

PLAN SYMBOLS

- SECTION SUBDIVISION LINE _____
- EXISTING R/W _____
- NEW R/W _____
- TEMP EASE _____
- RAILROAD R/W _____
- ROAD SHOULDER _____
- EDGE OF LAKE _____
- SWAMP BOUNDARY _____
- MISCELLANEOUS BOUNDARY _____
- CORPORATE OR CITY LIMITS // // // // // // // //
- PROPERTY LINE _____
- RECREATIONAL TRAIL _____
- ROAD ALIGNMENT _____
- ALIGNMENT POINTS _____
- RIVER OR CREEK _____
- DRAINAGE DITCH _____
- BRIDGE _____
- RAILROAD (SINGLE TRACK) _____
- RR CROSSING PAVEMENT MARKING _____
- RR CROSSING GATE _____
- RR CROSSBUCK SIGN _____
- RR CROSSBUCK SIGN W/LIGHTS _____
- BARBED WIRE FENCE _____
- CHAIN LINK FENCE _____
- WOVEN WIRE, COMBINATION WOVEN AND BARB _____
- WOOD FENCE _____
- BILLBOARD _____
- RETAINING WALL _____
- GUARDRAIL (CABLE) _____
- GUARDRAIL (PLATE BEAM) _____
- DRAIN TILE _____
- CULVERT _____
- CULVERT WITH APRONS _____
- TREELINE OR BRUSHLINE _____
- DECIDUOUS TREES _____
- CONIFER (EVERGREEN) TREES _____
- HEDGE _____
- BUSH OR SHRUB _____
- SWAMP OR MARSH _____
- MONUMENT (CI,ACT,ACP,BCP,...) _____
- CONCRETE OR STONE MONUMENT _____
- IRON PIPE, PIN OR REBAR _____
- IRON PIN WITH BRASS DISK _____
- NAIL, PK NAIL, SPIKE, SFP, T-BAR, ... _____
- VERTICAL CONTROL _____
- HORIZONTAL CONTROL _____
- POWER POLE _____
- LIGHT POLE _____
- LIGHT AND TELEPHONE POLE _____
- LIGHT, TELEPHONE AND POWER POLE _____
- GUY POLE _____
- POLE ANCHOR _____
- TELEPHONE POLE _____
- TELEPHONE AND POWER POLE _____
- UNDERGROUND UTILITY PEDESTAL _____
- TELEPHONE MANHOLE (VAULT) _____
- ELECTRIC CABLE IN CONDUIT _____
- TELEPHONE CABLE IN CONDUIT _____
- BURIED ELECTRIC CABLE _____
- BURIED TELEPHONE CABLE _____
- GAS LINE _____
- WATER LINE _____
- VALVE _____
- FIRE HYDRANT _____
- WATER MANHOLE _____
- WELL _____
- LAWN SPRINKLER HEAD _____
- MANHOLE _____
- CATCH BASIN _____
- SEPTIC TANK _____
- FORCE MAIN LIFT STA. _____
- SEWER LINE _____
- PERMANENT BARRICADE _____
- TRAFFIC SIGNAL LIGHT _____
- HAND HOLE _____
- ENTRANCE _____
- BUILDING _____
- SATELLITE DISH _____
- STEEL TOWER _____
- FLAG POLE _____
- SIGN _____
- TYPE III BARRICADE _____
- CHANNELIZING DEVICE _____
- TYPE A WARNING LIGHT _____

MINNESOTA DEPARTMENT OF TRANSPORTATION SAINT LOUIS COUNTY

CONSTRUCTION PLAN FOR: MILL BITUMINOUS SURFACE, CURB AND GUTTER, SIDEWALKS, PLANT MIXED BITUMINOUS SURFACE

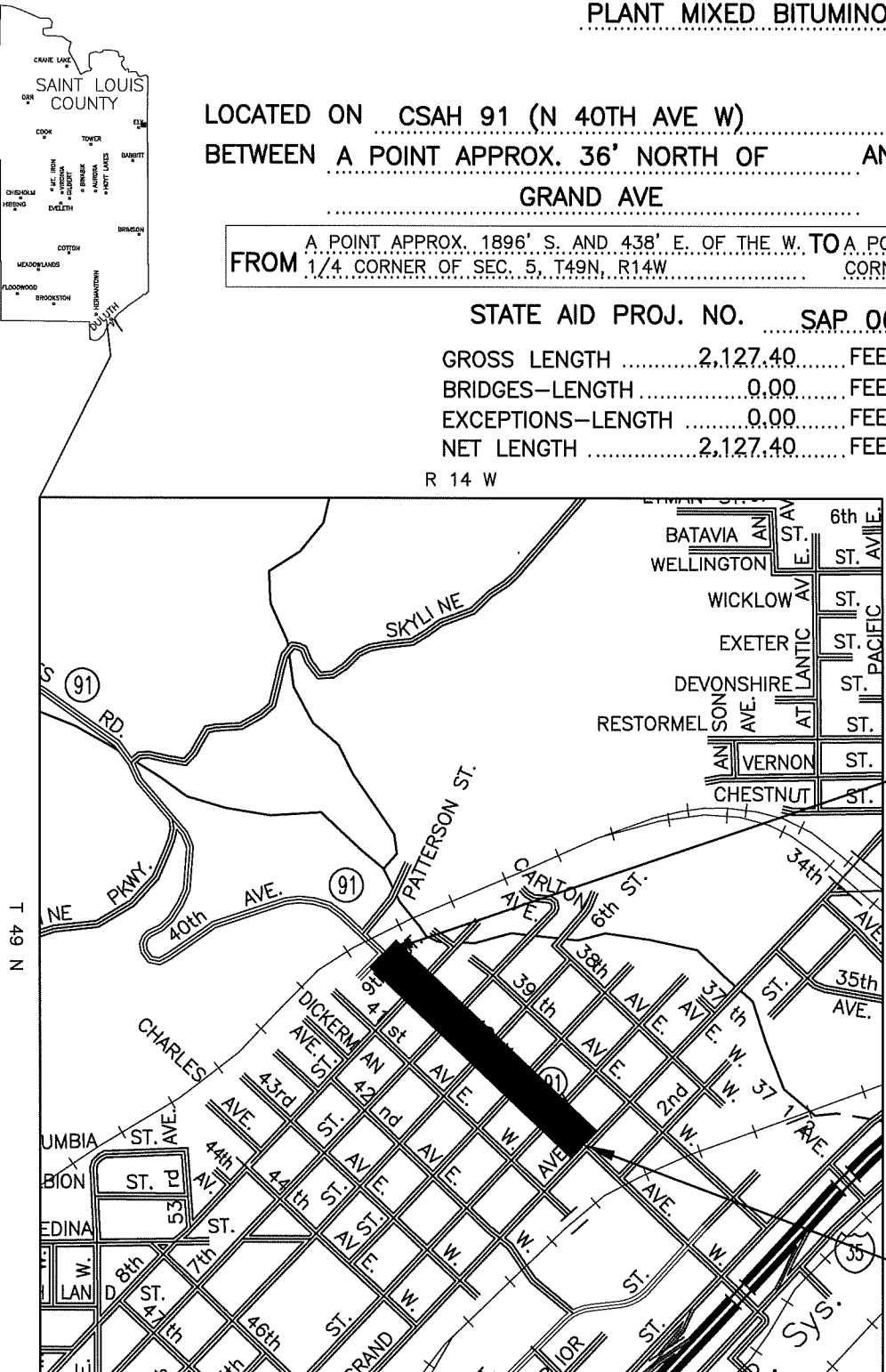
LOCATED ON CSAH 91 (N 40TH AVE W)
BETWEEN A POINT APPROX. 36' NORTH OF _____ AND _____
GRAND AVE

FROM A POINT APPROX. 1896' S. AND 438' E. OF THE W. 1/4 CORNER OF SEC. 5, T49N, R14W TO A POINT APPROX. 426' S. AND 1099' W. OF THE W. 1/4 CORNER OF SEC. 5, T49N, R14W

STATE AID PROJ. NO. SAP 069-691-031

GROSS LENGTH	2,127.40	FEET	0.403	MILES
BRIDGES-LENGTH	0.00	FEET	0.000	MILES
EXCEPTIONS-LENGTH	0.00	FEET	0.000	MILES
NET LENGTH	2,127.40	FEET	0.403	MILES

R 14 W

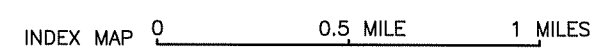


T 49 N

END SAP 069-691-031
STA. 21+63.40

BEGIN SAP 069-691-031
STA. 0+36.00

SCALES



PREVIOUS PLANS	
DATE	SHEET NO.
1998	SAP 069-691-16

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

SAP 069-691-031
CP 0091-368592

MINN. PROJ. NO.

GOVERNING SPECIFICATIONS

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

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
(PHASE 1)	
1	TITLE SHEET AND INDEX MAP
2	ESTIMATED QUANTITIES
3	TYPICAL SECTIONS
4	QUANTITY CHARTS
5-6	TRAFFIC CONTROL DETAILS
7-9	PAVEMENT MARKING DETAILS
10-11	CROSS SECTIONS
12	

THIS PLAN CONTAINS X SHEETS

DESIGN DESIGNATION

ADT (CURRENT YEAR)	2019	=	5500
ADT (FUTURE YEAR)	2039	=	6225
D (DIRECTIONAL DISTR.)		=	50/50%
T (HEAVY COMMERCIAL -13.3%)		=	827
PROJ. SOIL FACTOR		=	N/A
TRAFFIC LANE WIDTH		=	11.0'
SHOULDER WIDTH		=	7.0'
FUNCTIONAL CLASSIFICATION		=	MAJOR COLLECTOR
RURAL RECONDITIONING	STA. 0+36.00 TO STA. 21+63.40		

DESIGNERS SOUTH DESIGN

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: STEPHEN E. KRASAWAY

SIGNATURE: _____

DATE: _____ LIC. NO. 45397

APPROVED _____
ST. LOUIS CO. HWY. ENGINEER _____ DATE _____

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE AID RULES AND POLICIES _____ DATE _____

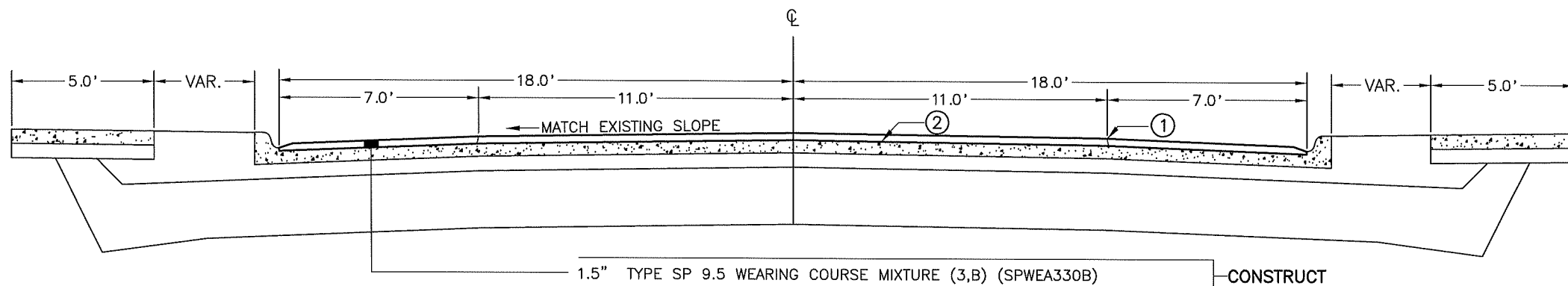
STATE AID ENGINEER: APPROVED FOR STATE AID FUNDING _____ DATE _____

SHEET NO. X OF X SHEETS

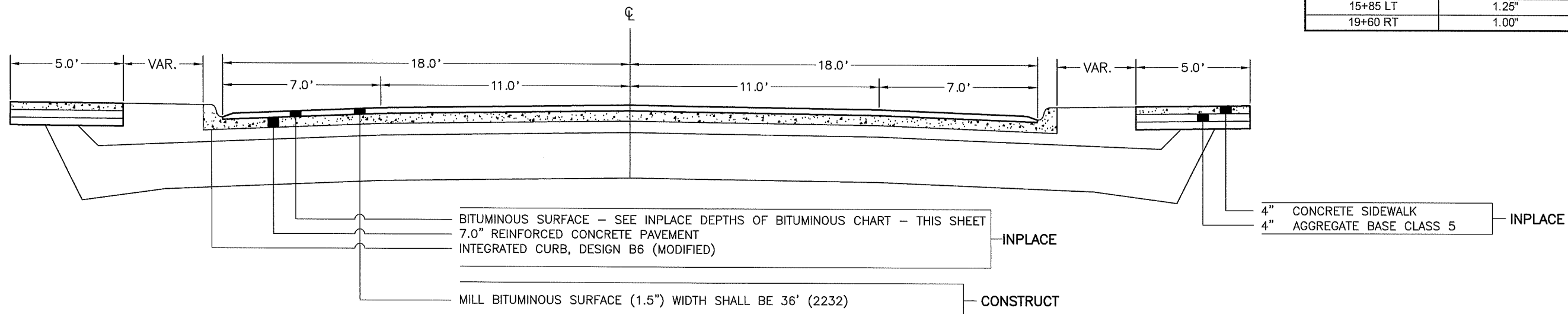
K:\Projects\B1 - 120 CSAH\CSAH 91\0091-368480\400 Design\410 Drawings\520 Sheets\3)_ CP 0091-368480 TYPICAL SECTIONS.dwg

TYPICAL SECTION
 PLANT MIXED BITUMINOUS SURFACE
 CSAH 91 (N 40TH AVE W)
 STA. 0+36.00 TO STA. 21+63.40

- ① BITUMINOUS SAFETY EDGE, SEE SPECIAL PROVISIONS (ALSO REQUIRED ON CENTERLINE FOR FIRST PASS OF EACH LIFT.)
- ② SPEC. 2357 BIT. MATERIAL FOR TACK COAT, BETWEEN LAYERS, AS REQUIRED.



TYPICAL SECTION
 MILL BITUMINOUS SURFACE
 CSAH 91 (N 40TH AVE W)
 STA. 0+36.00 TO STA. 21+63.40



INPLACE DEPTHS OF BITUMINOUS	
STATION / LOCATION	DEPTH
2+25 RT	1.25"
4+48 RT	1.25"
9+00 RT	1.50"
12+17 RT	0.75"
15+78 RT	1.50"
15+85 LT	1.25"
19+60 RT	1.00"

NO SCALE

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: *Stephen E. Krasaway*
 TYPED NAME: STEPHEN E. KRASAWAY

DATE: 45397
 LIC. NO.

SAP 069-691-031
 CP 0091-368480

TYPICAL SECTIONS
 SHEET NO. X OF X SHEETS