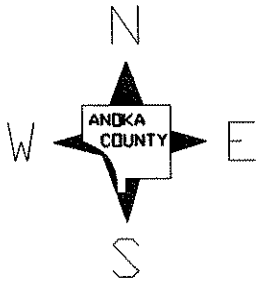


STATE OF MINNESOTA
 DEPARTMENT OF TRANSPORTATION
 CONSTRUCTION PLAN FOR REMOVE & REPL.
CULVERT



C.S.A.H. NO. 16
 AT: 350' EAST OF ABLE STREET

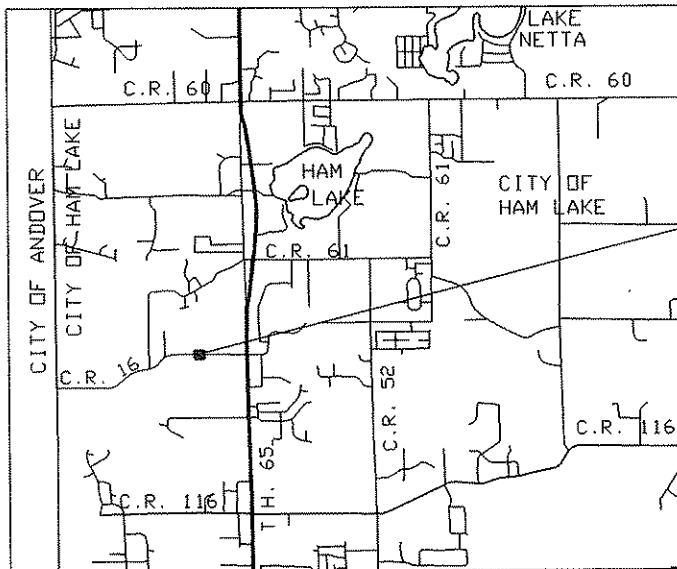
COUNTY PROJECT NO. 95-46-16

GROSS LENGTH 0.00 FEET 0.000 MILES

BRIDGES LENGTH 0.00 FEET 0.000 MILES

EXCEPTIONS LENGTH 0.00 FEET 0.000 MILES

NET LENGTH 0.00 FEET 0.000 MILES



PROJECT C.P. 95-46-16

DESIGN SPEED

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

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 MINN.

GOVERNING SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION", AS AMENDED BY THE MAY 2, 1994 SUPPLEMENTAL SPECIFICATIONS.

Donald W. Jensen REG. NO. 20235 DATE 6/20/95
 DESIGN ENGINEER

APPROVED 6/20/95 *Jensen*
 ANDOKA COUNTY ENGINEER

ITEM NO	ITEM	UNIT	TOTAL EST. QUANT
2021.501	MOBILIZATION	LUMP SUM	1
2104.501	SAWING BITUMINOUS PAVEMENT	LIN FT	48
2104.505	REMOVE BITUMINOUS PAVEMENT	SY	256
2104.509	REMOVE CULVERT PIPE	EACH	1
2105.521	GRANULAR BORROW (LV)	CY	525
0340.601	4" THICK BIT WEARING (INCL 6" CL-5)	SY	256
2451.509	AGGREGATE BEDDING (LV)	CY	65
2501.511	24" CS PIPE CULVERT	LIN FT	46
2501.567	24" CS SAFETY APR. AND GRATE, DES. 3128F	EACH	2
2511.515	GEOTEXTILE TYPE V	SY	149
0563.601	DETOUR SIGNING	LUMP SUM	1
2573.502	SILT FENCE, PREASSEMBLED	LIN FT	30
2575.555	TURF ESTABLISHMENT	LUMP SUM	1

DESIGN DESIGNATIONS:

TYPE 41 WEAR: 41WEA50055Y

TYPE 31 BASE: 31BBB50000Y

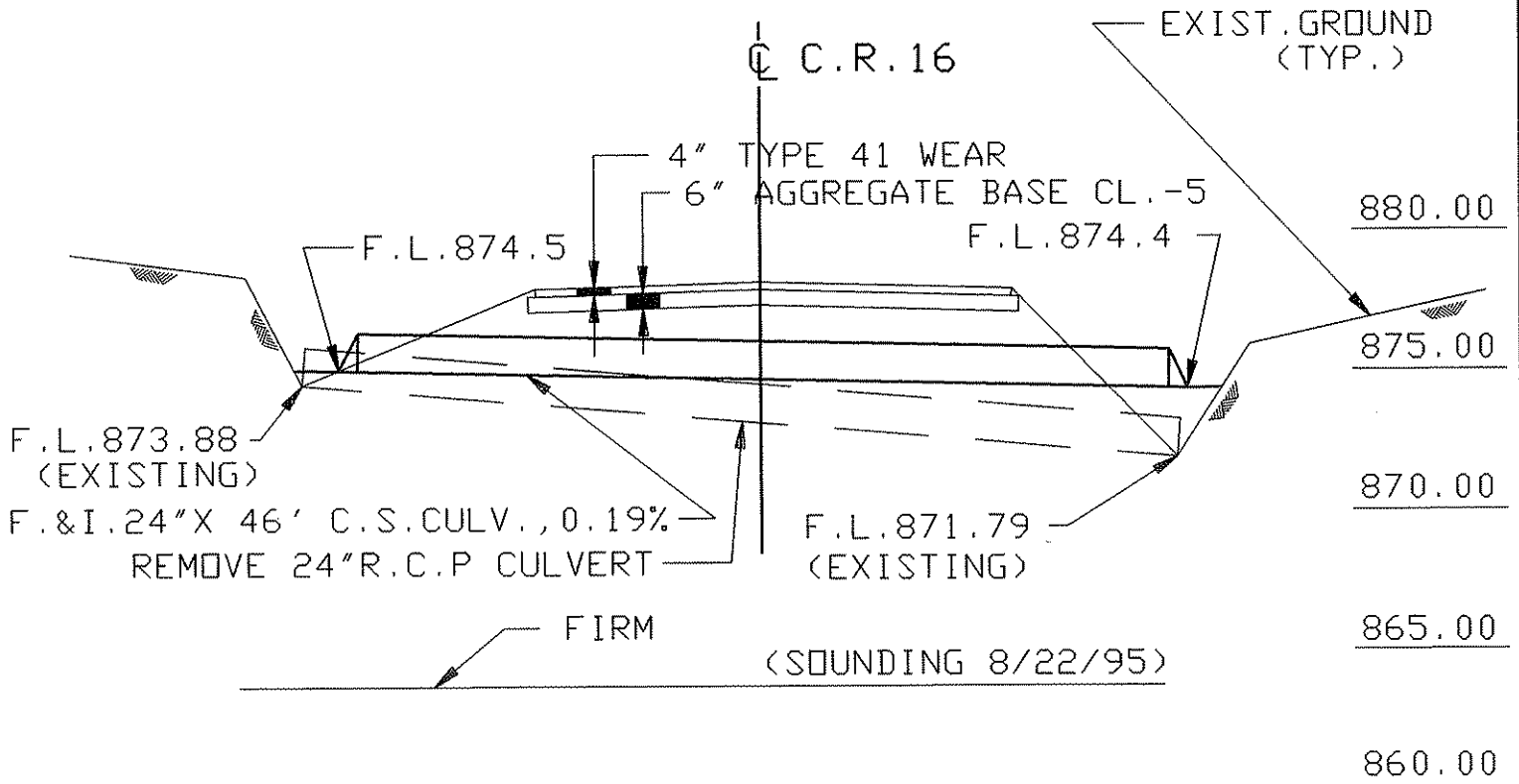
BASIS OF PLANNED QUANTITIES

- 2340 TYPE 41 WEARING COURSE MIX.: 120 LBS./SQ.YD. PER 1" THICK
2340 TYPE 31 LEVELING COURSE MIX.: 120 LBS./SQ.YD. PER 1" THICK
2357 BITUMINOUS MATERIAL FOR TACK COAT: 0.05 GAL./SQ.YD.

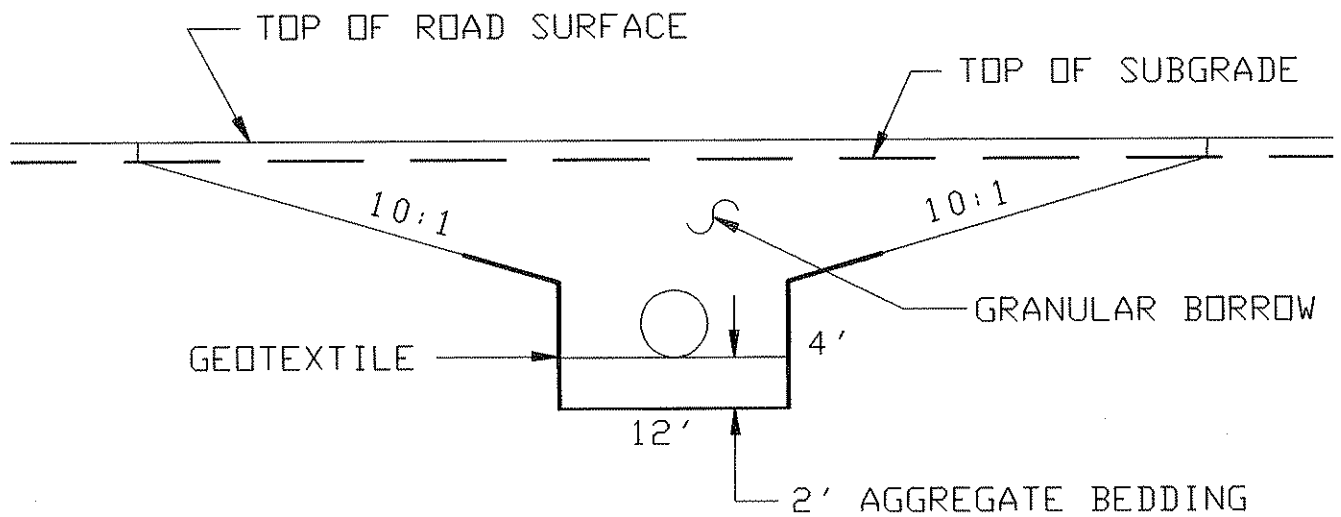
STANDARD DETAIL PLATES	
PLATE NO.	DESCRIPTION
0004 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3040 F	CORRUGATED METAL PIPE CULVERT
3128 F	SAFETY APRON
8000 I	STANDARD BARRICADES

TYPICAL SECTIONS

CULVERT INSTALLATION DETAIL

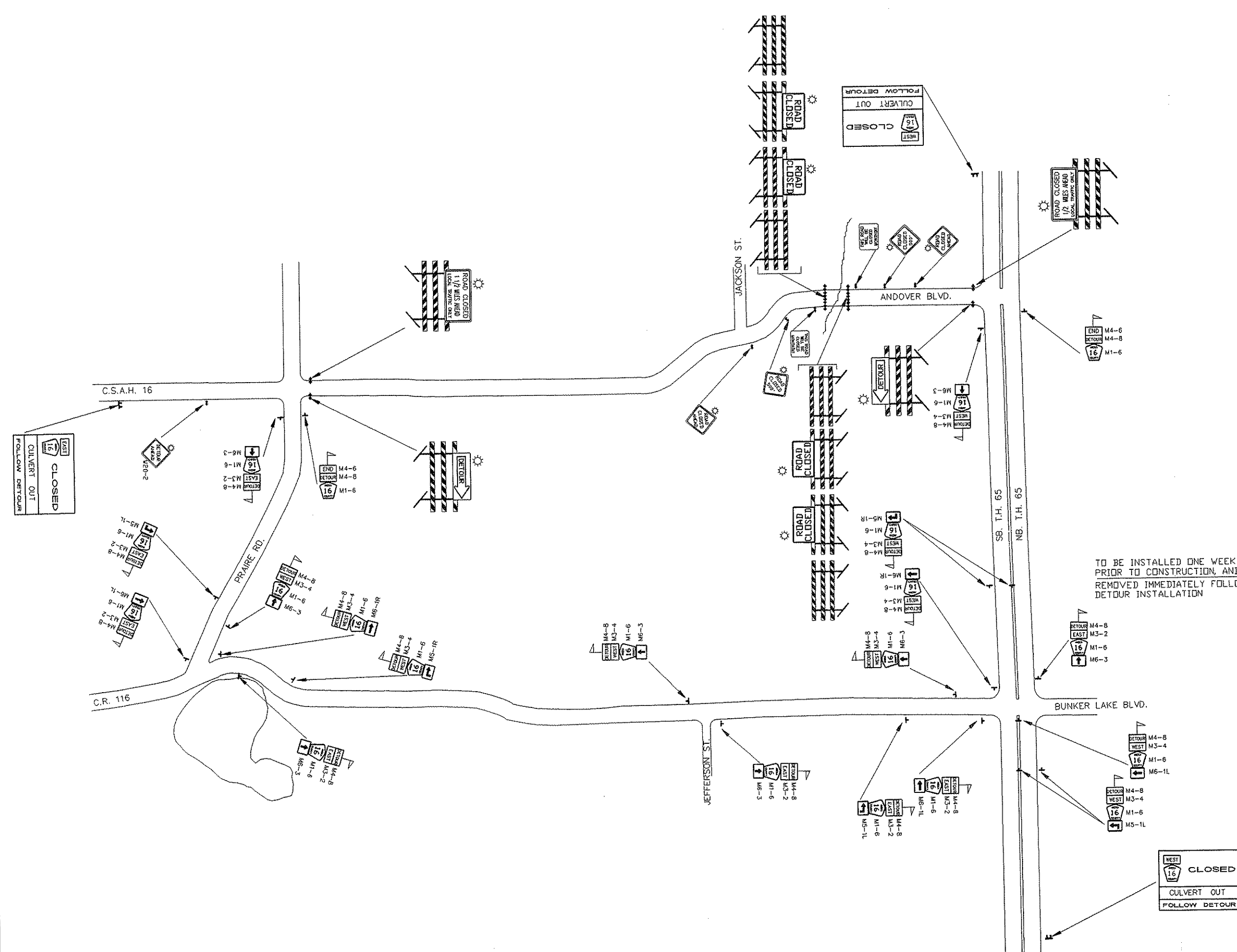


FABRIC INSTALLATION DETAIL



NOTE:

NOT TO SCALE



M.U.T.C.D. CODE	SIZE	INSERT	QTY
W20-2	48" x 48"	FLASHER ROAD CLOSED AHEAD	1
W20-3	48" x 48"	FLASHER ROAD CLOSED AHEAD 500'	2
R11-2	48" x 30"	FLASHER ROAD CLOSED	4
M4-10R	48" x 18"	FLASHER DETOUR	1
M4-10L	48" x 18"	FLASHER DETOUR	1
R11-3	60" x 30"	FLASHER ROAD CLOSED 1/2 MILES AHEAD LOCAL TRAFFIC ONLY	1
			1
	8 FT. TYPE III		12
M1-6	24" x 12"	CLOSED	1
	ESTIMATED 96' x 72"	AT R/R CROSSING FOLLOW DETOUR	2
G20-X1	48" x 48"	THIS ROAD WILL BE CLOSED MONTHDAY	2
FLAG			
M4-6	24" x 12"	END DETOUR	2
M4-8	24" x 12"		
M1-6	24" x 24"		
FLAG			
M4-8	24" x 12"	DETOUR WEST	3
M3-4	24" x 12"		2
M1-6	24" x 24"		1
	21" x 15"		2
			4
FLAG			
M4-8	24" x 12"	DETOUR EAST	2
M3-2	24" x 12"		2
M1-6	24" x 24"		2
	21" x 15"		4

TO BE INSTALLED ONE WEEK PRIOR TO CONSTRUCTION, AND REMOVED IMMEDIATELY FOLLOWING DETOUR INSTALLATION

WEST
16
CLOSED
CULVERT OUT
FOLLOW DETOUR

CULVERT DETOUR
C.S.A.H. 16

REVISIONS	DATE	BY