

MINNESOTA DEPARTMENT OF TRANSPORTATION

ANOKA COUNTY

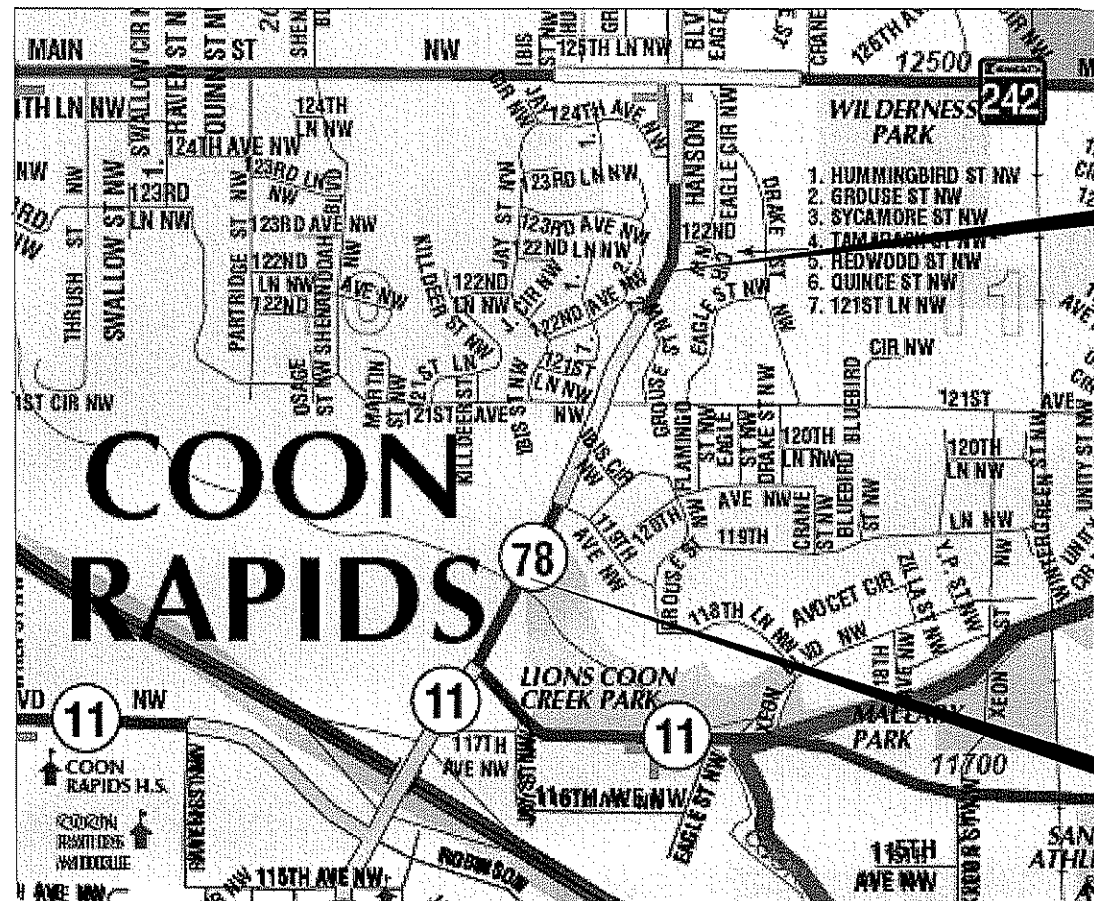
CONSTRUCTION PLAN FOR 1.5" BITUMINOUS MILL & 2" OVERLAY

LOCATED ON C.S.A.H. 78 BETWEEN 580' SOUTH OF 119TH AVE NW AND 230' NORTH OF 122ND AVE NW

COUNTY PROJ. NO. 09-17-78

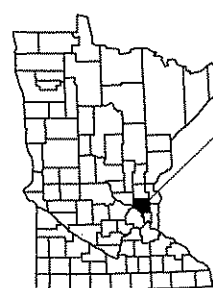
C.S.A.H. 78

GROSS LENGTH	2570 FEET	0.49 MILES
BRIDGES-LENGTH	FEET	MILES
EXCEPTIONS-LENGTH	FEET	MILES
NET LENGTH	2570 FEET	0.49 MILES



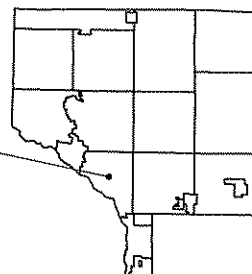
END PROJECT
STA 35+70

BEGIN PROJECT
STA. 10+00



PROJECT LOCATION

CITY OF COON RAPIDS
ANOKA COUNTY
MN/DOT TRANSPORTATION DISTRICT - METRO
SECTION 10
TOWNSHIP 31 NORTH
RANGE 24 WEST



STATEMENT OF ESTIMATED QUANTITIES

09-17-78

ITEM NO.	ITEM	NOTE NO.	UNIT	TOTAL EST. QUANT.
2021.501	MOBILIZATION		LUMP SUM	1
2232.501	MILL BITUMINOUS SURFACE (1.5")	8	SQ YD	17802
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	4	GALLON	890
2360.501	TYPE SP 12.5 WEARING COURSE MIX (4, E)		TON	1940
2360.501	TYPE SP 12.5 WEARING COURSE MIX (4, E)-STREETS & ENTRANCES		TON	107
2563.601	TRAFFIC CONTROL	7	LUMP SUM	1
2564.603	4" BROKEN LINE WHITE-TEMPORARY PAINT	6	LIN FT	960
2564.603	4" SOLID LINE WHITE - EPOXY	3	LIN FT	5120
2564.603	4" BROKEN LINE WHITE-EPOXY	3	LIN FT	960
2564.603	4" SOLID LINE YELLOW - EPOXY	3	LIN FT	1872
2564.603	4" DOUBLE SOLID LINE YELLOW - EPOXY	3	LIN FT	2190
2564.603	24" SOLID LINE WHITE-HOT TAPE	3	LIN FT	140
2564.603	24" SOLID LINE YELLOW-EPOXY	3	LIN FT	345
2564.618	3' x 6' ZEBRA CROSSWALK WHITE- HOT TAPE	3	SQ FT	846
2565.602	LOOP DETECTOR 6' X 6'	1,2	EACH	20
2580.523	REMOVABLE LANE TAPE	5	LIN FT	410
2581.602	PAVEMENT MESSAGE (RT ARROW)-HOT TAPE	3	EACH	2
2581.602	PAVEMENT MESSAGE (LT ARROW)-HOT TAPE	3	EACH	4

NOTES:

- 1 WILL BE LOCATED AND MARKED BY ANOKA CO. PRIOR TO MILLING.
- 2 REPLACE ONLY IF DAMAGED DURING MILLING OPERATION.
- 3 MESSAGES AND EPOXY PAINT TO BE INPLACE WITHIN 72 HOURS OF FINAL PLACEMENT OF BITUMINOUS WEARING COURSE.
- 4 TACK FOR MILLED BITUMINOUS AREAS. EST. AT 0.05 GAL / SQ YD.
- 5 TEMP LANE TAPE SKIPS TO BE PLACED ON NEW MAT AT END OF EACH PAVING DAY.
- 6 TEMP PAINT SKIPS FOR MARKING LANES DELINEATION ON MILLED BIT SURFACE AT END OF EACH MILLING DAY.
- 7 INCLUDES STOP HERE ON RED SIGNS INSTALLED AT INTERSECTION (DURING MILLING OPERATION).
- 8 MAINLINE MILLING INCLUDES DETAIL MILLING AROUND MANHOLES, GATE VALVES, AND ALL STRUCTURES IN BIT. PAVEMENT AREA TO BE MILLED.

SPECIAL DIRECTIONS:

- 9 CONTRACTOR MUST COORDINATE MILLING / PAVING SCHEDULE WITH ANOKA COUNTY SIGNAL DEPARTMENT FOR SIGNALS TO BE PUT ON
 - 10 CONTRACTOR MUST COORDINATE MILLING / PAVING SCHEDULE WITH ANOKA CO. SHERIFF DEPT /CITY OF COON RAPIDS POLICE DEPT. FOR TRAFFIC CONTROL.
 - 11 TRAFFIC CONTROL ITEM INCLUDES POLICE OFFICER IF NEEDED FOR MILLING / PAVING SIGNALIZED INTERSECTIONS.
 - 12 STOP HERE ON RED SIGNS TO BE PLACED ON TEMP. STANDS AT STOP BAR LOCATIONS IMMEDIATELY AFTER MILLING / PAVING SIGNALIZED INTERSECTIONS.
 - 13 SIGNS REMAIN INPLACE UNTIL PERMANENT PAVEMENT MARKINGS ARE INPLACE (STOP HERE ON RED SIGNS / INSTALL. INCIDENTAL TO TRAFFIC CONTROL)
- CONTRACTOR MUST COORDINATE MILLING / PAVING SCHEDULE WITH ANOKA COUNTY SIGNAL DEPARTMENT FOR SIGNALS TO BE PUT ON FLASH FOR INTERSECTION MILLING / PAVING.

BASIS OF PLANNED QUANTITIES

2357.502	BITUMINOUS MATERIAL FOR TACK COAT	05 GAL / SQ YD
2360.501	TYPE SP 12.5 WEARING COURSE MIX (4, E)	(SQ YD * IN. *115 LBS)/2000 = TONS
2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	(2 UNITS * 8 DAYS)
2564.603	4" BROKEN LINE WHITE- TEMPORARY PAINT	((PROJECT LENGTH * 2) / 50) * 10

PLAN SET

Sheet	
1	TITLE / SEQ
2	MILLING PLAN
3 - 4	TYPICAL SECTIONS
5	PAVEMENT MARKINGS

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: Charles Cadenhead
SIGNATURE: *Charles Cadenhead*
DATE: 2/23/09 LICENSE NO. 40416

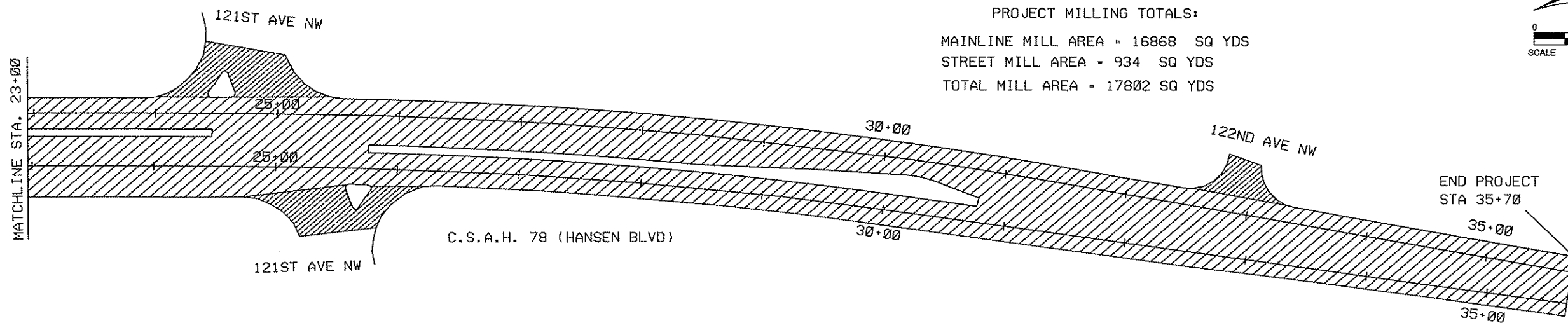
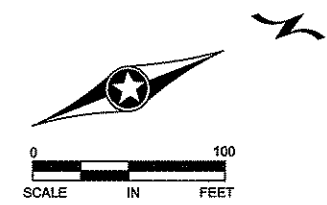
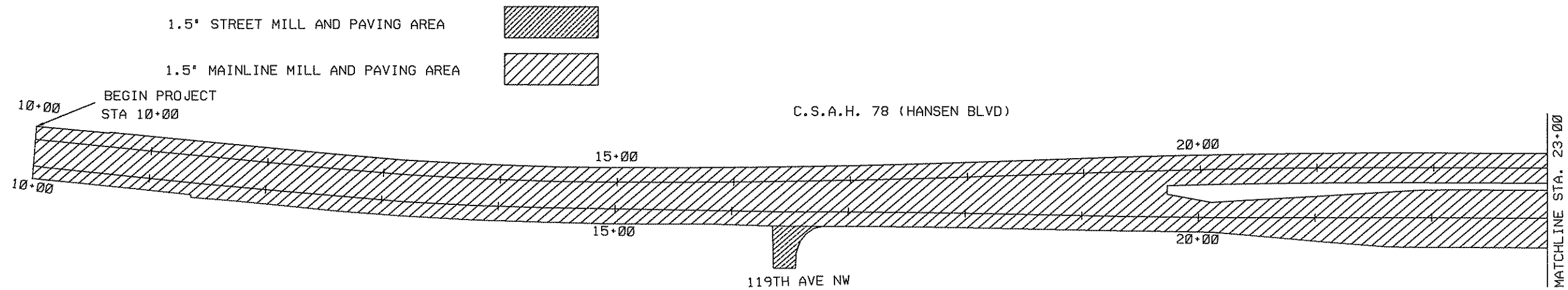
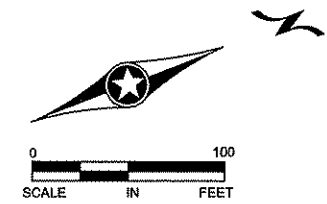
DRAWN BY: SK DATE: 2/3/09
DESIGN BY: SK DATE: 2/3/09
CHECKED BY: CO DATE: 2/3/09



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
STATE PROJECT NO. _____
STATE PROJECT NO. _____
STATE PROJECT NO. 09-17-78

TITLE / SEQ
CSAH 78
Sheet 1 of 5 Sheets



PROJECT MILLING TOTALS:
 MAINLINE MILL AREA = 16868 SQ YDS
 STREET MILL AREA = 934 SQ YDS
 TOTAL MILL AREA = 17802 SQ YDS

NO	DATE	BY	CHKD	APPR	REVISION

NAME: P:\09-01-00\CSAH_78\Plan\OVERLAY TEMPLAT PLAN PLAN.dgn 02/11/2009 2:10:42 PM

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: Charles Cadenhead
 SIGNATURE: *Charles Cadenhead*
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DRAWN BY SK DATE 2/3/2009
 DESIGN BY SK DATE 2/3/2009
 CHECKED BY CO DATE 2/3/2009

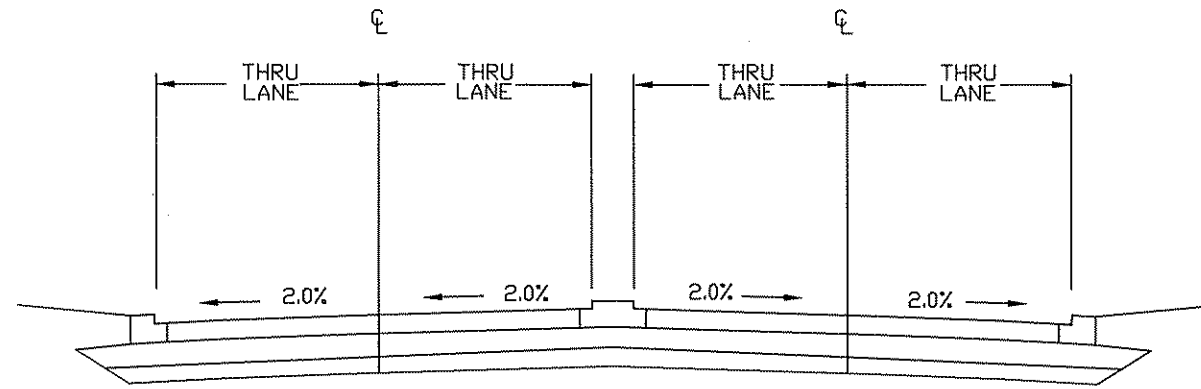


ANOKA COUNTY
 HIGHWAY DEPT.

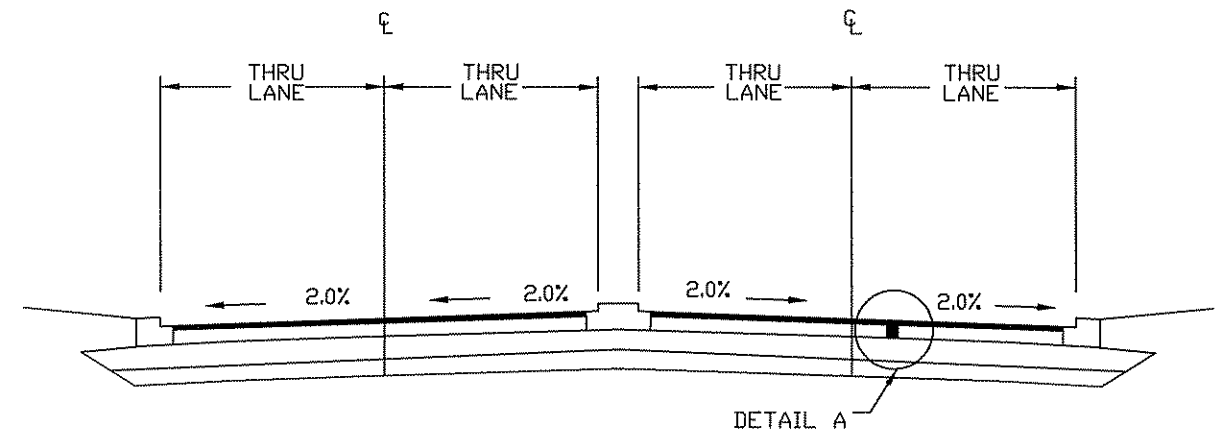
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 09-17-78

BIT MILLING PLAN
 CSAH 78
 STA 10+00 TO 35+70
 Sheet 2 of 5 Sheets

EXISTING STANDARD SECTION

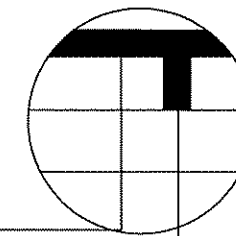


PROPOSED SECTION



DETAIL A

1.5' MILL IN PLACE BITUMINDUS SURFACE
 2" TYPE SP 12.5 WEAR (SPWEB440 E)
 EXISTING BITUMINDUS



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\09-01-00\CSAH_78\Plan\OVERLAY TEMPLAT TYP DETAILS.dgn 02/06/2009 11:26:57 AM

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
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 SIGNATURE: *Charles Cadenhead*
 DATE: 3/23/09 LICENSE NO. 40416

DRAWN BY SK DATE 2/3/2009
 DESIGN BY SK DATE 2/3/2009
 CHECKED BY CO DATE 2/3/2009

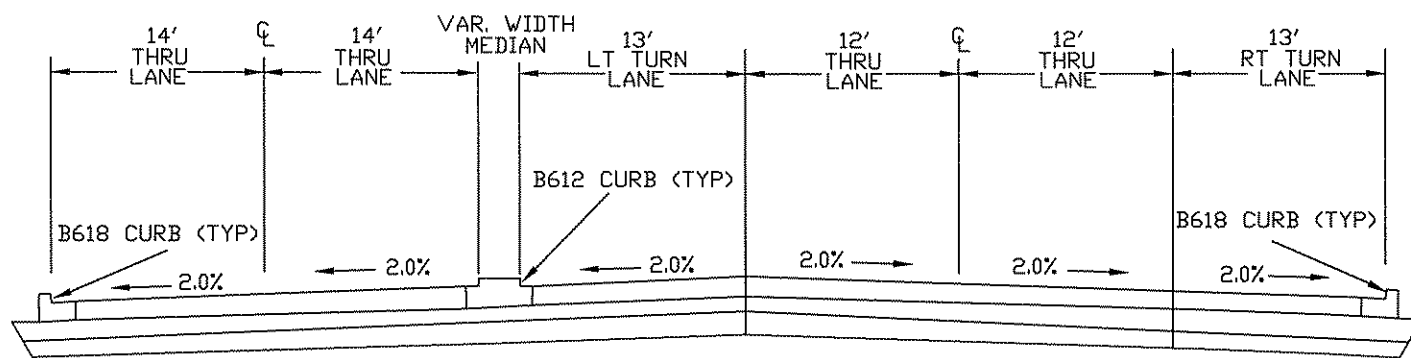


ANOKA COUNTY
 HIGHWAY DEPT.

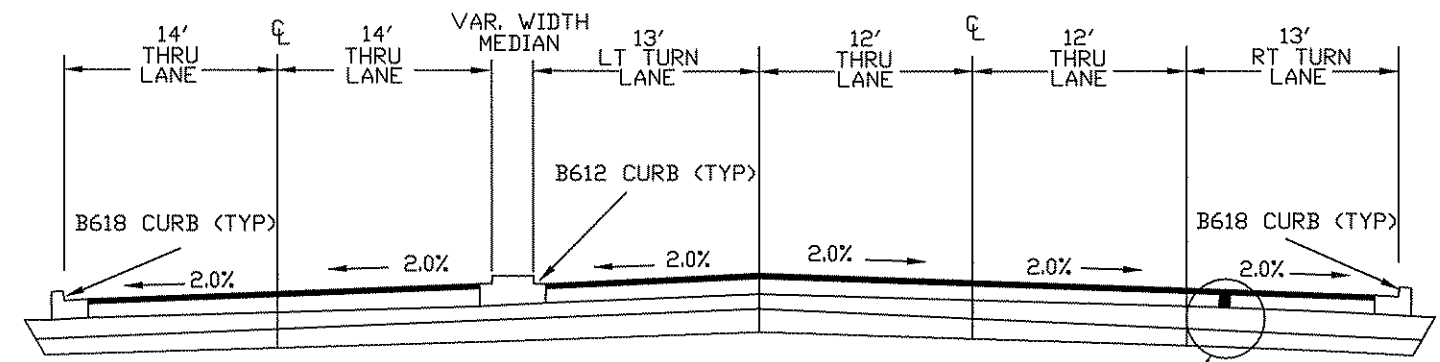
STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 CITY PROJECT NO. _____
 COUNTY PROJECT NO. 09-17-78

TYPICAL SECTIONS
 CSAH 78
 Sheet 3 of 5 Sheets

EXISTING STANDARD SECTION

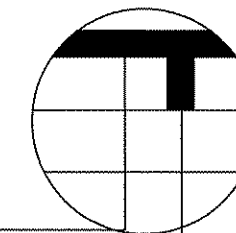


PROPOSED SECTION



DETAIL A

1.5' MILL IN PLACE BITUMINOUS SURFACE
 2' TYPE SP 12.5 WEAR (SPWEB440 E)
 EXISTING BITUMINOUS



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\09-01-00\CSAH_78\Plan\OVERLAY TEMPLAT TYP DETAIL.S.dgn 02/06/2009 11:25:41 AM

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: Charles Cadenhead
 SIGNATURE: *Charles Cadenhead*
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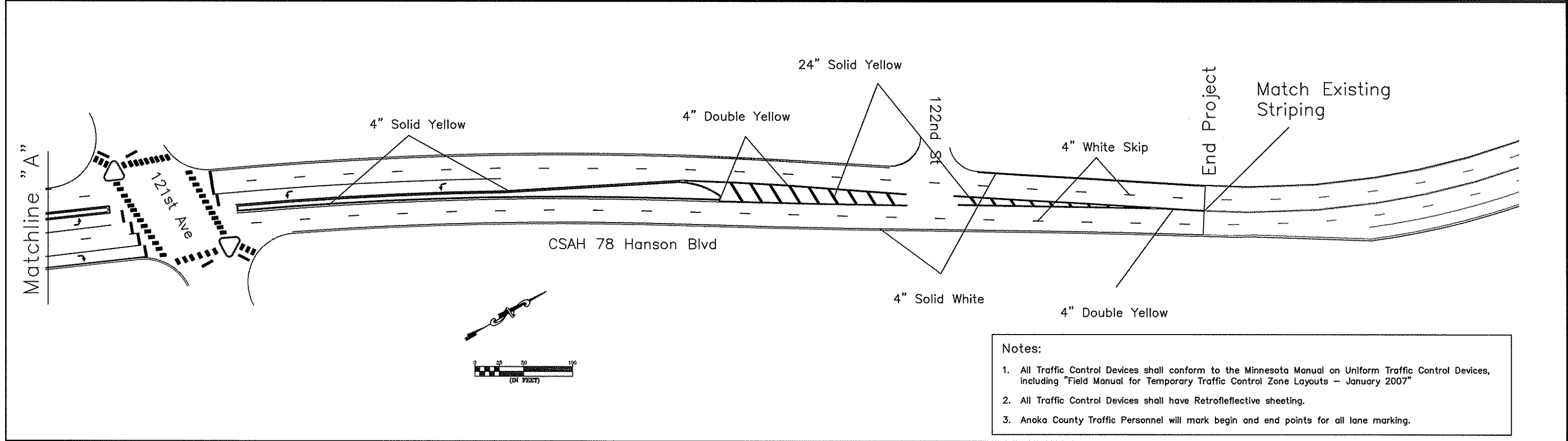
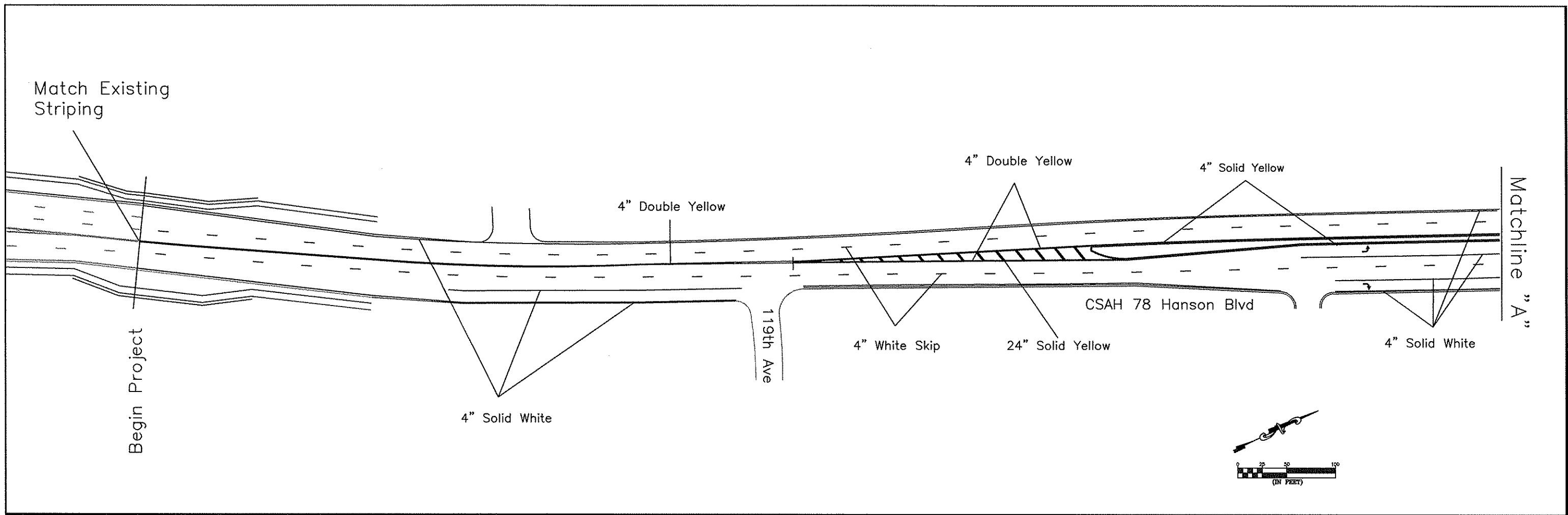
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 CHECKED BY CO DATE 2/3/2009



ANOKA COUNTY
 HIGHWAY DEPT.

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 COUNTY PROJECT NO. 09-17-78

TYPICAL SECTIONS
 CSAH 78
 Sheet 4 of 5 Sheets



- Notes:
1. All Traffic Control Devices shall conform to the Minnesota Manual on Uniform Traffic Control Devices, including "Field Manual for Temporary Traffic Control Zone Layouts - January 2007"
 2. All Traffic Control Devices shall have Retroreflective sheeting.
 3. Anoka County Traffic Personnel will mark begin and end points for all lane marking.

NO	DATE	BY	CHKD	APPR	REVISION

NAME: T:\Traffic\dwg\CSAH 78 (Hanson Blvd_Flamingo St)\from CSAH 1 to CSAH 22.dwg 02/25/2009 3:24:19 PM CST MN.

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: Charles Cadenhead
 SIGNATURE: *Charles Cadenhead*
 DATE: 2/25/09 LICENSE NO: 40416

DRAWN BY: MTH DATE: 02/26/09
 DESIGN BY: DATE: _____
 CHECKED BY: DATE: _____

ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 09-17-78

CSAH 78
PAVEMENT MARKINGS
 Sheet 5 of 5 Sheets