

MINNESOTA DEPARTMENT OF TRANSPORTATION

LYON COUNTY

CONSTRUCTION PLAN FOR: BITUMINOUS SURFACING AND AGGREGATE SHOULDERS.

COUNTY STATE AID HIGHWAY NO. 24

BETWEEN: U.S. 59 AND 250TH AVE.

FROM: N. 1/4 COR. SEC. 21 T113N-R41W

TO: 1850.00' EAST OF N. 1/4 COR. SEC. 21 T113N-R41W

STATE AID PROJECT NO. 042-624-017

GROSS LENGTH 1815.00 FEET 0.344 MILES

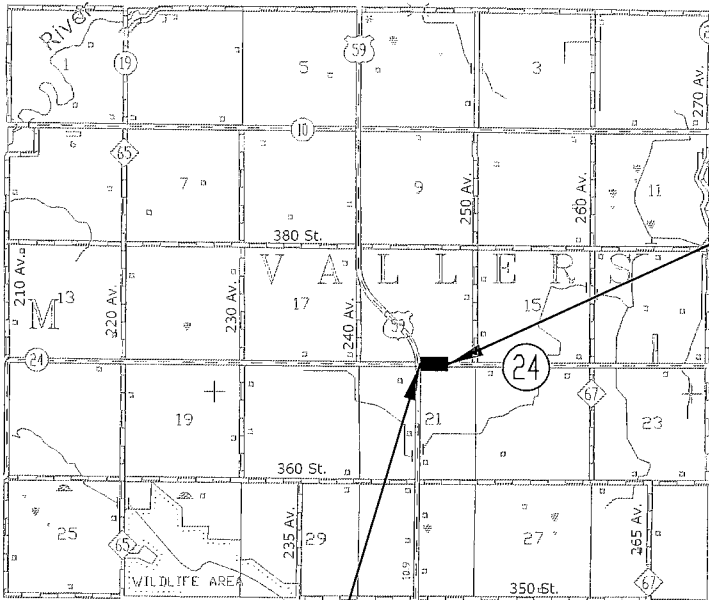
BRIDGE LENGTH 0.00 FEET 0.000 MILES

EXCEPTIONS LENGTH 0.00 FEET 0.000 MILES

NET LENGTH 1815.00 FEET 0.344 MILES

SHEET NO. 1 TITLE SHEET
 SHEET NO. 2 ESTIMATED QUANTITY SHEET
 SHEET NO. 3 TYPICAL SECTIONS SHEET
 SHEET NO. 4 TRAFFIC CONTROL PLAN SHEET

THIS PLAN CONTAINS 4 SHEETS



END S.A.P. 042-624-017
STA. 18+50.00

BEG. S.A.P. 042-624-017
STA. 00+35.00

FUNCTIONAL CLASSIFICATION:
 RURAL MAJOR COLLECTOR

DESIGN SPEED 55 MPH

ADT 370 (2017)

PROJ ADT 490 (2037)

NO. OF TRAFFIC LANES: 2

NO. OF PARKING LANES: 2

S.F. 130 %

R VALUE = 10

TON DESIGN 10

ESALS (20 YR) = 150,000

SHOULDER WIDTH 6.00'

STOPPING SITE DISTANCE BASED ON:

3.5' HEIGHT OF EYE

2.0' HEIGHT OF OBJECT

GRADED: SAP 042-624-016 (2016)

SURFACED:

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.

Signature: *Aaron VanMoer* Typed Name: Aaron VanMoer
 Design Engineer

Date: 2/15/17 License No.: 50428

Aaron VanMoer Date: 2/15/17
 Approved County Engineer

Tom Stumvoll Date: 2/16/17
 District State Aid Engineer:

Reviewed for Compliance with State Aid Rules/Policy

Tom Stumvoll Date: 2/16/17
 Approved for State Aid Funding - for State Aid Engineer

GOVERNING SPECIFICATIONS
 THE 2016 EDITION OF THE MINNESOTA DEPARTMENT
 OF TRANSPORTATION "STANDARD SPECIFICATIONS
 FOR CONSTRUCTION".

NOTE	ITEM NO.	ITEM	UNIT	MUN.	RURAL	TOTAL ESTIMATED QUANTITY
	2021.501	MOBILIZATION	LUMP SUM		1.00	1.00
	2051.501	MAINT. & RESTORATION OF HAUL ROADS	LUMP SUM		1.00	1.00
1	2112.501	SUBGRADE PREPARATION	ROAD STA		18.00	18.00
	2221.501	SHOULDER BASE AGGREGATE CL. 5 MOD	TON		740.00	740.00
2	2360.501	TYPE SP12.5 WEAR COURSE MIXTURE (3,C)	TON		540.00	540.00
2	2360.502	TYPE SP12.5 NON WEAR COURSE MIXTURE (3,C)	TON		560.00	560.00
	2563.601	TRAFFIC CONTROL	LUMP SUM		1.00	1.00
	2582.502	24" STOP LINE PAINT	LIN FT		14.00	14.00
	2582.502	4" SOLID LINE PAINT	LIN FT		1260.00	1260.00
3	2582.502	6" SOLID LINE PAINT	LIN FT		3630.00	3630.00

CONSTRUCTION NOTES

1. SHAPE EXISTING AGGREGATE SURFACE AS DIRECTED BY THE ENGINEER.
2. 30° SAFETY EDGE SHALL BE INCLUDED. BITUMINOUS SAFETY EDGE SHALL EXTEND AT A 30° ANGLE FROM THE TOP OF EACH COURSE. BITUMINOUS TACK COAT SHALL BE INCLUDED IN THE TOTAL BID PRICE. 0% RAP.
3. YELLOW CENTERLINE PAINT. TOTAL QUANTITY INCLUDED SOLID AND BROKEN LINE. BROKEN SHALL BE 10' PAINT AND 40' SKIP.

BASIS FOR ESTIMATED QUANTITIES

NON WEARING COURSE MIXTURE

BITUMINOUS MATERIAL FOR MIXTURE (MAXIMUM DENSITY)
110LBS./SQ.YD./INCH OF DEPTH

WEARING COURSE MIXTURE

BITUMINOUS MATERIAL FOR MIXTURE (MAXIMUM DENSITY)
110LBS./SQ.YD./INCH OF DEPTH

TACK COAT

BITUMINOUS MATERIAL FOR TACK COAT .05 GALS. PER SQ.YD.

SHOULDER BASE AGGREGATE CLASS 5 MOD

140 LBS/CU. FT.

STANDARD PLATES AS APPROVED BY THE FEDERAL HIGHWAY
ADMINISTRATION SHALL APPLY ON THIS PROJECT.

STANDARD PLATES

PLATE NO.	DESCRIPTION
8000 J	CHANNELIZERS
9000 E	APPROACHES AND ENTRANCES

CERTIFIED BY: _____

LICENSED PROFESSIONAL ENGINEER

LIC. NO. 50428

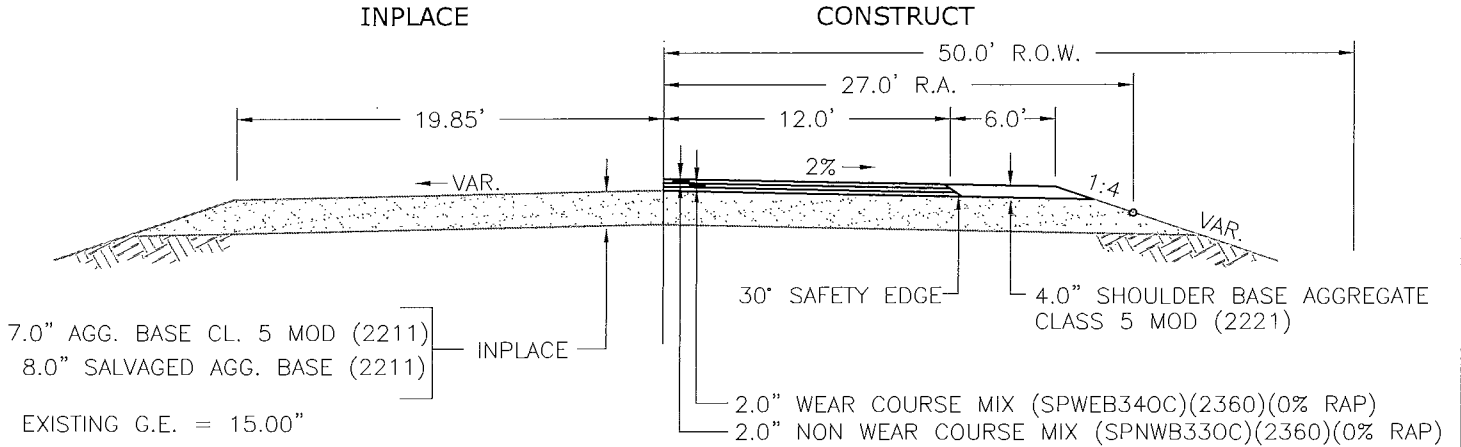
STATE AID PROJECT NO. 042-624-017

SHEET 2 OF 4 SHEETS

TYPICAL SECTION

STA. 0+35.00 TO STA. 18+50.00

NOT TO SCALE



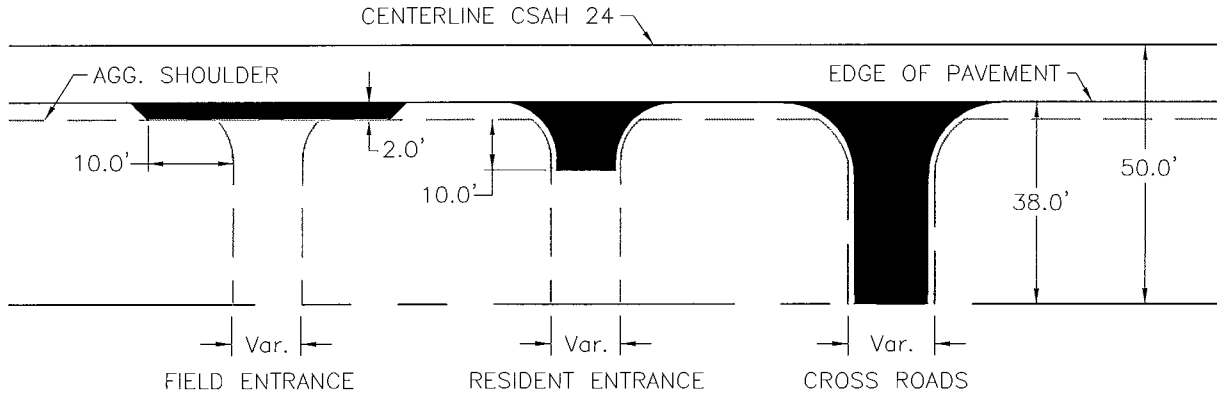
GRANULAR EQUIVALENT
 10 TON
 R VALUE: 10
 ESAL'S: 150,000
 REQUIRED 21.25
 ON PLANS 24.00"

SECTION NOTES:

- 30' BITUMINOUS SAFETY EDGE SHALL BE INCLUDED WITH THE TOTAL BID PRICE FOR BITUMINOUS WEARING COURSE (2360).

TYPICAL AUXILIARY APPROACH PAVING

STANDARD PLATE 9000E SHALL APPLY. FIELD ADJUST AS DIRECTED BY THE ENGINEER.



ENTRANCE TYPE	#	EST. TONS
FIELD ENTRANCE	3	30
RESIDENT ENTRANCE	0	0
CROSS ROADS	0	0
		30

CERTIFIED BY:

LIC. NO. 50428

LICENSED PROFESSIONAL ENGINEER

STATE AID PROJECT NO. 042-624-017

SHEET 3 OF 4 SHEETS

