

5:10 PM

3/15/2019

i:\pww\engineer\projects\1500-1999\1691\_2019\_street\_preservation\drawings\1691\_tts.dwg

# MINNESOTA DEPARTMENT OF TRANSPORTATION CITY OF DULUTH DEPARTMENT OF PUBLIC WORKS AND UTILITIES ENGINEERING DIVISION

CONSTRUCTION PLANS FOR: CONCRETE PAVEMENT REHABILITATION, SIDEWALK AND ADA IMPROVEMENTS.

LOCATED ON KENT ROAD & 24TH AVENUE EAST (MSAS 153) FROM WOODLAND AVENUE (MSAS 157) TO EAST SUPERIOR STREET (MSAS 147).

LOCATED ON 26TH AVENUE EAST (MSAS 191) FROM EAST SUPERIOR STREET (MSAS 147) TO 49 FT S. OF C/L JEFFERSON ST.

STATE PROJ. NO. 118-153-004  
GROSS LENGTH 2986.0 FEET 0.565 MILES  
BRIDGES-LENGTH NA FEET NA MILES  
EXCEPTIONS-LENGTH 123 FEET 0.023 MILES  
NET LENGTH 2863.0 FEET 0.542 MILES

STATE PROJ. NO. 118-191-002  
GROSS LENGTH 1116.7 FEET 0.211 MILES  
BRIDGES-LENGTH NA FEET NA MILES  
EXCEPTIONS-LENGTH 0.0 FEET 0.0 MILES  
NET LENGTH 1116.7 FEET 0.2114 MILES

A POINT APPROX. 2922' EAST AND 2282' NORTH OF THE S.W. COR. OF SEC. 14, T 50 N, R 14 W

A POINT APPROX. 115' EAST AND 777' NORTH OF THE S.W. COR. OF SEC. 13, T 50 N, R 14 W

END  
S.A.P. 118-153-004  
CITY PROJ. NO. 1691  
24th AVE. E STA 80+84.0

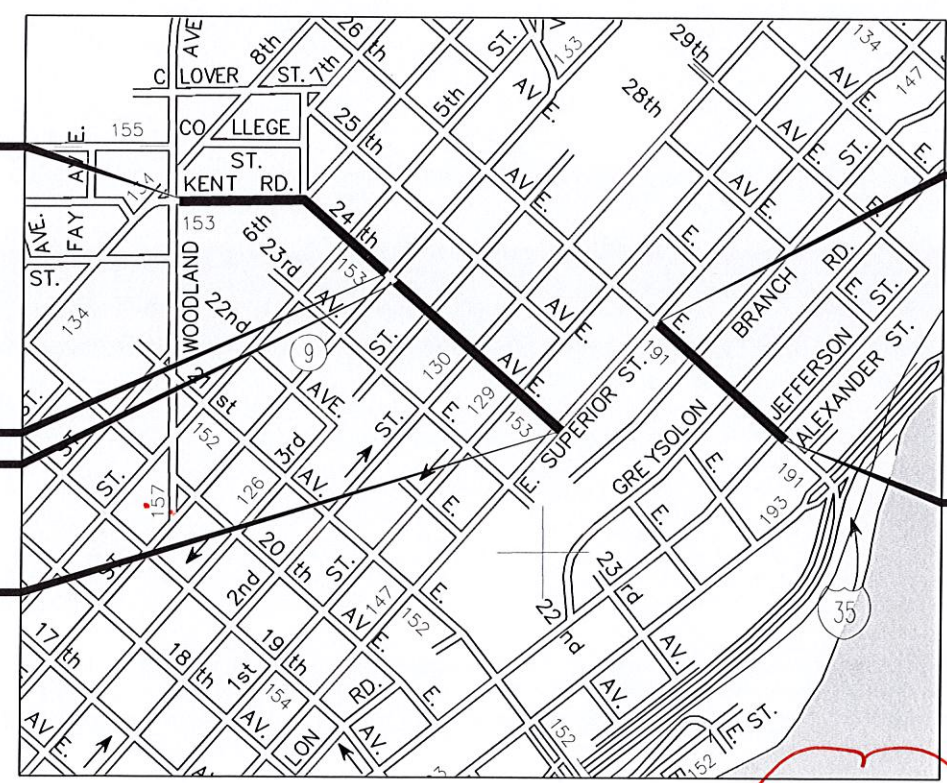
EXCEPTION  
S.A.P. 118-153-004  
CITY PROJ. NO. 1691  
STA 65+24.0  
TO STA. 66+47.0

BEGIN  
S.A.P. 118-191-002  
CITY PROJ. NO. 1691  
26TH AVE. E. STA 10+33.3  
MSAS 191

A POINT APPROX. 714' EAST AND 1478' NORTH OF THE S.W. COR. OF SEC. 13, T 50 N, R 14 W

A POINT APPROX. 1558' EAST AND 710' NORTH OF THE S.W. COR. OF SEC. 13, T 50 N, R 14 W

END  
S.A.P. 118-191-002  
CITY PROJ. NO. 1691  
26TH AVE. E. STA 21+50



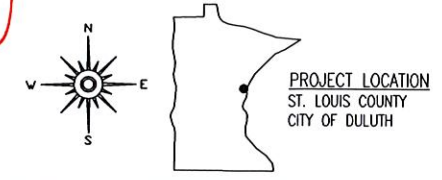
DESIGN DESIGNATION  
STATE AID PROJECT NO. 118-153-004  
R-VALUE 10 EN18 NA  
ADT (CURRENT YEAR) 2016 = 2700  
ADT (FUTURE YEAR) 2033 = 3051  
D (DIRECTIONAL DISTR.) = 1350  
T (HEAVY COMMERCIAL) = 135 (5%)  
DESIGN SPEED 30 MPH  
BASED ON STOPPING SIGHT DISTANCE  
HEIGHT OF EYE 3.5' HEIGHT OF OBJECT 2.0'  
DESIGN SPEED NOT ACHIEVED AT:  
STA. 57+72.0 TO STA. 58+90.5 MPH 25.1

DESIGN DESIGNATION  
STATE AID PROJECT NO. 118-191-002  
R-VALUE 10 EN18 NA  
ADT (CURRENT YEAR) 2016 = 4750  
ADT (FUTURE YEAR) 2033 = 5558  
D (DIRECTIONAL DISTR.) = 2375  
T (HEAVY COMMERCIAL) = 238 (5%)  
DESIGN SPEED 30 MPH  
BASED ON STOPPING SIGHT DISTANCE  
HEIGHT OF EYE 3.5' HEIGHT OF OBJECT 2.0'  
DESIGN SPEED NOT ACHIEVED AT:  
STA. 10+13.6 TO STA. 10+43.6 MPH STOP CONDITION

① THE 25 MPH DESIGN SPEED EXCEPTION IN LIEU OF THE REQUIRED 30 MPH DESIGN SPEED, IS ALLOWED BY A VARIANCE TO STATE RULE 8820.9912. (DATED MARCH 26, 1984). APPROVED BY THE COMMISSIONER OF TRANSPORTATION ON MAY 4, 1987.

SCALES  
PLAN 30'  
INDEX MAP 1200'  
GENERAL LAYOUT

*3.2 miles*  
*2.1 mi miles traffic signs on freeway*



WARNING:  
LOCATION OF UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR. CALL BEFORE DIGGING. GOPHER STATE ONE CALL 1-800-252-1166 REQUIRED BY LAW

| PLAN REVISIONS |           |          |
|----------------|-----------|----------|
| DATE           | SHEET NO. | APPROVER |
|                |           |          |
|                |           |          |
|                |           |          |

MINN PROJECT NO

GOVERNING SPECIFICATIONS  
THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. AVAILABLE AT:  
<http://www.dot.state.mn.us/pre-letting/spec/index.html>

THE 2019 EDITION OF THE CITY OF DULUTH PUBLIC WORKS AND UTILITIES DEPARTMENT CONSTRUCTION STANDARDS AND SUPPLEMENTS OR ADDENDUMS SHALL APPLY.  
AVAILABLE AT:  
<http://www.duluthmn.gov/engineering/standard-construction-specifications/>

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".

INDEX

| SHEET NO. | DESCRIPTION                       |
|-----------|-----------------------------------|
| 1         | TITLE SHEET                       |
| 2         | PLAN LEGEND GENERAL NOTES         |
| 3         | STATEMENT OF ESTIMATED QUANTITIES |
| 4-10      | CONSTRUCTION CHARTS               |
| 11-13     | TYPICAL SECTIONS                  |
| 14-29     | DETAILS STANDARD PLANS            |
| 30-31     | INPLACE TOPO AND REMOVALS         |
| 32-37     | CPR PLAN                          |
| 38-43     | ADA PLAN                          |
| 44-47     | TRAFFIC CONTROL                   |
| 48        | PAVEMENT MARKINGS                 |

THIS PLAN CONTAINS 00 SHEETS

DESIGN TEAM  
P. LOOMIS, D. KRATOCHWILL

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.  
**PATRICK F. LOOMIS**  
PROJECT ENGINEER (TYPED OR PRINTED NAME)

0-00-19 49099  
PROJECT ENGINEER DATE LIC. NO.

CITY APPROVAL

| APPROVED   | CHIEF ENGINEER OF TRANSPORTATION | DATE |
|--|----------------------------------|------|
|  |                                  |      |
| APPROVED   | CHIEF ENGINEER OF UTILITIES      | DATE |
|  |                                  |      |
| APPROVED   | CITY ENGINEER                    | DATE |
|  |                                  |      |
| DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID RULES/POLICY |                                  | DATE |
|  |                                  |      |
| APPROVED FOR FEDERAL AID FUNDING: STATE AID ENGINEER                             |                                  | DATE |
|  |                                  |      |

STATE PROJECT NUMBERS SAP 118-153-004, 118-191-002

CITY PROJECT NUMBER 1691

SHEET NO. 0 OF 00