

REVISION DATE 06/13/18

2-OCT-2019

Sample Plan

TITLE SHEET ----- NARRATIVE

References:

- Design Scene: Chapter 1 - Title Sheet
- Road Design Manual: Chapter 2
- Technical Manual: Chapter 6

Miscellaneous: <http://thub.metro/design/projectmanagement.html> Request State Aid Numbers

General Information:

Work description should encompass all major work categories. This information may be obtained from Program and Project Management System (PPMS). Examples can be found in Chapter 1 of the Design Scene.

If the project involves multiple S.P.'s, each S.P. should be described by length and reference point. The Index map should show the beginning and end of each S.P. All S.P.'s shall be shown in the lower right hand corner. Include the Trunk Highway number with the S.P. number and show the legislative route number only on the Title Sheet. For example: STATE PROJ. NO. 0000-00 (T.H. 00=00). The Legislative Route Number is a number that is assigned to a segment of TH by the State Legislature; the Legislative Route Number can be found at the MnDOT Office of Transportation Data & Analysis web site: http://www.dot.state.mn.us/roadway/data/reports/control_sections.pdf. This shows the Control Section Report which lists the Route Numbers for the roadways by district. For more information, see the Design Scene.

Exceptions are bridges with no work and other areas with no work being done. The sum of the exceptions equals the total exceptions length. The gross length minus the exceptions equals the net length. Exceptions should be noted on the Index map. If exceptions or bridge length is zero, leave length empty.

The roadway length and description note is normally based on the northbound or eastbound alignment. Show the necessary equations, but only for the roadway that the length and description is based. The Designer should choose the alignment that best describes the project. This note is not needed on a project that has only one roadway alignment that is used for the project.

The pit data, if applicable, may be shown on the Title Sheet or, if shown elsewhere, note on the Title Sheet where this data can be found in the plan. This information is found in the Soils Letter.

If Federally funded, include the Federal Project Number in the upper right hand corner. If State funded, include the words "State Funds". The Federal Project Number may be found in the Bidletting Schedule located on www.dot.state.mn.us/bidlet/misfiles/pdf/schedule.pdf. If not found, contact Metro Program Management to initiate request for a Federal Project Number.

Plan sheets should be in the order shown on this Sample Plan Index. Some sheets shown may be combined or eliminated. Depending on the project, the designer may need to adjust the font size to accommodate the necessary items.

The Index also shows plan sheets that are developed by other functional groups. They include:

- Striping Plans
- Traffic Control Plans
- Lighting Plans (sometimes a separate plan)
- Signing Plans (sometimes a separate plan)
- Traffic Management System Plans
- Signal Plans (sometimes a separate plan)

The designer is required to coordinate the project with the applicable functional groups.

After assigning sheet numbers, and additional sheets are determined to be necessary, the new sheets may be assigned an "A" designation so as to simplify the cross-referencing of the plan sheets. Likewise, if a sheet number is deleted, that deletion is noted in the Index and below the Index. The plan sheet total should be the actual number of sheets in the plan.

Squad members names are recommended (but not mandatory) in the Design Squad box.

Use the signature block format as shown. If some signatures are not necessary, that title shall be removed. For example, a bituminous overlay plan may not require the Water Resources Engineer's signature. If the project includes State Aid funding, additional information will be required. See General Notes for guidelines. Provide printed name of engineer who will be signing the Plan.

Design Designation information can be obtained from the Design Memorandum or Project Memorandum. If not available from these sources, contact the Metro Traffic Forecast Engineer (Planning Office).

Information located on the left border of the plan sheet indicates the CADD file name, plot name and the plot date. The revision date shown is intended for the Sample Plan only.

The Title Sheet is to be plotted on vellum, not on bond paper.

Miscellaneous Continued:

Process A projects (such as those processed through Maintenance Lettings) require a special title sheet.

Determining Reference Points and Posts is explained in Chapter 1 of the Design Scene.

Cross Sections are always the last set of sheets.

An alternate sheet numbering system for plan sheets created by the various traffic units is to prefix the sheet numbers with letters associated with these units. (ie: 14 Traffic Control sheets would be numbered TC1-TC14; 15 TMS sheets would be numbered SZ1-SZ15).

If petroleum lines are within the project limits, place the following: WARNING: HIGH PRESSURE PIPELINE(S) EXCAVATION AND/OR CONSTRUCTION PROHIBITED WITHOUT COMPLIANCE WITH GOPHER STATE ONE-CALL AND WITHOUT WRITTEN PERMISSION FROM THE OWNER

Once the title sheet is partially complete, it's good practice to send an electronic copy of the title sheet to the C.O. plan review section for them to check.

Sample Plan

TITLE SHEET ----- CHECKLIST

- _____ 1. Beginning and End of Project
- _____ 2. Length of Project Based on Roadway
- _____ 3. Equations
- _____ 4. Bar Scales
- _____ 5. County, Section, Township and Range
- _____ 6. Gravel Pits and Pit Data, if applicable
 - ___ A. Pit Number
 - ___ B. County
 - ___ C. Legal Description
 - ___ D. Material Available (if noted in Soils Letter)
- _____ 7. Design Designation / Design Exceptions / Design ESALS
- _____ 8. File Name, plot name and date of plot
- _____ 9. Title Block (use applicable signatures)
- _____ 10. Governing Specifications Note (use latest applicable edition of the specifications)
- _____ 11. Federal Project Number (upper right-hand corner only)
 - If no federal funds indicate "State Funds"
- _____ 12. Work Description ("CONSTRUCTION PLAN FOR")
- _____ 13. Index (show "A" sheets, deleted sheets, and total sheets)
- _____ 14. Exceptions-Lengths
- _____ 15. North Arrow
- _____ 16. State Aid Number, if applicable
- _____ 17. Identify Bridge Numbers for both Existing and New Structures
- _____ 18. Legislative Route Number after Trunk Highway Number
- _____ 19. Project Location Map
- _____ 20. Charge Identifier (in pencil)
- _____ 21. Reference Points

TITLE SHEET NARRATIVE AND CHECKLIST

REVISION DATE 05/24/18

title.sht

2-OCT-2019

Projects\DM_R05\Non_Project\Design\Sample\Eng\title.sht

MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR GRADING, BITUMINOUS SURFACING, AND BRIDGE NO. 02045, 02046, 02047 & 02048

LOCATED ON TH 10 FROM TH 65 TO 0.5 MILES SOUTH EAST OF COUNTY ROAD J

STATE PROJ. NO. 0000-00

GROSS LENGTH..... 9981.75 FEET... 1.890 MILES.
 BRIDGES-LENGTH..... 255.32 FEET... 0.048 MILES
 EXCEPTIONS-LENGTH..... 153.00 FEET... 0.029 MILES
 NET LENGTH..... 9828.75 FEET... 1.861 MILES
 REF. POINT .234+00.268 TO REF. POINT.236+00.158

NOTE: LENGTH AND DESCRIPTION BASED ON THE TH 10 EB ALIGNMENT

WARNING:
 HIGH PRESSURE PIPELINE(S)
 EXCAVATION AND/OR CONSTRUCTION PROHIBITED
 WITHOUT COMPLIANCE WITH GOPHER STATE ONE- CALL AND
 WITHOUT WRITTEN PERMISSION FROM
 KOCH REFINERY

SAMPLE PLAN

FED. PROJ. NO. NH 031-1(63)

GOVERNING SPECIFICATIONS

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR CONSTRUCTION' SHALL GOVERN.

INDEX

SHEET NO.	DESCRIPTION
1 - 1A	TITLE SHEET
2 - 3	GENERAL LAYOUT
4 - 5	ESTIMATED QUANTITIES
6	STANDARD PLATES
7 - 10	EARTHWORK TABULATION AND SUMMARY
11	SOILS AND CONSTRUCTION NOTES
12 - 15	TABULATIONS
16 - 17	INPLACE UTILITY TABULATIONS AND PLAN
18 - 19	PROPOSED UTILITY TABULATIONS AND PLAN
20 - 26	TYPICAL SECTIONS
27	MISCELLANEOUS DESIGN DETAILS
28	SPECIAL ENVIRONMENTAL PLAN SHEETS
29	STANDARD PLANS
30	STAGING PLAN
31	BYPASS PLANS
32 - 35	ALIGNMENT PLAN AND TABULATIONS
36	INPLACE TOPOGRAPHY
37	REMOVAL PLANS
38	CONSTRUCTION PLANS
39 - 41	CONSTRUCTION PLAN DETAILS
42 - 44	PROFILES
45 - 46	CONCRETE PAVING PLANS
47	CONCRETE PAVING DETAILS
48	BITUMINOUS PAVING DETAILS
49 - 50	SUPERELEVATION PLANS
51 - 53	RETAINING WALL PLANS AND PROFILES
54 - 63	RETAINING WALL DETAILS
64 - 67	NOISE WALL PROFILES, TABULATIONS AND DETAILS
68	DRAINAGE PLANS
69 - 72	DRAINAGE PROFILES AND TABULATIONS
73	DRAINAGE DETAILS
74 - 77	STORM WATER POLLUTION PREVENTION PLAN AND WATER RESOURCES NOTES
78	EROSION CONTROL PLANS
79	TURF ESTABLISHMENT PLANS
80	IMPACT ATTENUATOR PLAN AND DETAILS
81	TRAFFIC BARRIER PLANS
82	TRAFFIC BARRIER DETAILS
83	FENCING PLANS
84	CONTOURS
TC1	TRAFFIC CONTROL PLAN
PM1	PERMANENT PAVEMENT MARKING PLAN
SL1	LIGHTING PLANS
ST1	SIGNING PLANS
T21 - T22	TRAFFIC MANAGEMENT SYSTEM PLANS
SS1	TRAFFIC CONTROL SIGNAL SYSTEM PLANS
X1 - X2	CROSS SECTION MATCH LINE LAYOUT
X3	CROSS SECTIONS

SHEET NO. 19 HAS BEEN REMOVED FROM THIS PLAN

THIS PLAN CONTAINS 95 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: WILL D. ZINE LICENSE # 00000

DATE: SIGNATURE:

DESIGN SQUAD ROE D. TAYLE, J. DOE, G. SMITH, K. JONES, L. WHITE

RECOMMENDED FOR APPROVAL DISTRICT TRANSPORTATION ENGINEER 20

RECOMMENDED FOR APPROVAL DISTRICT MATERIALS ENGINEER 20

RECOMMENDED FOR APPROVAL DISTRICT WATER RESOURCES/HYDRAULICS ENGINEER 20

RECOMMENDED FOR APPROVAL DISTRICT TRAFFIC ENGINEER 20

RECOMMENDED FOR APPROVAL STATE PRE-LETTING ENGINEER 20

OFFICE OF LAND MANAGEMENT APPROVAL DIRECTOR, LAND MANAGEMENT 20

APPROVED 20 STATE DESIGN ENGINEER

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, WERE 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: LICENSE #

DATE: SIGNATURE:

EQUATIONS
 TH 10 EB P.T. 715+35.51 =
 TH 10 EB P.O.T. 715+53.76

STATE PIT NO. 82009 IS A POSSIBLE AGGREGATE SOURCE. LOCATION IS NW 1/4 OF NE 1/4 OF SECTION 4, T28N, R20W IN ANOKA COUNTY.

TH 10 EB STA 625+00
BEG. S.P. 0000-00

TH 10 EB STA 725+00
END S.P. 0000-00

SCALES
INDEX MAP 1200'

DESIGN DESIGNATION

Design ESALS	= 10.2 MILLION
ADT (Current Year) 1990	= 38,700
ADT (Future Year) 2010	= 74,000
DHV (Design Hr. Vol.)	= 4350
D (Directional Distr.)	= 85 %
T (Heavy Commercial)	= 3.7 %
Design Speed	70 MPH
Based on	STOPPING Sight Distance
Height of eye	3.50'
Height of object	2.00'
Design Speed not achieved at:	
STA. TO STA.	MPH
STA. TO STA.	MPH

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY



PROJECT LOCATION
COUNTY : RAMSEY
DISTRICT : METRO

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL
STATE PROJ. NO. 0000-00 CHARGE IDENTIFIER

REVISION DATE 05/24/18
 PLOTTED/REVISED: 2-OCT-2019

DISTRICT *: Metro
 PLOT NAME: fitesth
 PATH & FILENAME: Projects\DM-ROS\Won-Project\Design\SamplePlan\Eng\fitesth.dgn

MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR GRADING, ALTERNATE BITUMINOUS OR CONCRETE SURFACING, ADA IMPROVEMENTS, RETAINING WALLS, NOISE WALLS, LIGHTING, TMS, SIGNALS, BRIDGE NO. 27303, 27304, 27305, 27306 AND 27109

SAMPLE PLAN

FED. PROJ. NO. NHPP 0100 (317)

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

INDEX

SHEET NO.	DESCRIPTION
1A	TITLE SHEET GENERAL LAYOUT SHEETS STATEMENT OF ESTIMATED QUANTITIES STANDARD PLATES EARTHWORK TABULATIONS & SUMMARIES SOILS AND CONSTRUCTION NOTES TABULATIONS INPLACE UTILITY TABULATIONS INPLACE UTILITY PLAN MISCELLANEOUS DRAINAGE REMOVAL TABULATIONS INPLACE DRAINAGE PLAN TYPICAL SECTIONS MISCELLANEOUS DETAILS BUILDING REMOVAL PLAN STANDARD PLANS STAGING PLAN ALIGNMENT PLAN AND TABULATIONS INPLACE TOPOGRAPHY & REMOVAL PLANS CONSTRUCTION PLANS CONSTRUCTION PLAN DETAILS ADA-PEDESTRIAN CURB RAMP DETAILS INTERSECTION DETAILS PROFILES CONCRETE PAVING PLAN RETAINING WALL PLANS, PROFILES, DETAILS & TABULATIONS NOISE WALL PLAN, PROFILE, TABULATIONS & DETAILS DRAINAGE INDEX, SUPERELEVATION & DRAINAGE PLANS DRAINAGE TABULATION & PROFILES DRAINAGE DETAILS POND DETAILS TEMPORARY DRAINAGE PLAN AND TABULATION TEMPORARY SEDIMENT CONTROL STANDARD PLANS WATER RESOURCE NOTES TURF ESTABLISHMENT PLAN CITY UTILITY PLANS, DETAILS & TABULATIONS C.P. SHOO-FLY PLAN, DETAILS & TABULATION TRAFFIC CONTROL PLAN PAVEMENT MARKING PLANS LIGHTING PLANS SIGNING PLANS TRAFFIC MANAGEMENT SYSTEM PLANS TRAFFIC CONTROL SIGNAL SYSTEM PLANS CROSS SECTION MATCHLINE LAYOUT & INDEX CROSS SECTIONS

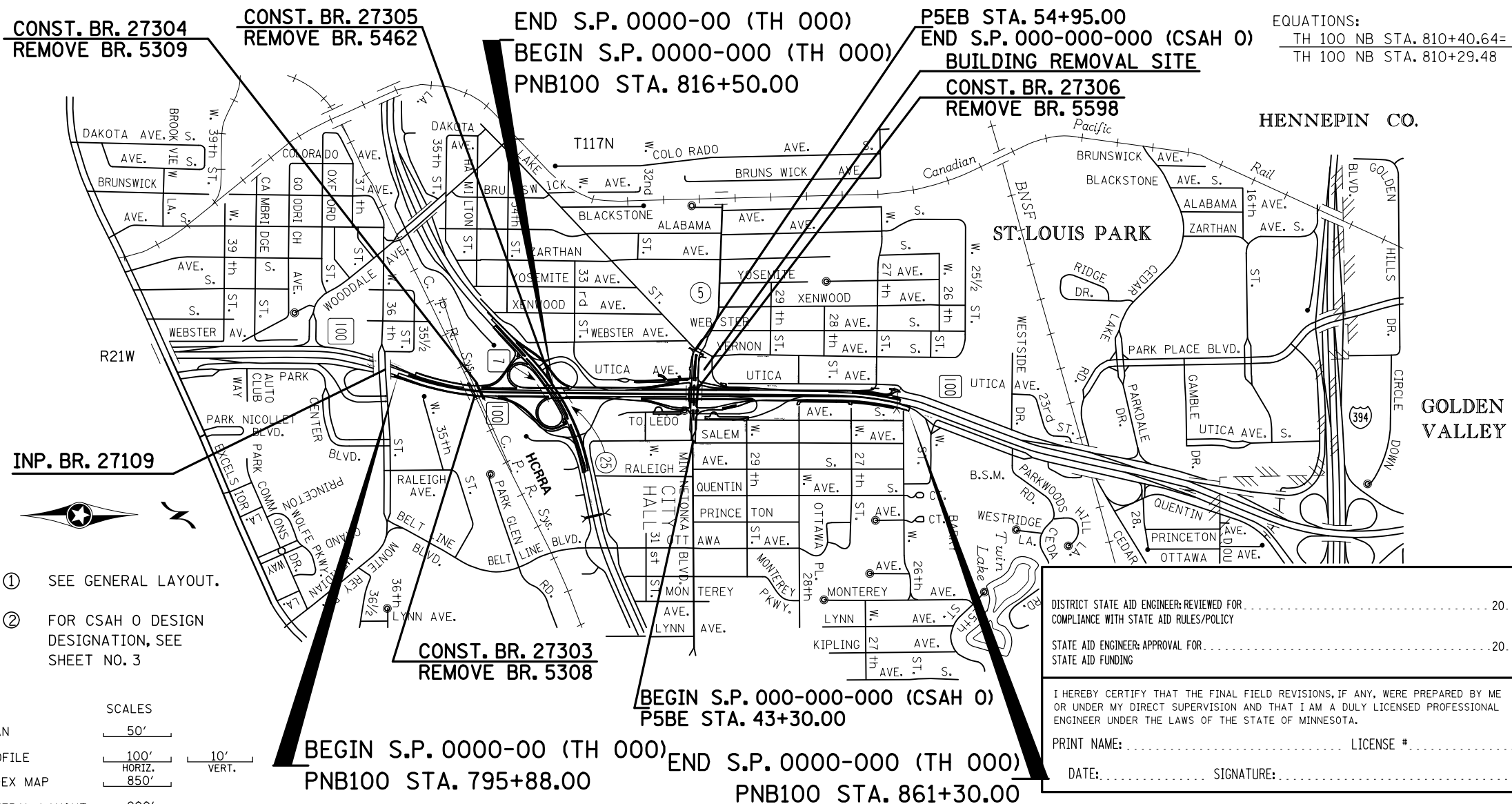
LOCATED ON T.H. 100 FROM 100' NORTH OF 36TH ST. W. TO 80' NORTH OF 26TH ST. W.

STATE PROJ. NO. 0000-00 (T.H. 000)
 GROSS LENGTH 2073.00 FEET 0.393 MILES
 BRIDGES-LENGTH FEET MILES
 EXCEPTIONS-LENGTH FEET MILES
 NET LENGTH 2073.00 FEET 0.393 MILES
 REF. POINT 5+00.508 TO REF. POINT 5+00.901

STATE PROJ. NO. 0000-000 (T.H. 000)
 GROSS LENGTH 4480.00 FEET 0.849 MILES
 BRIDGES-LENGTH FEET MILES
 EXCEPTIONS-LENGTH FEET MILES
 NET LENGTH 4480.00 FEET 0.849 MILES
 REF. POINT 5+00.901 TO REF. POINT 6+00.750

STATE PROJ. NO. 000-000-000 (CSAH 0)
 GROSS LENGTH 1165.00 FEET 0.221 MILES
 BRIDGES-LENGTH FEET MILES
 EXCEPTIONS-LENGTH FEET MILES
 NET LENGTH 1165.00 FEET 0.221 MILES
 REF. POINT N/A TO REF. POINT N/A

NOTE:
 LENGTH AND DESCRIPTION OF PROJECT IS BASED ON THE PNB100 AND P5EB ALIGNMENT.



- ① SEE GENERAL LAYOUT.
- ② FOR CSAH 0 DESIGN DESIGNATION, SEE SHEET NO. 3

SCALES

PLAN	50'
PROFILE	100' HORIZ. 10' VERT.
INDEX MAP	850'
GENERAL LAYOUT	200'

T.H.100 DESIGN DESIGNATION ② INDEX MAP

Concrete Design ESALS 35 yr. = 16,644,000 (RIGID)
 Bituminous Design ESALS 20 yr. = 6,393,000 (FLEXIBLE)

ADT (Current Year) 2009 = ① Design Speed 60 MPH TH 100
 ADT (Future Year) 2030 = ① Based on Stopping Sight Distance

DHV (Design Hr. Vol.) = Height of eye 3.5' Height of object 2.0'
 D (Directional Distr.) = % Design Speed not achieved at:
 T (Heavy Commercial) = % STA. TO STA. MPH
 STA. TO STA. MPH



DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY 20
 STATE AID ENGINEER: APPROVAL FOR STATE AID FUNDING 20

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, WERE 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: LICENSE #
 DATE: SIGNATURE:

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

STATE PROJ. NO. 0000-00 CHARGE IDENTIFIER 0000-00

PROJECT LOCATION
 COUNTY : HENNEPIN
 DISTRICT : METRO

THIS PLAN CONTAINS 1109 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: WILL D. ZINE LICENSE # 00000
 DATE: SIGNATURE:
 DESIGN SQUAD ROE D. TAYLE, J. DOE, G. SMITH, K. JONES, L. WHITE

RECOMMENDED FOR APPROVAL	DISTRICT TRANSPORTATION ENGINEER	20
RECOMMENDED FOR APPROVAL	DISTRICT MATERIALS ENGINEER	20
RECOMMENDED FOR APPROVAL	DISTRICT WATER RESOURCES/HYDRAULICS ENGINEER	20
RECOMMENDED FOR APPROVAL	DISTRICT TRAFFIC ENGINEER	20
RECOMMENDED FOR APPROVAL	CITY OF ST LOUIS PARK	20
RECOMMENDED FOR APPROVAL	HENNEPIN COUNTY	20
RECOMMENDED FOR APPROVAL	STATE PRE-LETTING ENGINEER	20
OFFICE OF LAND MANAGEMENT APPROVAL	DIRECTOR, LAND MANAGEMENT	20
APPROVED	STATE DESIGN ENGINEER	20

S.P. 0000-00 (TH 000) S.P. 000-000-000 (CSAH 0)
 STATE PROJ. NO. 0000-00 (TH 000 = 000) SHEET NO. 1A OF 84 SHEETS