

**PLAN SYMBOLS**

- ..... COUNTY LINE .....
- ..... TOWNSHIP OR RANGE LINE .....
- ..... SECTION LINE .....
- ..... QUARTER LINE .....
- ..... SIXTEENTH LINE .....
- ..... RIGHT OF WAY LINE .....
- ..... SLOPE EASEMENT .....
- ..... EXISTING RIGHT OF WAY .....
- ..... PROPERTY LINE .....
- ..... CORPORATE OR CITY LIMITS .....
- ..... RETAINING WALL .....
- ..... RAILROAD .....
- ..... RAILROAD RIGHT OF WAY .....
- ..... RIVER OR CREEK .....
- ..... DRAINAGE DITCH .....
- ..... CULVERT .....
- ..... DROP INLET .....
- ..... GUARD RAIL .....
- ..... BARBED WIRE FENCE .....
- ..... WOVEN WIRE FENCE .....
- ..... CHAIN LINK FENCE .....
- ..... WOOD FENCE .....
- ..... STONE WALL OR FENCE .....
- ..... HEDGE .....

- ..... LOWLAND .....
- ..... TIMBER ORCHARD .....
- ..... BRUSH .....
- ..... NURSERY .....

- ..... CATTLE GUARD .....
- ..... OVERPASS (Highway Over) .....
- ..... UNDERPASS (Highway Under) .....
- ..... BRIDGE .....

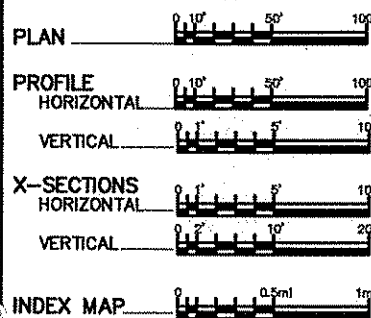
- ..... BUILDING (One Story Frame) .....
- ..... F-FRAME C-CONCRETE .....
- ..... S-STONE T-TILE .....
- ..... B-BRICK ST-STUCCO .....

- ..... RAILROAD CROSSING BELL .....
- ..... RAILROAD CROSSING GATE .....
- ..... MANHOLE .....
- ..... CATCH BASIN .....
- ..... FIRE HYDRANT .....
- ..... CAST IRON MONUMENT .....
- ..... IRON PIN .....
- ..... GRAVEL PIT .....
- ..... SAND PIT .....
- ..... BORROW PIT .....
- ..... ROCK QUARRY .....

**UTILITY SYMBOLS**

- ..... POWER POLE LINE .....
- ..... TELEPHONE OR TELEGRAPH POLE LINE .....
- ..... JOINT TELEPHONE & POWER ON POWER POLES .....
- ..... ON TELEPHONE POLES .....
- ..... ANCHOR .....
- ..... STEEL TOWER .....
- ..... STREET LIGHT .....
- ..... PEDESTAL (Cable Terminal) .....
- ..... GAS MAIN .....
- ..... WATERMAIN .....
- ..... TELEPHONE CABLE IN CONDUIT .....
- ..... ELECTRIC CABLE IN CONDUIT .....
- ..... TELEPHONE MANHOLE .....
- ..... ELECTRIC MANHOLE .....
- ..... BURIED TELEPHONE CABLE .....
- ..... BURIED ELECTRIC CABLE .....
- ..... AERIAL TELEPHONE CABLE .....
- ..... SEWER (Sanitary or Storm) .....
- ..... SEWER MANHOLE .....

**SCALES**



# MINNESOTA DEPARTMENT OF TRANSPORTATION

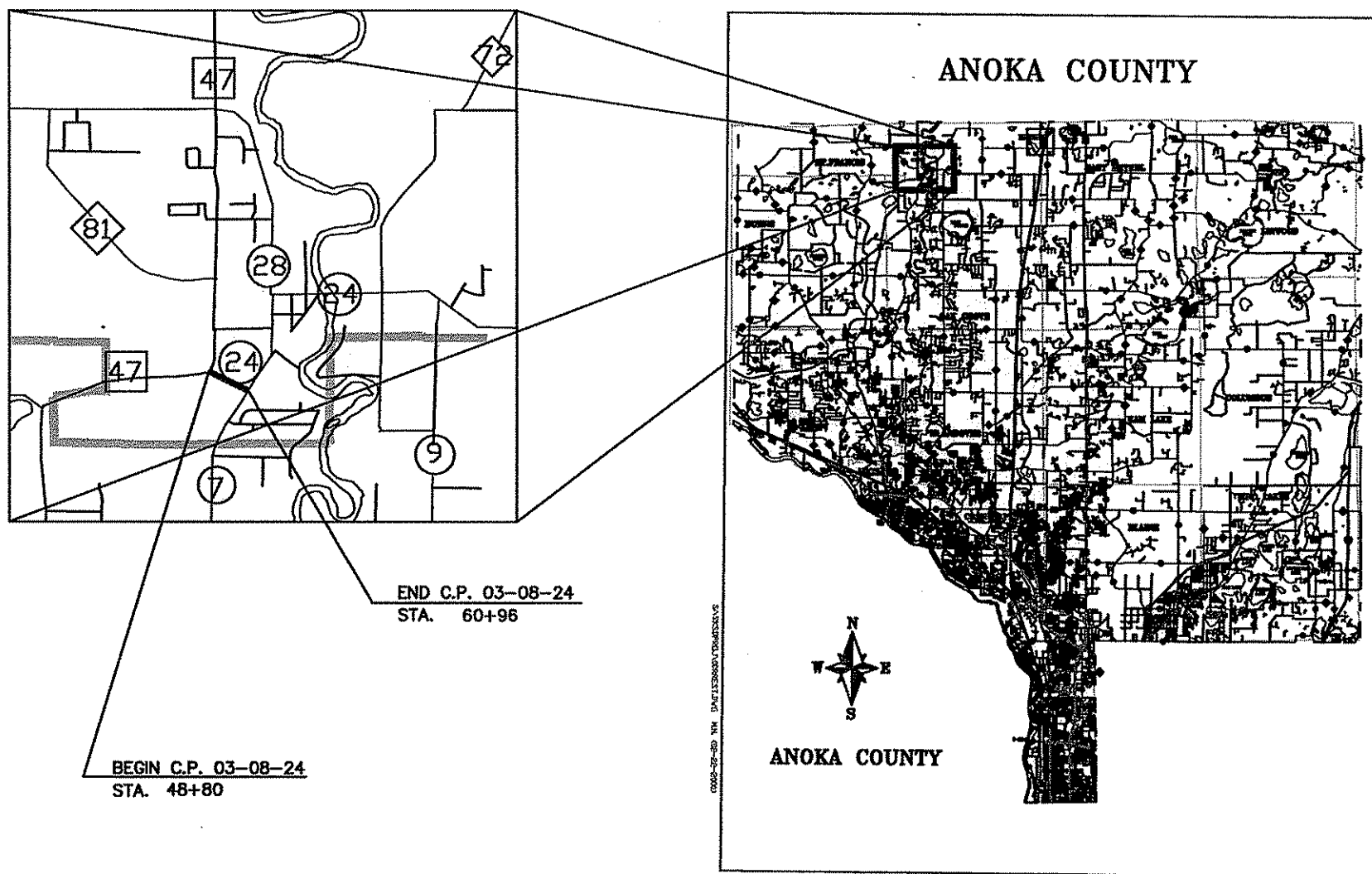
## ANOKA COUNTY

### CONSTRUCTION PLAN FOR BITUMINOUS RECLAMATION/TURN LANE CONST. & BIT. SURFACING

LOCATED ON C.S.A.H. 24 FROM T.H. 47 TO C.S.A.H. 7

COUNTY PROJECT NO. 03-08-24  
..... C.S.A.H. 24 .....

GROSS LENGTH	1116.00 FEET	0.211 MILES
BRIDGES-LENGTH	0.00 FEET	0.000 MILES
EXCEPTIONS-LENGTH	0.00 FEET	0.000 MILES
NET LENGTH	1116.00 FEET	0.211 MILES



END C.P. 03-08-24  
STA. 60+96

BEGIN C.P. 03-08-24  
STA. 48+80

MINN. PROJ. NO. \_\_\_\_\_  
MINN. PROJ. NO. \_\_\_\_\_

**GOVERNING SPECIFICATIONS**

THE 2000 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MMUTCD, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS - JANUARY, 2001."

**INDEX**

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3	TABULATIONS
4-5	TYPICAL SECTIONS
6-7	DETAILS
8	PLAN VIEW
9	STRIPING PLAN
10-14	CROSS-SECTIONS

THIS PLAN CONTAINS 14 SHEETS

**DESIGN DESIGNATION**

ESAL <sub>20</sub>	614,775
R VALUE	70
ADT (2002)=	4265
Proj. ADT (2022)=	6398
Proj. HCADT (2022)=	377
Soil Factor	50 %
<u>10</u> TON DESIGN	

Functional Classification COLLECTOR  
 No. of Traffic Lanes 2 No. of Parking Lanes 0  
 Design Speed 55 MPH  
 Based on Stopping Sight Distance  
 Height of eye 3.5' Height of object 0.5'  
 Design Speed not achieved at:  
 STA. \_\_\_\_\_ TO STA. \_\_\_\_\_ MPH  
 STA. \_\_\_\_\_ TO STA. \_\_\_\_\_ MPH  
 STA. \_\_\_\_\_ TO STA. \_\_\_\_\_ MPH

Approved 4/29, 2003   
 ANOKA COUNTY ENGINEER

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: MARK DALY  
 SIGNATURE:   
 DATE: 4/1/03 LICENSE NO. 21763

DRAWN BY J.F. DATE 4/1/03  
 DESIGN BY G.A. DATE 4/1/03  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_



**ANOKA COUNTY  
HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

TITLE SHEET

Sheet 1 of 14 Sheets

NO	DATE	BY	CHK	APPR	REVISION


NAME: S:\SDSK\PROJ\02-000-00\PLAN\01-TITLE.DWG

A. STATEMENT OF ESTIMATED QUANTITIES					
TAB NO.	SPEC. NO.	ITEM	NOTE NO.	UNIT	ESTIMATED QUANTITY
	2021.501	MOBILIZATION		LUMP SUM	1.00
	2104.509	REMOVE METAL APRON		EACH	2.00
	2104.523	SALVAGE SIGN, TYPE C		EACH	8.00
E	2105.521	SELECT GRANULAR BORROW (LV)	1	CU YD	1000.00
	2123.503	MOTOR GRADER	2	HOUR	5.00
	2123.509	DOZER	3	HOUR	20.00
	2123.521	PNEUMATIC-TIRED ROLLER	2	HOUR	5.00
	2130.501	WATER	4	M-GAL	16.00
F	2211.501	AGGREGATE BASE CLASS-5	6	TON	15.00
G	2221.501	AGGREGATE SHOULDERING CLASS-7B	6	TON	95.00
H	2232.501	MILL BITUMINOUS SURFACE ( 2" )		SQ YD	4.00
I	2331.604	BITUMINOUS PAVEMENT RECLAMATION		SQ YD	5456.00
J	2350.609	TYPE LV 3 WEARING COURSE MIXTURE	7	TON	525.00
K	2350.609	TYPE LV 4 WEARING COURSE MIXTURE ST. APPR. & ENT.	7	TON	10.00
L	2350.609	TYPE LV 3 NON- WEARING COURSE MIXTURE	7	TON	700.00
M	2357.502	BITUMINOUS MATERIAL FOR TACK COAT		GALLON	290.00
	2501.511	18" CS PIPE CULVERT		LIN FT	18.00
	2501.567	18" CS SAFETY APRON & GRATE DESIGN 3128		EACH	2.00
N	2506.522	ADJUST FRAME & RING CASTING ( SANITARY )		EACH	1.00
O	2540.602	INSTALL MAILBOX SUPPORT		EACH	1.00
	2563.601	TRAFFIC CONTROL		LUMP SUM	1.00
	2563.604	CONSTRUCTION SIGN SPECIAL ( DIAMOND GRADE )	8	SQ FT	112.00
	2564.537	INSTALL SIGN, TYPE C		EACH	8.00
	2564.602	TEMPORARY RELOCATE SIGN TYPE C		EACH	8.00
P	2564.603	4" SOLID LINE WHITE-EPOXY		LIN FT	2762.00
P	2564.603	4" DOUBLE SOLID LINE YELLOW-EPOXY		LIN FT	1063.00
Q	2575.501	SEEDING		ACRE	0.35
R	2575.502	SEED MIXTURE 50B		POUND	18.00
S	2575.511	MULCH MATERIAL, TYPE 1		TON	0.70
T	2575.519	DISC ANCHORING		ACRE	0.35
U	2575.525	EROSION STABILIZATION BLANKET, TYPE 2	5	SQ YD	60.00
V	2575.532	COMMERCIAL FERTILIZER ANALYSIS 22-5-10		POUND	175.00
W	2580.501	TEMPORARY LANE MARKING		LIN FT	178.00

B. BASIS OF ESTIMATED QUANTITIES	
SPEC NO.	RATE
2350	LV 3 WEARING COURSE MIXTURE, (LVWE35030C) LV 3 NON WEARING COURSE MIXTURE, (LVNW35030C) LV 4 WEARING COURSE MIXTURE, STREET APPR. & ENT., (LVWE45030C) 110 LBS / SQ YD / INCH
2357	BITUMINOUS MATERIAL FOR TACK COAT 0.05 GAL SQ / YD / PER LIFT APPLIED
2575	COMMERCIAL FERTILIZER ANALYSIS 22-5-10 500 LBS / ACRE

C. CONSTRUCTION NOTES	
NOTE NO.	
1	FOR TURN LANE CONSTRUCTION.
2	FOR FINAL SHAPING AND COMPACTION OF THE RECLAIMED MATERIAL.
3	TO BE USED TO STRIP INPLACE TOPSOIL AND SPREAD THE SALVAGED TOPSOIL ON THE SLOPES IN THE TURN LANE CONSTRUCTION AREAS AS DIRECTED BY THE ENGINEER.
4	FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.
5	TO BE USED AT CULVERT ENDS.
6	RECYCLED GLASS WILL NOT BE ALLOWED IN CLASS-5 OR CLASS-7B.
7	INCLUDES QUANTITY FOR ADDING 1/4" TO THE DESIGN THICKNESS.
8	2 - 8' X 7' SIGNS, SEE SPECIAL PROVISIONS.

D.	MN DOT STANDARD PLATE NO.	DESCRIPTION
	3040 F	CORRUGATED METAL PIPE CULVERT
	3128 H	METAL SAFETY APRON & GRATE
	3221 C	CORROGATED STEEL PIPE COUPLING BAND
	9102 D	TURF ESTABLISHMENT AREAS

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: <u>MARK DALY</u> SIGNATURE: <u>[Signature]</u> DATE: <u>4/17/03</u> LICENSE NO. <u>21763</u>					DRAWN BY: <u>J.E.</u> DATE <u>4/1/03</u> DESIGN BY: <u>G.A.</u> DATE <u>4/1/03</u> CHECKED BY: _____ DATE _____		 <b>ANOKA COUNTY</b> <b>HIGHWAY DEPT.</b>		STATE PROJECT NO. _____ STATE AID PROJECT NO. _____ STATE AID PROJECT NO. _____ COUNTY PROJECT NO. <u>03-08-24</u>		<b>STATEMENT OF ESTIMATED QUANTITIES</b> Sheet <u>2</u> of <u>14</u> Sheets	
NO	DATE	BY	CHK	APPR	REVISION			NAME: S:\SDSK\PROJ\000000\000000\028000.DWG				

E. SELECT GRANULAR BORROW (LV)			
			EST. TOTAL CU. YDS.
SEE X-SECTIONS			1000

F. AGGREGATE BASE CLASS 5			
DRIVE.	STA.	LOC.	TON
	5297	LT.	5
	5121	RT.	5
	5955	LT.	5
			TONS 15

G. AGGR. SHLD CL-7B/C (1.0'/2.0' SHLD. 3.5"DEPTH=CU.YDS.(CV)/STATION)						
LOC.	STA.	STA.	L-IN STA.	DEPTH	CU. YDS/STA.	CU.YDS.(CV)
LT	4980	5460	4.8	3.5"	1.70	8.2
LT	5460	6096	6.4	3.5"	2.78	17.7
RT	4980	5616	6.4	3.5"	2.78	17.7
RT	5616	6096	4.8	3.5"	1.7	8.2
					(BASED ON MNDOT CONVERSION CV-TON OF 1.8)	CU. YDS. (CV) 51.7
						TONS 93.0

H. MILL BITUMINOUS SURFACE (BUTT JOINTS)						
	STA.	LOC.	L'	W'	SQ. YDS.	
MARTIES FARM SERVICE	5372	RT.	23	1.5	3.8	
					SQ. YDS. 3.8	

I. RECLAIM BITUMINOUS SURFACING					
BEGIN STA.	END STA.	L'	W'	SQ. YDS.	
4980	6096	1110	44	5456.0	
				TOTAL SQ YDS. 5456.0	

J. TYPE LV 3 WEARING COURSE MAIN LINE 1.75" (110 LBS/IN/SY)						
BEGIN STA.	END STA.	LOC.	L'	W'	SQ. YDS.	
4980	6096	C/L	1116.0	24.0	2976.0	
RTL @ 47 4980	5460	LT	480.0	12.0	640.0	
RTL @ 7 5616	6096	RT	480.0	12.0	640.0	
5460	6096	LT	636.0	8.0	565.3	
4980	5616	RT	636.0	8.0	565.3	
<b>1.5' KICK OUTS</b>						
	5297		LT.	82	1.5	13.7
	5121		RT.	58	1.5	9.7
	5955		LT.	51	1.5	8.5
					SQ. YDS.(LV3 1.75") = 5418.5	
					TONS = 522.0	

K. TYPE LV4 WEARING COURSE, ENTRANCES. 3" (110 LBS/IN/SY)					
	STA.	LOC.	L'	W'	SQ. YDS.
MARTIES FARM SERVICE	5372	RT.	38	15	63.3
					SQ. YDS. LV4 (3") = 63.3
					TONS = 10.0

L. TYPE LV3 NONWEARING COURSE MAIN LINE 2.25" (110 LBS/IN/SY)						
	STA.	STA.	LOC.	L'	W'	SQ. YDS.
	5480	6096	C/L	1116.0	25.0	3100.0
RTL @ 47 4980	5460		LT	480.0	12.5	666.7
RTL @ 7 5616	6096		RT	480.0	12.5	666.7
	5460	6096	LT	636.0	8.5	600.7
	4980	5616	RT	636.0	8.5	600.7
<b>1.5' KICK OUTS</b>						
	5297		LT.	82	1.5	13.7
	5121		RT.	58	1.5	9.7
	5955		LT.	51	1.5	8.5
					SQ. YDS. LV3 (1 1/2") = 5666.5	
					TONS = 701.0	

M. BITUMINOUS MATERIAL FOR TACK				
	SQ YDS	GAL / SQ YD	GALLONS	
MV3 WEAR MAIN LINE	5667	0.05	283.4	
LV4 WEAR BIT DR.	63	0.05	3.2	
			TOTAL GALLONS 286.5	

N. ADJ. FRAME & RING CASTING (SAN.)		
	STA.	LOC.
1) SAN. MH. STA. 54+86	54+86	22' RT

O. MAILBOX SUPPORTS		
	STA.	LOC.
1) MARTIES FARM SERVICE	53+72	RT.

P. PERMANENT STRIPING	
EPOXY	LIN. FT.
4" SOLID LINE WHITE-EPOXY	2762.00
4" DOUBLE LINE YELLOW-EPOXY	1063.00

Q. SEEDING			
STA.	STA.	LOC.	ACRE
49+80	54+80	LT.	0.19
56+16	60+96	RT.	0.16
			ACRE = 0.35

R. SEED MIXTURE 50B		
ACRE	LBS/ACRE	LBS
0.35	50	18
		POUNDS = 18

S. MULCH MATERIAL, TYPE 1		
ACRE	2 TON / ACRE	TONS
0.35	2	0.70
		TONS = 0.70

T. DISK ANCHORING			
STA.	STA.	LOC.	ACRE
49+80	54+80	LT.	0.19
56+16	60+96	RT.	0.16
			ACRE = 0.35

U. EROSION CONTROL BLANKET, TYPE 2		
	EST. SQ. YDS.	
50+00 CULV. ENDS.	60	

V. COMMERCIAL FERT. ANALYSIS 22-5-10			
	LBS / ACRE	ACRES	TOTAL LBS.
	500	0.35	175

W. TEMPORARY LANE MARKING 4' SKIPS AT 50' INTERVALS						
STA.	STA.	LOC.	LENGTH	TAPE LENGTH	LIFTS	LIN. FT.
4980	6096	C/L	1116	89.0	2	178.0
						LIN. FT. = 178.0

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: MARK DALY

SIGNATURE: MR ADL

DATE: 4/17/2003 LICENSE NO. 21763

DRAWN BY J.F. DATE 4/1/03

DESIGN BY G.A. DATE 4/1/03

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_



ANOKA COUNTY  
HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

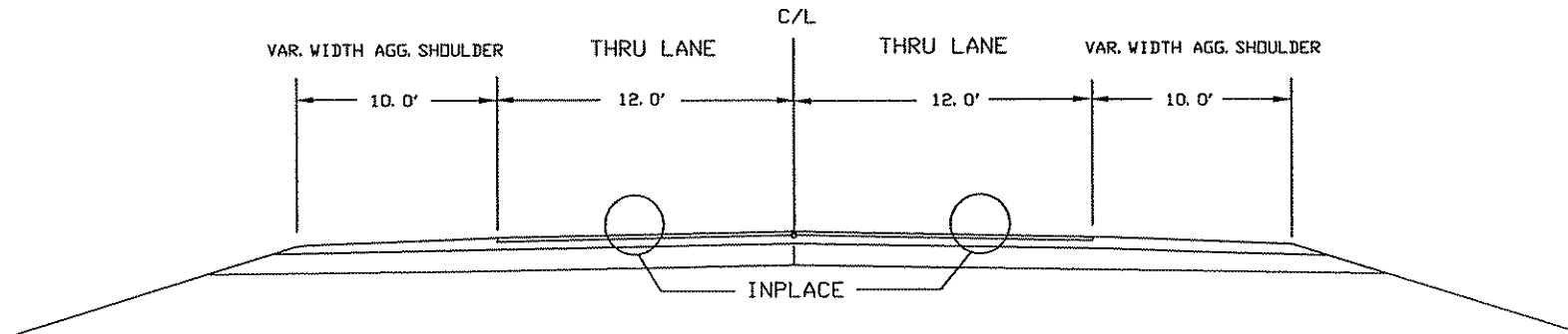
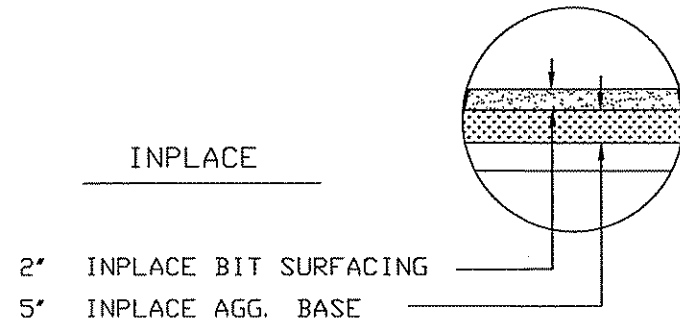
STATE AID PROJECT NO. \_\_\_\_\_

COUNTY PROJECT NO. 03-08-24

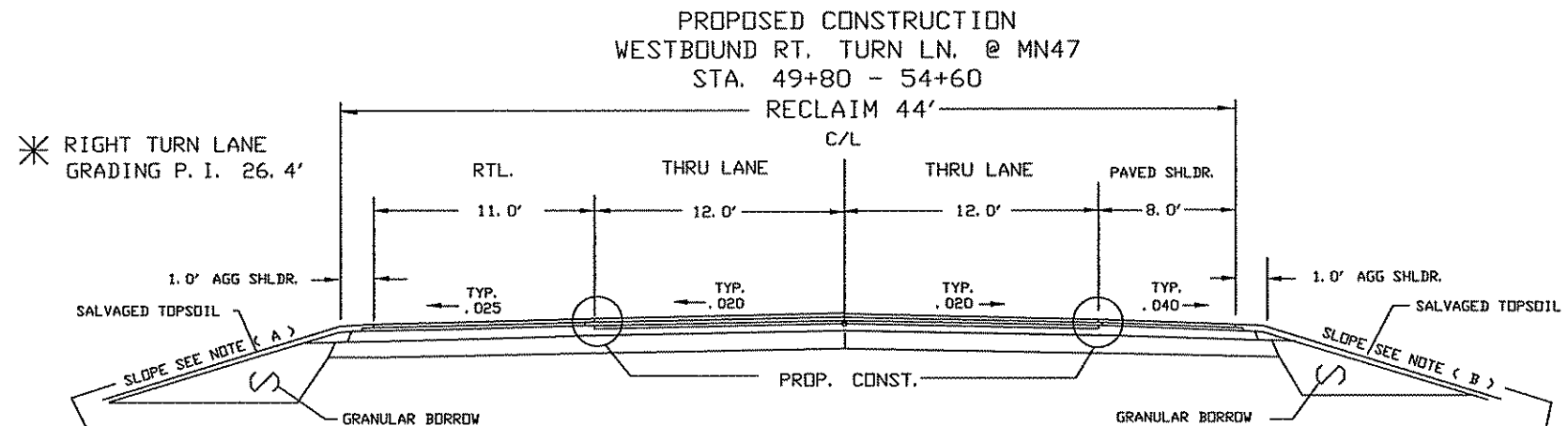
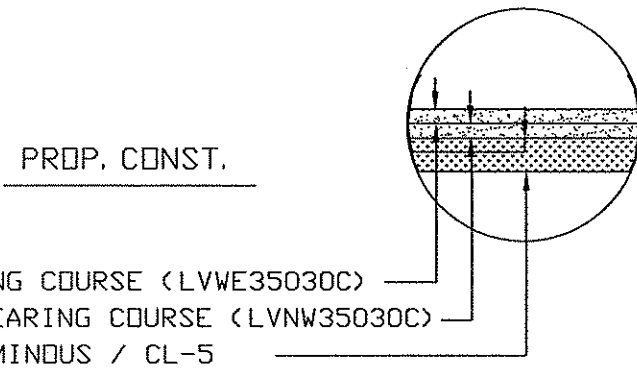
TABULATION CHARTS

Sheet 3 of 14 Sheets

EXISTING ROADWAY  
STA. 49+80 - 60+96



PROPOSED CONSTRUCTION  
WESTBOUND RT. TURN LN. @ MN47  
STA. 49+80 - 54+60



NOTE (A)  
STA. 49+80 - 50+50  
GRANULAR BORROW ADDED FOR EXTENDED WIDTH FOR PIPE EXTENSION AND 6:1 INSLOPE.  
STA. 50+50 - 54+60  
GRANULAR BORROW ADDED FOR 4:1 INSLOPE.

NOTE (B)  
STA. 49+80 - 50+50  
GRANULAR BORROW ADDED FOR EXTENDED WIDTH FOR PIPE EXTENSION AND 6:1 SLOPE.

NO	DATE	BY	CHKD	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: MARK DALY  
SIGNATURE: *Mark Daly*  
DATE: 4/17/2003 LICENSE NO. 21783

DRAWN BY: J.F. DATE: 4/1/03  
DESIGN BY: G.A. DATE: 4/1/03  
CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

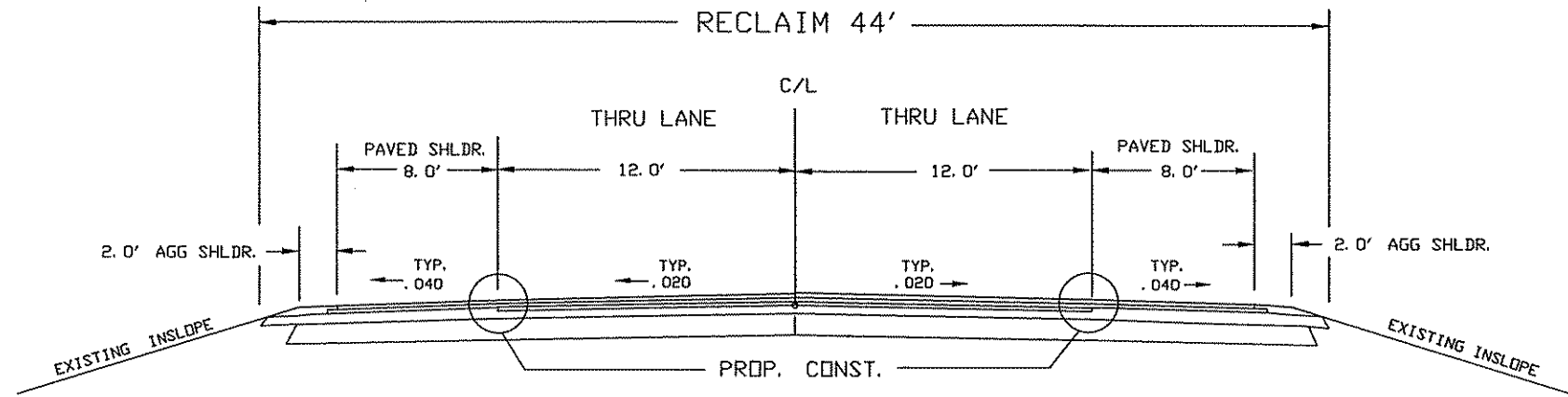


ANOKA COUNTY  
HIGHWAY DEPT.

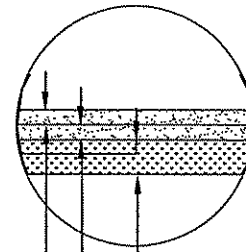
STATE PROJECT NO. \_\_\_\_\_  
STATE AID PROJECT NO. \_\_\_\_\_  
STATE AID PROJECT NO. \_\_\_\_\_  
COUNTY PROJECT NO. 03-08-24

TYPICAL SECTION

PROPOSED CONSTRUCTION  
STA. 54+60 - STA. 56+16

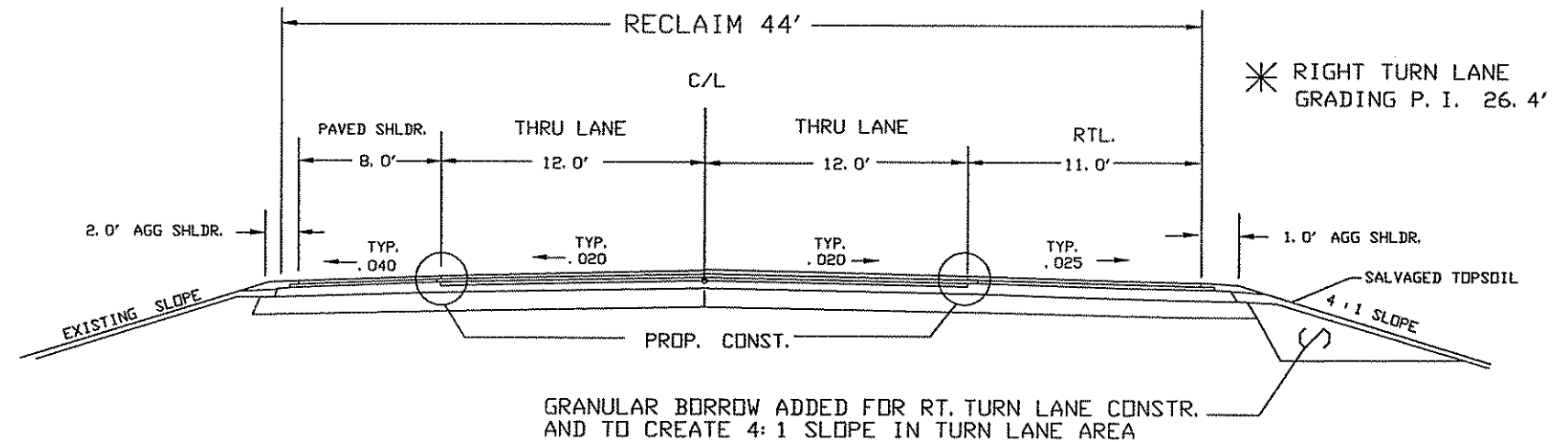


PROP. CONST.

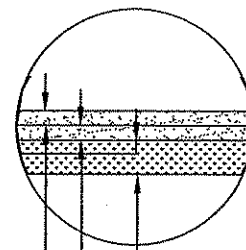


- 1 1/2" TYPE LV 3 WEARING COURSE (LVWE35030C)
- 2 " TYPE LV 3 NON-WEARING COURSE (LVNW35030C)
- 7" RECLAIMED BITUMINOUS / CL-5

PROPOSED CONSTRUCTION  
EASTBOUND RT. TURN LN. @ CSAH 7  
STA. 56+16 - 60+96



PROP. CONST.



- 1 1/2" TYPE LV 3 WEARING COURSE (LVWE35030C)
- 2 " TYPE LV 3 NON-WEARING COURSE (LVNW35030C)
- 7" RECLAIMED BITUMINOUS / CL-5

NO	DATE	BY	CHK	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: MARK DALY  
 SIGNATURE: [Signature]  
 DATE: 4/17/03 LICENSE NO. 21763

DRAWN BY: J.F. DATE: 4/1/03  
 DESIGN BY: G.A. DATE: 4/1/03  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



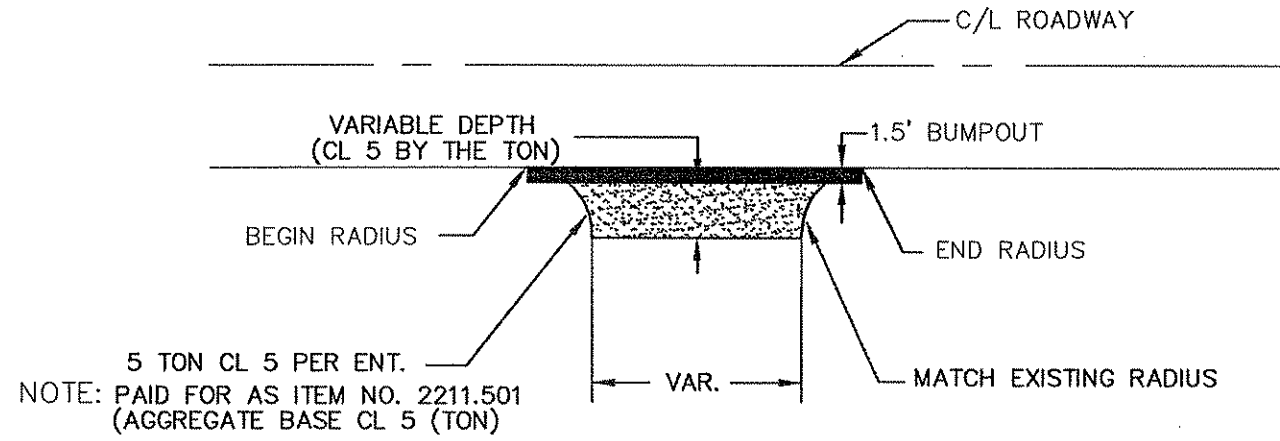
ANOKA COUNTY  
HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

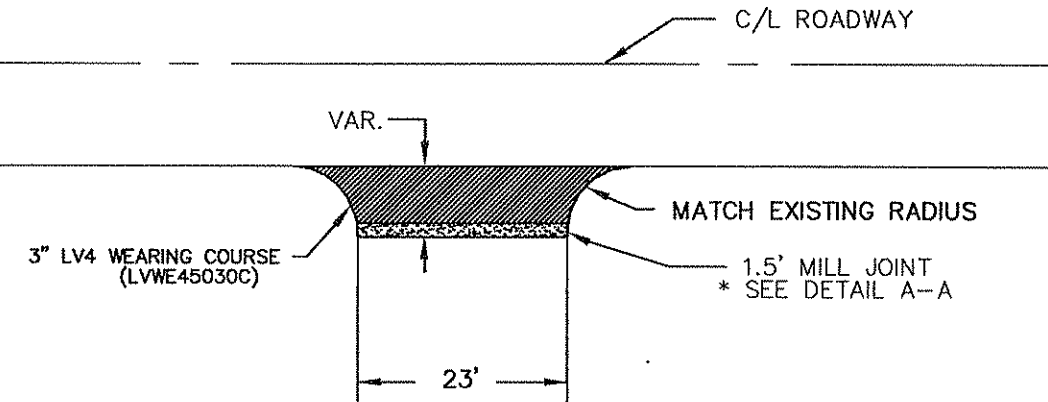
TYPICAL SECTION

Sheet 5 of 14 Sheets

FIELD AND UNPAVED ENTRANCES

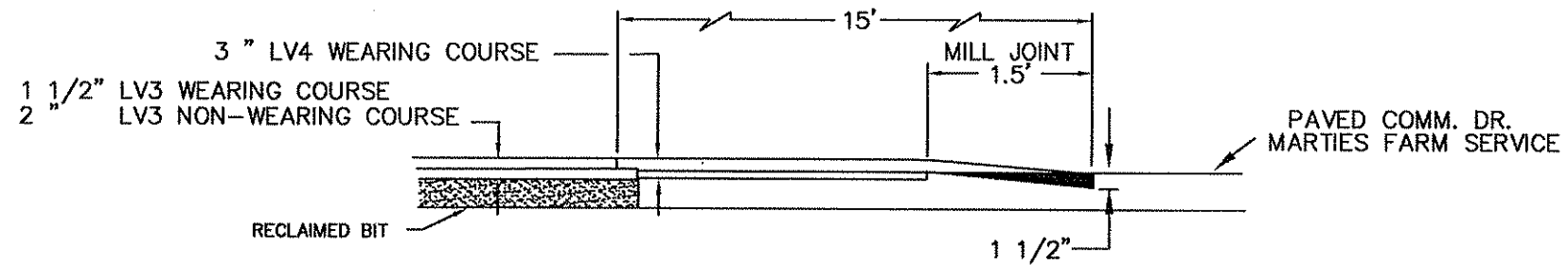


PAVED DRIVEWAY, MARTIES FARM SERVICE



MILLING DETAILS A-A

MARTIES FARM SERVICE



NO	DATE	BY	CHKD	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: MARK DALY

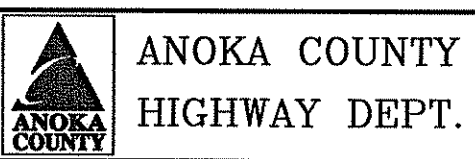
SIGNATURE: *Mark Daly*

DATE: 4/17/2002 LICENSE NO. 21763

DRAWN BY: J.F. DATE: 4/1/03

DESIGN BY: G.A. DATE: 4/1/03

CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



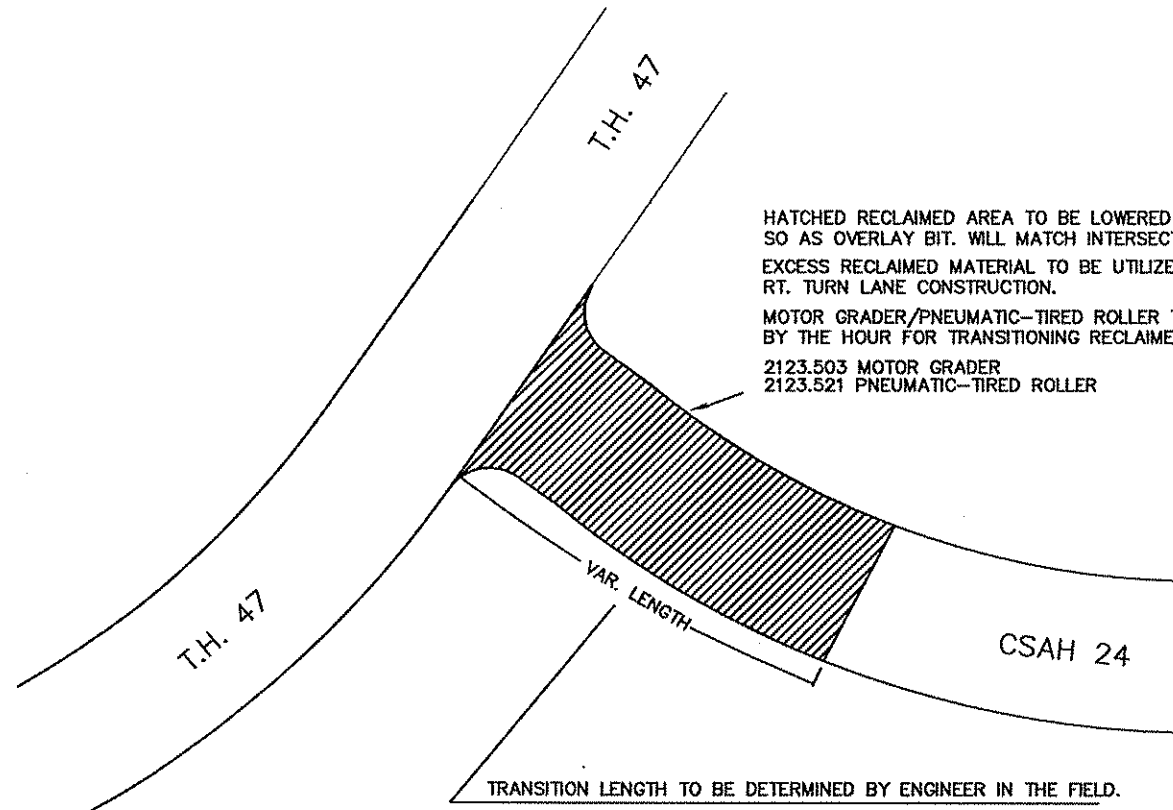
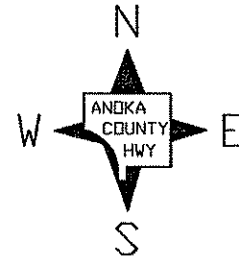
STATE PROJECT NO. \_\_\_\_\_

STATE AID PROJECT NO. \_\_\_\_\_

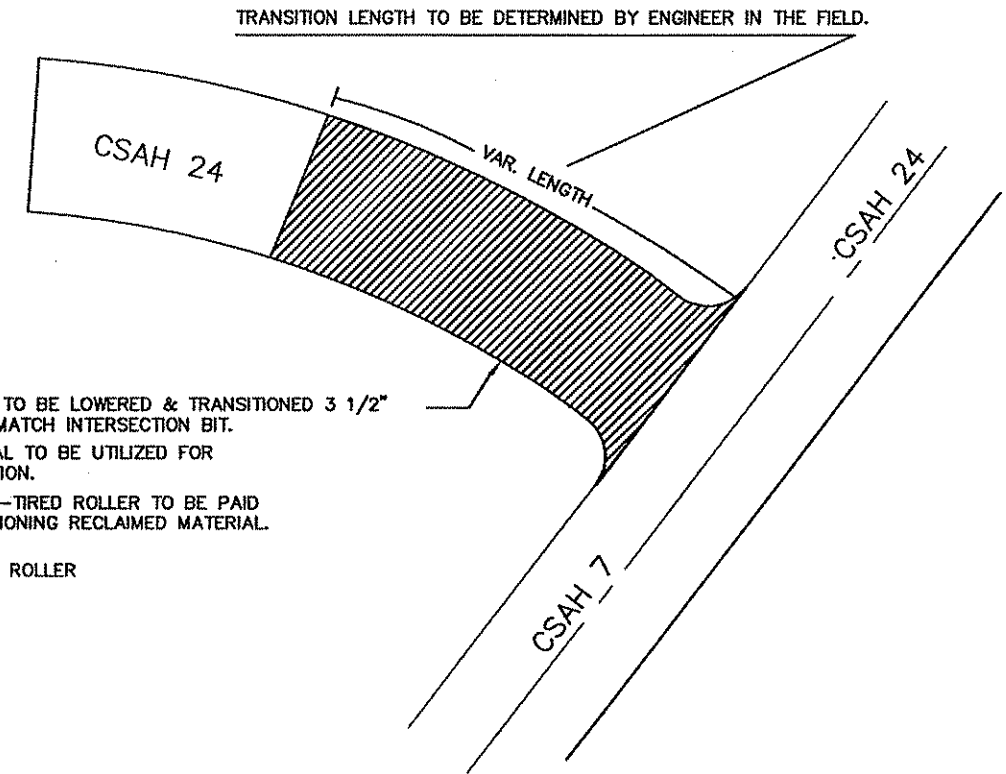
STATE AID PROJECT NO. \_\_\_\_\_

COUNTY PROJECT NO. 03-08-24

# TRANSITION DETAILS

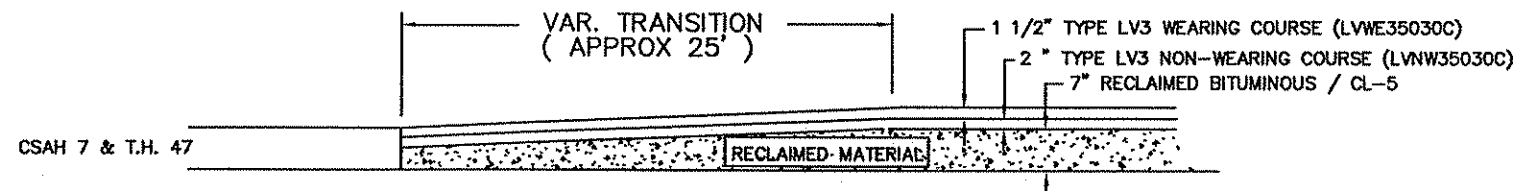


HATCHED RECLAIMED AREA TO BE LOWERED & TRANSITIONED 3 1/2" SO AS OVERLAY BIT. WILL MATCH INTERSECTION BIT.  
 EXCESS RECLAIMED MATERIAL TO BE UTILIZED FOR RT. TURN LANE CONSTRUCTION.  
 MOTOR GRADER/PNEUMATIC-TIRED ROLLER TO BE PAID BY THE HOUR FOR TRANSITIONING RECLAIMED MATERIAL.  
 2123.503 MOTOR GRADER  
 2123.521 PNEUMATIC-TIRED ROLLER



HATCHED RECLAIMED AREA TO BE LOWERED & TRANSITIONED 3 1/2" SO AS OVERLAY BIT. WILL MATCH INTERSECTION BIT.  
 EXCESS RECLAIMED MATERIAL TO BE UTILIZED FOR RT. TURN LANE CONSTRUCTION.  
 MOTOR GRADER/PNEUMATIC-TIRED ROLLER TO BE PAID BY THE HOUR FOR TRANSITIONING RECLAIMED MATERIAL.  
 2123.503 MOTOR GRADER  
 2123.521 PNEUMATIC-TIRED ROLLER

## TRANSITIONS @ CSAH 7 & T.H. 47

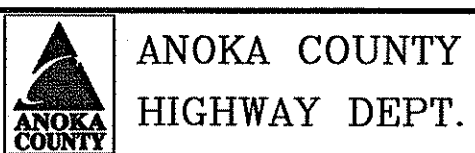


\* NOTE- TRANSITION TO BE PAID AS EQUIP. HRS FOR MOTOR GRADER & ROLLER TO MOVE AND COMPACT RECLAIMED MATERIAL FOR JOINT.

NO	DATE	BY	CHKD	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: MARK DALY  
 SIGNATURE: [Signature]  
 DATE: 4/17/03 LICENSE NO. 21763

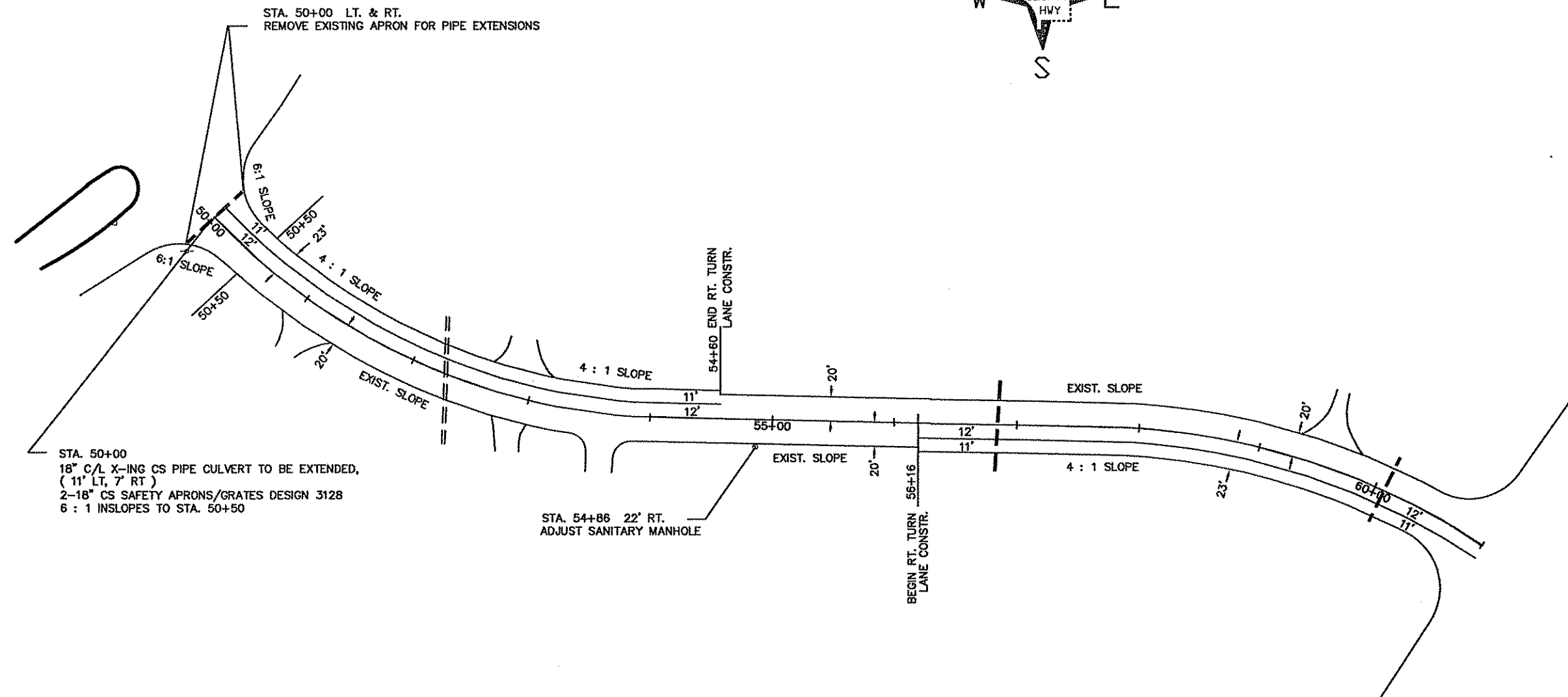
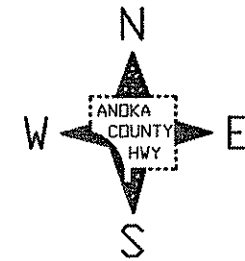
DRAWN BY: J.F. DATE: 4/1/03  
 DESIGN BY: G.A. DATE: 4/1/03  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

DETAILS

Sheet 7 of 14 Sheets



STA. 50+00  
 18" C/L X-ING CS PIPE CULVERT TO BE EXTENDED,  
 ( 11' LT, 7' RT )  
 2-18" CS SAFETY APRONS/GRATES DESIGN 3128  
 6 : 1 INSLOPES TO STA. 50+50

STA. 54+86 22' RT.  
 ADJUST SANITARY MANHOLE

NO	DATE	BY	CHKD	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: MARK DALY  
 SIGNATURE: [Signature]  
 DATE: 4/17/2003 LICENSE NO. 21763

DRAWN BY J.E. DATE 4/1/03  
 DESIGN BY G.A. DATE 4/1/03  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_



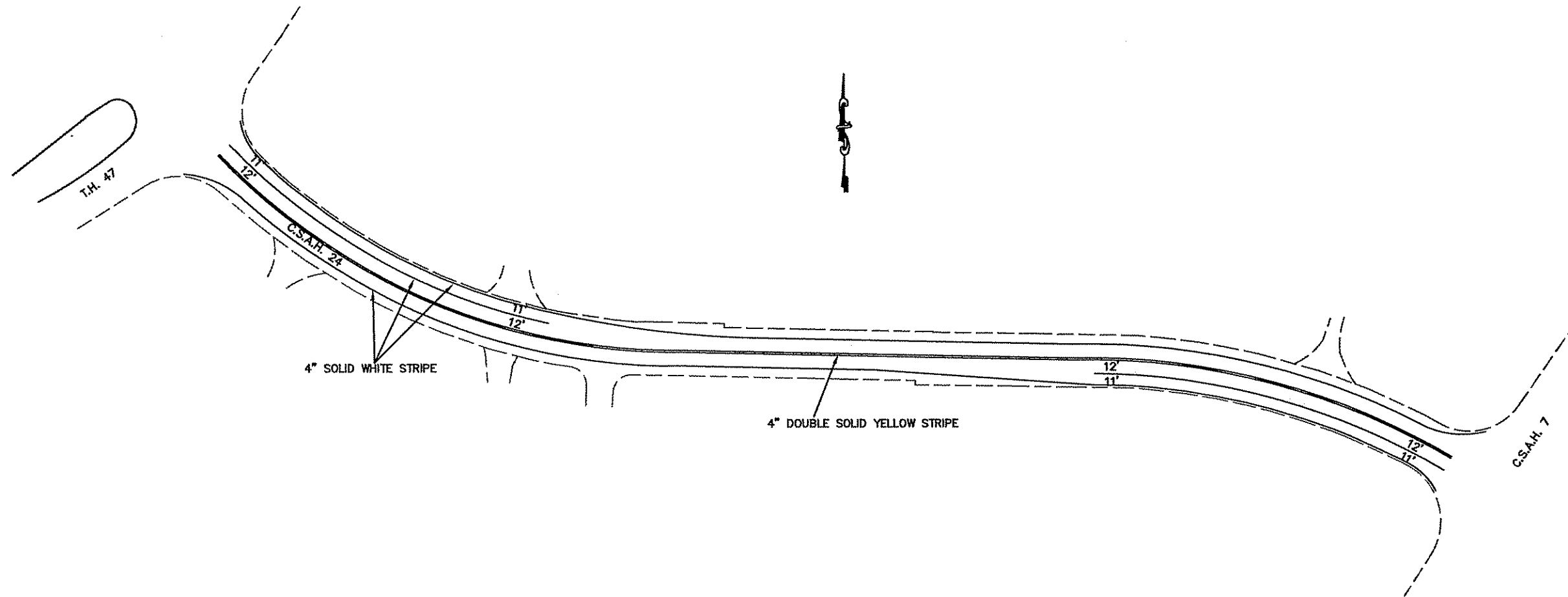
**ANOKA COUNTY  
 HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

PLAN VIEW

Sheet B of 14 Sheets





1063' 4" DOUBLE SOLID YELLOW EPOXY  
 2762' 4" SOLID WHITE EPOXY

C.S.A.H. 24 227th. AVE.  
 BETWEEN T.H. 47 AND C.S.A.H. 7

NO	DATE	BY	CHKD	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: MARK DALY  
 SIGNATURE: *Mark Daly*  
 DATE: 4/17/2003 LICENSE NO. 21763

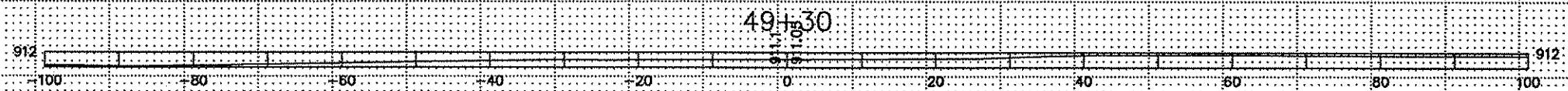
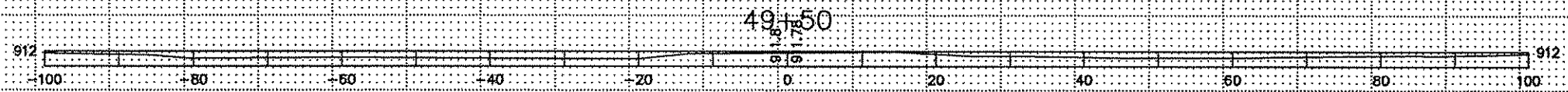
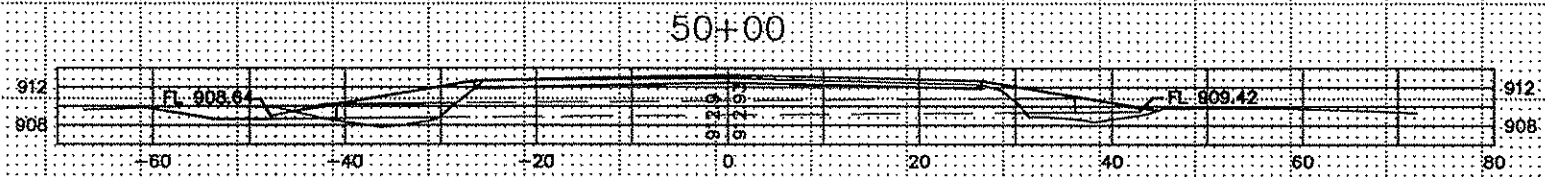
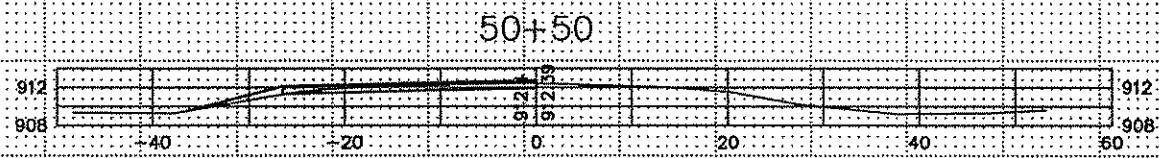
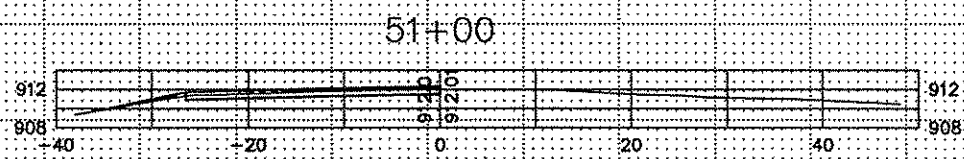
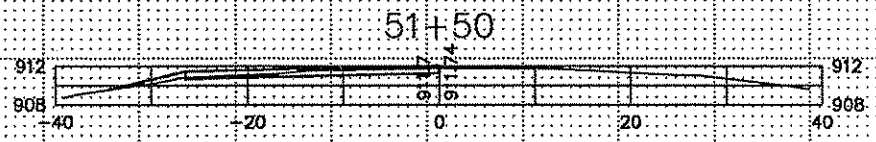
DRAWN BY: ST DATE 04/18/03  
 DESIGN BY: DATE  
 CHECKED BY: DATE



ANOKA COUNTY  
 HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

PERMANENT STRIPING  
 Sheet 9 of 14 Sheets



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: MARK DALY  
 SIGNATURE: [Signature]  
 DATE: 4/17/2002 LICENSE NO. 21763

DRAWN BY: B.L. DATE: 4/1/03

DESIGN BY: G.A. DATE: 4/1/03

CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



**ANOKA COUNTY  
 HIGHWAY DEPT.**

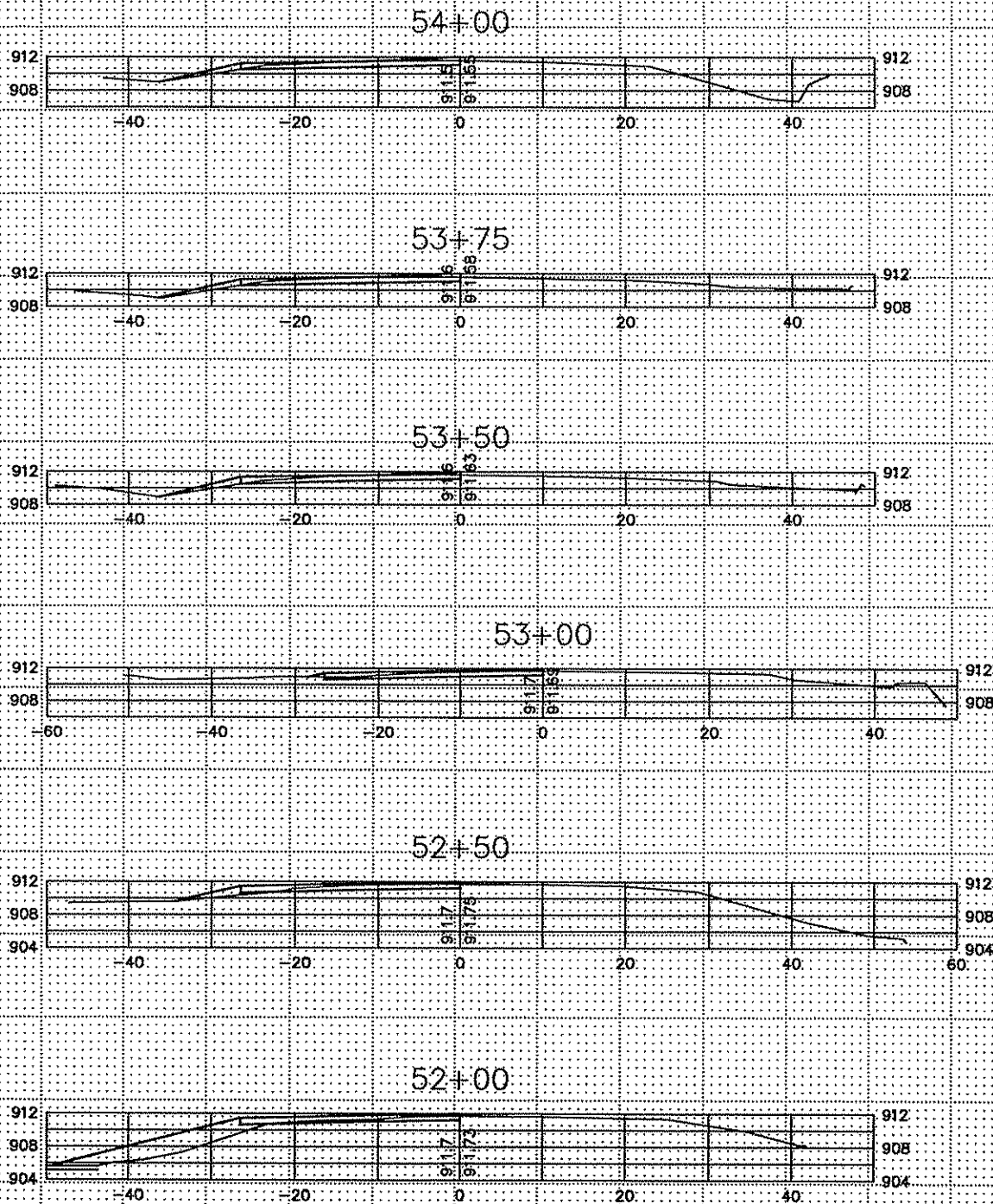
STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

**CROSS SECTIONS  
 STA 49+30 TO 51+50**

Sheet 10 of 14 Sheets

NO	DATE	BY	CHKD	APPR	REVISION

NAME: S:\SDSK\PROJ\000000\000000\028000.DWG



NO	DATE	BY	CHKD	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: MARK DALY  
 SIGNATURE: [Signature]  
 DATE: 4/17/2003 LICENSE NO. 21763

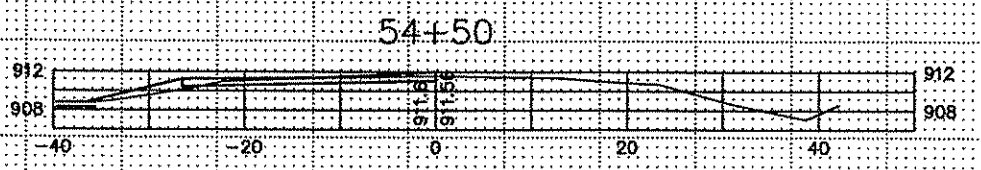
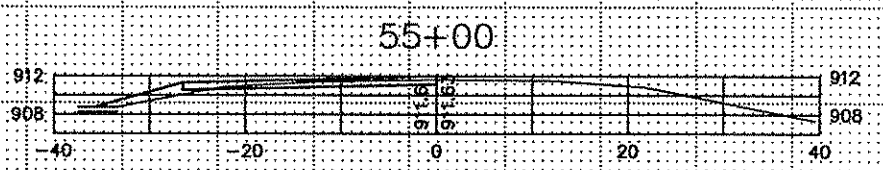
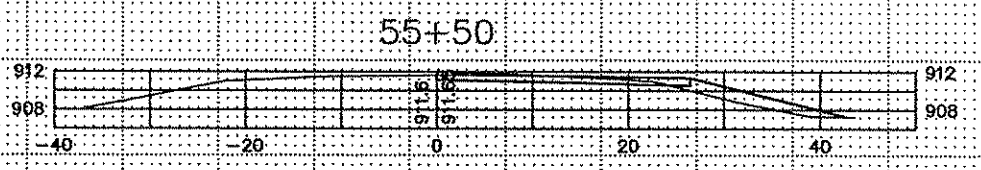
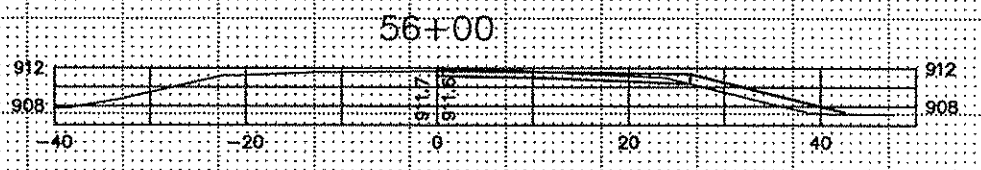
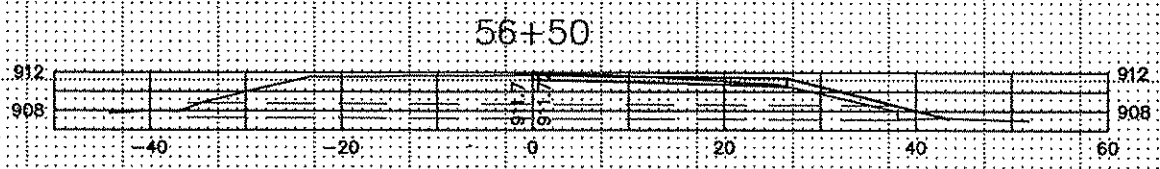
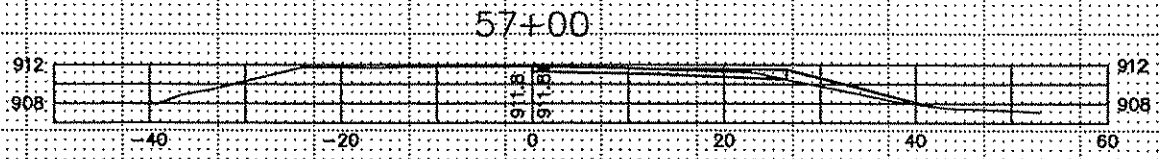
DRAWN BY B.L. DATE 4/1/03  
 DESIGN BY G.A. DATE 4/1/03  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_



**ANOKA COUNTY**  
**HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

**CROSS SECTIONS**  
 STA 52+00 TO 54+00  
 Sheet 11 of 14 Sheets



NO	DATE	BY	CKD	APPR	REVISION

NAME: S:\RISK\PROJ\000000\000000\028000.DWG

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: MARK DALY  
 SIGNATURE: *M R Daly*  
 DATE: 4/17/03 LICENSE NO. 21763

DRAWN BY: B.L. DATE: 4/1/03  
 DESIGN BY: G.A. DATE: 4/1/03  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

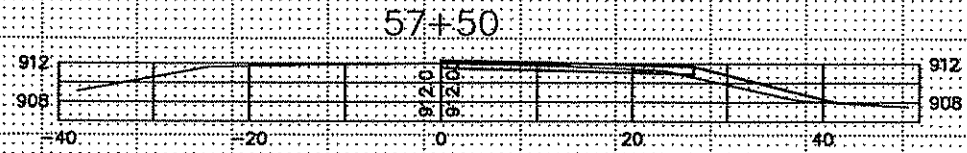
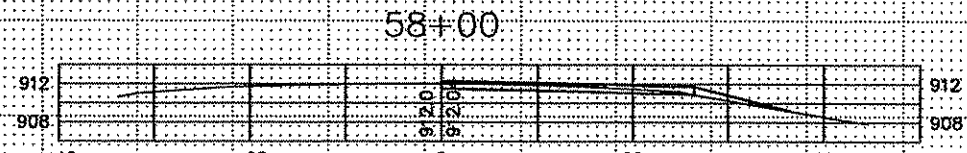
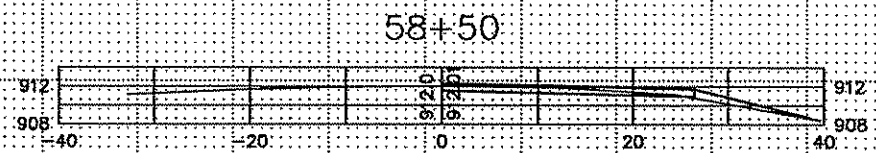
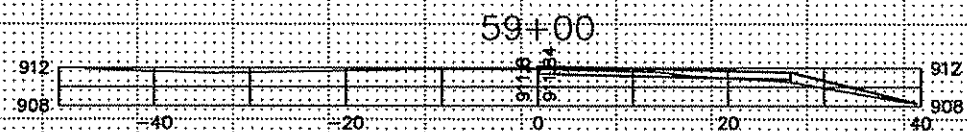
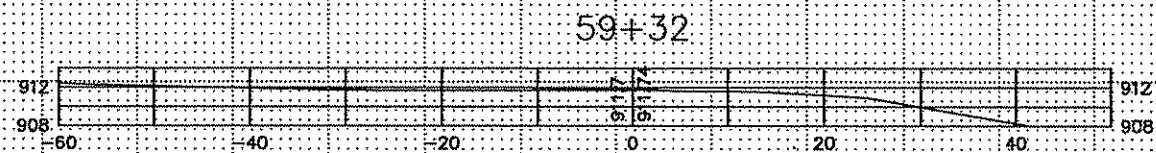
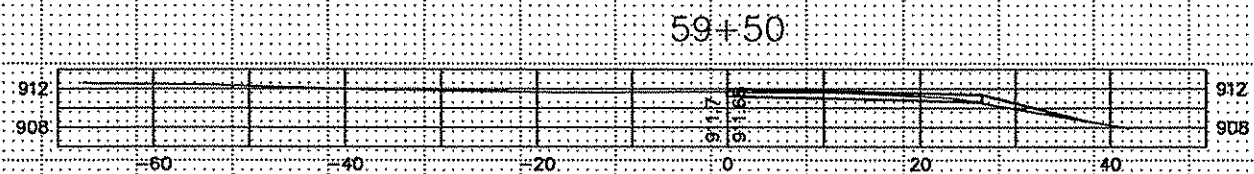


ANOKA COUNTY  
 HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

CROSS SECTIONS  
 STA 54+50 TO 57+00  
 Sheet 12 of 14 Sheets





NO	DATE	BY	CKD	APPR	REVISION

NAME: S:\SUSKPROA\000000\000000\027000.DWG

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: MARK DALY  
 SIGNATURE: *M. DALY*  
 DATE: 1/17/2003 LICENSE NO. 21763

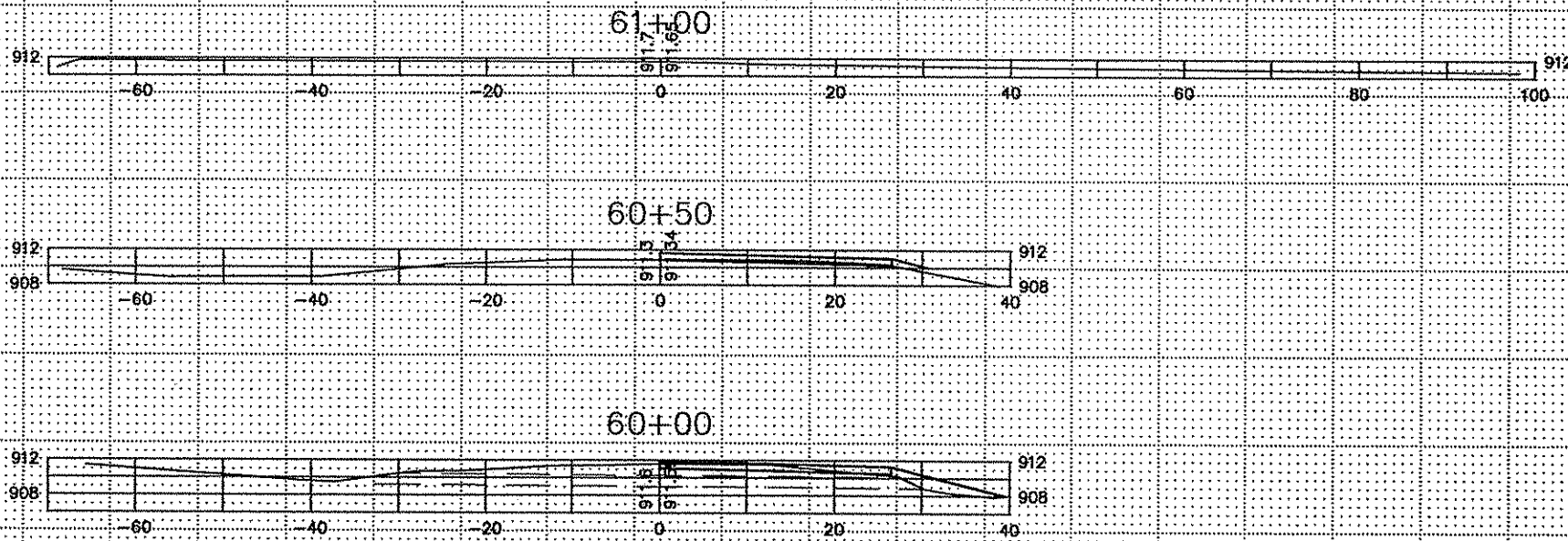
DRAWN BY: B.L. DATE 4/1/03  
 DESIGN BY: G.A. DATE 4/1/03  
 CHECKED BY: DATE



ANOKA COUNTY  
 HIGHWAY DEPT.

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

CROSS SECTIONS  
 STA 57+50 TO 59+50  
 Sheet 13 of 14 Sheets



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: MARK DALY  
 SIGNATURE: [Signature]  
 DATE: 4/17/2003 LICENSE NO. 21763

DRAWN BY: B.L. DATE 4/1/03  
 DESIGN BY: G.A. DATE 4/1/03  
 CHECKED BY: \_\_\_\_\_ DATE \_\_\_\_\_



**ANOKA COUNTY**  
**HIGHWAY DEPT.**

STATE PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 STATE AID PROJECT NO. \_\_\_\_\_  
 COUNTY PROJECT NO. 03-08-24

**CROSS SECTIONS**  
 STA 60+00 TO 61+00  
 Sheet 14 of 14 Sheets

NO	DATE	BY	CKD	APPR	REVISION

NAME: S:\SDS\PRD\000000\000000\026000.DWG