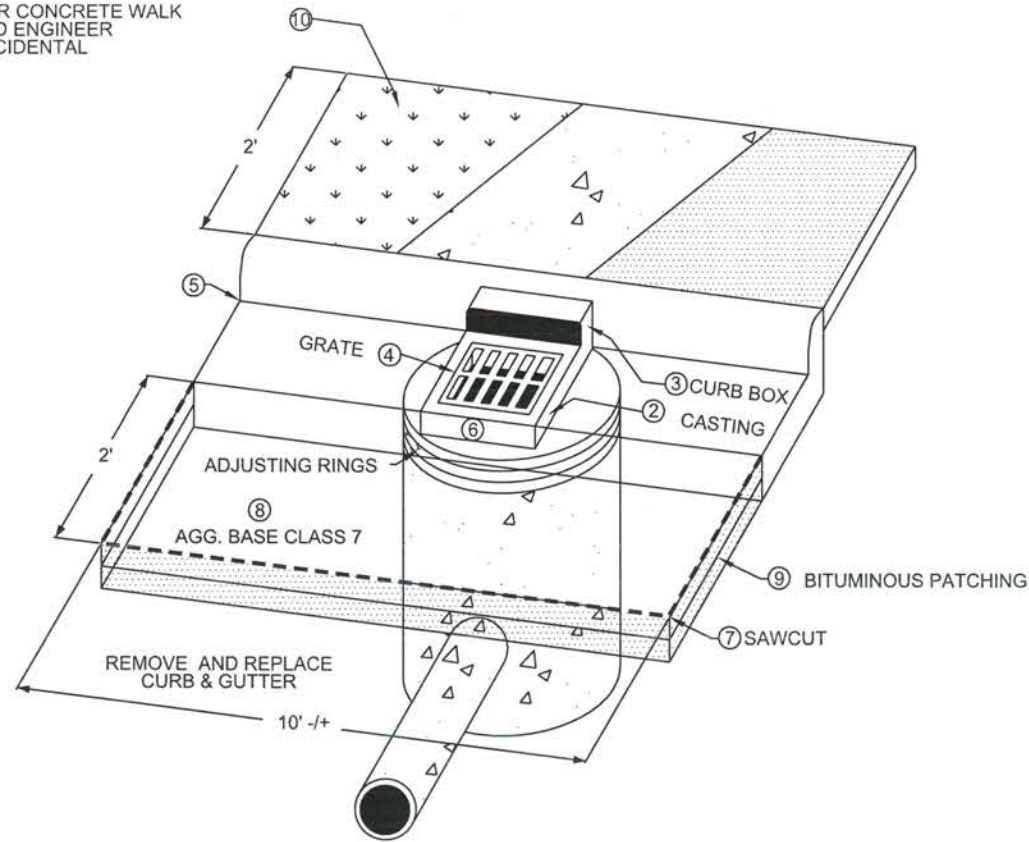
COUNTY PROJECT 15-21-30

TYPICAL SECTIONS
 Sheet 3 of 8 Sheets

CATCH BASIN DETAIL

SEE STRUCTURE TAB FOR LOCATION
(PAGE 3)

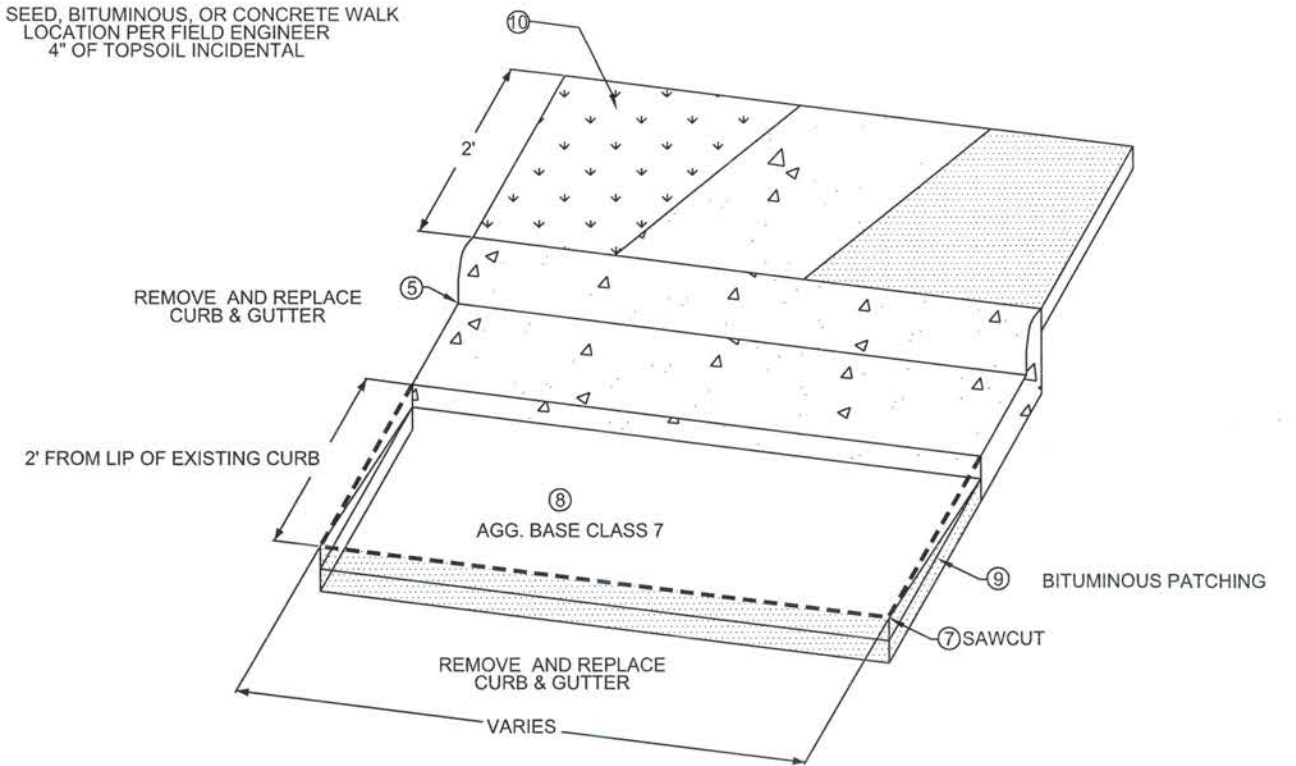
SOD, SEED, BITUMINOUS, OR CONCRETE WALK
LOCATION PER FIELD ENGINEER
4" OF TOPSOIL INCIDENTAL



NEW CURB DETAIL

SEE PLAN FOR LOCATION

SOD, SEED, BITUMINOUS, OR CONCRETE WALK
LOCATION PER FIELD ENGINEER
4" OF TOPSOIL INCIDENTAL



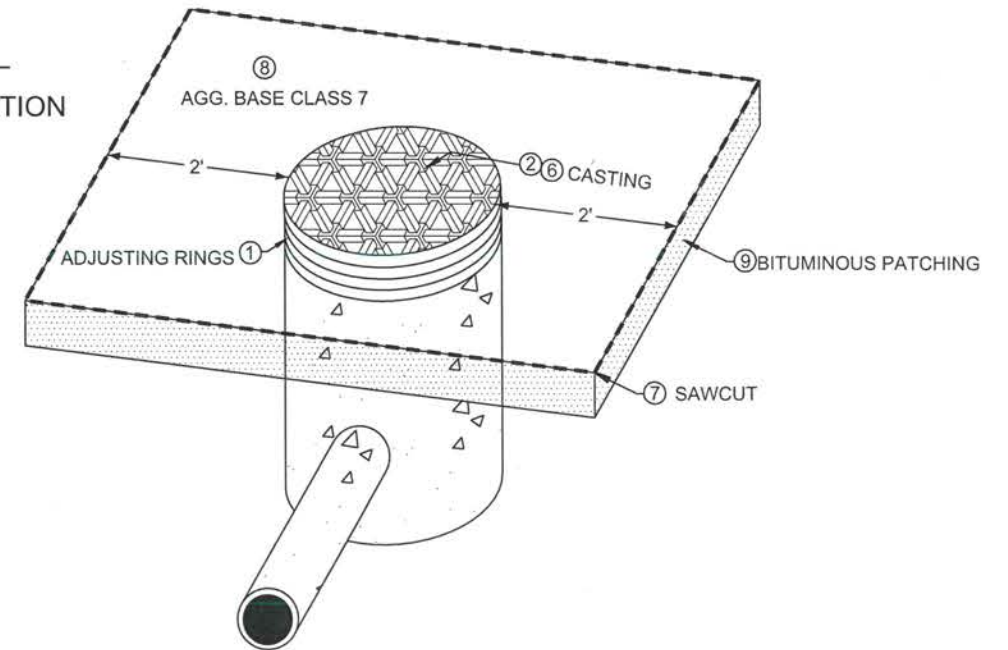
NOTES

FOR TRAFFIC CONTROL AT CATCH BASIN AND MANHOLE REPAIRS REFER TO THE MINNESOTA MANUAL ON TEMPORARY TRAFFIC CONTROL LAYOUTS FIELD MANUAL.

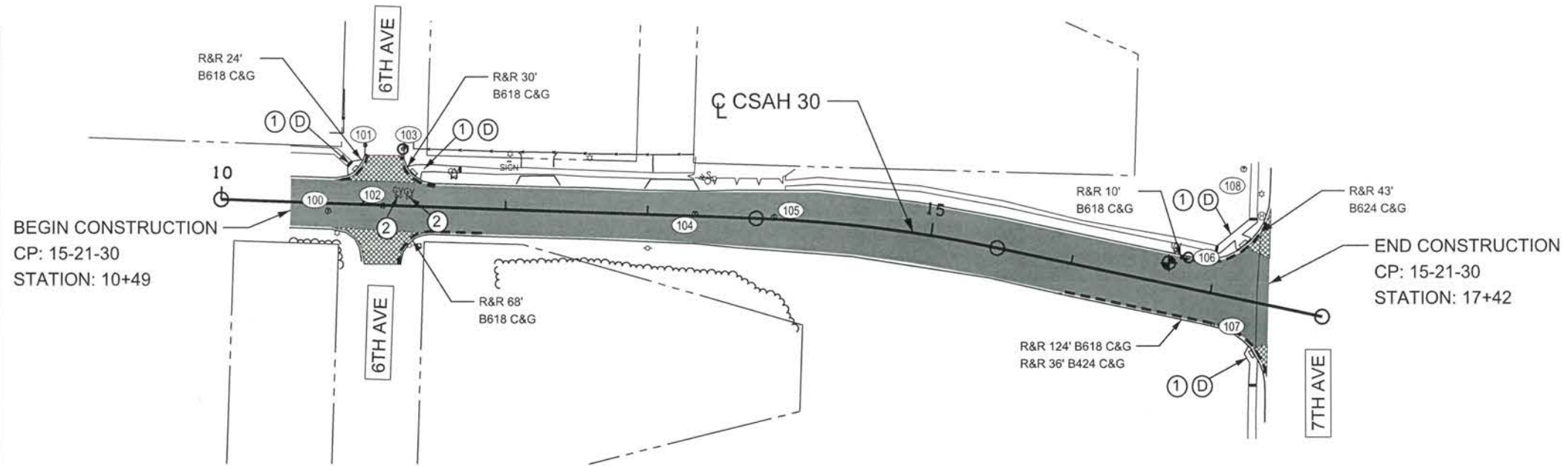
- ① CONCRETE ENCASED CONCRETE ADJUSTING RINGS STANDARD PLATE 4026A
- ② RING AND FRAME CASTING; REFERENCE CASTING ASSEMBLIES SUMMARY CHART FOR CASTING TYPE
- ③ CURB BOX MATCHES CASTING REFERENCE CHART FOR CASTING TYPE
- ④ GRATE CASTING; REFERENCE CASTING ASSEMBLIES SUMMARY CHART FOR CASTING TYPE
- ⑤ CONCRETE CURB AND GUTTER DESIGN B STANDARD PLATE 7100G
- ⑥ INSTALLATION OF CATCH BASIN OR MANHOLE CASTINGS; REFERENCE STANDARD PLATE PER TYPE OF CASTING
- ⑦ SAWCUT BITUMINOUS PAVEMENT / CONCRETE CURB FULL DEPTH.
- ⑧ ADD AND COMPACT AGGREGATE BASE CLASS 7 AROUND REPAIRED STRUCTURE. ITEM INCIDENTAL TO ENTIRE STRUCTURE REPAIR
- ⑨ REMOVE VARIABLE DEPTH BITUMINOUS, PATCH WITH 2, 3" LIFTS OF BITUMINOUS, TOP LIFT SHOULD TAPER TO BOTTOM LIFT AT CURB.
- ⑩ REPLACE DISTURBED AREA BEHIND CATCH BASIN WITH EITHER SOD (RESIDENTIAL AREAS), EROSION CONTROL BLANKET, BITUMINOUS, OR CONCRETE

MANHOLE DETAIL

SEE STRUCTURE TAB FOR LOCATION
(PAGE 3)



LEGEND	
Ⓧ	TRUNCATED DOMES
①	6" CONCRETE WALK (REMOVE & REPLACE)
②	ADJUST GATE VALVE
○	SEWER WORK LOCATION
⊕	CORE LOCATION
---	SAWCUT / CURB REPLACEMENT
■	MILL BIT. PAVEMENT (2.0")
▨	MILL BIT. PAVEMENT (SPECIAL)
---	R / W



STORM DRAINAGE TAB

NUMBER	TYPE	ACTION	NEW CASTING	FURNISH AND INSTALL CASTING ASSEMBLY	RING HEIGHT (LN FT) INCIDENTAL TO CASTING ASSEMBLY	GROUT (EACH)
100	MH-STORM	NONE				
101	CB	NONE				
102	MH-SAN	NONE				
103	CB	GROUT				STRUCTURE
104	MH-SAN	NONE				
105	MH-SAN	NONE				
106	CB	RE-RING	R-3030	1	1.1	
107	CB	NONE				
108	MH-STORM	NONE				
TOTALS:				1	-	1

CASTING ASSEMBLIES SUMMARY

ASSEMBLY	RING OR FRAME CASTING	COVER OR GRATE CASTING	CURB BOX	QUANTITY	DESCRIPTION
NEENAH*	R-3030	TYPE L	YES	1	
*OR APPROVED EQUAL					
ALL CASTING HEIGHTS ARE TO BE VERIFIED IN THE FIELD.					
ALL MANHOLE COVERS SHOULD BE LABELED AS STORM OR SANITARY					

NO	DATE	BY	CKD	APPR	REVISION	

NAME: P:\15-01-00\CSAH_30(4thAve-7thAve)\Base\PROPOSED\15-21-30 Proposed.dgn

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 SIGNATURE: *Matthew J. John*
 DATE: 4/2/15 LICENSE NO. 51639

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 CHECKED BY: CSO DATE: 02/12/2015



**ANOKA COUNTY
HIGHWAY DEPT.**

COUNTY PROJECT 15-21-30

CONSTRUCTION PLAN
 STA 10+00 TO 18+00
 Sheet 5 of 8 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 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 FILD OR DUST TO BE DEPOSITED ON THE PAVEMENT SURFACE AFTER CLEANING AND BEFORE THE MARKING MATERIAL CAN BE APPLIED.

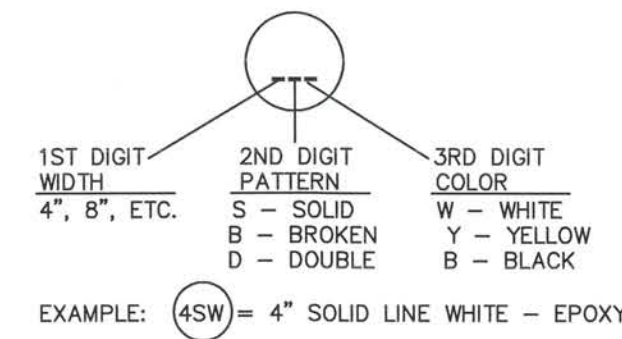
THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF MATERIAL.

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



PAVEMENT MARKING TABULATION		
ITEM	UNIT	TOTAL QUANTITY
4" SOLID LINE WHITE - EPOXY PAINT	LIN FT	1260
4" DOUBLE LINE YELLOW - EPOXY PAINT	LIN FT	630

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

DRAWN BY: RLB DATE: 4-3-14
 DESIGN BY: RLB DATE: 4-3-14
 CHECKED BY: JR DATE: 4-3-14



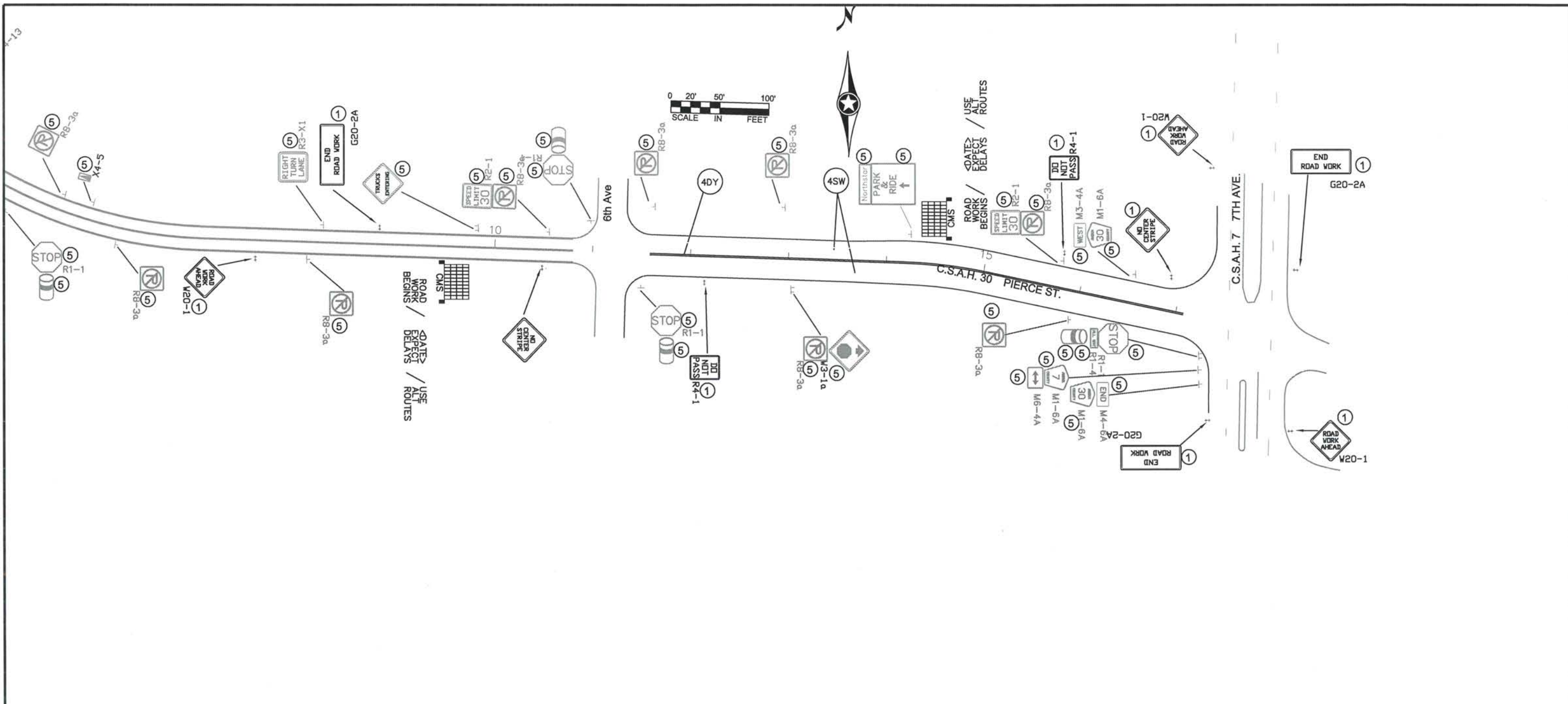
**ANOKA COUNTY
HIGHWAY DEPT.**

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-21-30

**PERMANENT MARKING
TABULATION**
 Sheet 6 of 8 Sheets

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\13-01-00\CSAH 18\Bases\TRAFFIC\Perm pvmt mrkg guide notes_guidelines.dwg



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 INSTALL THE PORTABLE CHANGEABLE MESSAGE SIGN (CMS) A MINIMUM OF SEVEN 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.
- 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. 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.

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

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\15-01-00\CSAH30\base\Traffic\signing & striping.dwg

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PRINT NAME: MATTHEW J. JOHN

SIGNATURE: *Matthew J. John*


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

DRAWN BY: RLB DATE: 2/18/15

DESIGN BY: RLB DATE: 2/18/15

CHECKED BY: JR DATE: 2/18/15

ANOKA COUNTY
HIGHWAY DEPT.



STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 15-21-30

TEMPORARY SIGNING,
PERMANENT SIGNING
AND STRIPING

Sheet 7 of 8 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		2	1	7.0'
R4-2	24" x 30"	5.00		0	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 (ESTIMATED3)		
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		

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 INSTALL THE PORTABLE CHANGEABLE MESSAGE SIGN (CMS) A MINIMUM OF SEVEN 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.
- 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. 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	

		U	S	E			
		A	L	T	.		
		R	O	U	T	E	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: 2/18/15
 DESIGN BY: RLB DATE: 2/18/15
 CHECKED BY: JR DATE: 2/18/15



ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 15-21-30

TRAFFIC CONTROL QUANTITY
 Sheet 8 of 8 Sheets

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\15-01-00\CSAH30 (4thave-7th)\base\Traffic\signing & striping.dwg