

STATEMENT OF ESTIMATED QUANTITIES

NOTES	ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL PROJECT QUANTITIES ESTIMATED
	2021.501	MOBILIZATION	LUMP SUM	1
	2104.502	SALVAGE SIGN TYPE C	EACH	3
1	2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	570
	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	232
	2104.510	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	265
17	2105.507	COMMON EXCAVATION	CU YD	650
	2105.507	SELECT GRANULAR BORROW (LV)	CU YD	200
5	2105.602	CONSTRUCT TURN LANE	EACH	1
2	2123.503	MOTOR GRADER	HOUR	12
9	2123.510	DOZER	HOUR	8
	2130.523	WATER	MGAL	137
3	2211.509	AGGREGATE BASE CLASS 5	TON	285
	2215.504	FULL DEPTH RECLAMATION	SQ YD	19634
4	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	60
	2221.509	SHOULDER BASE AGGREGATE CLASS 5	TON	62
	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	297
	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	993
1,6	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	66
7	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (4,C)	TON	253
	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (4,C)	TON	5814
14	2540.602	MAIL BOX SUPPORT	EACH	32
10	2563.601	TRAFFIC CONTROL	LUMP SUM	1
11	2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	UNIT DAY	20
	2564.502	INSTALL SIGN PANEL TYPE C	EACH	4
	2564.518	SIGN PANELS TYPE C	SQ FT	6.25
8	2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER	LIN FT	100
15	2574.507	COMMON TOPSOIL BORROW (LV)	CU YD	150
16	2575.504	EROSION CONTROL BLANKETS CATEGORY 0	SQ YD	1400
12	2581.503	REMOVABLE PREFORMED PAVEMENT MARKING TAPE	LIN FT	284
13	2582.503	4" SOLID LINE MULTI COMP	LIN FT	18335
13	2582.503	4" BROKEN LINE MULTI COMP	LIN FT	1440
13	2582.503	4" DBLE SOLID LINE MULTI COMP	LIN FT	250

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 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 AND ELMCREST REALIGNMENT.
4	MATERIAL SHALL BE HAULED AND USED FOR PROFILE CORRECTION AREAS. ITEM INCLUDES PLACEMENT, SHAPING, COMPACTION, AND MAINTENANCE OF MATERIAL. EXCESS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
5	THIS ITEM INCLUDES: COMMON EXCAVATION, SELECT GRANULAR BORROW, TOPSOIL AND AGG BASE CL-5. (SEE PAGE 12 FOR QUANTITIES) SHAPING OF SUB-GRADE AND AGGREGATE BASE ARE INCIDENTAL TO CONSTRUCT TURN LANE ITEM.
6	ITEM FOR BITUMINOUS DRIVEWAYS. DRIVEWAYS SHALL BE PAVED AFTER MAINLINE PAVING AND BEFORE FINAL STRIPING.
7	ITEM FOR BITUMINOUS STREET APPROACHES. STREET APPROACHES SHALL BE PAVED AFTER MAINLINE PAVING AND BEFORE FINAL
8	PLACE LOGS ON SMOOTH, PREPPED SOILS WITH NO GAPS BETWEEN LOG AND SOIL. INSTALL LOGS ALONG CONTOURS WITH ENDS TURNED UP SLOPE IN A J-HOOKED MANNER.
9	ITEM USED FOR DITCH GRADING FOLLOWING CONSTRUCTION OF RIGHT TURN LANE. ITEM SHALL BE USED ONLY AS NECESSARY AS DETERMINED BY THE ENGINEER.
10	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.
11	2 MESSAGE BOARDS, ONE ON EACH END OF PROJECT, WILL BE INSTALLED 10 DAYS PRIOR TO ANY CONSTRUCTION; REFERENCE STRIPING PLAN FOR DETAILS.
12	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.
13	FINAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS OF COMPLETION OF MAINLINE WEAR COURSE PAVING.
14	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.
15	ITEM USED AT ENGINEER'S DISCRETION FOR RESTORATION OF DISTURBED AREAS ALONG DRIVEWAYS, STREET APPROACHES AND BEHIND CURB
16	TYPE 1 FERTILIZER AND TYPE 25-121 SEED ARE INCIDENTAL TO THIS ITEM. SEE "BASIS OF PLANNED QUANTITIES" FOR APPLICATION RATES.
17	THIS ITEM INCLUDES 550 CU YD FOR THE ELMCREST AVENUE REALIGNMENT

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 1	350 LBS / ACRE

MNDOT STANDARD PLATES

PLATE NUMBER	DESCRIPTION
8000J	CHANNELIZERS (3 SHEETS)
9350A	MAILBOX SUPPORT (SWING-AWAY TYPE)

NO	DATE	BY	CKD	APPR	REVISION
	04/19/2019				

NAME: P:\19-01-00\CR_02_(CSAH16-ECCountyLine)\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: 4/19/19 LICENSE NO. 46732

DRAWN BY: BRM DATE: 1/28/2019

DESIGN BY: BRM DATE: 1/28/2019

CHECKED BY: HG DATE: 04/19/2019



**ANOKA COUNTY
HIGHWAY DEPT.**

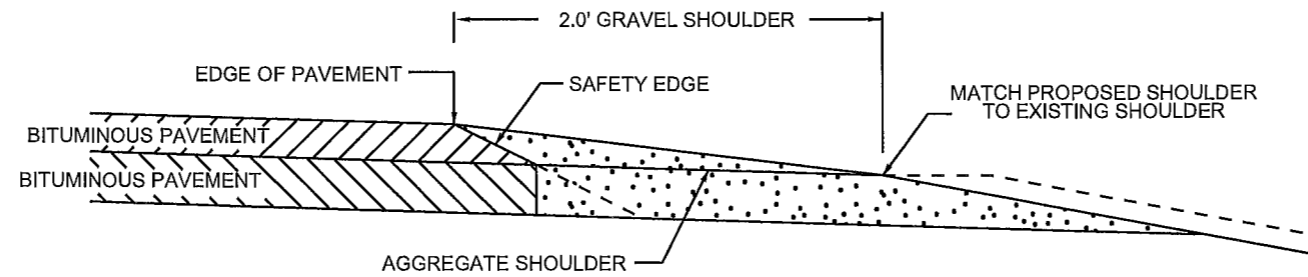
COUNTY PROJECT CP 19-13-62

STATEMENT OF ESTIMATED QUANTITIES

Sheet 2 of 22 Sheets

SHOULDER DETAIL

BITUMINOUS SAFETY EDGE
GRAVEL SHOULDER



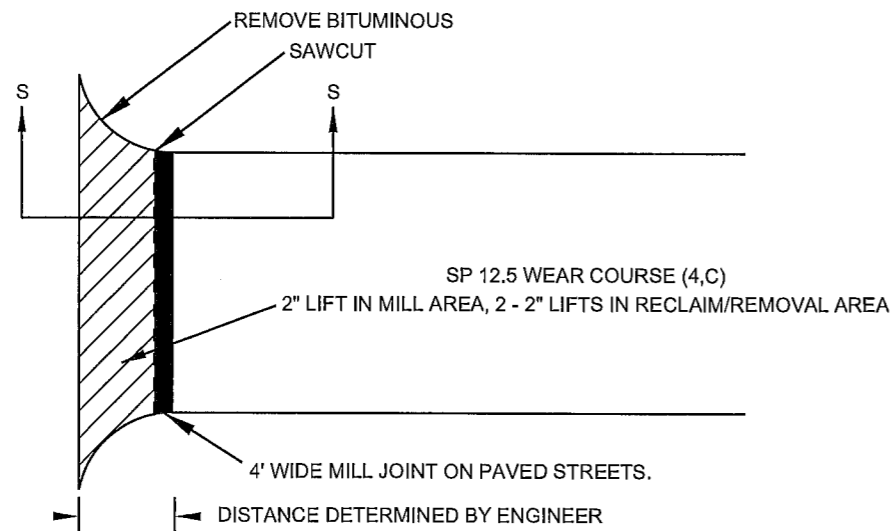
SAFETY EDGE TO BE USED IN ALL NON-CURB AREAS ON SHOULDER.

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

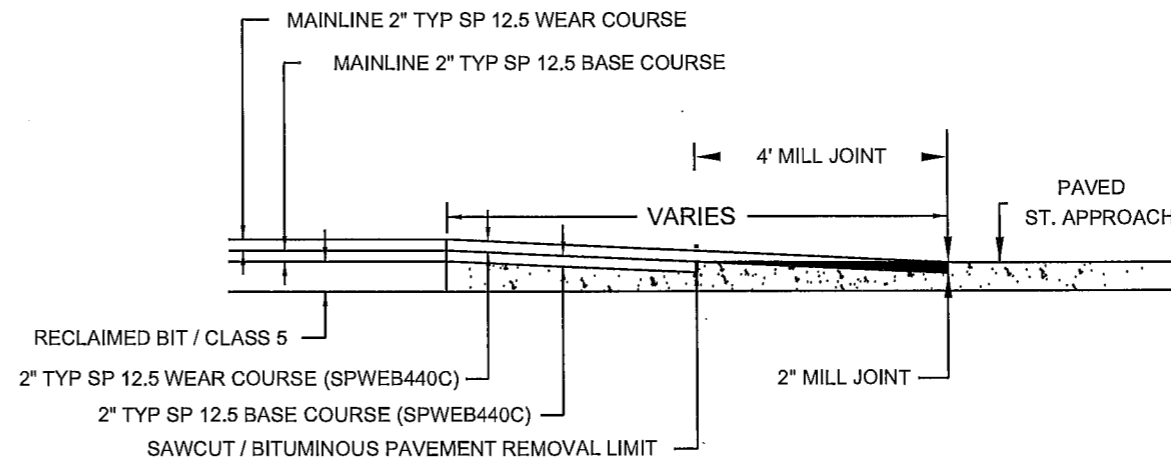
STREET APPROACH DETAIL (RECLAIM)

BITUMINOUS STREET

PLAN VIEW



SECTION S - S

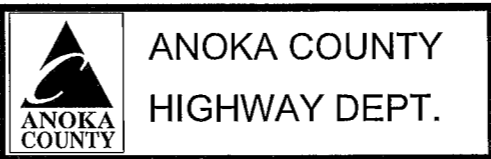


NO	DATE	BY	CKD	APPR	REVISION	
NAME: P:\19-01-00\CR_62_(CSAH18-ECountryLine)\Base\PROPOSED\Proposed.dgn						

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: 4-25-19 LICENSE NO. 46732

DRAWN BY BRM DATE 1/29/2019
DESIGN BY BRM DATE 1/29/2019
CHECKED BY HG DATE 03/27/2019



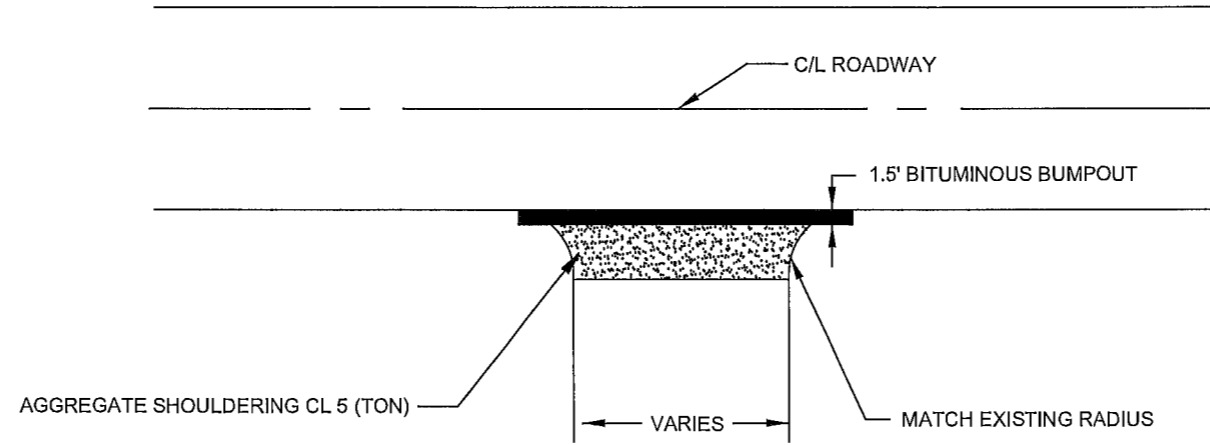
COUNTY PROJECT CP 19-13-62

DETAILS

Sheet 5 of 22 Sheets

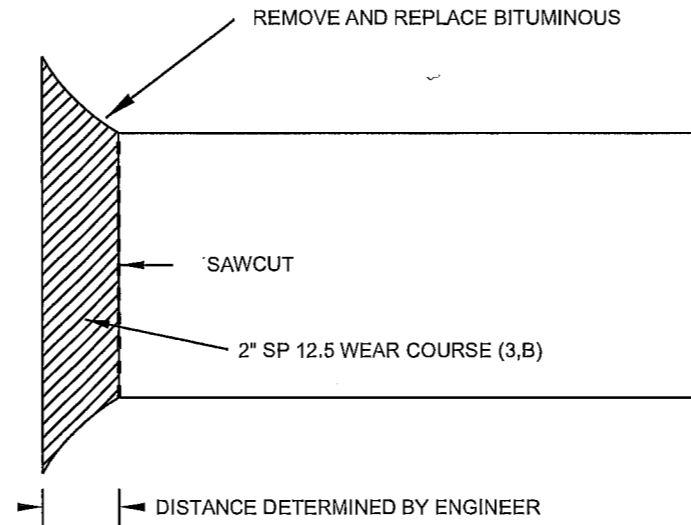
DRIVEWAY DETAIL

GRAVEL / FIELD ENTRANCE



RECLAIM AREA - DRIVEWAY DETAIL

PLAN VIEW



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: JOSEPH MACPHERSON

SIGNATURE: *[Signature]*

DATE: 4-15-19 LICENSE NO. 46732

DRAWN BY BRM DATE 1/28/2019

DESIGN BY BRM DATE 1/28/2019

CHECKED BY HG DATE 03/27/2019



ANOKA COUNTY
HIGHWAY DEPT.

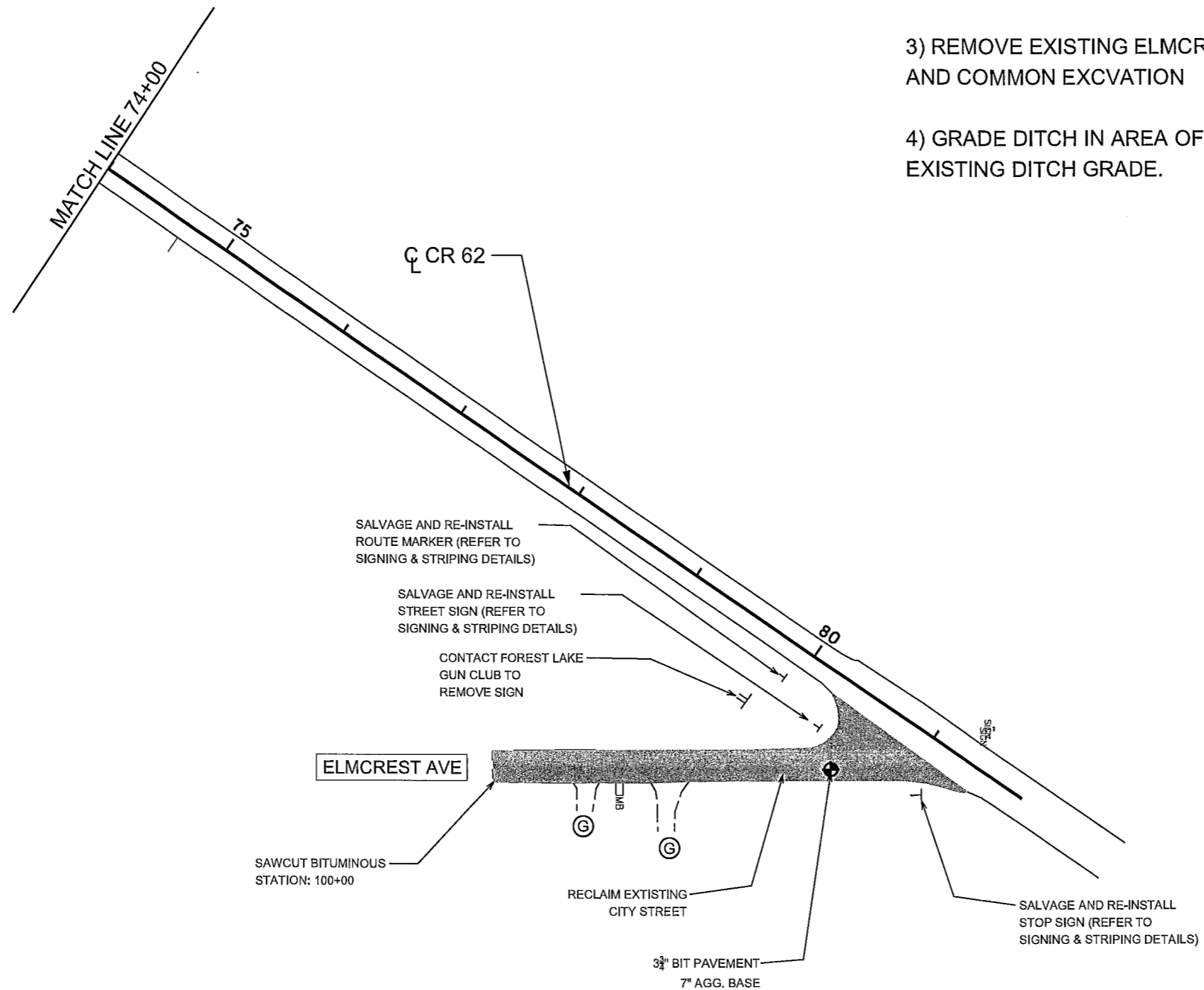
COUNTY PROJECT CP 19-13-62

DETAILS

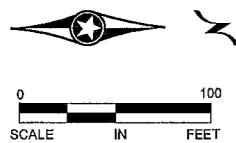
Sheet 6 of 22 Sheets

NOTES

- 1) RECLAIM ELMCREST AVE IN CONJUNCTION WITH CR 62 RECLAIM
- 2) CONSTRUCT ELMCREST AVE REALIGNMENT, ALLOWING TRAFFIC TO USE EXISTING ALIGNMENT UNTIL PROPOSED ALIGNMENT IS COMPLETE. (SEE CONSTRUCTION PLAN)
- 3) REMOVE EXISTING ELMCREST AVE ALIGNMENT, INCLUDING RECLAIM/GRAVEL AND COMMON EXCVATION
- 4) GRADE DITCH IN AREA OF EXISTING ELMCREST AVE ALIGNMENT TO MATCH EXISTING DITCH GRADE.



LEGEND	
	MAINLINE (RECLAIM)
	BITUMINOUS
	GRAVEL
	SAWCUT
	CORE LOCATION



NO	DATE	BY	CKD	APPR	REVISION
	03/27/2019				

NAME: P:\19-01-00\CR_62 (CSAH18-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: 7-26-19 LICENSE NO. 46732

DRAWN BY BRM DATE 1/28/2019

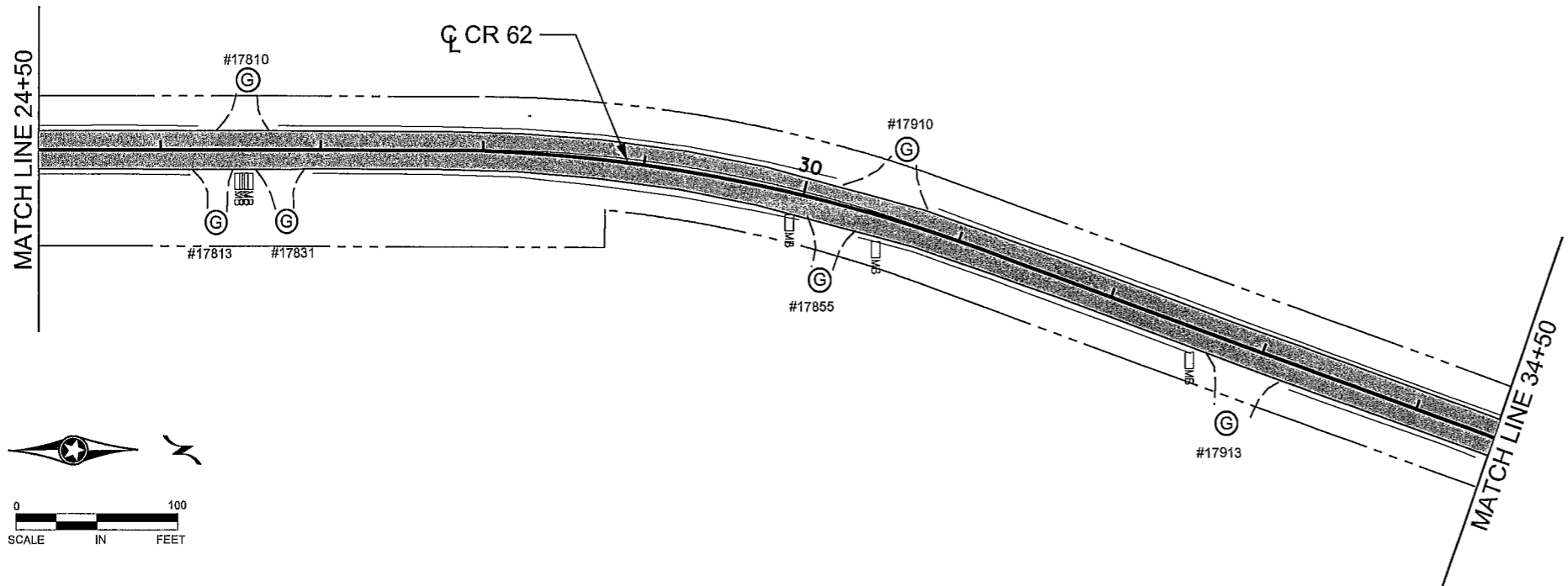
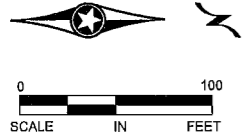
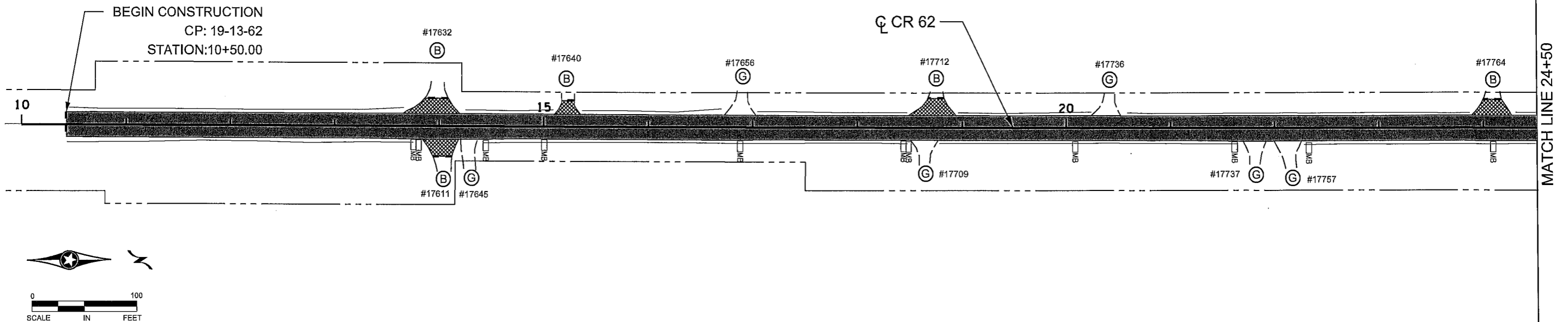
DESIGN BY BRM DATE 1/28/2019

CHECKED BY HG DATE 03/27/2019

ANOKA COUNTY HIGHWAY DEPT.

COUNTY PROJECT CP 19-13-62

ELMCREST AVE REMOVAL PLAN
 STA 100+00 TO 102+18
 Sheet 7 of 22 Sheets



LEGEND	
	MAINLINE (RECLAIM)
	REMOVE AND REPLACE PAVEMENT
	CONSTRUCT RIGHT TURN LANE
(B)	BITUMINOUS DRIVEWAY
(G)	GRAVEL DRIVEWAY OR APPROACH
	CORE LOCATION
- - -	SAWCUT
— — —	R/W
— • —	BIOROLL

NO	DATE	BY	CKD	APPR	REVISION	DATE	TIME
	03/27/2019						9:27:15 AM

NAME: P:\19-01-00\CR_62_(CSAH18-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:

DATE: 3-25-19 LICENSE NO. 46732

DRAWN BY BRM DATE 1/28/2019

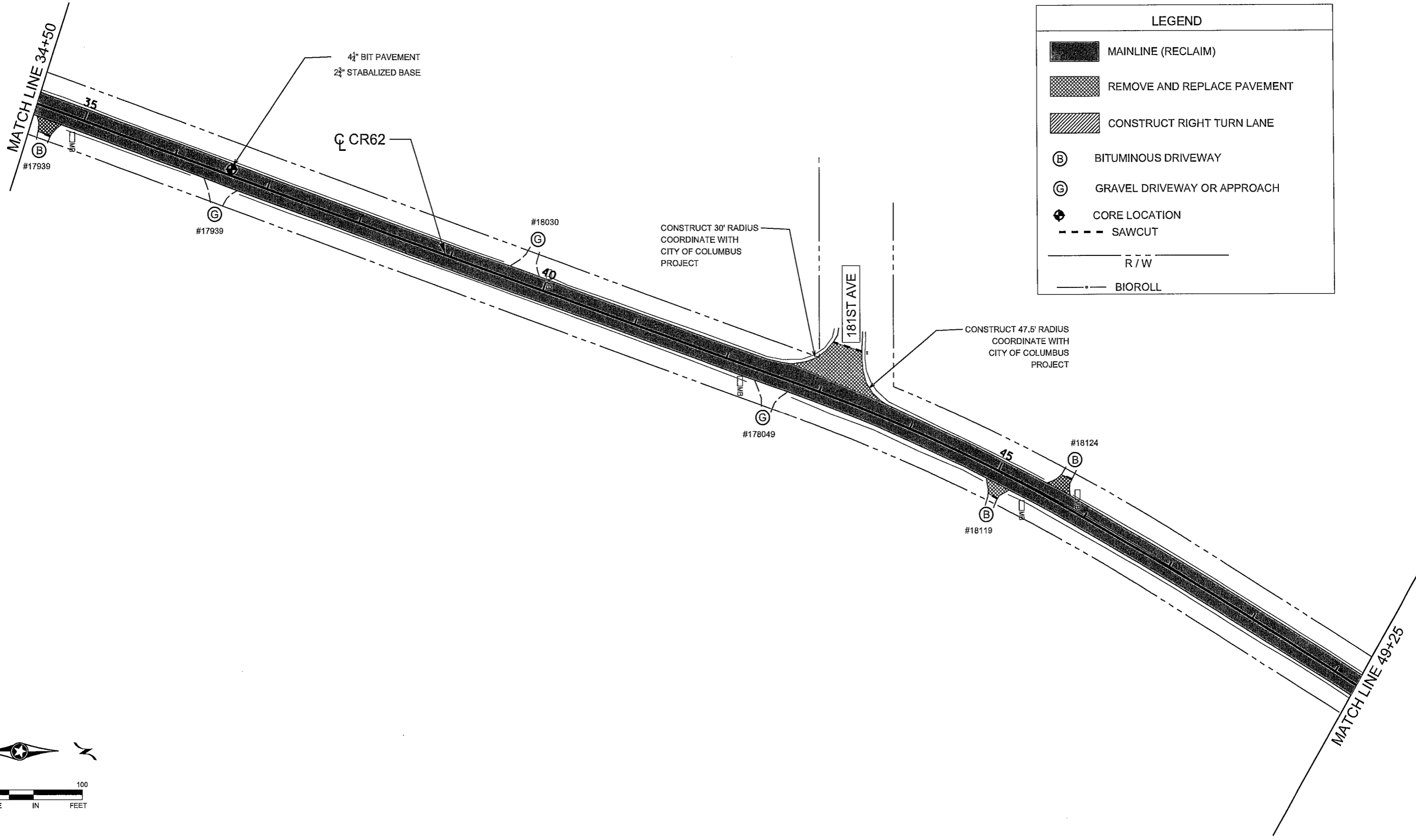
DESIGN BY BRM DATE 1/28/2019

CHECKED BY HG DATE 03/27/2019

ANOKA COUNTY HIGHWAY DEPT.

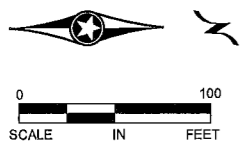
COUNTY PROJECT CP 19-13-62

CONSTRUCTION PLAN
STA 10+50 TO 34+50
Sheet 8 of 22 Sheets



LEGEND

- MAINLINE (RECLAIM)
- REMOVE AND REPLACE PAVEMENT
- CONSTRUCT RIGHT TURN LANE
- BITUMINOUS DRIVEWAY
- GRAVEL DRIVEWAY OR APPROACH
- CORE LOCATION
- SAWCUT
- R / W
- BIOROLL



NO	DATE	BY	CKD	APPR	REVISION
	03/27/2019				

NAME: PA19-01-00\CR_62_(CSAH18-ECountryLine)\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: 9-25-19 LICENSE NO. 46732

DRAWN BY BRM DATE 1/28/2019

DESIGN BY BRM DATE 1/28/2019

CHECKED BY HG DATE 03/27/2019

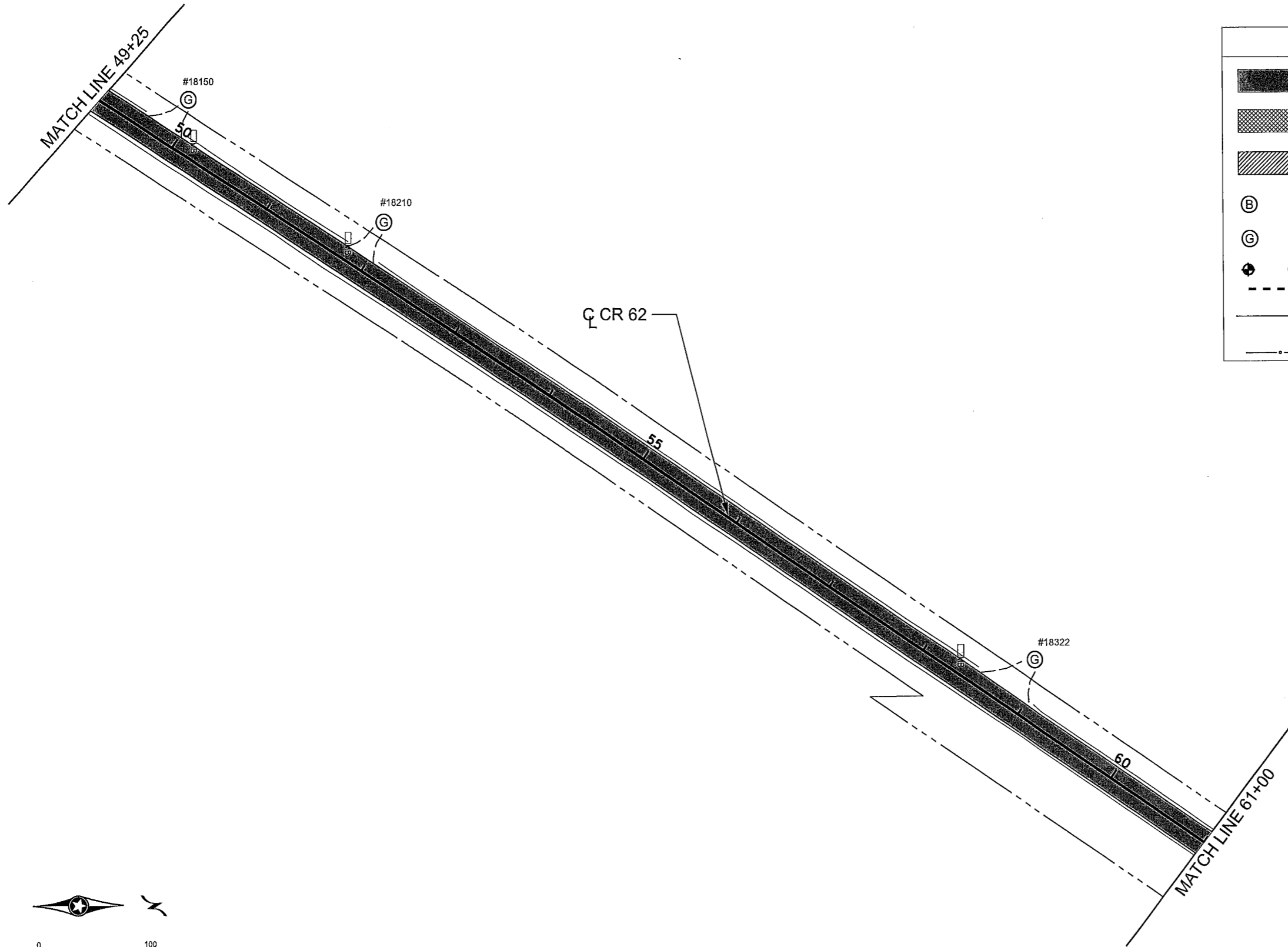
ANOKA COUNTY HIGHWAY DEPT.

COUNTY PROJECT CP 19-13-62

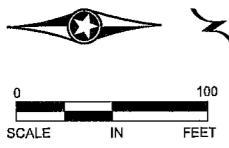
CONSTRUCTION PLAN

STA 34+50 TO 49+25

Sheet 9 of 22 Sheets



LEGEND	
	MAINLINE (RECLAIM)
	REMOVE AND REPLACE PAVEMENT
	CONSTRUCT RIGHT TURN LANE
	BITUMINOUS DRIVEWAY
	GRAVEL DRIVEWAY OR APPROACH
	CORE LOCATION
	SAWCUT
	R / W
	BIOROLL



NO	DATE	BY	CKD	APPR	REVISION	DATE	TIME

NAME: P:\19-01-00\CR_62_(CSAH18-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:

DATE: 7-25-19 LICENSE NO. 46732

DRAWN BY BRM DATE 1/28/2019

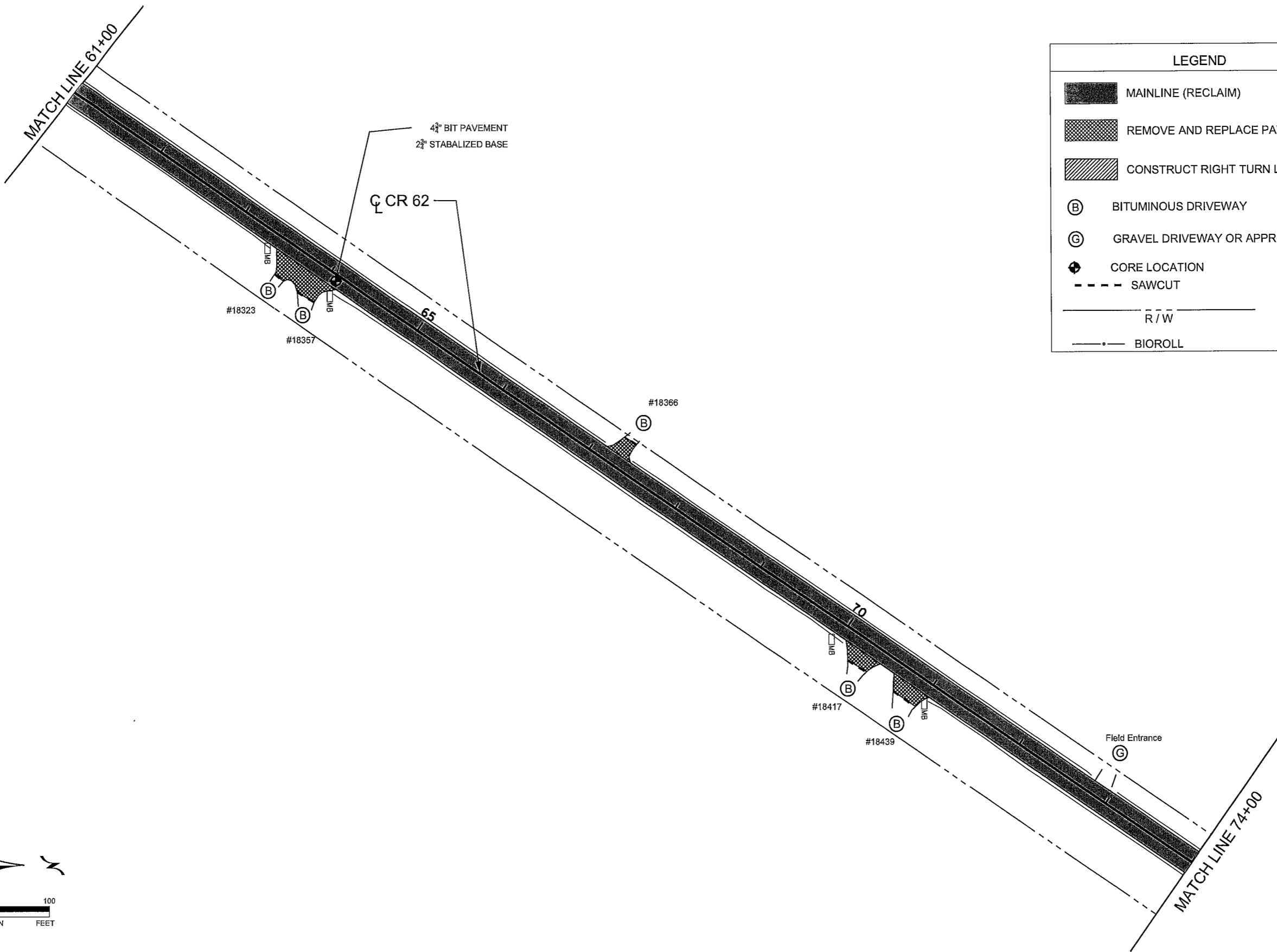
DESIGN BY BRM DATE 1/28/2019

CHECKED BY HG DATE 03/27/2019

ANOKA COUNTY
HIGHWAY DEPT.

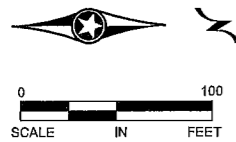
COUNTY PROJECT CP 19-13-62

CONSTRUCTION PLAN
STA 49+25 TO 61+00
Sheet 10 of 22 Sheets



LEGEND

- MAINLINE (RECLAIM)
- REMOVE AND REPLACE PAVEMENT
- CONSTRUCT RIGHT TURN LANE
- BITUMINOUS DRIVEWAY
- GRAVEL DRIVEWAY OR APPROACH
- CORE LOCATION
- SAWCUT
- R / W
- BIOROLL



NO	DATE	BY	CKD	APPR	REVISION	DATE	TIME

NAME: P:\19-01-00\CR_62_(CSAH18-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. MACHERSON

SIGNATURE:

DATE: 4-25-19 LICENSE NO. 46732

DRAWN BY BRM DATE 1/28/2019

DESIGN BY BRM DATE 1/28/2019

CHECKED BY HG DATE 03/27/2019

ANOKA COUNTY
HIGHWAY DEPT.

COUNTY PROJECT CP 19-13-62

CONSTRUCTION PLAN

STA 61+00 TO 74+00

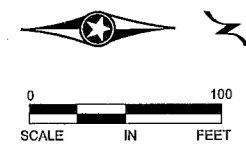
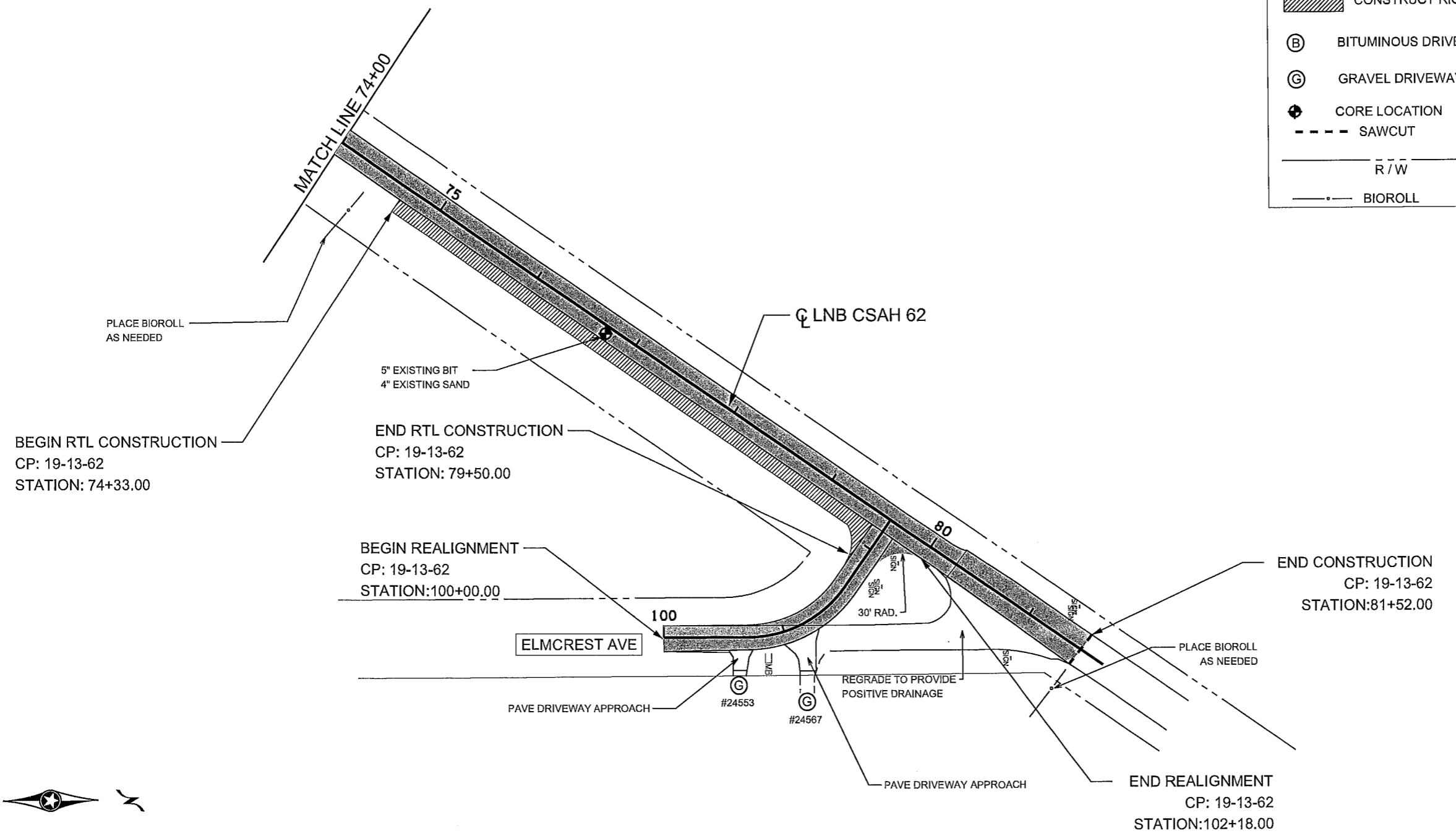
Sheet 11 of 22 Sheets

APAnders

RIGHT TURN LANE AND STREET REALIGNMENT TAB

STREET	STATION RANGE	RTL / BYPASS	COMMON EXCAVATION (CU YDS)	GRANULAR BORROW (CV) (CU YDS)	TOPSOIL BORROW (LV) (CU YDS)	CLASS 5 (TON)
Elmcrest Ave	74+33 - 79+50	RTL	100	360	120	120
Elmcrest Ave	100+00-102+18	Realign	550	200	100	50
TOTALS:			650	560	220	170

LEGEND	
	MAINLINE (RECLAIM)
	REMOVE AND REPLACE PAVEMENT
	CONSTRUCT RIGHT TURN LANE
	BITUMINOUS DRIVEWAY
	GRAVEL DRIVEWAY OR APPROACH
	CORE LOCATION
	SAWCUT
	R / W
	BIOROLL



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: <i>[Signature]</i> DATE: 4-28-19 LICENSE NO. 46732					DRAWN BY: BRM DATE: 1/28/2019 DESIGN BY: BRM DATE: 1/28/2019 CHECKED BY: HG DATE: 03/27/2019	<p>ANOKA COUNTY HIGHWAY DEPT.</p>	<p>CONSTRUCTION PLAN</p> <p>STA 74+00 TO 80+26</p> <p>Sheet 12 of 22 Sheets</p>
NO. DATE BY CKD APPR REVISION 03/27/2019 9:27:16 AM NAME: P:\19-01-00\CR_02_(CSAH18-ECountyLine)\Base\PROPOSED\Proposed.dgn	COUNTY PROJECT CP 19-13-62						

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.

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 BEANS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE MULTI COMP RESIN LINE TO PROVIDE AN IMMEDIATE NO-TRACK SYSTEM.

A MULTI COMP RESIN LINE SHALL BE APPLIED WITH A MINIMUM THICKNESS OF 20 MILS (WET) AND 4" WIDE. GLASS BEANS 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:

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.

PAVEMENT MARKING TABULATION		
ITEM	UNIT	TOTAL QUANTITY
4" SOLID LINE WHITE - MULTI COMP	LIN FT	15200
4" SOLID LINE YELLOW - MULTI COMP	LIN FT	3135
4" SOLID DOUBLE LINE YELLOW - MULTI COMP	LIN FT	250
4" BROKEN LINE YELLOW - MULTI COMP	LIN FT	1440

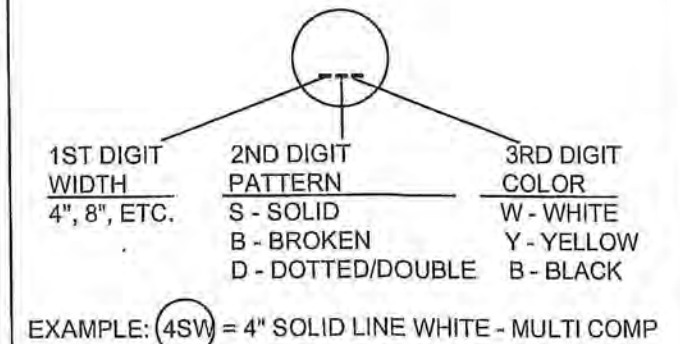
1 10' STRIPE, 40' GAP

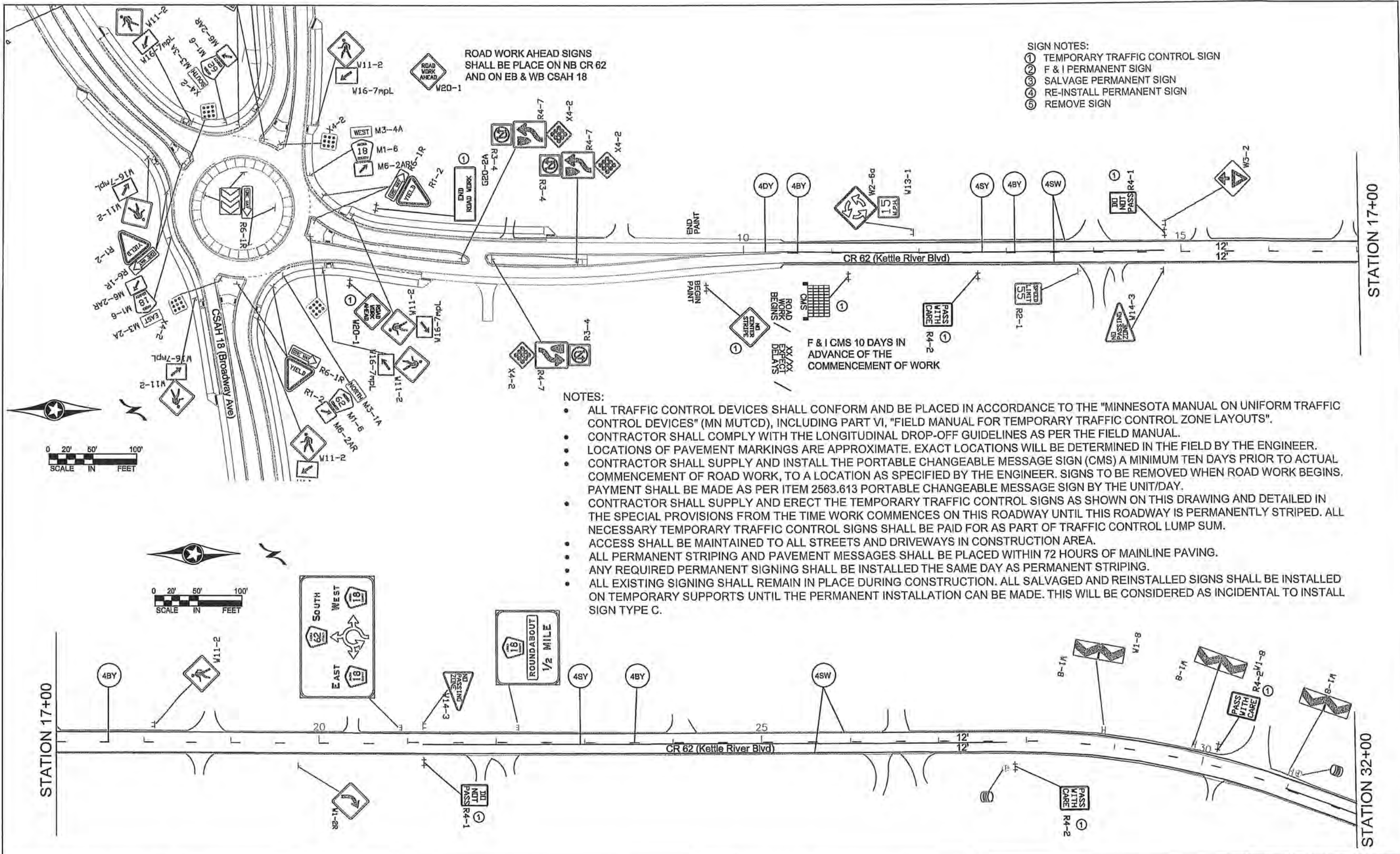
SYMBOLS & MATERIALS LEGEND

- CROSSWALK BLOCK WHITE-POLY PREFORM
- ← PAVEMENT MESSAGE (LEFT ARROW) POLY PREFORM

STRIPING KEY

- CIRCLE - MULTI COMP
- SQUARE - POLY PREFORM THERMOPLASTIC
- △ TRIANGLE - PAINT
- ⬠ PENTAGON - REMOVABLE PREFORMED PLASTIC MARKING





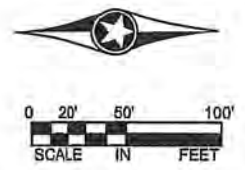
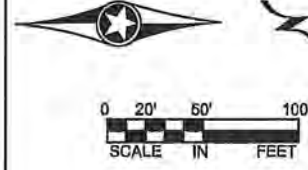
- SIGN NOTES:**
- ① TEMPORARY TRAFFIC CONTROL SIGN
 - ② F & I PERMANENT SIGN
 - ③ SALVAGE PERMANENT SIGN
 - ④ RE-INSTALL PERMANENT SIGN
 - ⑤ REMOVE SIGN

ROAD WORK AHEAD SIGNS SHALL BE PLACE ON NB CR 62 AND ON EB & WB CSAH 18

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 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.
- 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.

F & I CMS 10 DAYS IN ADVANCE OF THE COMMENCEMENT OF WORK



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CR 62 (CSAH18-ECountyLine)\Base\Traffic\Signling & Striping.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: DOUGLAS W. FISCHER

SIGNATURE: *[Signature]*

DATE: 4/25/19 REG. NO. 20235

DRAWN BY: TMV DATE: 02/14/19

DESIGN BY: DATE: _____

CHECKED BY: DATE: _____

ANOKA COUNTY HIGHWAY DEPT.

STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

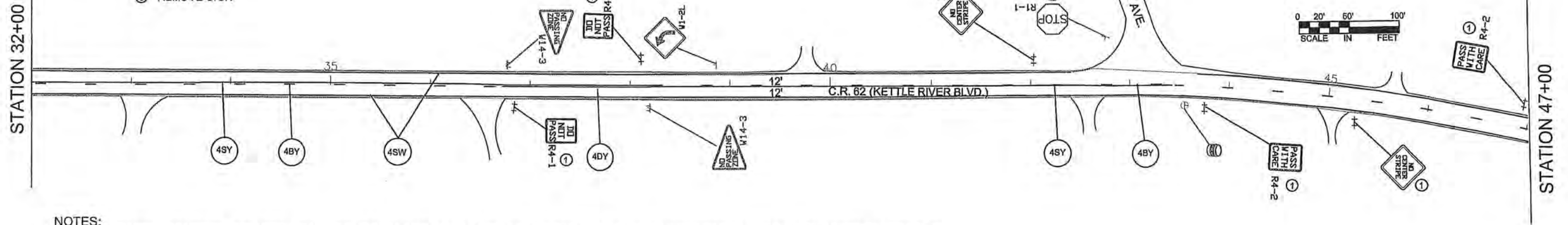
STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 19-13-62

TEMPORARY SIGNING, PERMANENT SIGNING AND STRIPING

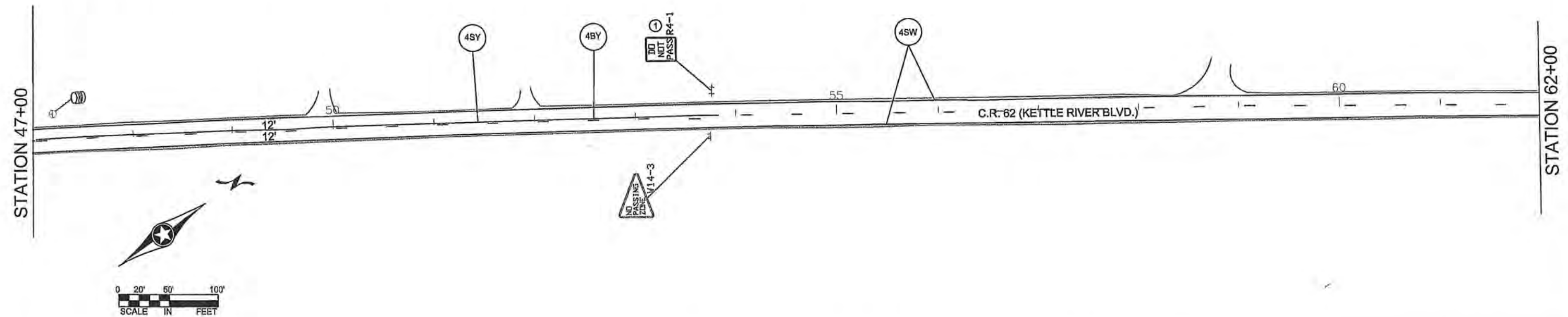
Sheet 14 of 22 Sheets

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



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 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.
- 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.



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CR 62 (CSAH18-ECOUNTYLINE)\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 REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: DOUGLAS W. FISHER

SIGNATURE: *[Signature]*

DATE: 4/25/19 REG. NO. 20235

DRAWN BY: JMV DATE: 02/14/19

DESIGN BY: DATE: _____

CHECKED BY: DATE: _____

ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

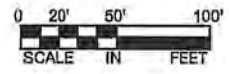
COUNTY PROJECT NO. 19-13-62

TEMPORARY SIGNING,
PERMANENT SIGNING
AND STRIPING

Sheet 15 of 22 Sheets



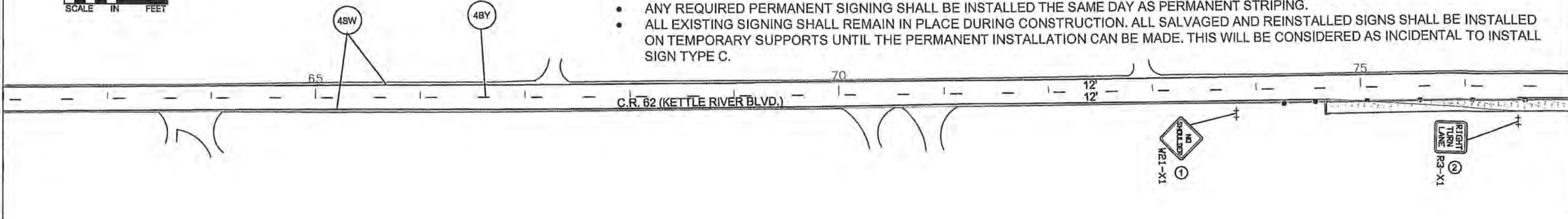
 CONSTRUCT UNDER TRAFFIC



NOTES:

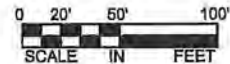
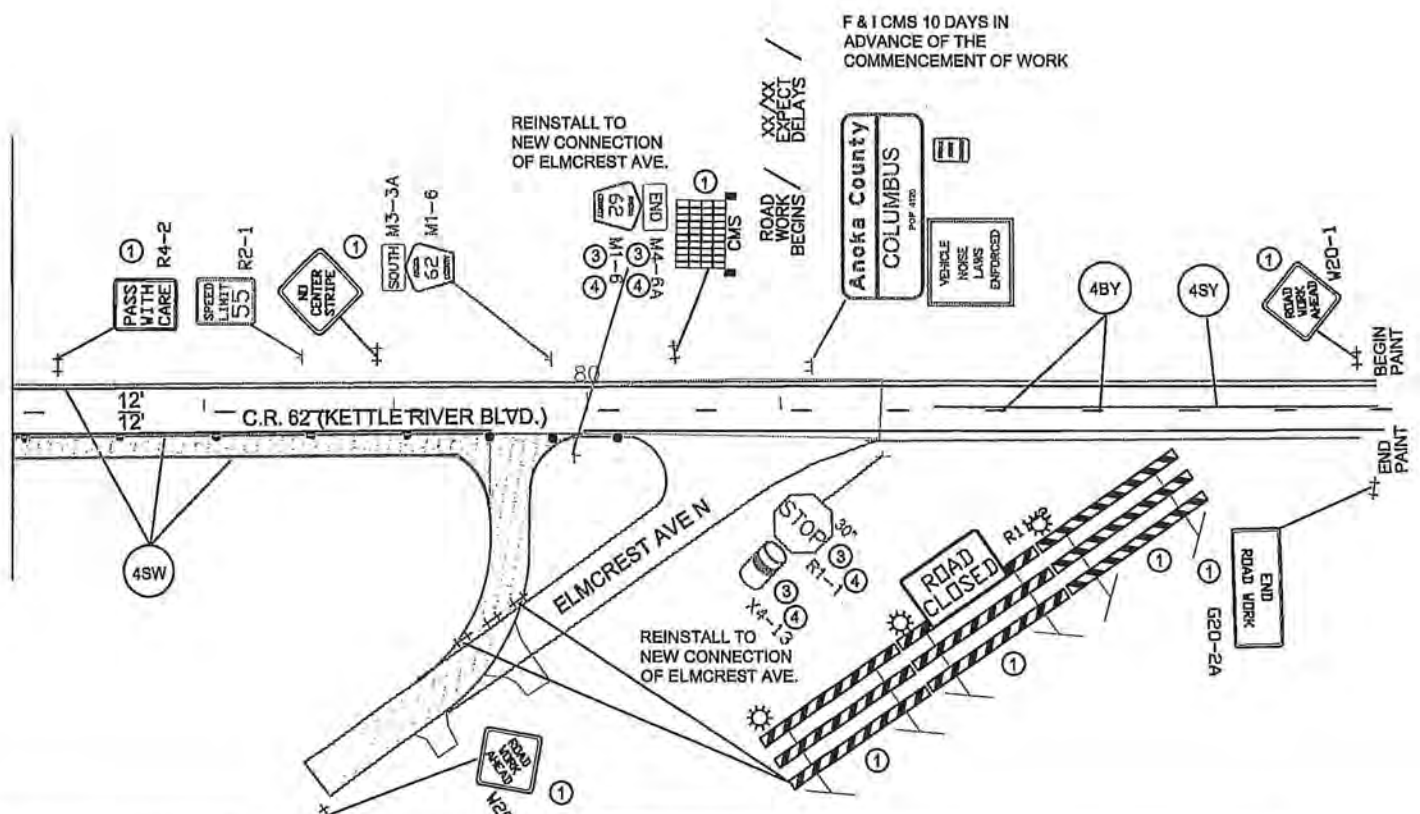
- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), INCLUDING PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
- CONTRACTOR SHALL COMPLY WITH THE LONGITUDINAL DROP-OFF GUIDELINES AS PER THE 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 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.
- 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.

STATION 62+00



STATION 77+00

STATION 77+00



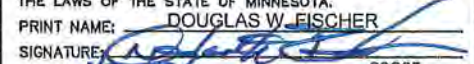
- SIGN NOTES:**
- ① TEMPORARY TRAFFIC CONTROL SIGN
 - ② F & I PERMANENT SIGN
 - ③ SALVAGE PERMANENT SIGN
 - ④ RE-INSTALL PERMANENT SIGN
 - ⑤ REMOVE SIGN

NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CR 62 (CSAH18-ECountyLine)\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 REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: DOUGLAS W. FISCHER

SIGNATURE: 

DATE: 1/25/19 REG. NO. 20235

DRAWN BY: TMV DATE: 02/14/19

DESIGN BY: DATE: _____

CHECKED BY: DATE: _____



ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 19-13-62

TEMPORARY SIGNING,
PERMANENT SIGNING
AND STRIPING

Sheet 16 of 22 Sheets

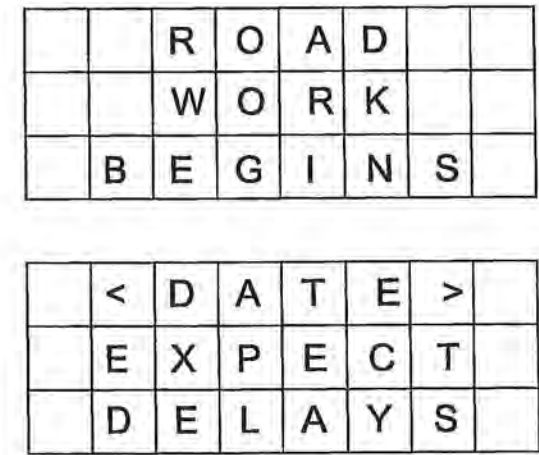
TEMPORARY TRAFFIC CONTROL SIGNS						
M.U.T.C.D. CODE	SIZE	PANEL AREA FT. ²	INSERT	QUANTITY		MOUNTING HEIGHT FT.
				No.	POST	
W8-12	48" x 48"	16.00		4	2	7.0'
R4-1	24" x 30"	5.00		5	1	7.0'
R4-2	24" x 30"	5.00		6	1	7.0'
G20-2A	48" x 24"	8.00		2	2	7.0'
W8-1A	48" x 48"	16.00		AS NEEDED		
W8-1A	48" x 48"	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 7)		
REFLECTORIZED REBOUNDABLE DRUM				AS NEEDED (ESTIMATED 11)		
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 AT 10 DAYS EA		

TEMPORARY TRAFFIC CONTROL SIGNS			
M.U.T.C.D. CODE	SIZE	INSERT	QUANTITY
R11-2	48" x 30"		1
FLASHER TYPE III	8 FOOT		
FLASHER TYPE III	8 FOOT		1
FLASHER TYPE III	8 FOOT		1

SIGN PANELS TYPE C							
M.U.T.C.D. CODE	SIZE	INSERT	QUANTITY	SQ FT PANEL AREA	SQ FT TOTAL AREA	MOUNTING POST PER INSTALLATION	MOUNTING HEIGHT
R3-X1	30" x 30"		1	6.25	6.25	1	7.0'

REINSTALL SALVAGED SIGN ASSEMBLIES TYPE C				
SIZE	INSERT	QUANTITY	MOUNTING POST PER INSTALLATION	MOUNTING HEIGHT To pavement edge
24" x 12"		1	1	7.0'
24" x 24"				
30" x 30"		1	1	7.0'
4" x 15"				
TOTAL TYPE C SIGN ASSEMBLIES 2				

CHANGEABLE MESSAGE BOARD - MESSAGE SEQUENCE LAYOUT

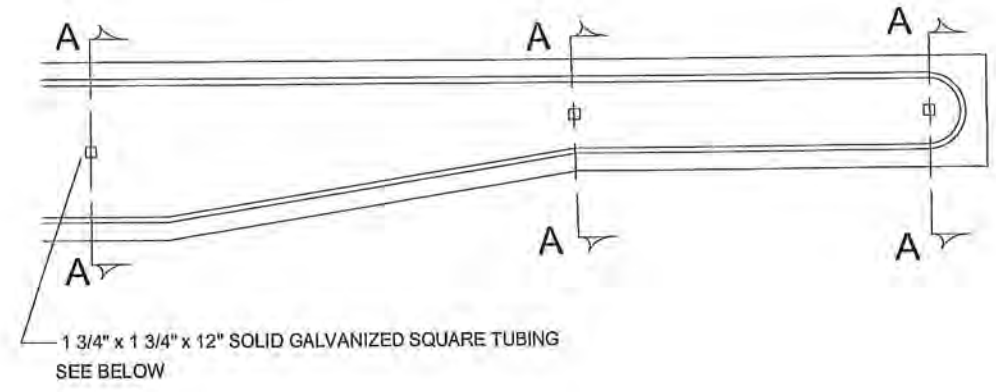
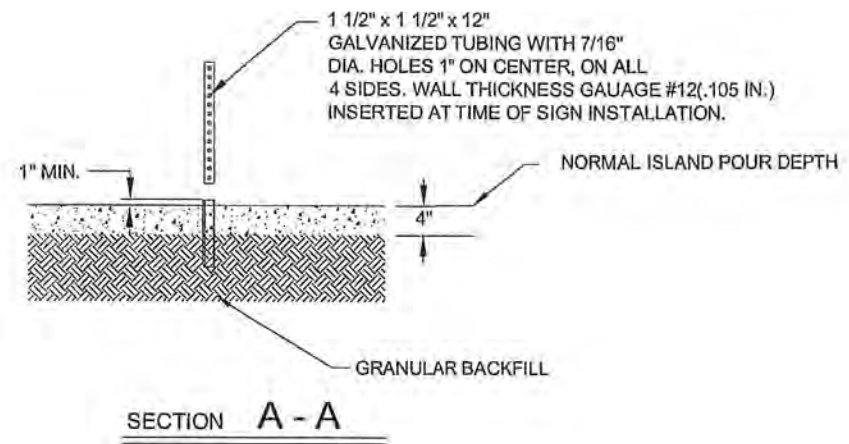


CMS sign to be installed a minimum of ten days prior to actual commencement of road work. Signs to be removed when road work begins.

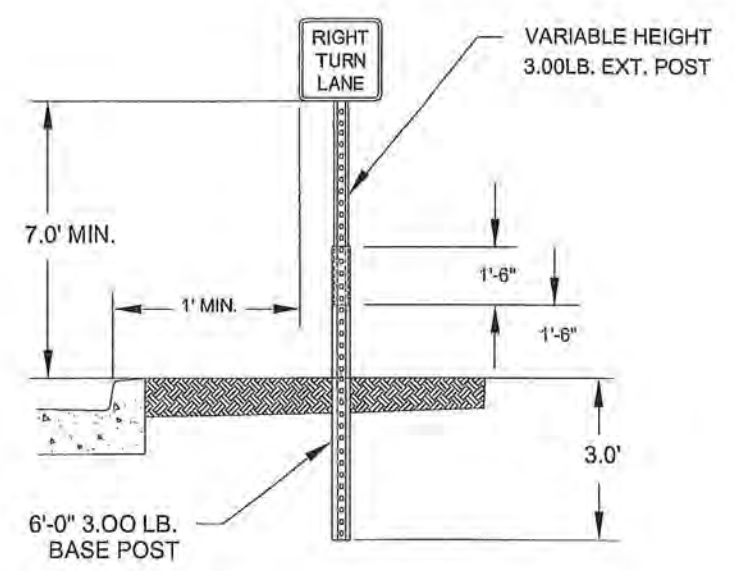
EXISTING SIGN TAB					
STATION	ADDRESS DESCRIPTION (NOTES)	SALVAGE	RE-INSTALL	SIGN NUMBER	SIGN LEGEND
		SIGN TYPE C	SIGN TYPE C		
80+10	RT	1	1	M4-6a M1-6	END 62 RTE MKR
81+25	RT	1	1	R1-1	30" STOP DELINEATOR
TOTAL		1	1		

NOTES:

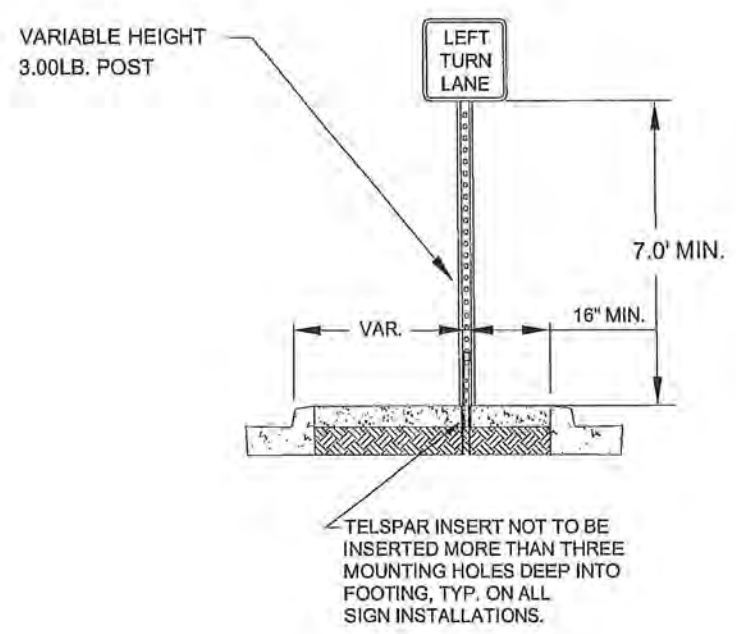
- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD), INCLUDING PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".
- CONTRACTOR SHALL COMPLY WITH THE LONGITUDINAL DROP-OFF GUIDELINES AS PER THE 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 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.
- 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.



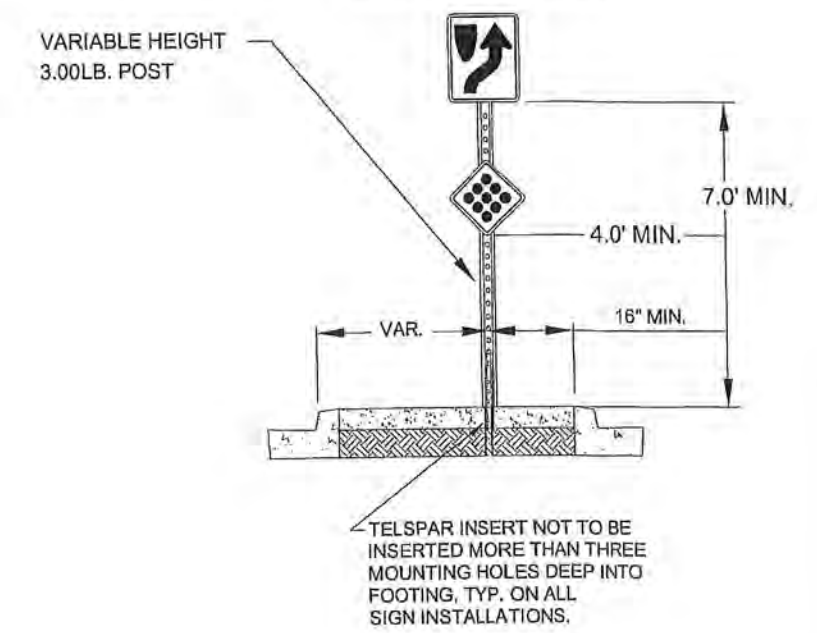
GROUND POST MOUNT SIGN
INSTALLATION TYPICAL



ISLAND MOUNT BREAK-AWAY SIGN
INSTALLATION TYPICAL



ISLAND MOUNT BREAK-AWAY SIGN
INSTALLATION TYPICAL
KEEP RIGHT/CLUSTER



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CR 62 (CSAH18-ECountryLine)\Base\Traffic\Sign&Stripe Details.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: DOUGLAS W. RISCHER, P.E.

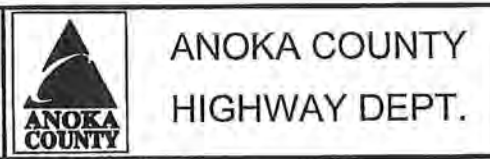
SIGNATURE: *[Signature]*

DATE: 4/25/19 REG. NO. 20235

DRAWN BY: TMV DATE: 02/21/19

DESIGN BY: DATE: _____

CHECKED BY: DATE: _____



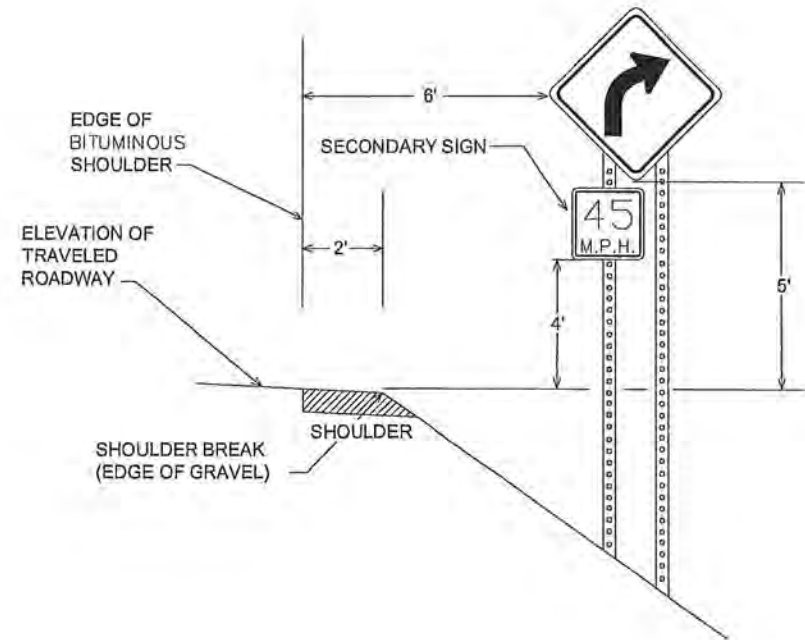
STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

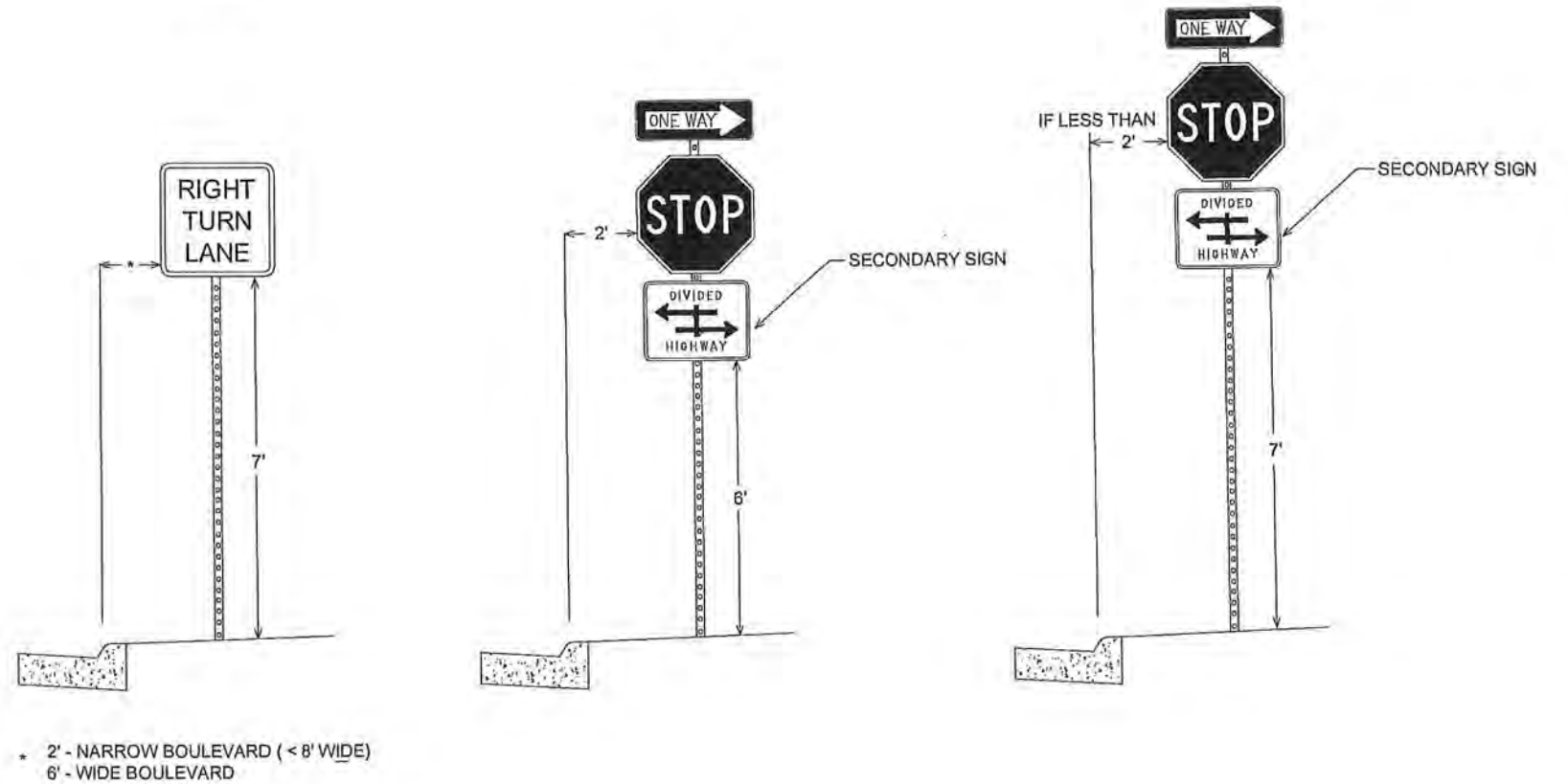
STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 19-13-62

TYPICAL SIGN PLACEMENT
(RURAL)

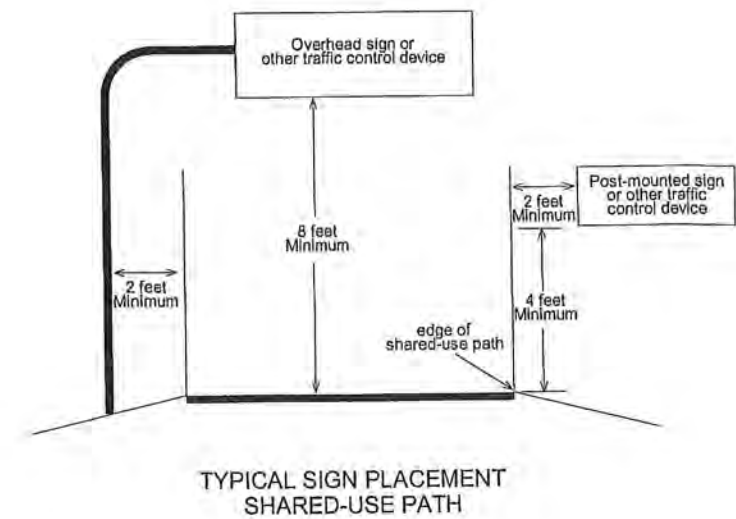


TYPICAL SIGN PLACEMENT
(URBAN)



NOTES:

- ALL DIMENSIONS ARE MINIMUMS
- MAINTAIN A CLEAR DISTANCE OF 2' BETWEEN SIGNS AND BITUMINOUS TRAIL
- 7' SIGN CLEARANCE IF A CLEAR DISTANCE OF 2' BETWEEN SIGNS AND BITUMINOUS TRAIL CANNOT BE MAINTAINED



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CR 62 (CSAH18-ECOUNTYLINE)\Base\Traffic\Sign&Stripe Details.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: DOUGLAS W. FISCHER, P.E.

SIGNATURE: *[Signature]*

DATE: 4/25/19 REG. NO. 20235

DRAWN BY: TMV DATE: 02/21/19

DESIGN BY: DATE: _____

CHECKED BY: DATE: _____

ANOKA COUNTY
HIGHWAY DEPT.

STATE PROJECT NO. _____

STATE AID PROJECT NO. _____

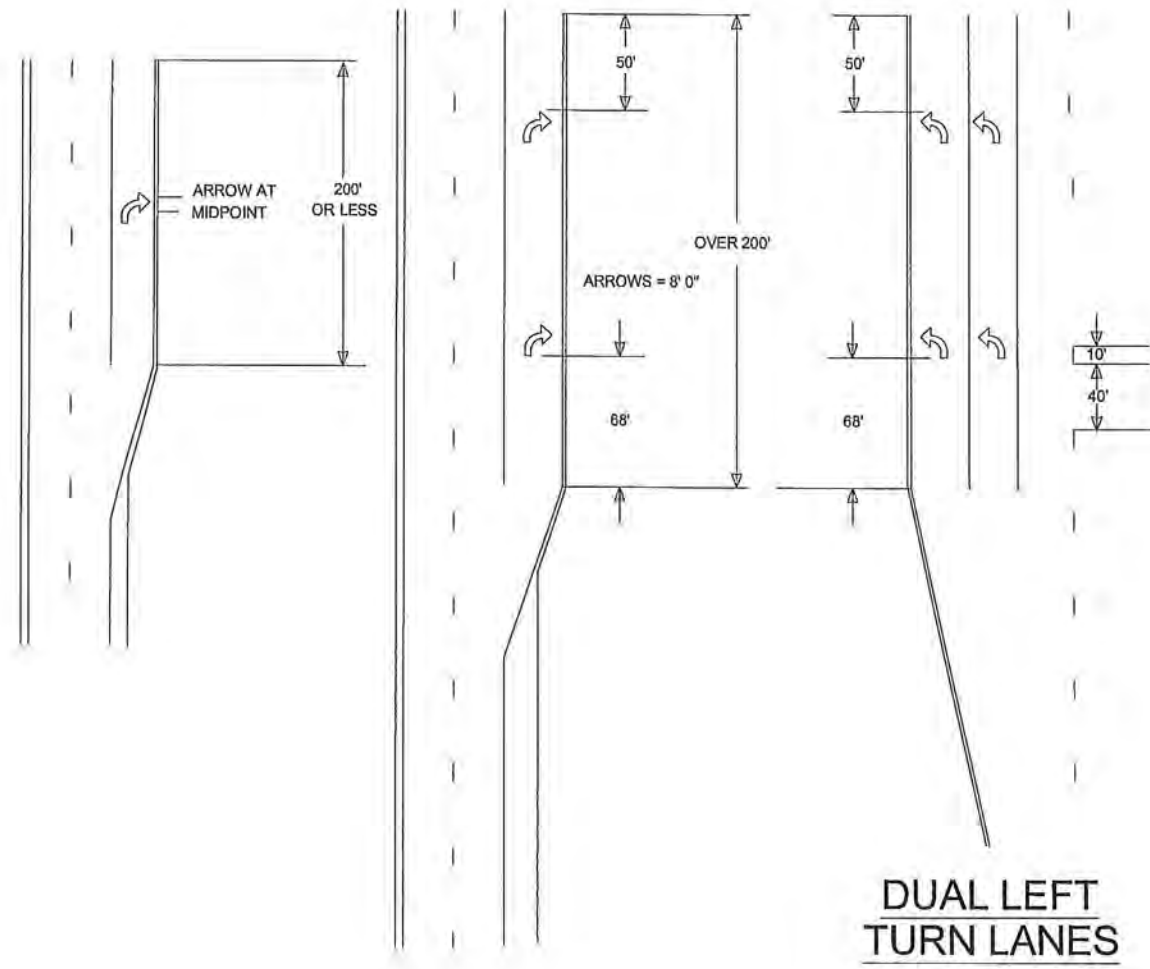
STATE AID PROJECT NO. _____

COUNTY PROJECT NO. 19-13-62

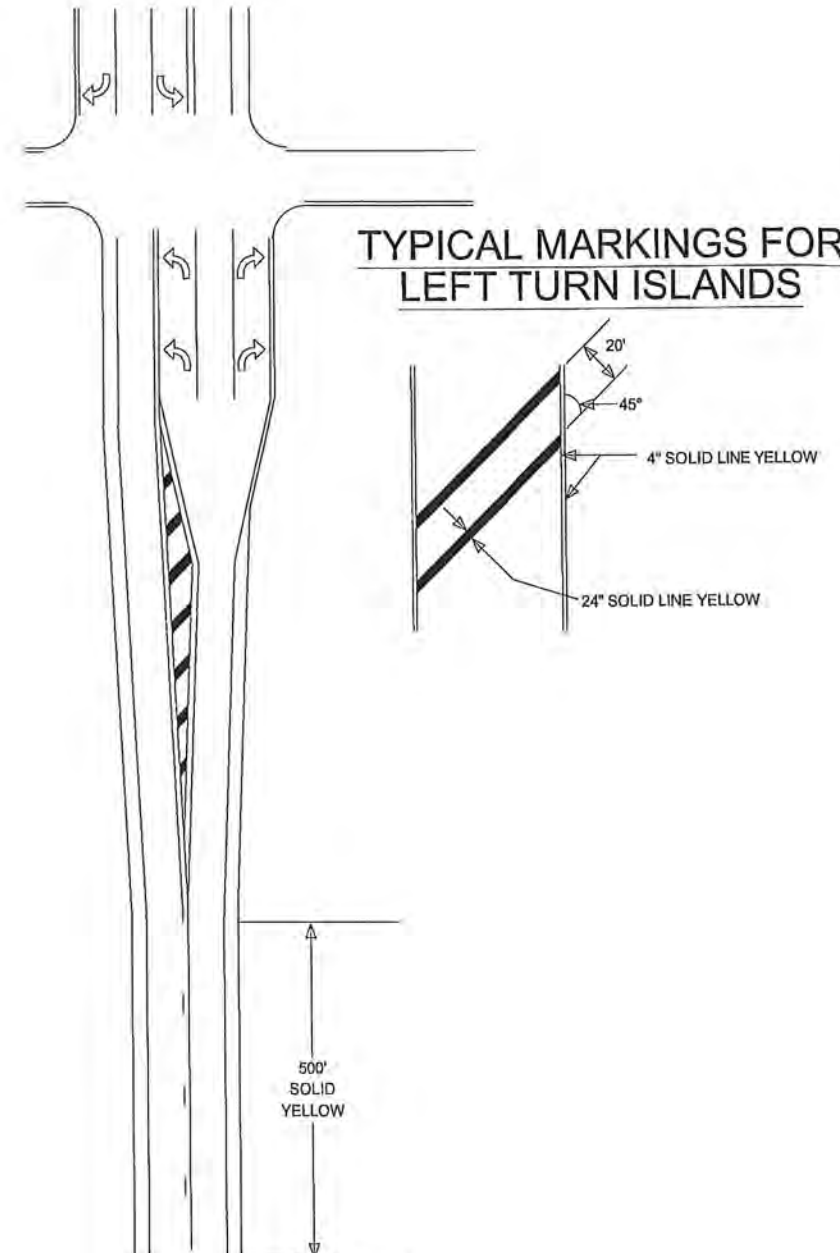
SIGNING & STRIPING
DETAILS

Sheet 20 of 22 Sheets

**TYPICAL MESSAGE PLACEMENT
FOR TURN LANES**



**TYPICAL MARKINGS FOR
LEFT TURN ISLANDS**



NO	DATE	BY	CKD	APPR	REVISION

NAME: P:\19-01-00\CR 62 (CSA\18-E\CountyLine)\base\Traffic\Sign&Stripe Details.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: DOUGLAS W. FISCHER, P.E.
SIGNATURE: *[Signature]*
DATE: 4/25/19 REG. NO. 20235

DRAWN BY: TMV DATE: 02/21/19
DESIGN BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____



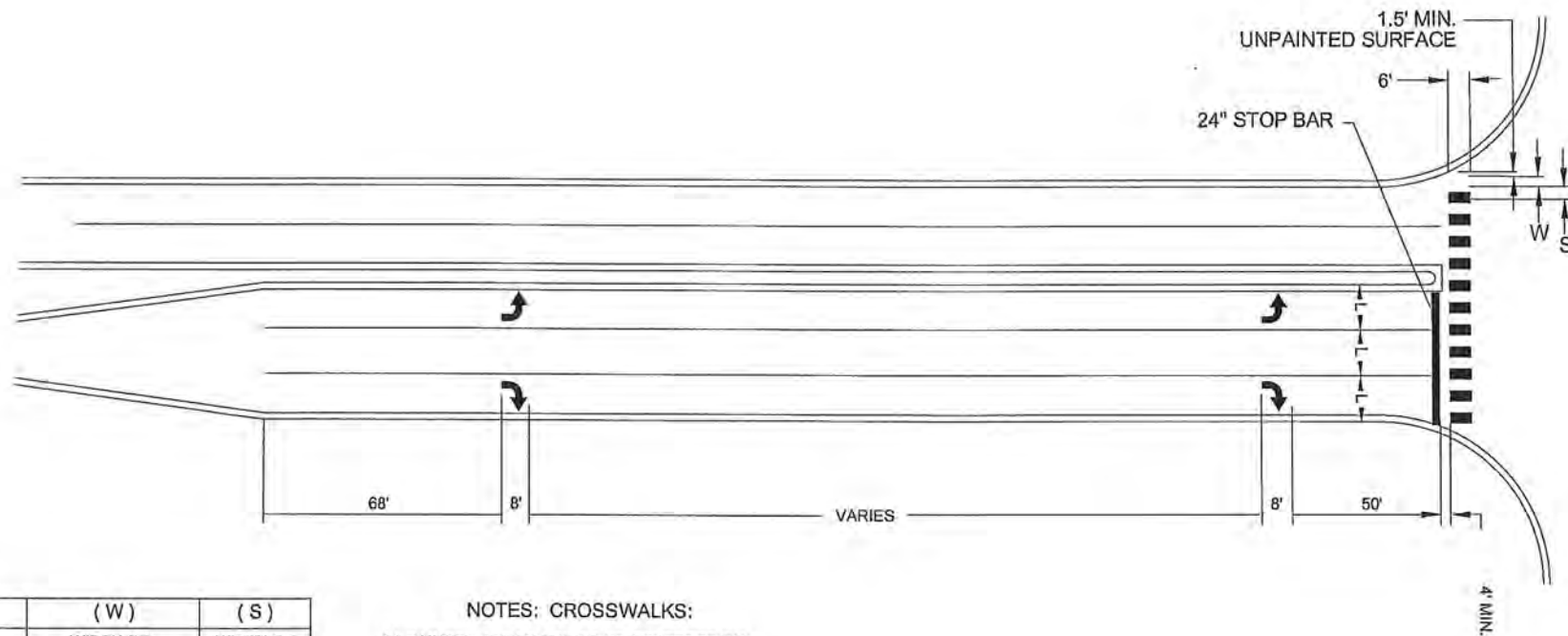
**ANOKA COUNTY
HIGHWAY DEPT.**

STATE PROJECT NO. _____
STATE AID PROJECT NO. _____
STATE AID PROJECT NO. _____
COUNTY PROJECT NO. 19-13-62

**SIGNING & STRIPING
DETAILS**

Sheet 21 of 22 Sheets

MARKINGS FOR PEDESTRIAN CROSSWALKS



(L)	(W)	(S)
WIDTH OF INSIDE LANE	WIDTH OF PAINTED AREAS	WIDTH OF SPACE
9'	2.0'	2.5'
10'	2.5'	2.5'
11'	2.5'	3.0'
12'	3.0'	3.0'
13'	3.0'	3.5'

NOTES: CROSSWALKS:

- 1.) PAINTED AREAS ARE TO BE CENTERED ON CENTER AND LANE LINES, EVEN IF INTERSECTION IS NOT ALIGNED.
- 2.) LOCATION OF ZEBRA CROSSWALKS AND STOP BARS, SIGNAL LOOPS AND PED RAMP ARE APPROXIMATE. FINAL LOCATIONS ARE TO BE DETERMINED AND FIELD VERIFIED DURING CONSTRUCTION BY THE FIELD ENGR.
- 3.) ZEBRA CROSSWALKS ARE TO BE PARALLEL TO THE DRIVING LANE OR LANES. EVEN IF THE STREET IS ON AN ANGLE TO THE INTERSECTION.
- 4.) A MIN. OF 1.5' (450mm) CLEAR DISTANCE MUST BE LEFT ADJACENT TO THE CURB. IF LAST PAINTED AREA FALLS INTO THIS AREA, IT MUST BE OMITTED.
- 5.) ON TWO LANE STREETS, USE SPACING SHOWN FOR AN 11' (3.3mm) INSIDE LANE.

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: DOUGLAS W. FISCHER, P.E.

SIGNATURE: *[Signature]*

DATE: 4/25/19 REG. NO. 20235

DRAWN BY: TMV DATE: 02/21/19

DESIGN BY: DATE

CHECKED BY: DATE



ANOKA COUNTY
 HIGHWAY DEPT.

STATE PROJECT NO. _____
 STATE AID PROJECT NO. _____
 STATE AID PROJECT NO. _____
 COUNTY PROJECT NO. 19-13-62

SIGNING & STRIPING
 DETAILS

Sheet 22 of 22 Sheets