

EXISTING PLAN SYMBOLS

PROPERTY LINES/RIGHT-OF-WAY	---
UTILITY EASEMENT	- - - -
TREE LINE	~~~~~
SIGN	+
DECIDUOUS TREE	⊗
SHRUB	⊗
CONIFEROUS TREE	⊗

EXISTING UTILITY SYMBOLS

FIBER OPTIC LINE	— F —
GAS LINE	— G —
COMMUNICATION LINE	— C —
ELECTRIC POWER LINE	— E —
WATER MAIN	— —
SANITARY SEWER	— > —
STORM SEWER	— >> —
COMMUNICATIONS PEDESTAL	⊞
POWER POLE	⊞
ELECTRIC BOX	⊞
CATCH BASIN	⊞
STORM APRON	⊞
STORM SEWER MANHOLE	⊞
GATE VALVE	⊞
HYDRANT	⊞
SANITARY SEWER MANHOLE	⊞

2023 LAKE DRIVE TRUNK WATER MAIN PROJECT

CITY OF LINO LAKES, MN

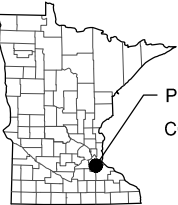
CONSTRUCTION PLAN FOR WATER MAIN IMPROVEMENTS

LOCATED ON LAKE DRIVE (CSAH 23) FROM FORSHAM LAKE DRIVE TO PARK COURT



EXCAVATION NOTICE SYSTEM

A CALL TO GOPHER STATE ONE (651-454-0002) IS REQUIRED A MINIMUM OF 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION.



PROJECT LOCATION
COUNTY: ANOKA

SECT 17, TWP 31, RNG 22

HORIZONTAL DATUM: NAD83(1996) GEOID
VERTICAL DATUM: NAVD88

PROJECT LOCATION MAP

UTILITY INFORMATION

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY 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."

GOPHER ONE CALL TICKET NUMBER: XXXXXXXX

UTILITY COORDINATION MEETING HELD ON: 12/07/2022

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

PLAN SET INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL LAYOUT
3	STATEMENT OF ESTIMATED QUANTITIES
4-5	MISCELLANEOUS DETAILS
6-7	TRAFFIC CONTROL PLAN
8-10	WATER MAIN PLANS
11-12	EROSION CONTROL PLANS

THIS PLAN SET CONTAINS 17 SHEETS

THIS PLAN SET HAS BEEN PREPARED FOR:

CITY OF LINO LAKES
600 TOWN CENTER PARKWAY
LINO LAKES, MN 55014
(651) 982-2400

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.



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.

FIRST X. LAST, P.E.

DATE: 01/23/2023

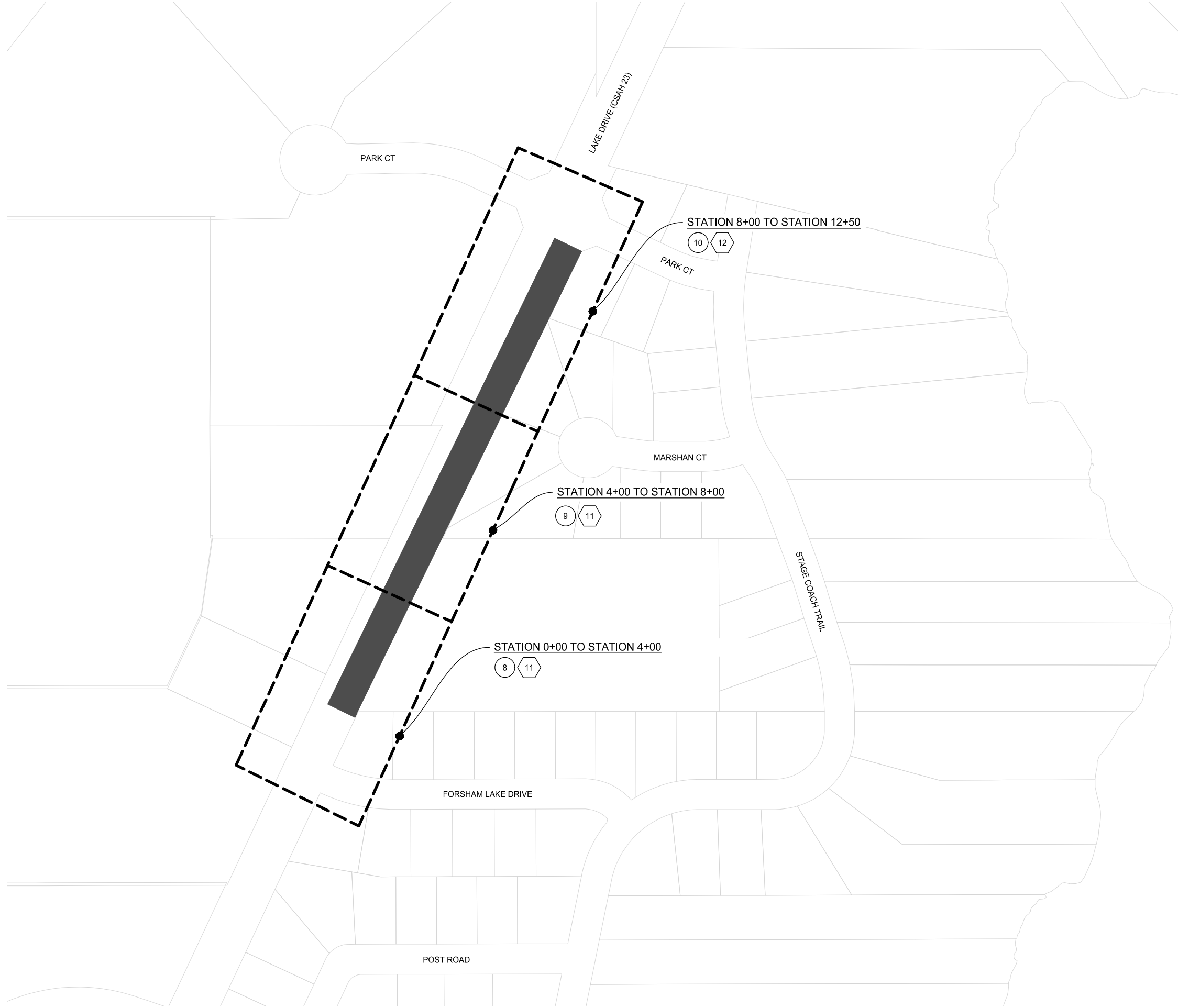
LICENSE NUMBER: XXXXX

WSB PROJ. NO. 021892-000

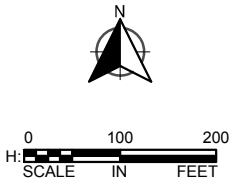
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17

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LEGEND	
SHEET NO.	DESCRIPTION
(X)	WATER MAIN PLANS
(X)	EROSION CONTROL PLANS



SCALE:	DESIGN BY:
AS SHOWN	KJG
PLAN BY:	CHECK BY:
KJG	DLH

REVISIONS	
NO.	DESCRIPTION

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.

FIRST X, LAST	LIC. NO.	XXXXX

DATE: 01/23/2023

GENERAL LAYOUT

2023 LAKE DRIVE TRUNK WATER MAIN IMPROVEMENTS
CITY OF LINO LAKES, MN

WSB PROJECT NO.
021892-000

SHEET
2 OF 12

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STATEMENT OF ESTIMATED QUANTITIES				
MNDOT SPECIFICATION NO.	DESCRIPTION	NOTES	UNIT	ESTIMATED TOTAL QUANTITY
WATER MAIN IMPROVEMENTS				
2021.501	MOBILIZATION		LS	1
2104.503	REMOVE WATER MAIN		L F	20
2104.504	REMOVE BITUMINOUS PAVEMENT		S Y	0
2106.601	DEWATERING		LS	1
2123.610	STREET SWEEPER (WITH PICKUP BROOM)		HOURL	15
2123.610	UTILITY CREW		HOURL	10
2130.523	WATER		MGAL	15
2360.509	TYPE SP 12.5 BIT MIXTURE FOR PATCHING		TON	0
2504.602	CONNECT TO EXISTING WATER MAIN		EACH	2
2504.602	HYDRANT		EACH	1
2504.602	6" GATE VALVE & BOX		EACH	1
2504.602	12" GATE VALVE & BOX		EACH	2
2504.602	SACRIFICIAL ANODE BAG (32 LB)		EACH	3
2504.603	6" WATERMAIN DUCTILE IRON CL 52		L F	10
2504.603	12" WATERMAIN DUCTILE IRON CL 52		L F	69
2504.603	14" WATERMAIN HDPE (DIRECTIONAL DRILLED)		L F	921
2504.604	4" POLYSTYRENE INSULATION		S Y	25
2504.608	DUCTILE IRON FITTINGS		LB	200
2563.601	TRAFFIC CONTROL		LS	1
2573.501	STABILIZED CONSTRUCTION EXIT		LS	1
2573.503	SEDIMENT CONTROL LOG TYPE WOOD FIBER		L F	160
2574.507	COMMON TOPSOIL BORROW		C Y	81
2574.508	FERTILIZER TYPE 3		LB	30
2575.505	SEEDING		ACRE	0.1
2575.508	SEED MIXTURE 25-151		LB	12
2575.508	HYDRAULIC MULCH MATRIX		LB	100

- NOTES
- 1

TO BE USED AS DIRECTED BY THE ENGINEER.
- 2

TOKEN ITEM.
- 3

BITUMINOUS PATCHING TO BE USED ON STREET XX
- 4

...
- 5

...
- 6

...
- 7

...
- 8

...



SCALE:DESIGN BY:

AS SHOWNKJG

PLAN BY:CHECK BY:

KJGDH

REVISIONS	
NO.	DESCRIPTION

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FIRST X LAST

DATE: 01/23/2023LIC. NO. XXXXX

STATEMENT OF ESTIMATED QUANTITIES

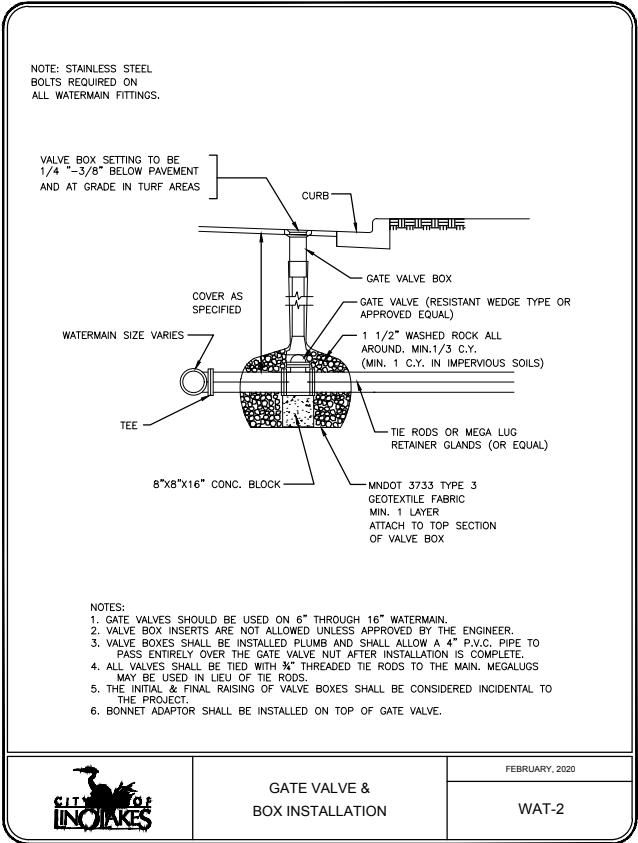
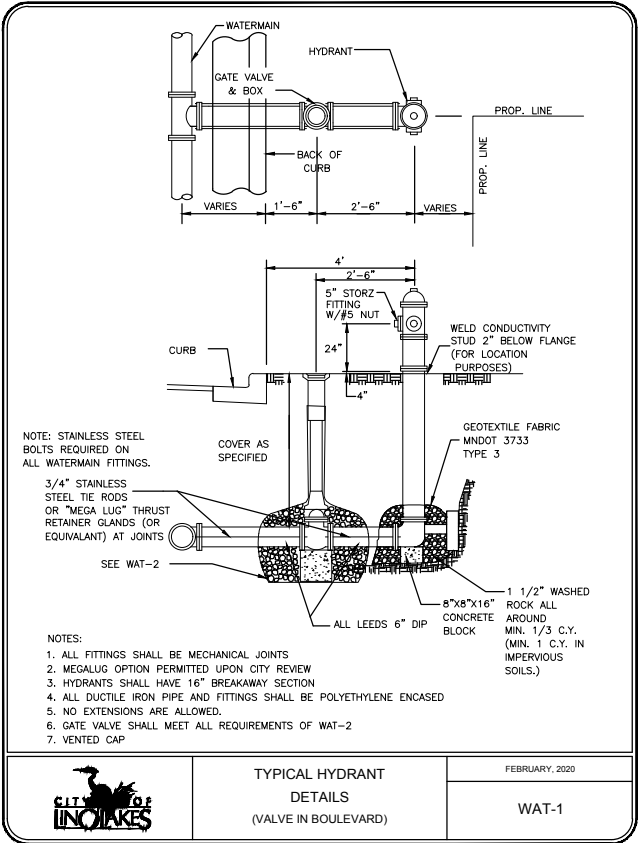
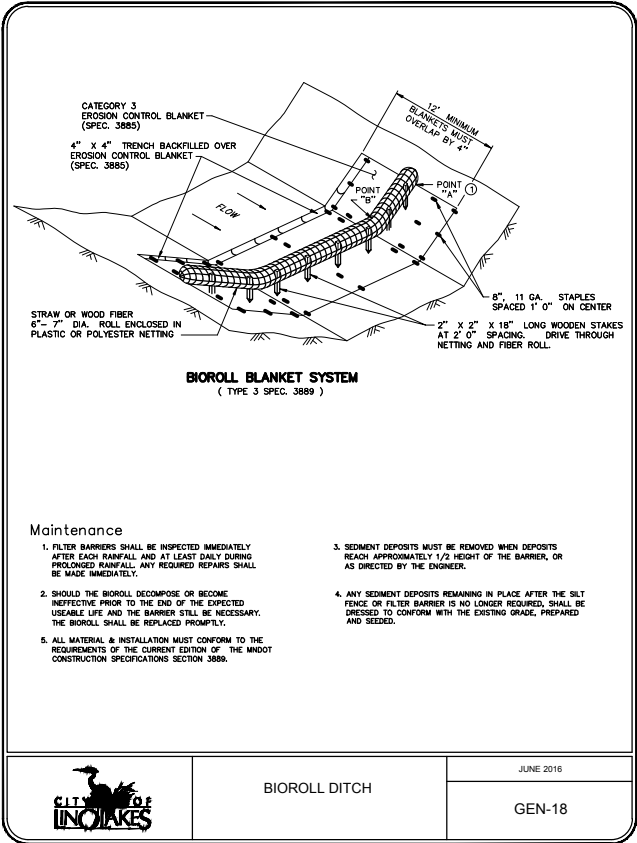
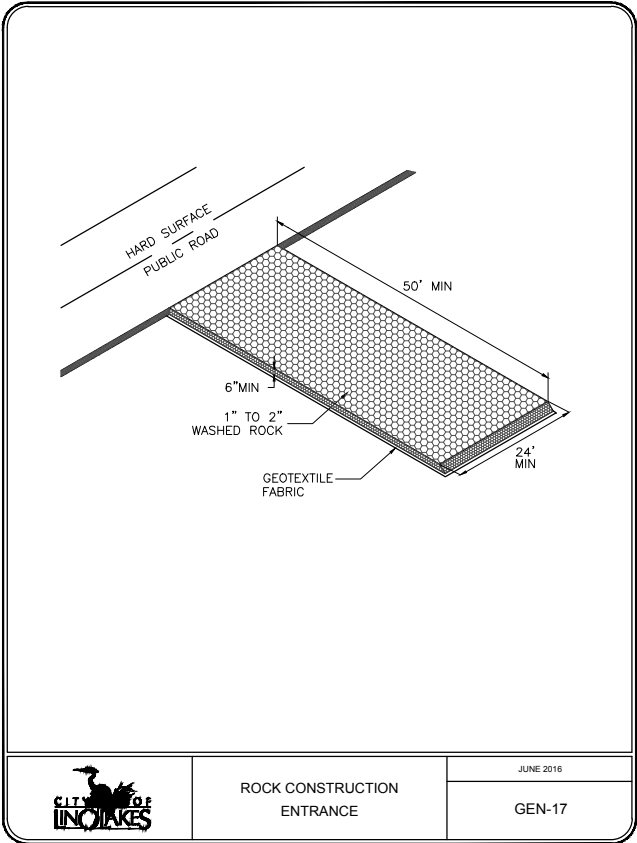
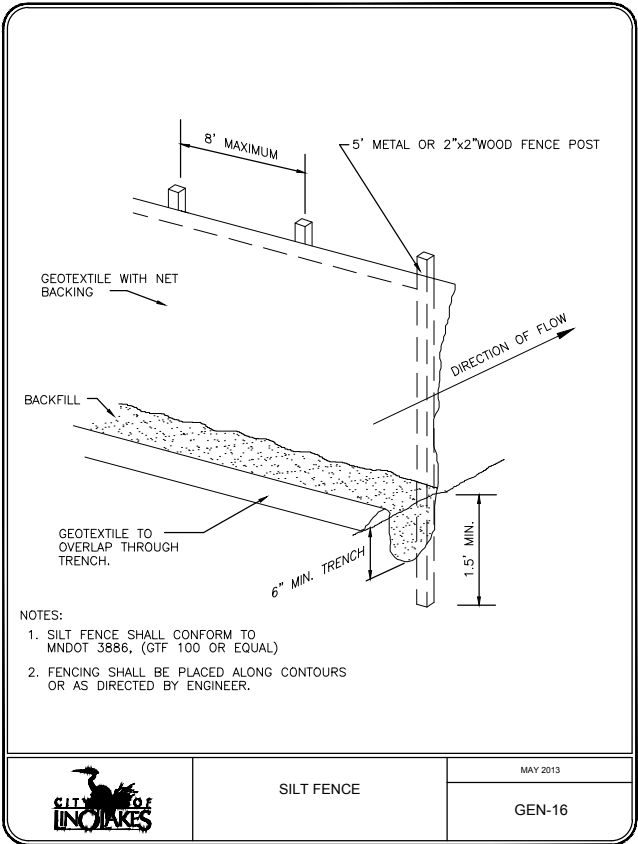
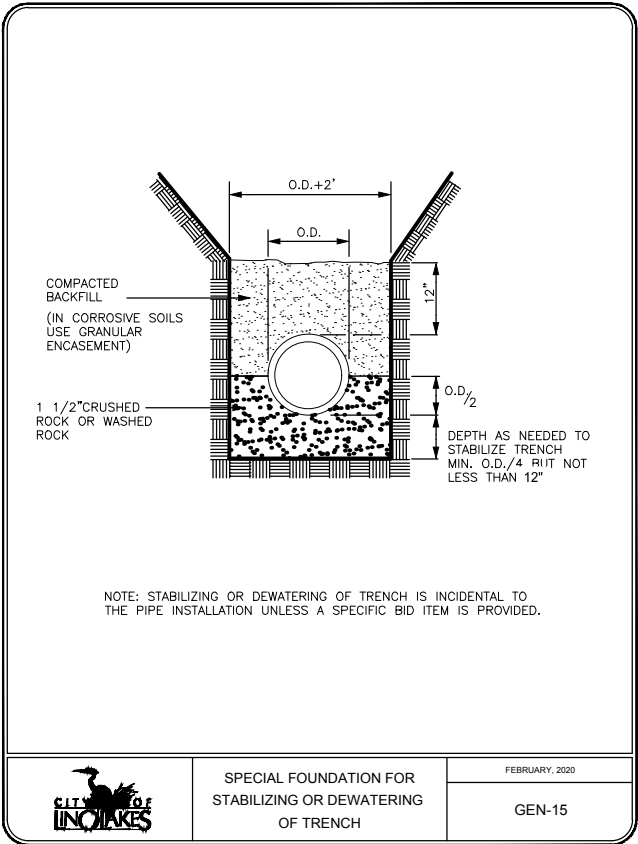
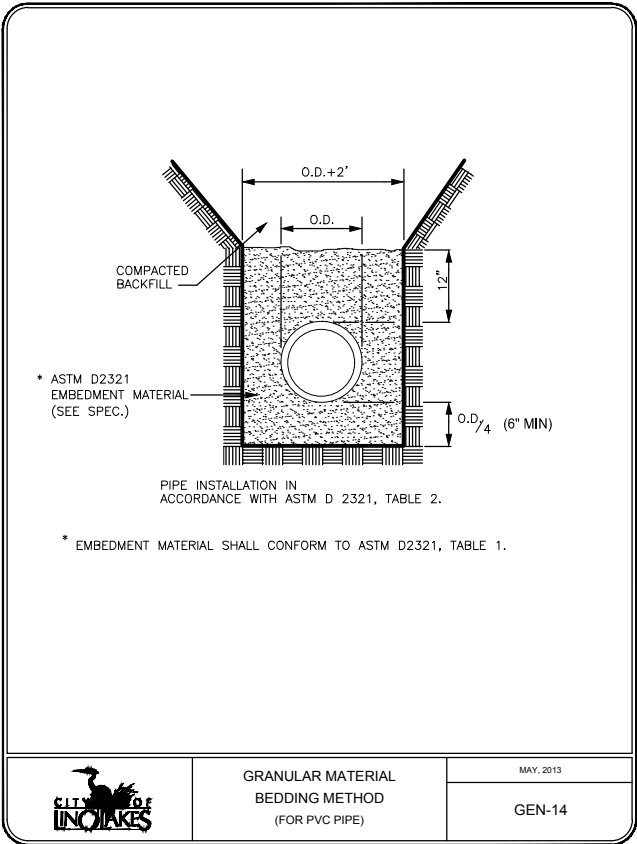
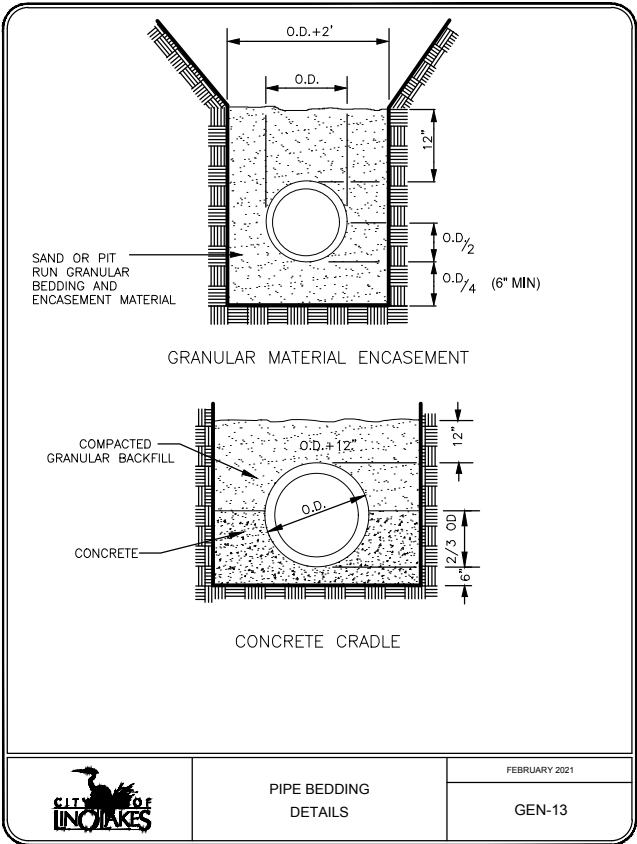
2023 LAKE DRIVE TRUNK WATER MAIN IMPROVEMENTS

CITY OF LINO LAKES, MN

WSB PROJECT NO.

021892-000

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NO.	DESCRIPTION

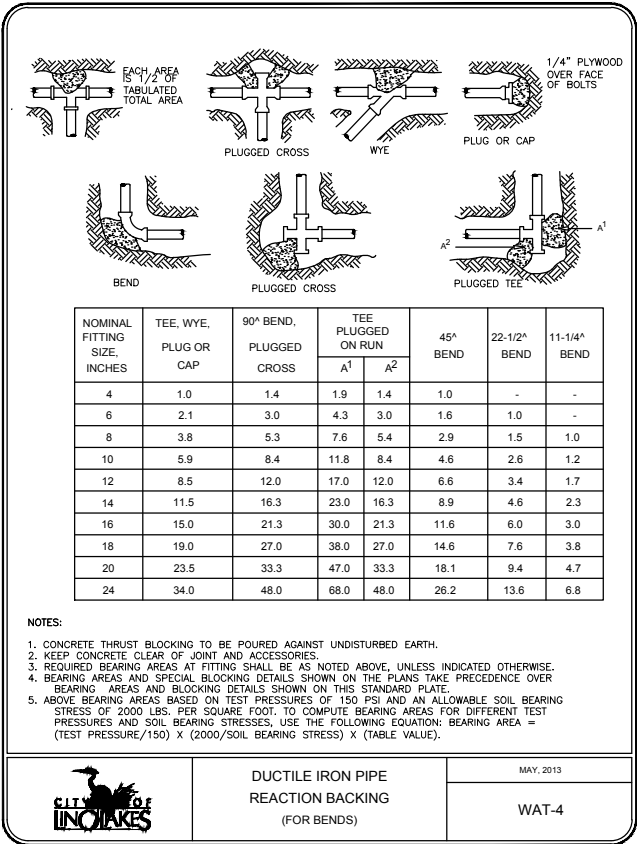
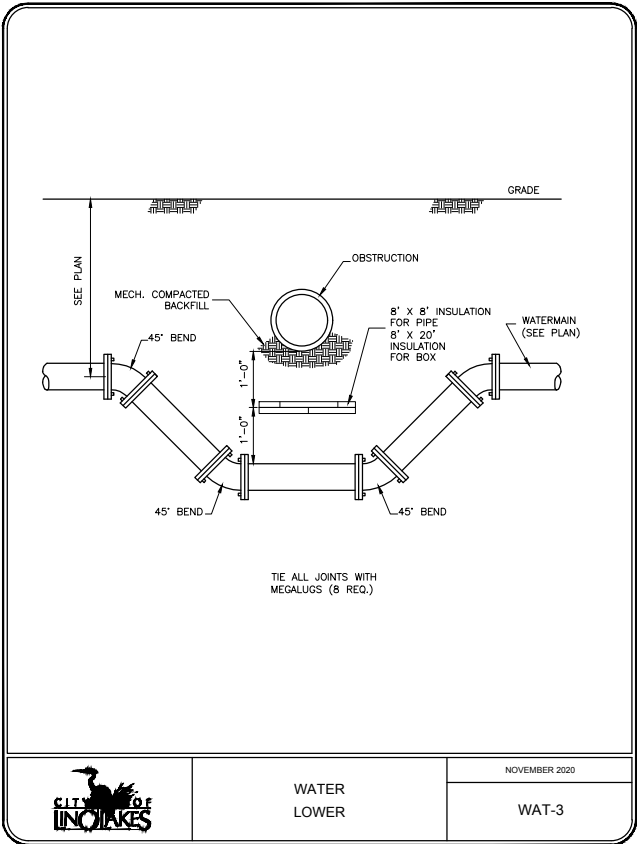
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

FIRST X LAST
DATE: 01/23/2023 LIC. NO. XXXXX

GENERAL LAYOUT

2023 LAKE DRIVE TRUNK WATER MAIN IMPROVEMENTS
CITY OF LINO LAKES, MN

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SCALE: AS SHOWN
PLAN BY: KJG
DESIGN BY: KJG
CHECK BY: DLH

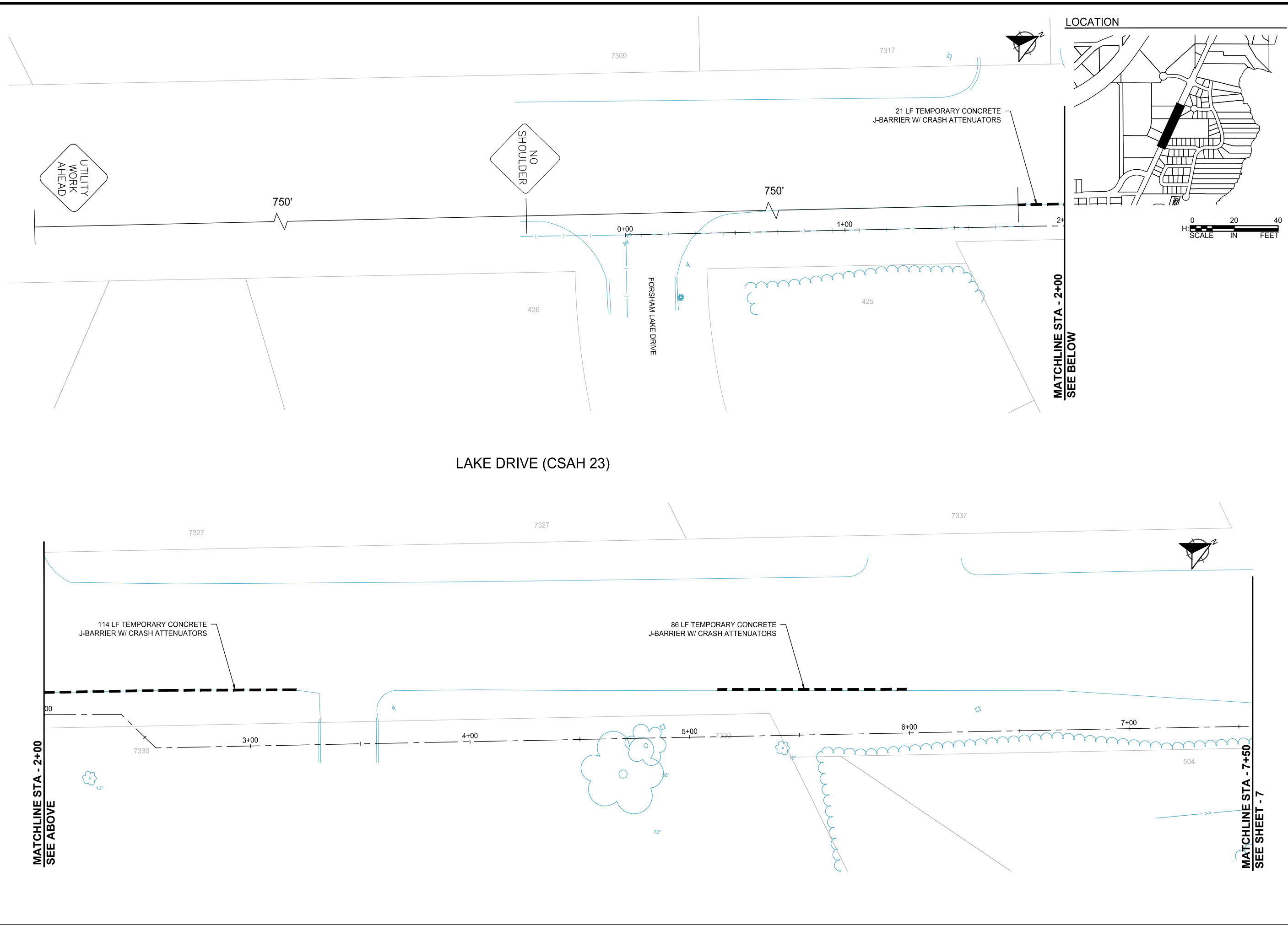
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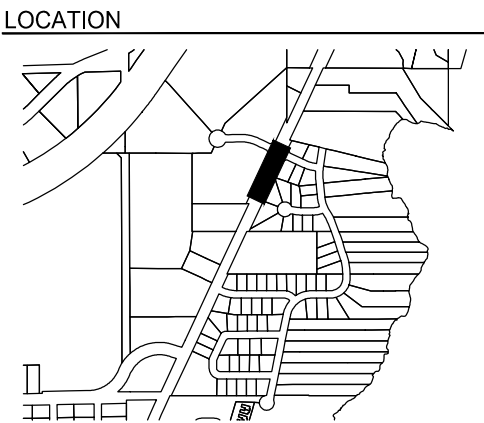
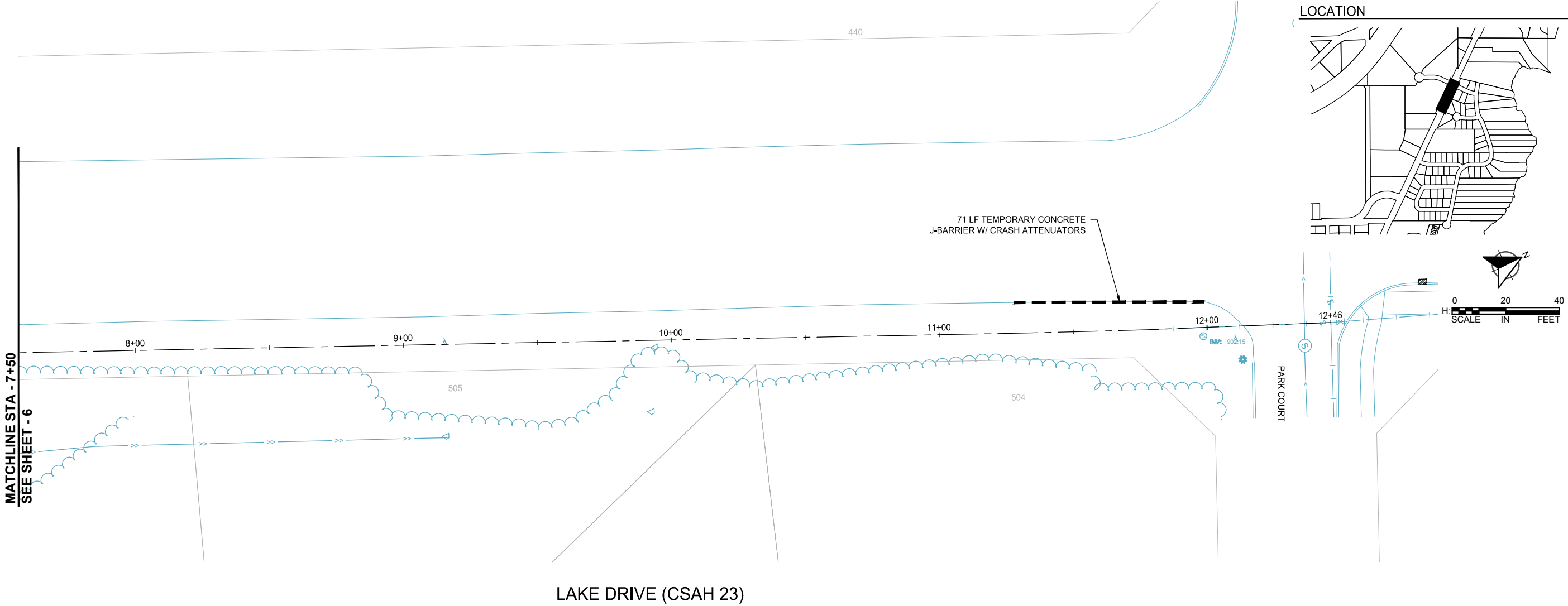
GENERAL LAYOUT

2023 LAKE DRIVE TRUNK WATER MAIN IMPROVEMENTS
CITY OF LINO LAKES, MN



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MATCHLINE STA - 7+50
SEE SHEET - 6



SCALE: AS SHOWN
PLAN BY: KJG
DESIGN BY: KJG
CHECK BY: DLH

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DATE: 01/23/2023 LIC. NO. XXXXX

FIRST X. LAST

TRAFFIC
CONTROL PLAN

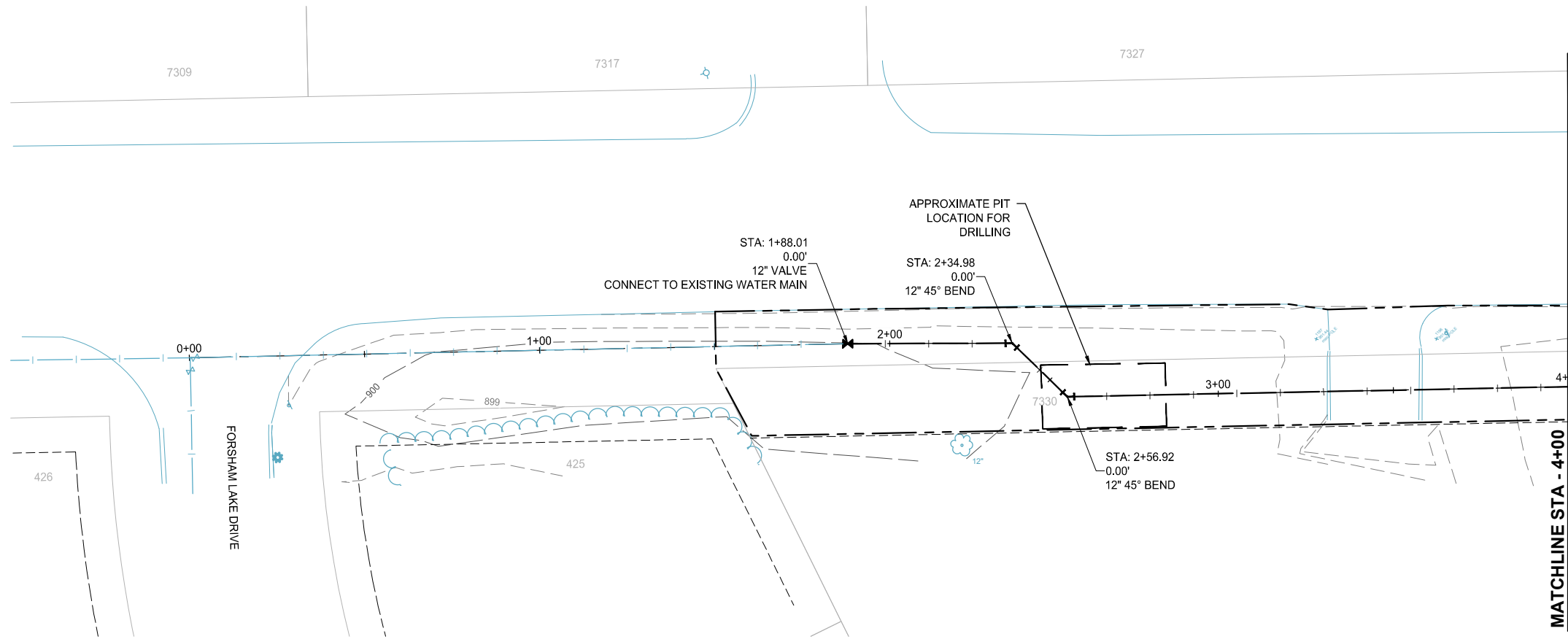
2023 LAKE DRIVE TRUNK WATER MAIN
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CITY OF LINO LAKES, MN

WSB PROJECT NO.
021892-000

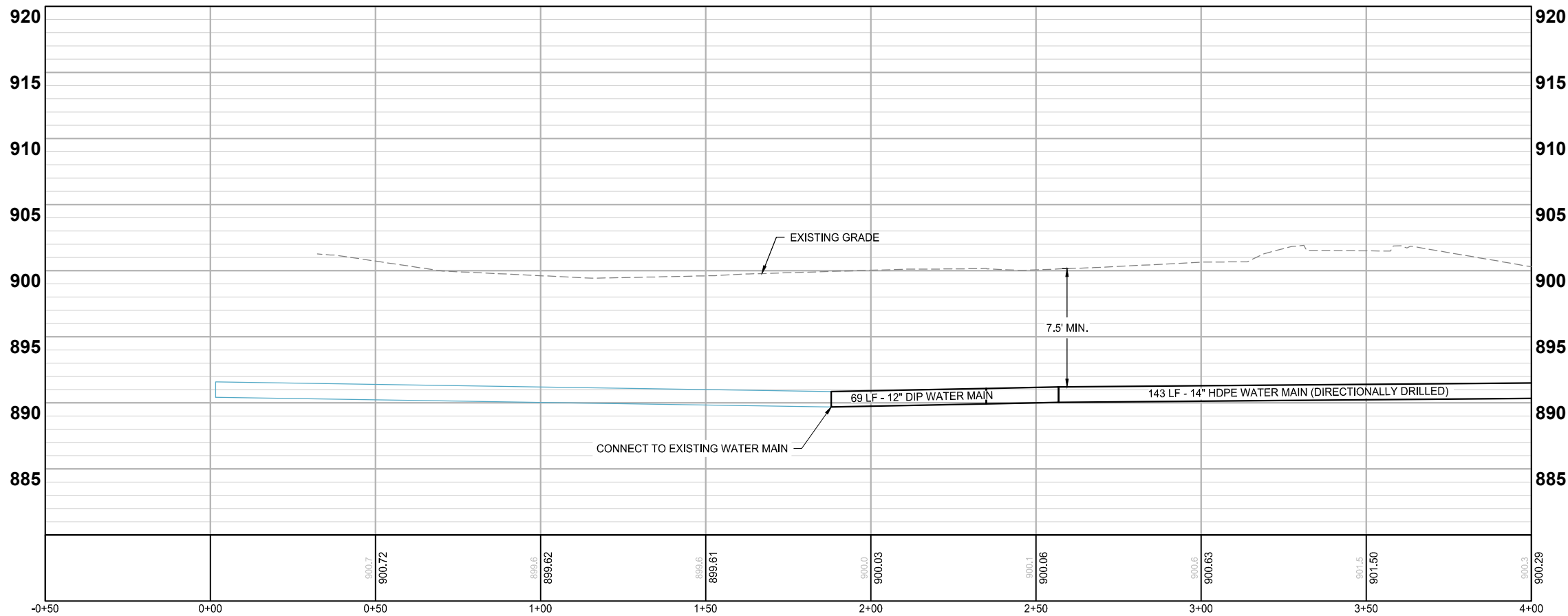
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7 OF 12

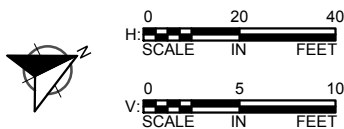
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LAKE DRIVE (CSAH 23)



LOCATION



LEGEND

- APPROX. CONSTRUCTION LIMITS
- PROPOSED WATERMAIN
- PROPOSED HYDRANT W/ VALVE
- PROPOSED WATER FITTINGS
- REMOVE & PATCH BITUMINOUS PAVEMENT
- REMOVE & REPLACE BITUMINOUS DRIVEWAY PAVEMENT
- CLEAR & GRUB TREE



SCALE: AS SHOWN
PLAN BY: KJG
DESIGN BY: KJG
CHECK BY: DLH

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WATER MAIN PLANS

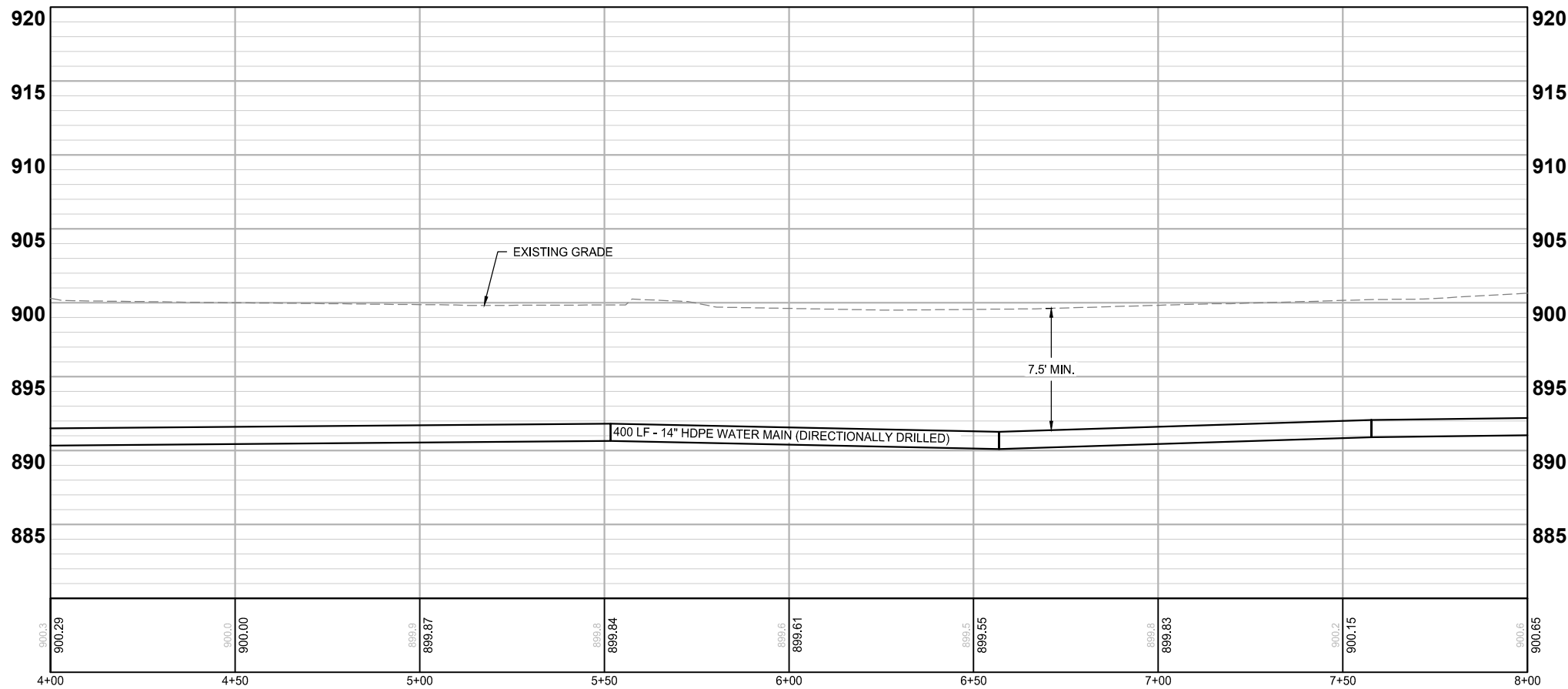
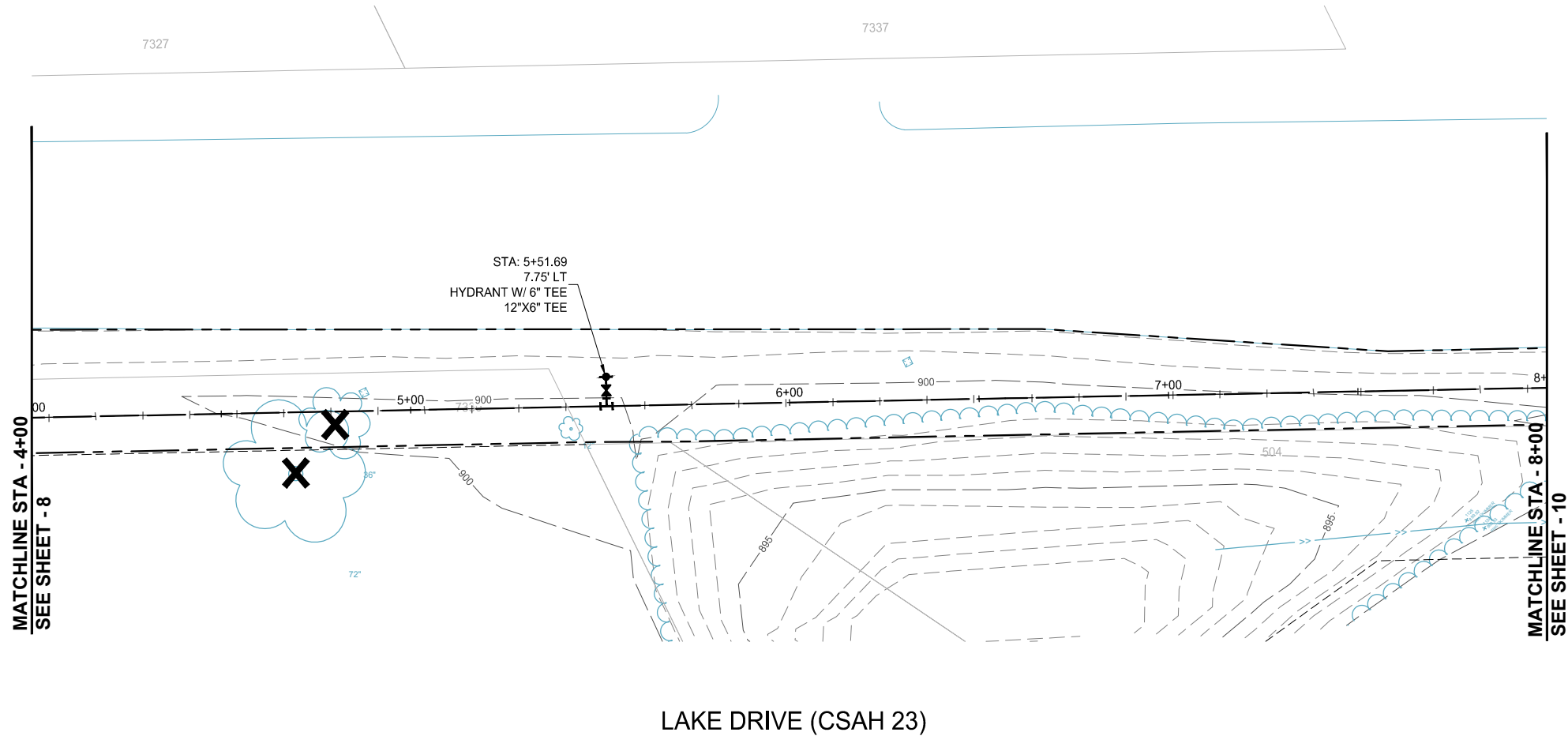
2023 LAKE DRIVE TRUNK WATER MAIN IMPROVEMENTS
CITY OF LINO LAKES, MN

WSB PROJECT NO.
021892-000

SHEET

8 OF 12

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LOCATION



LEGEND

- APPROX. CONSTRUCTION LIMITS
- PROPOSED WATERMAIN
- PROPOSED HYDRANT W/ VALVE
- PROPOSED WATER FITTINGS
- REMOVE & PATCH BITUMINOUS PAVEMENT
- REMOVE & REPLACE BITUMINOUS DRIVEWAY PAVEMENT
- CLEAR & GRUB TREE



SCALE: AS SHOWN
PLAN BY: KJG

DESIGN BY: KJG
CHECK BY: DLH

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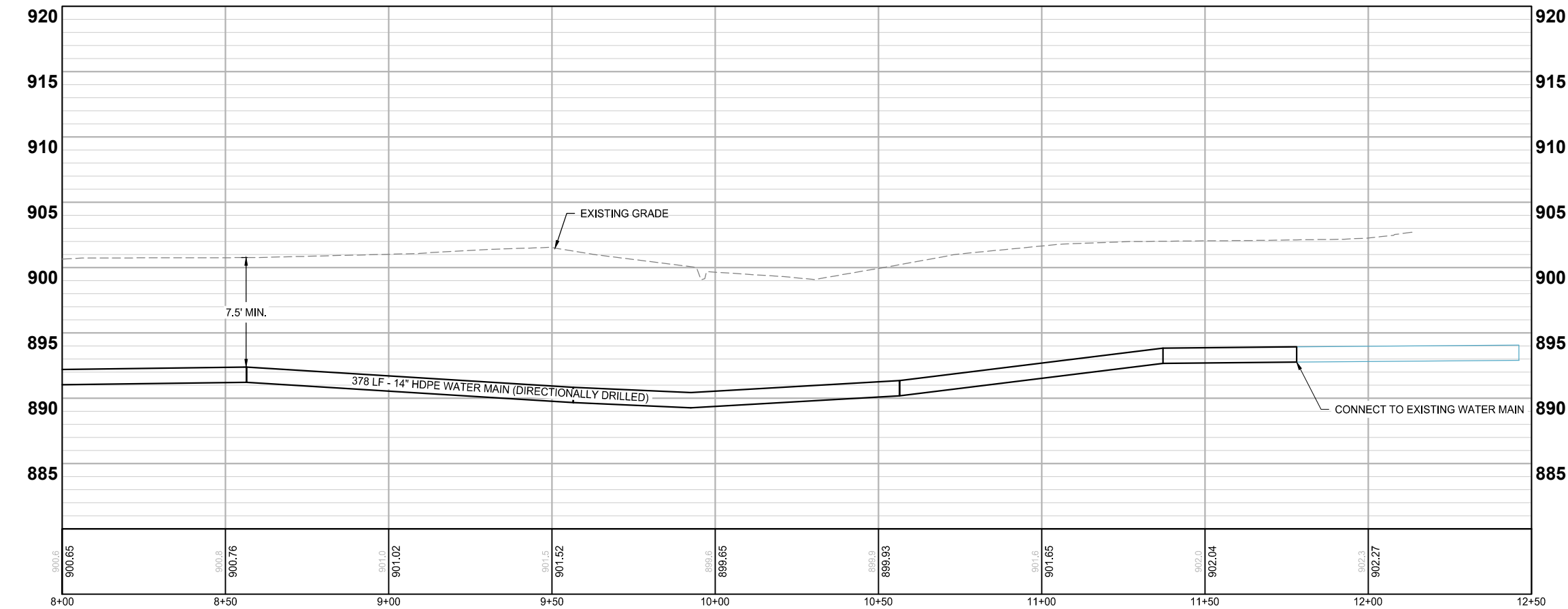
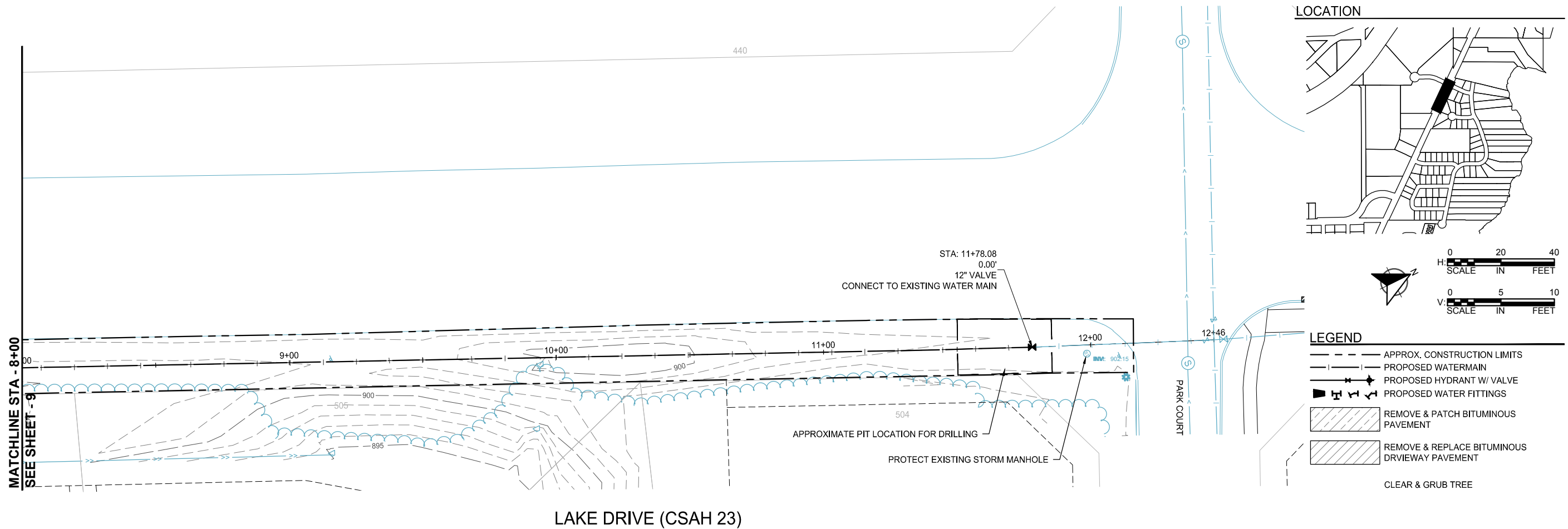
WATER MAIN PLANS

2023 LAKE DRIVE TRUNK WATER MAIN IMPROVEMENTS
CITY OF LINO LAKES, MN

WSB PROJECT NO.
021892-000

SHEET
9 OF 12

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wsb CITY OF LINO LAKES

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CHECK BY: DLH

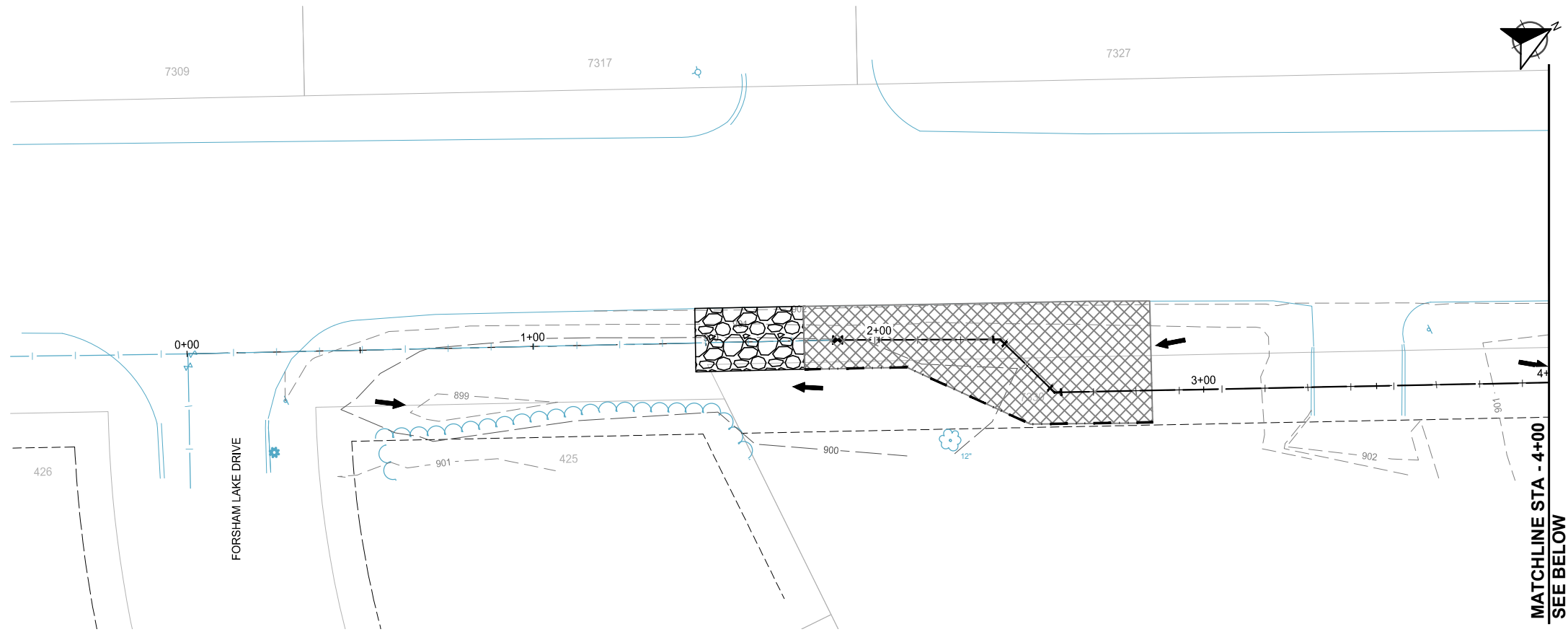
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WATER MAIN PLANS

2023 LAKE DRIVE TRUNK WATER MAIN IMPROVEMENTS
CITY OF LINO LAKES, MN

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LAKE DRIVE (CSAH 23)

LOCATION



LEGEND

- FLOW DIRECTION
- SF SILT FENCE, TYPE MS
- SEDIMENT CONTROL LOG TYPE WOOD FIBER
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY SOIL STABILIZATION: STABILIZED FIBER MATRIX @3000 LBS/ACRE
- PERMANENT: MNDOT SEED MIX 25-151 @ 120 LBS/ACRE, FERTILIZER TYPE 3 @ 350 LBS/ACRE, STABILIZED FIBER MATRIX @ 3000 LBS/ACRE



SCALE: AS SHOWN
PLAN BY: KJG
DESIGN BY: KJG
CHECK BY: DLH

REVISIONS

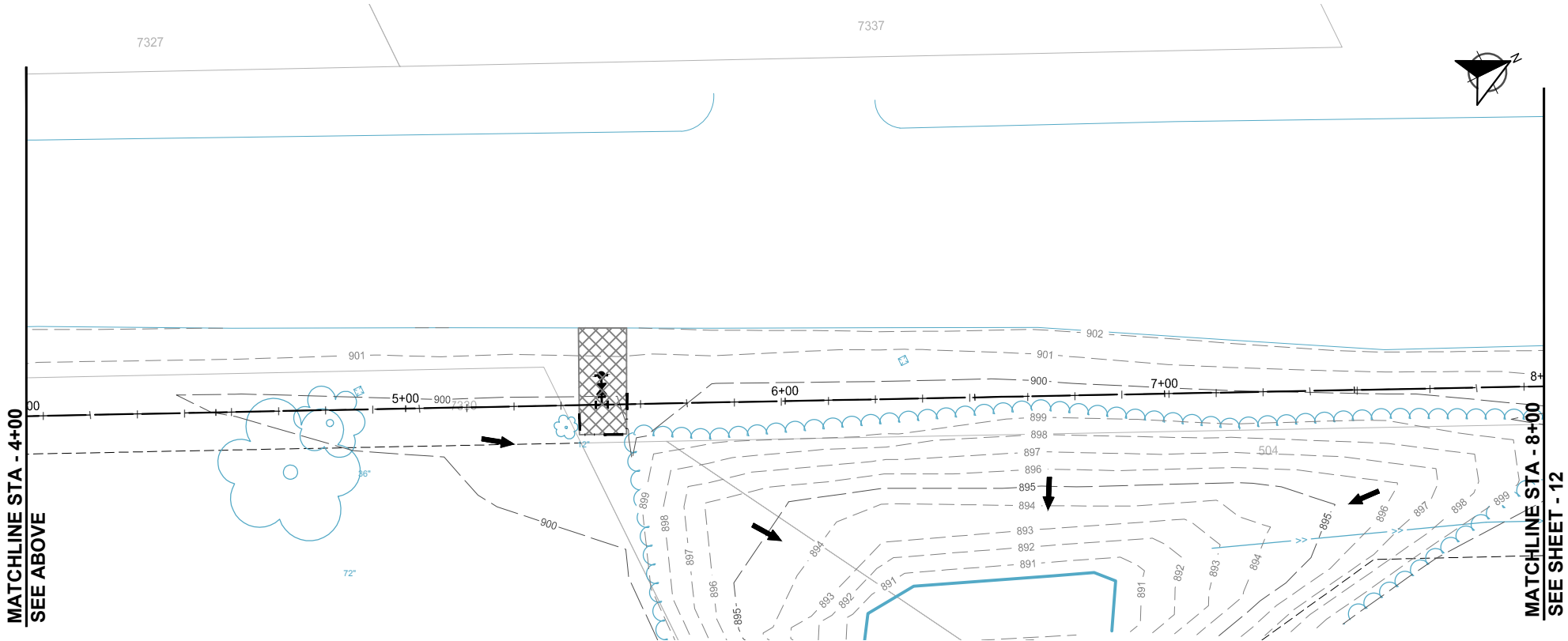
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EROSION CONTROL PLANS



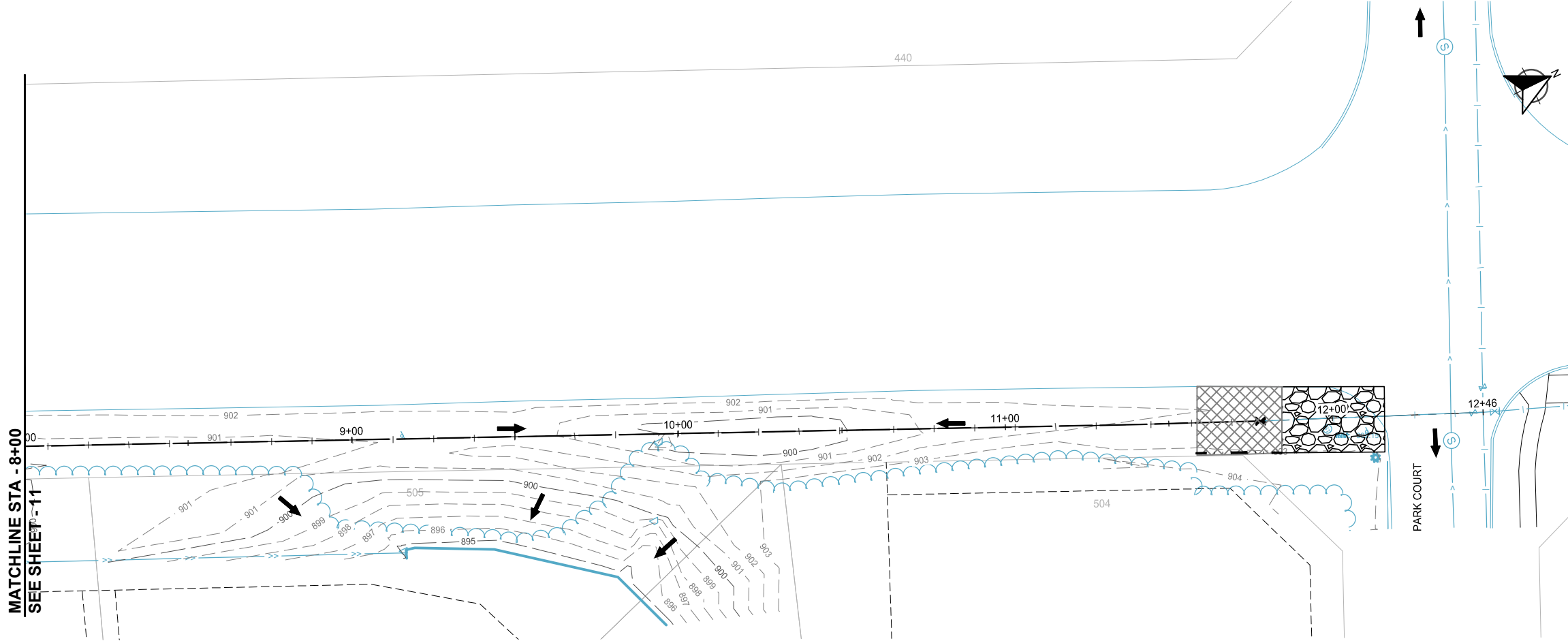
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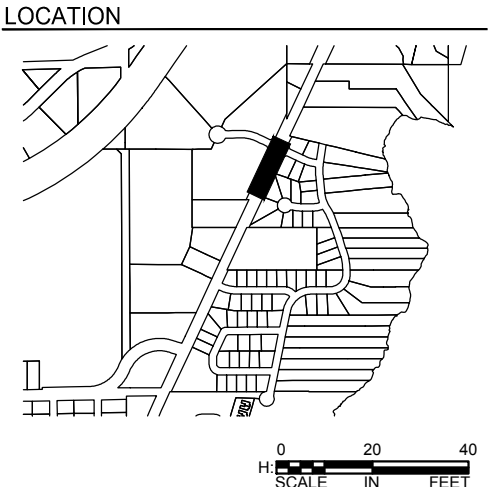
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11 OF 12



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LAKE DRIVE (CSAH 23)



- LEGEND**
- FLOW DIRECTION
 - SF SILT FENCE, TYPE MS
 - SEDIMENT CONTROL LOG TYPE WOOD FIBER
 - STABILIZED CONSTRUCTION ENTRANCE
 - TEMPORARY SOIL STABILIZATION: STABILIZED FIBER MATRIX @3000 LBS/ACRE
 - PERMANENT: MNDOT SEED MIX 25-151 @ 120 LBS/ACRE, FERTILIZER TYPE 3 @ 350 LBS/ACRE, STABILIZED FIBER MATRIX @ 3000 LBS/ACRE



SCALE: AS SHOWN
PLAN BY: KJG
KJG

DESIGN BY: KJG
CHECK BY: DLH
DLH

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EROSION
CONTROL PLANS

2023 LAKE DRIVE TRUNK WATER MAIN
IMPROVEMENTS
CITY OF LINO LAKES, MN