CITY OF DULUTH
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
ENGINEERING DIVISION

CONSTRUCTION PLANS FOR:
89TH AVE. E CREEK WATERMAIN REPLACEMENT
CITY PROJECT NO. 1311

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

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

THOMAS W. PFEFFER
PROJECT MANAGER (STAMPED OR PRINTED NAME)

Approved
CHIEF ENGINEER OF UTILITIES

Approved
CITY ENGINEER

Approved
CITY APPROVAL

THE 2016 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 2017 EDITION OF THE CITY OF DULUTH PUBLIC WORKS AND UTILITIES DEPARTMENT CONSTRUCTION STANDARDS AND SUPPLEMENT OR ADDENDUM SHALL APPLY.
AVAILABLE AT:
http://www.duluthmn.gov/engineering/standard-construction-specifications/

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3 TRAFFIC CONTROL PLAN
4 PLAN & PROFILE

THIS PLAN CONTAINS 4 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.

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### STATEMENT OF ESTIMATED QUANTITIES

<table>
<thead>
<tr>
<th>NOTES</th>
<th>ITEM NUM</th>
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**NOTES:**
1. ITEM INCLUDES TRENCH EXCAVATION, PIPE BEDDING & COVER MATERIAL, PIPE, FITTINGS AND TRACER WIRE
2. ITEM INCLUDES 4" SALVAGED OR IMPORTED TOPSOIL, FERTILIZER, AND SEED MIX NO. 25-141.
TRAFFIC CONTROL PLAN

NOTES:
1. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN THE DEVICES IN THIS TRAFFIC CONTROL PLAN UNLESS OTHERWISE NOTED.
2. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE 2014 MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES INCLUDING "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL 2014" (AVAILABLE AT: http://www.dot.state.mn.us/trafficsigns/publ/fielmanual/index.htm)
3. FIELD CONDITIONS MAY REQUIRE MODIFICATIONS OF THIS LAYOUT AS SEEMED NECESSARY BY THE ENGINEER.
4. THE NUMBER AND PLACEMENT OF TRAFFIC CONTROL DEVICES WILL DEPEND UPON THE SEQUENCE OF THE CONTRACTORS OPERATION.
5. ALL DISTANCES ARE APPROXIMATE.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ANY WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH MinRule.
7. IF THE CONTRACTOR DECIDES TO PERFORM THE CONSTRUCTION WORK IN A SEQUENCE OTHER THAN SHOWN IN THIS TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL PROVIDE COMPLETE REVISED TRAFFIC CONTROL PLANS TO BE APPROVED BY THE ENGINEER.
8. ALL TRAFFIC CONTROL DEVICES, INCLUDING OVERHEAD SIGNS ON ROADS OPEN TO TRAFFIC, THAT ARE NOT CONSISTENT WITH TRAFFIC OPERATION, SHALL BE COVERED, REMOVED OR REVERSED AS DIRECTED BY THE ENGINEER.
9. "ROAD CLOSED TO TRAFFIC" SIGNS SHALL BE INSTALLED ON TYPE III BARRIERS AND SHALL BE LOCATED AT A POINT IN THE STREET AS TO PERMIT LOCAL TRAFFIC USE BUT EFFECTIVELY DISourage TRAFFIC USE.
10. TYPE "A" LOW INTENSITY AHEAD WARNING LIGHTS SHALL BE MOUNTED ON ALL ADVANCE WARNING SIGNS AND ON ALL TYPE I AND TYPE II BARRIERS WHEN USED AT NIGHT OR TO IDENTIFY HAZARDS.
11. ADDITIONAL SIGNING MAY BE REQUIRED FOR SEPARATE LANE CLOSURES. THE SIGNING SHALL BE IN CONFORMITY WITH "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL 2014" AND SHALL BE CONSIDERED INCIDENTAL TO "TRAFFIC CONTROL".