

CAD LEGEND		
DESCRIPTION	PROPOSED	EXISTING
SECTION	---	---
RIGHT OF WAY	---	---
EASEMENT	---	---
LOT	---	---
CENTERLINE	---	---
PAVEMENT	---	---
CONCRETE	---	---
SIDEWALK	---	---
CURB & GUTTER	---	---
MAIL BOX	□	□
POST	○	○
SIGN	○	○
TREE	○	○
MJR CONTOUR	500	500
MNR CONTOUR	499	499
OVERHEAD	OH	OH
UTILITY POLE	○	○
GUY WIRE	ε--	ε--
VALVE	⊗	⊗
STORM PIPE	←	←
STORM MH	⊙	⊙
CB - SQUARE	⊙	⊙
CB - ROUND	⊙	⊙
APRON	▽	▽
FORCEMAIN	< FM	< FM
SANITARY	←	←
SANITARY MH	⊙	⊙
WATER LINE	—	—
HYDRANT	⊙	⊙
GAS PIPE	G	G
ABANDONED GAS	AB-G	AB-G
ELECTRICAL	E	E
ELEC MH	⊙	⊙
LIGHT POLE	⊙	⊙
TRANSFORMER	⊗	⊗
FIBER OPTIC	FO	FO
TELECOM	T	T

GIS LEGEND	
PROPOSED CURB STOP	●
PROPOSED WATER LATERAL	—
EXISTING WATER LATERAL	—
WATER MAIN	—
EXISTING WATER STRUCTURE	●
EXISTING SANITARY SYSTEM VALVE	●
EXISTING SANITARY FORCEMAIN	—
EXISTING SANITARY LATERAL	—
EXISTING SANITARY GRAVITY MAIN	—
EXISTING STORM SYSTEM VALVE	●
EXISTING STORM MAIN	—
EXISTING GAS STRUCTURE	●
EXISTING ACTIVE GAS MAIN	—
EXISTING ABANDONED GAS MAIN	---
HOT WATER STRUCTURE	●
HOT WATER MAIN	—
EXISTING STEAM	—
EXISTING STEAM MANHOLE	⊙
EXISTING HYDRANT	⊕
EXISTING SANITARY MANHOLE	⊙
EXISTING STORM CATCH BASIN	▭
EXISTING STORM INLET / OUTLET	▭
EXISTING STORM MANHOLE	⊙
TREE REMOVAL	⊗
PROPERTY CORNER OR SURVEY MONUMENT	⊗

# CITY OF DULUTH

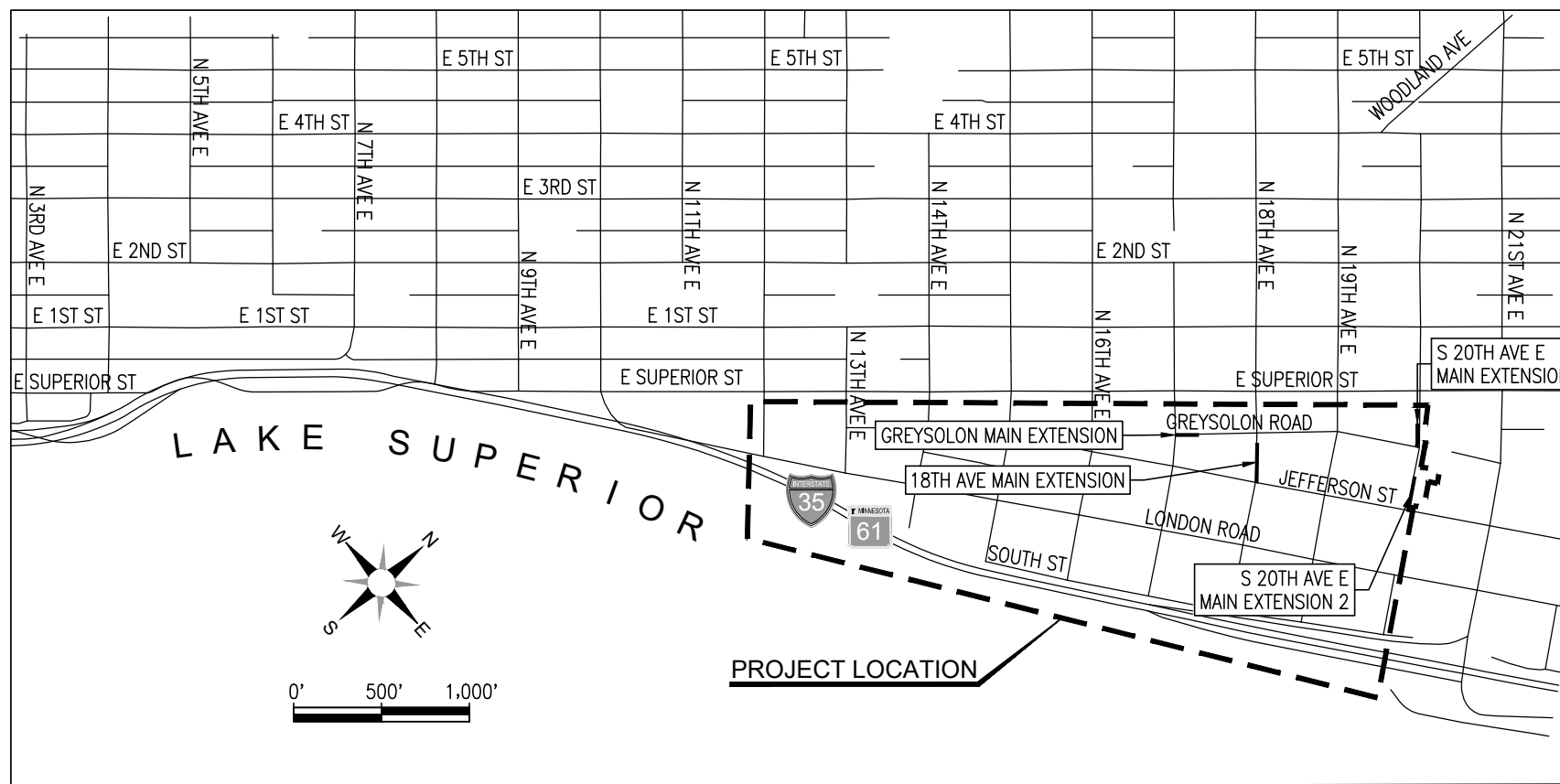
## DEPARTMENT OF PUBLIC WORKS AND UTILITIES

### ENGINEERING DIVISION

CONSTRUCTION PLANS FOR: LEAD SERVICE LINE REPLACEMENT (LSLR) – ENDION 1  
 LEAD WATER SERVICE LINE REPLACEMENT, GRADING, BASE, ROADWAY PAVEMENT, SIDEWALK, CURB & GUTTER, AND WATER MAIN EXTENSIONS

LOCATION: DULUTH, MN – ENDION NEIGHBORHOOD

CITY PROJECT NO. 2324  
 MPFA PROJECT NO. 1690011-

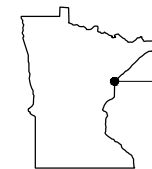


**BASIS OF DATUM**

- HORIZONTAL DATUM IS SAINT LOUIS COUNTY TRANSVERSE MERCATOR 1996 (SLCTM\_96)
- VERTICAL DATUM IS NAVD 88



PLAN REVISIONS		
DATE	SHEET NO.	APPROVER



PROJECT LOCATION  
 ST. LOUIS COUNTY  
 CITY OF DULUTH

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".

**GOVERNING SPECIFICATIONS**

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR CONSTRUCTION' SHALL GOVERN.  
 AVAILABLE AT: <http://www.dot.state.mn.us/pre-letting/spec/>

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

**WARNING:**

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

**BASIS OF BEARING/CONTROL**

CONTROL BASED ON THE ST. LOUIS COUNTY TRANSVERSE MERCATOR COORDINATE SYSTEM OF 1996

**SHEET INDEX**

SHEET NO	DESCRIPTION
1	TITLE
Q1	SEQ
C1-C9	QUANTITY CHARTS
D1-D19	CONSTRUCTION DETAILS
E1-E2	EROSION CONTROL & SWPPP
T1	TRAFFIC CONTROL & SPECIFICATIONS
I1-I3	SITE INDEX PLANS
S196-S275, S312-S314, S320-S323, S325-S353, S367	SERVICE REPLACEMENT PLANS
W1-W4	WATER MAIN EXTENSION PLAN & PROFILE SHEETS

---THIS PLAN CONTAINS 150 SHEETS---

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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.

Adam Zwak  
 PROJECT ENGINEER

PROJECT ENGINEER: Adam Zwak  
 DATE: 03/05/26  
 LIC. NO.: 55456

**CITY APPROVAL**

DocuSigned by:  
 Cari Pedersen 3/9/2026 | 13:18:00  
 APPROVED 6E53834EA... CHIEF ENGINEER OF TRANSPORTATION DATE

DocuSigned by:  
 Howard Smith, PE 3/9/2026 | 12:47:00  
 APPROVED 08B6B84E7... CHIEF ENGINEER OF UTILITIES DATE

Signed by:  
 Cindy Voigt 3/9/2026 | 15:18:00  
 APPROVED 1A236A4E8... CITY ENGINEER DATE