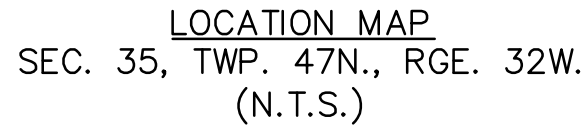


NE 1/4 SECTION 35, TOWNSHIP 47 N, RANGE 32 W.  
IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



<p><u>OWNER / DEVELOPER</u>          CLAYTON PROPERTIES GROUP, INC.          D.B.A. SUMMIT HOMES          120 SE 30TH STREET          CONTACT: VINCENT WALKER          LEE'S SUMMIT, MO 64082          PHONE: 816-246-6777          EMAIL: VINCENT@SUMMITHOMESKC.COM</p>	<p><u>UTILITY SERVICE NUMBERS</u>          NAME: LEE'S SUMMIT PUBLIC WORKS          PHONE: 816-969-1800</p>
<p><u>ENGINEER</u>          OLSSON          1301 BURLINGTON ST. SUITE 100          NORTH KANSAS CITY, MO 64116          CONTACT: JULIE SELLERS, PE          PHONE: 816.361.1177          EMAIL: JSSELLERS@OLSSON.COM</p>	<p>NAME: LEE'S SUMMIT WATER &amp; SERVICES          DEPARTMENT          PHONE: 816-969-1940</p>
<p><u>ENGINEER</u>          OLSSON          1301 BURLINGTON ST. SUITE 100          NORTH KANSAS CITY, MO 64116          CONTACT: JULIE SELLERS, PE          PHONE: 816.361.1177          EMAIL: JSSELLERS@OLSSON.COM</p>	<p>NAME: SPIRE (MGE)          PHONE: 314-342-0500</p>
<p><u>SURVEYOR</u>          OLSSON          1301 BURLINGTON ST. SUITE 100          NORTH KANSAS CITY, MO 64116          CONTACT: JASON ROUDEBUSH          PHONE: 816.361.1177          EMAIL: JROUDEBUSH@OLSSON.COM</p>	<p>NAME: AT&amp;T          PHONE: 800-286-8313</p> <p>NAME: EVERGY          PHONE: 816-471-5275</p> <p>NAME: SPECTRUM (TWC)          PHONE: 877-772-2253</p> <p>NAME: GOOGLE FIBER          PHONE: 877-454-6959</p>

☐ NOT FOR CONSTRUCTION

☒ REVIEWED FOR CONSTRUCTION




SHEET LIST	
NUMBER	TITLE
C301	TITLE SHEET
C302	GENERAL NOTES
C303	GENERAL LAYOUT
C304	WATER PLAN & PROFILE (LINE 1)
C305	WATER PLAN & PROFILE (LINE 2)
C306	WATER PLAN & PROFILE (LINE 3)
C307	WATER PLAN & PROFILE (LINE 3 CONT)
C308	WATER PLAN & PROFILE (LINE 4)
C309	DETAIL SHEET
C310	DETAIL SHEET

A tract of land in the Northeast Quarter of the Northeast Quarter of Section 35, Township 47 North, Range 32 West of the 5<sup>th</sup> Principal Meridian in Lee's Summit, Jackson County, Missouri being bounded and described by or under the direct supervision of Jeffrey P. Means P.L.S. 2000147866 as follows:

Commencing at the Northeast corner of said Northeast Quarter; thence North 89°07'44" West, on the North line of said Northeast Quarter, 1,319.40 feet to the Northwest corner of the Northeast Quarter of said Northeast Quarter; thence leaving said North line, South 02°10'22" East, on the West line of said Northeast Quarter, 346.14 feet to a point on the proposed Westerly line of OSAGE FIRST PLAT (LOTS 1 THRU 41, INCLUSIVE AND TRACTS A, B, C, D, E, F, G AND H); thence South 88°10'57" East, on said Westerly line, 127.17 feet; thence South 43°11'07" East, on said Westerly line, 19.80 feet; thence South 88°11'07" East, on said Westerly line, 50.00 feet; thence North 46°45'53" East, on said Westerly line, 19.80 feet; thence South 88°11'07" East, on said Westerly line, 50.00 feet; thence South 01°48'53" West, on said Westerly line, 170.00 feet; thence North 88°11'07" West, on said Westerly line, 202.50 feet; thence South 01°48'53" West, on said Westerly line, 335.30 feet to a point on the South line of said Northeast Quarter of said Northeast Quarter; thence North 88°09'45" West, on said South line, 423.24 feet to the Southwest corner of said Northeast Quarter of said Northeast Quarter; thence North 02°10'22" East, on the West line of said Northeast Quarter of said Northeast Quarter, 659.27 feet to the Point of Beginning. Containing 453,717 square feet or 10.42 acres, more or less.

BENCHMARK NO. 1  
CHISELED PLUS ON THE EAST FLANGED BOLT OF THE FIRE HYDRANT ON THE WEST SIDE OF SW PRYOR ROAD ON ADJOINING PROPERTY SOUTH OF THE  
SOUTHWEST CORNER OF SUBJECT PROPERTY.  
ELEVATION = 1014.830

BENCHMARK NO. 2  
RAILROAD SPIKE IN THE NORTH FACE OF POWER POLE LOCATED ON THE SOUTH SIDE MISSOURI STATE HIGHWAY 150 AT THE WEST SIDE OF THE DRIVEWAY TO  
2025 MISSOURI STATE HIGHWAY 150, LEE'S SUMMIT, MO.  
ELEVATION = 1031.313

  
 \_\_\_\_\_  
 JULIE SELLERS, P.E.  
 CIVIL ENGINEER  
 MO#2017000367

11/3/2020  
 \_\_\_\_\_  
 DATE

11/3/2020

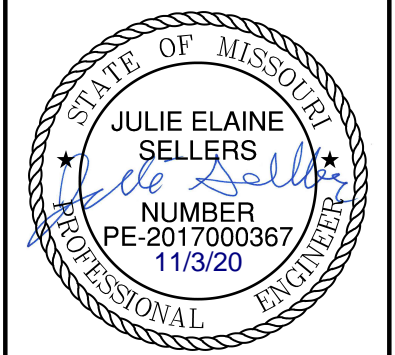
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DATE

**RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
01/27/2021**

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North Kansas City, MO 64116 TEL 816.361.1177 [www.olsson.com](http://www.olsson.com)

[illegible]

TITLE SHEET WATER MAIN EXTENSION PLANS	OSAGE SECOND PLAT
	2020

drawn by: D.F. / M.O. / A.A.  
checked by: C.G.W.  
designed by: A.A.  
QA/QC by: J.E.S.  
project no.: C19-2339  
drawing no.: \_\_\_\_\_  
date: 2020.11.03

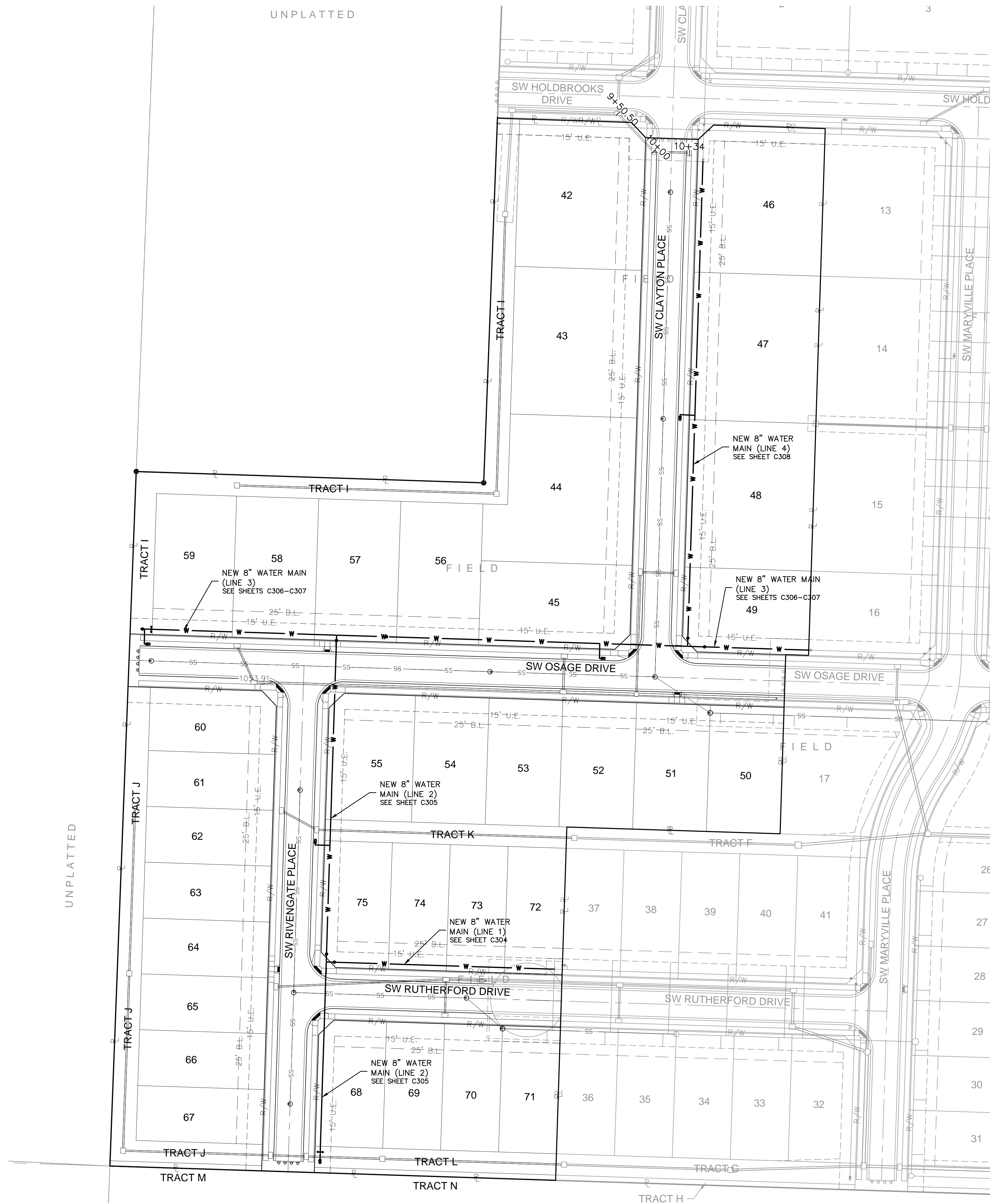
SHEET  
C301



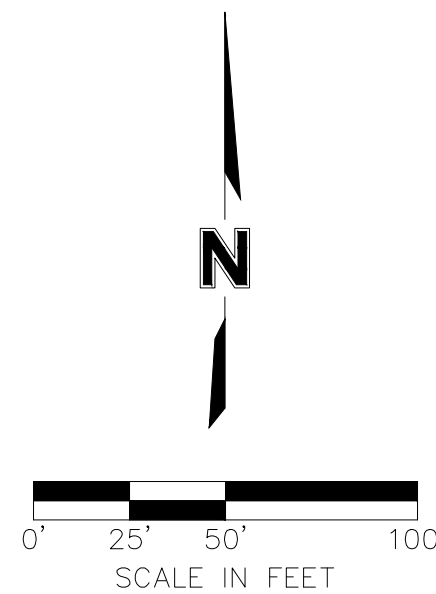




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**RELEASE FOR  
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DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
01/27/2021**



GENERAL LAYOUT  
WATER MAIN EXTENSION PLANS  
OSAGE  
SECOND PLAT

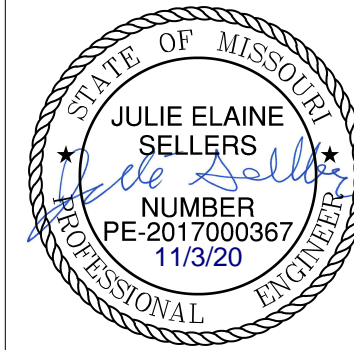
drawn by: D.F. / M.O. / A.A.  
checked by: C.G.W.  
designed by: A.A.  
QA/QC by: J.E.S.  
project no.: C19-2339  
drawing no.:  
date: 2020.11.03

SHEET  
C303

REV. NO.	DATE	REVISIONS DESCRIPTION

REVISIONS:

2020

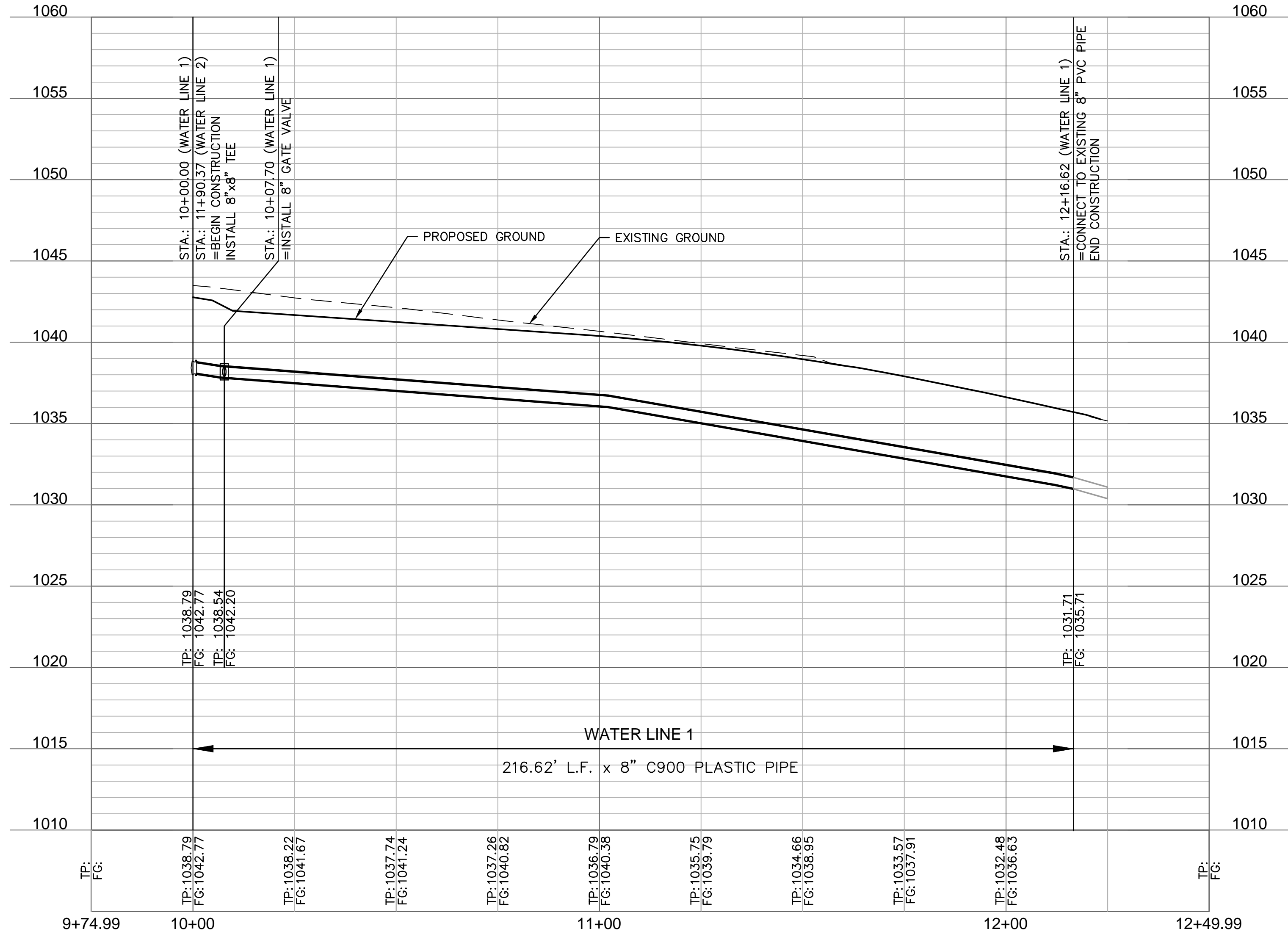
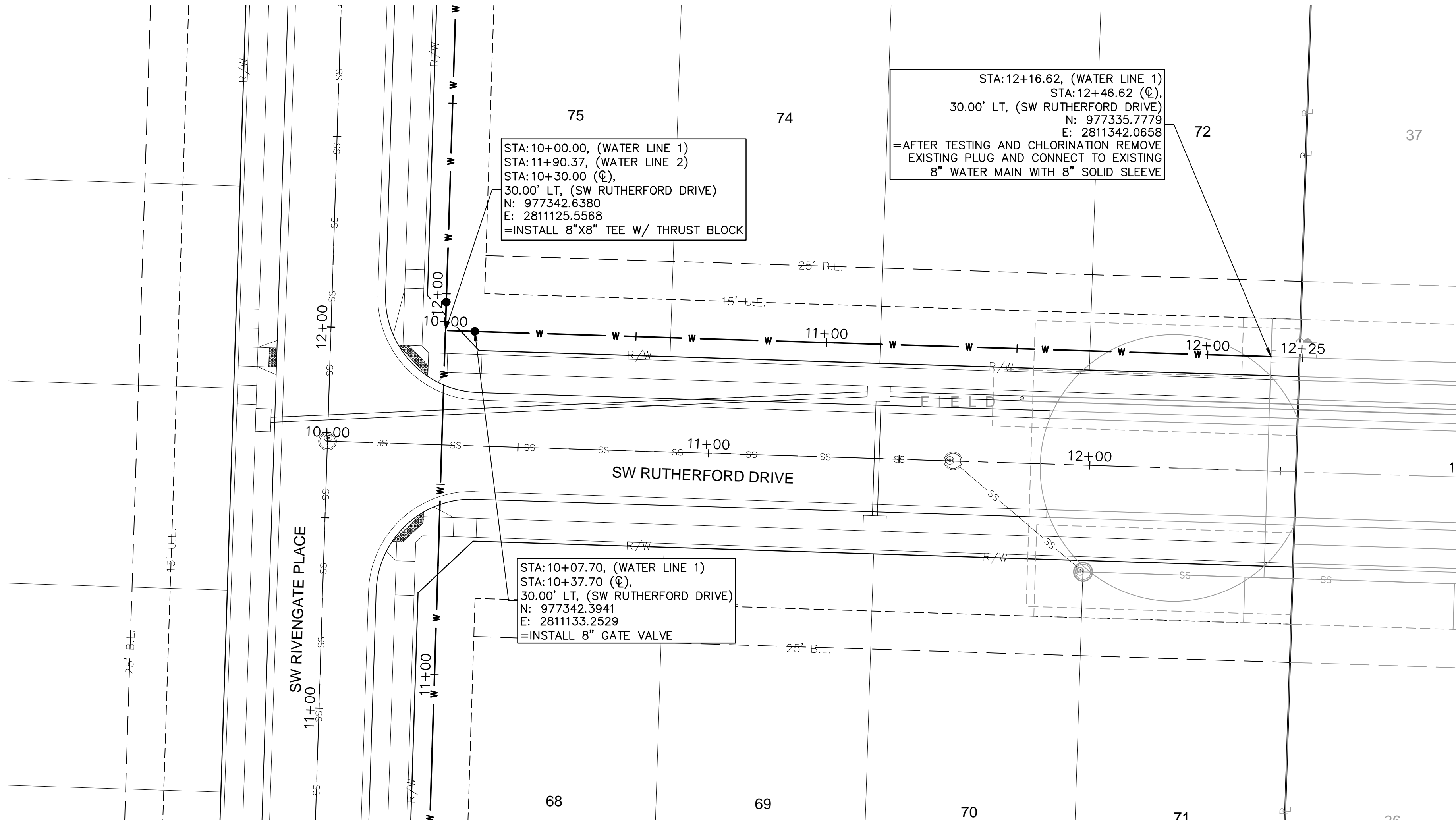


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North Kansas City, MO 64116

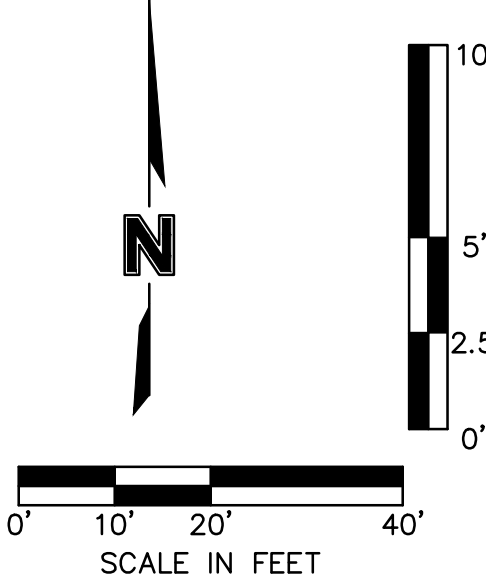
TEL 816.361.1177      [www.olsson.com](http://www.olsson.com)

olson

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RELEASE FOR  
CONSTRUCTION  
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DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
01/27/2021



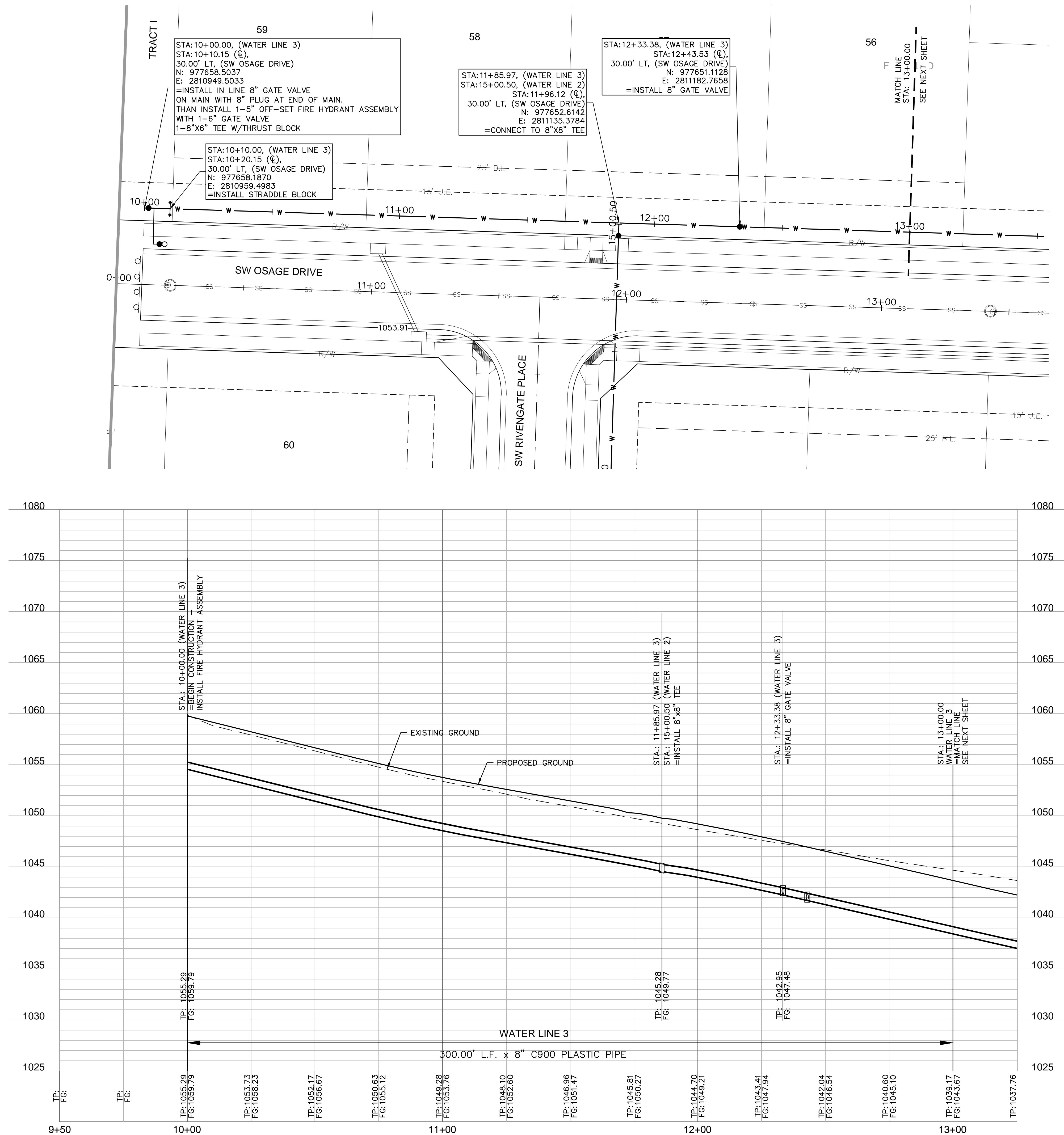
WATER PLAN & PROFILE (LINE 1) WATER MAIN EXTENSION PLANS		REV. NO.		DATE	REVISIONS DESCRIPTION
OSAGE SECOND PLAT					
2020		REVISIONS			
SHEET C304		olsson Olsson - Civil Engineering Missouri Certificate of Authority #: 001592 1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 www.olsson.com			







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USER: abcdigiliev



**RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
01/27/2021**

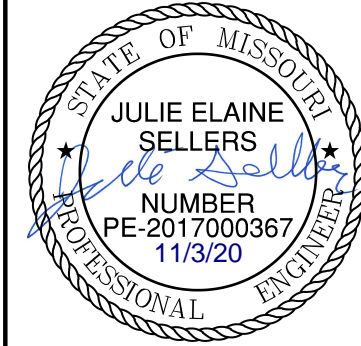
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WATER MAIN EXTENSION PLANS

OSAGE  
SECOND PLAT

2020

[illegible]

## REVISIONS



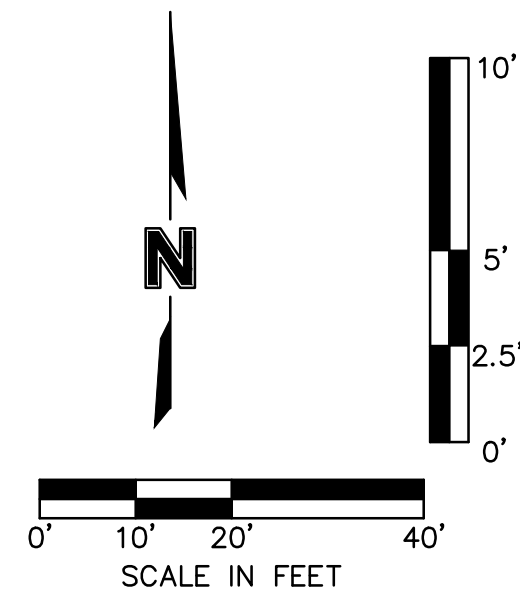
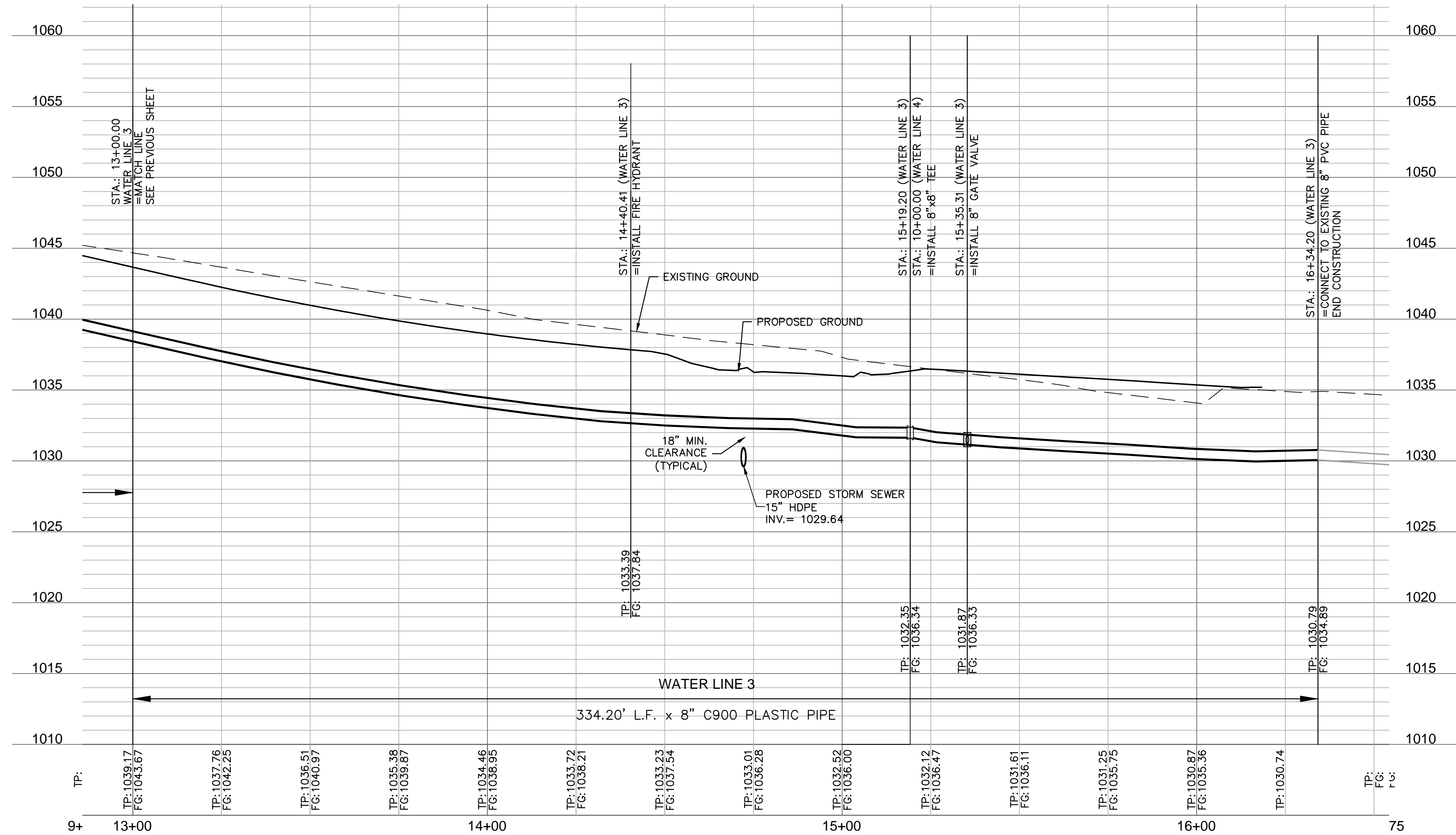
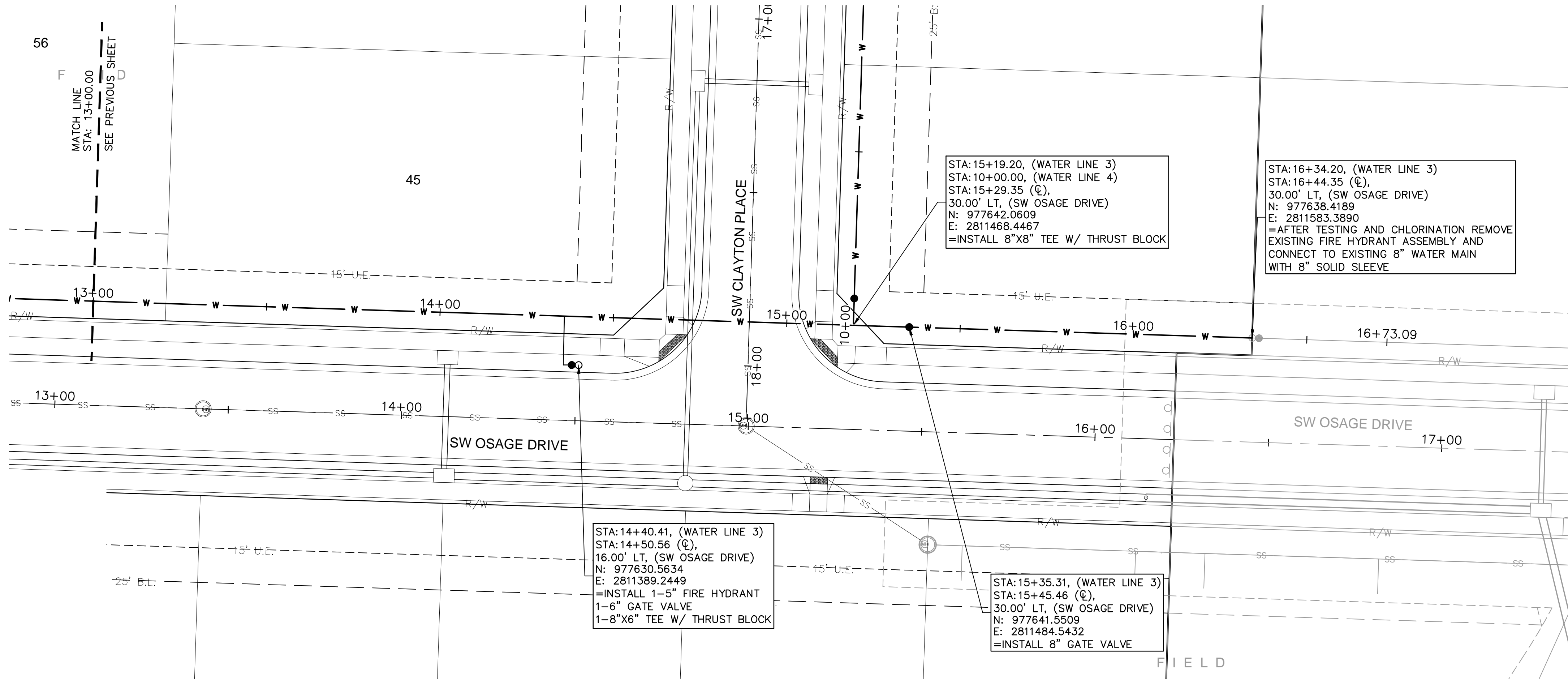
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USER: oshdigi@jwv



RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
01/27/2021

WATER PLAN & PROFILE (LINE 3 CONT)  
WATER MAIN EXTENSION PLANS

OSAGE  
SECOND PLAT

2020

REVISIONS

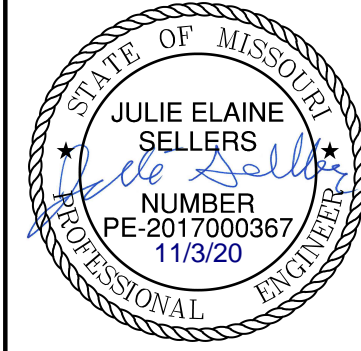
REVISIONS DESCRIPTION

DATE

REV. NO.

drawn by: D.F./M.O./A.A.  
checked by: C.G.W.  
designed by: A.A.  
QA/QC by: J.E.S.  
project no.: C19-2339  
drawing no.:  
date: 2020.11.03

SHEET  
C307

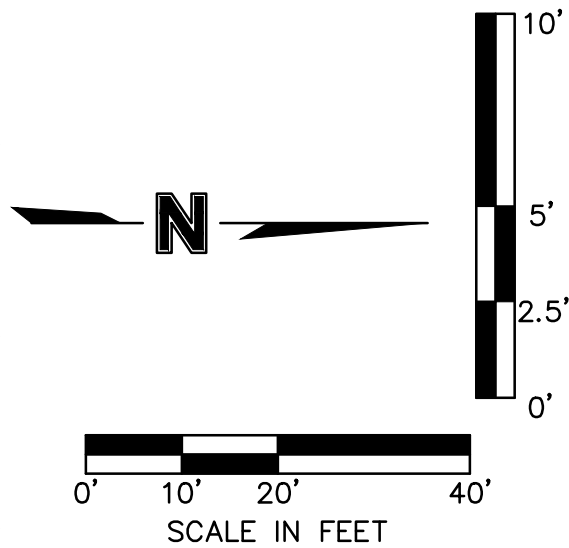
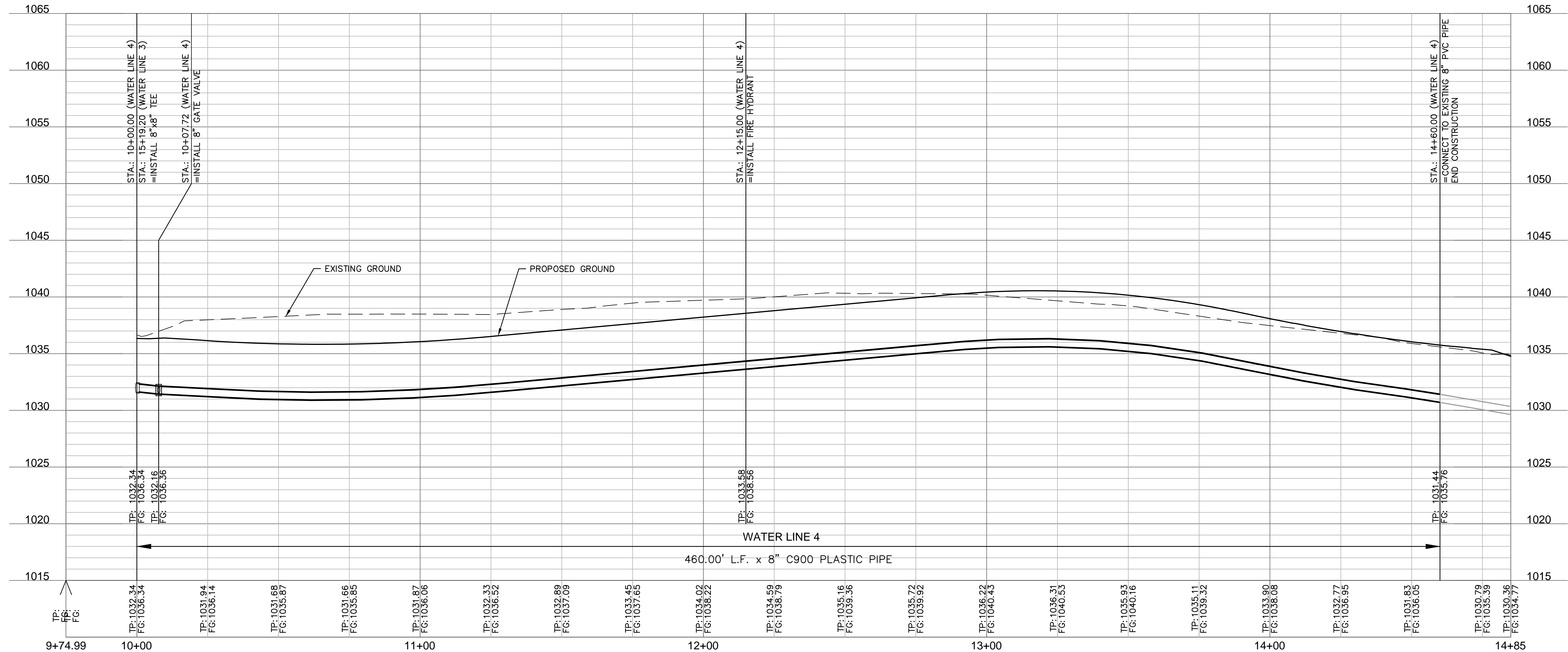
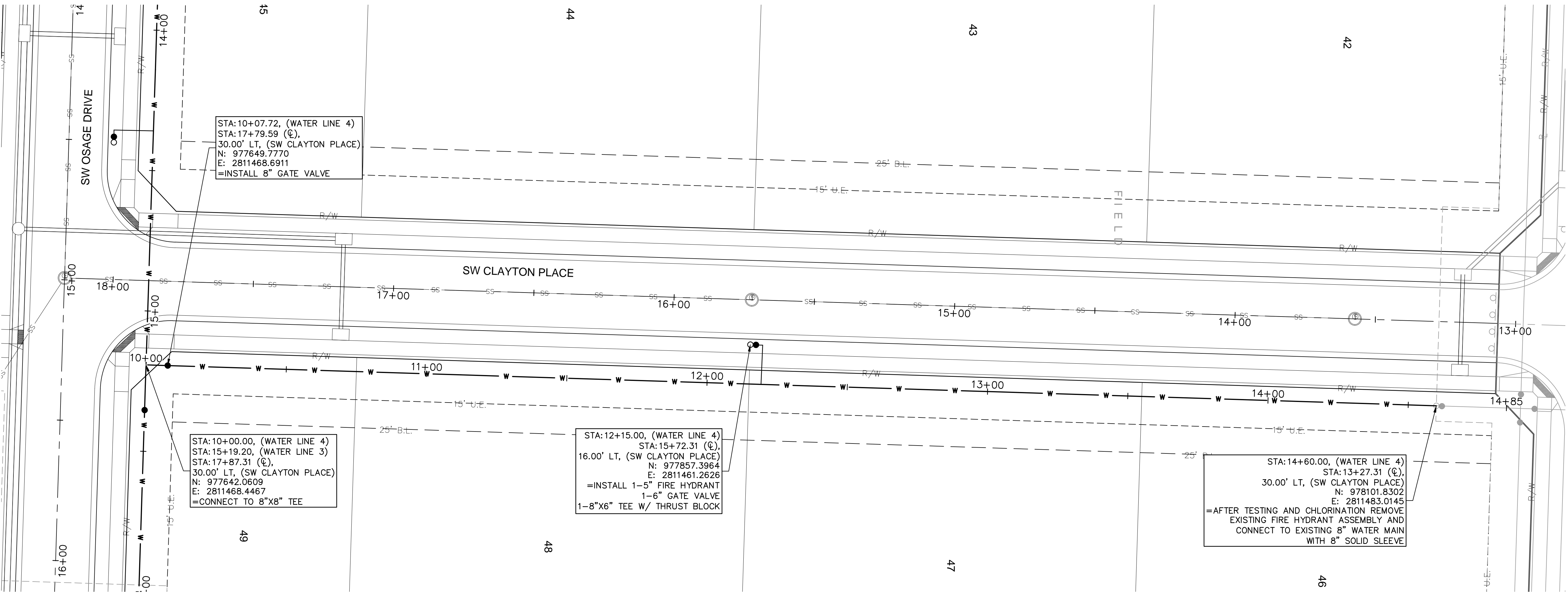


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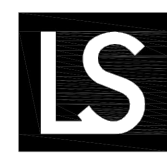
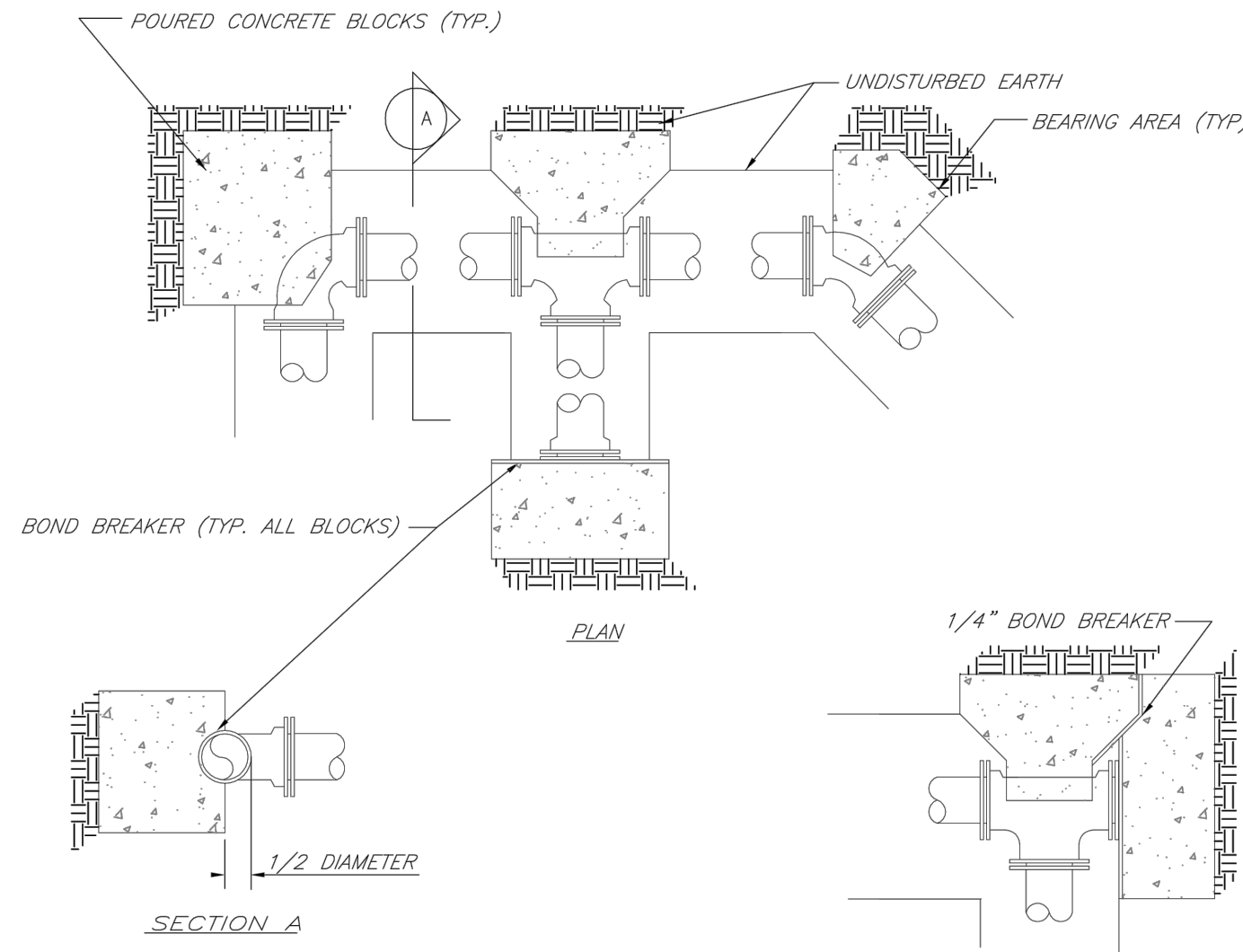
RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
01/27/2021

olsson		Julie Elaine Sellers Professional Engineer Missouri PE 2017000367 11/3/20		REVISIONS	
WATER PLAN & PROFILE (LINE 4)		OSAGE		2020	
WATER MAIN EXTENSION PLANS		SECOND PLAT			
drawn by: D.F./M.O./A.A.		checked by: C.G.W.		designed by: A.A.	
QA/QC by: J.E.S.		project no.: C19-2339		drawing no.: 2020.11.03	
date: 2020.11.03		SHEET		C308	



REQUIRED CONCRETE BEARING AREA (SQUARE FEET - SF)					
NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.8	26.7	14.4	5.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	REST. JT.	32.5	16.5	8.3
20	REST. JT.	REST. JT.	40.1	20.4	10.3
24	REST. JT.	REST. JT.	REST. JT.	29.4	14.8

- NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
  2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
  3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
  4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

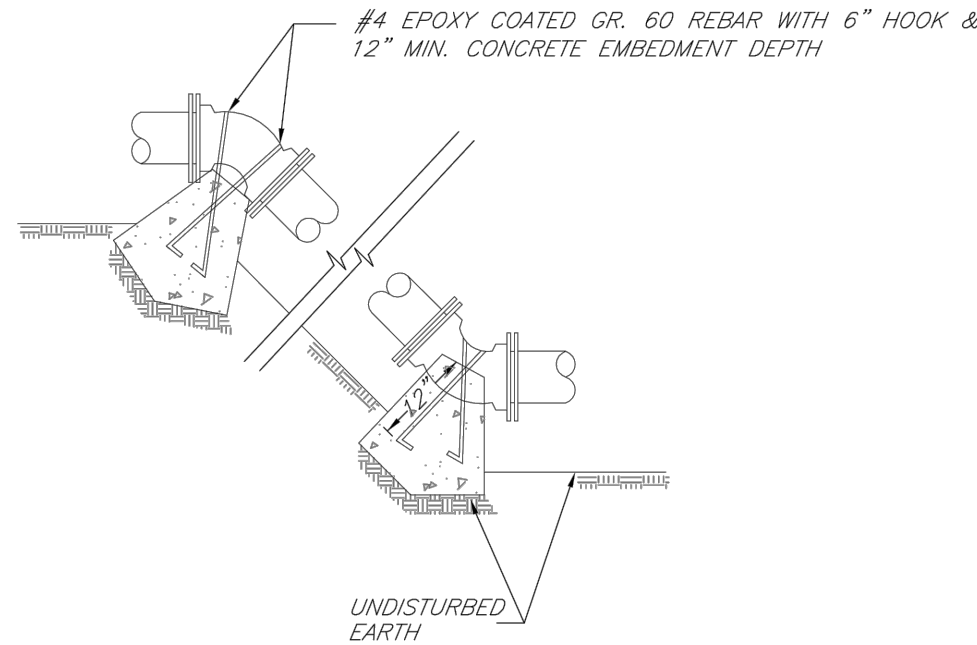


**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063  
**HORIZONTAL THRUST BLOCKS**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-1  
Rev: 1/14  
Rev:

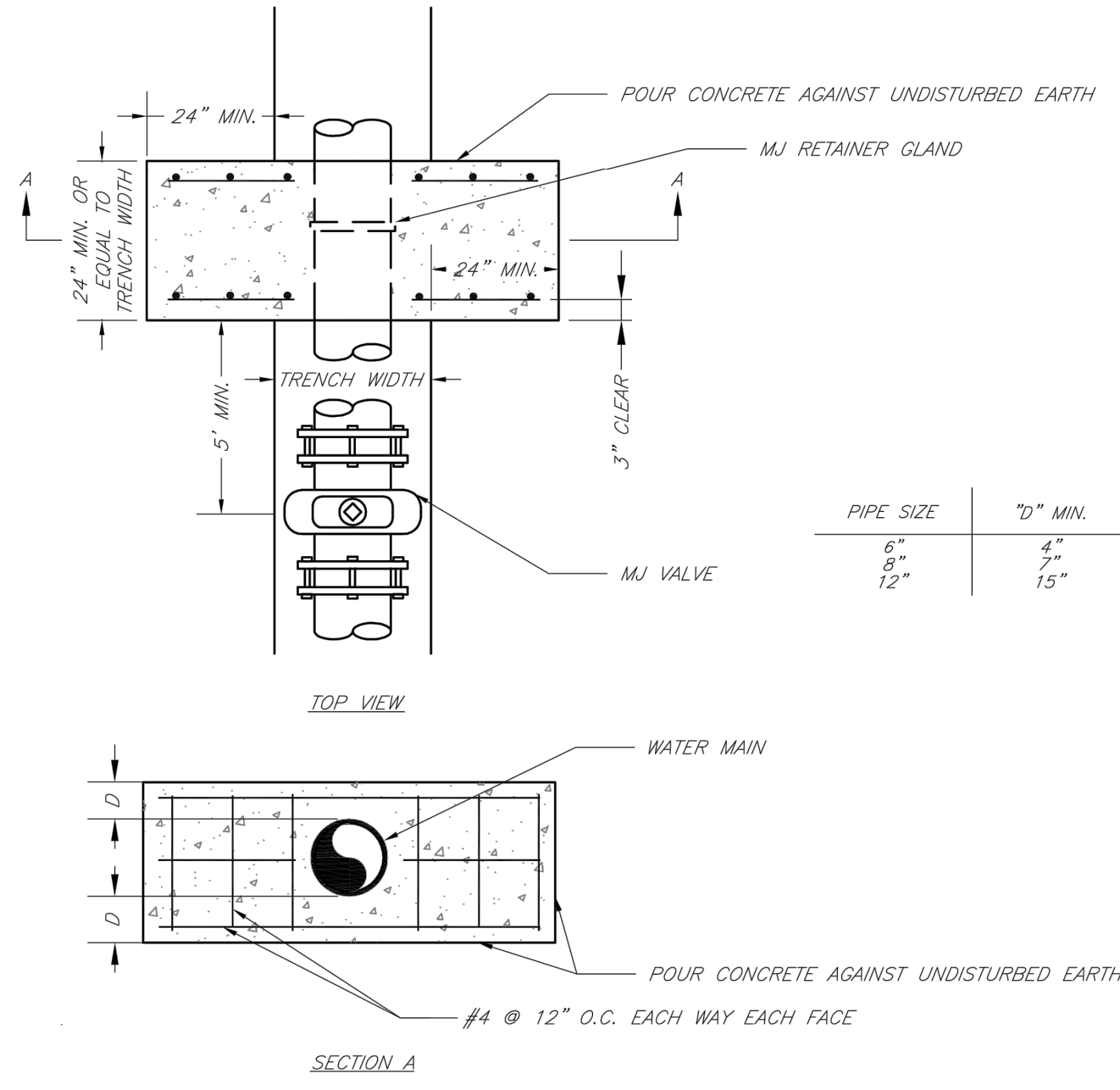
REQUIRED CONCRETE VOLUME (CUBIC FEET - CF)					
NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.3	54.7	27.5
12	202.0	REST. JT.	154.6	78.8	39.6
14	REST. JT.	REST. JT.	210.4	107.3	53.9
16	REST. JT.	REST. JT.	REST. JT.	140.1	70.4
18	REST. JT.	REST. JT.	REST. JT.	177.3	89.1
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	110.0
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	158.4

- NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
  2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
  3. BEARING MUST BE AGAINST UNDISTURBED SOIL.
  4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



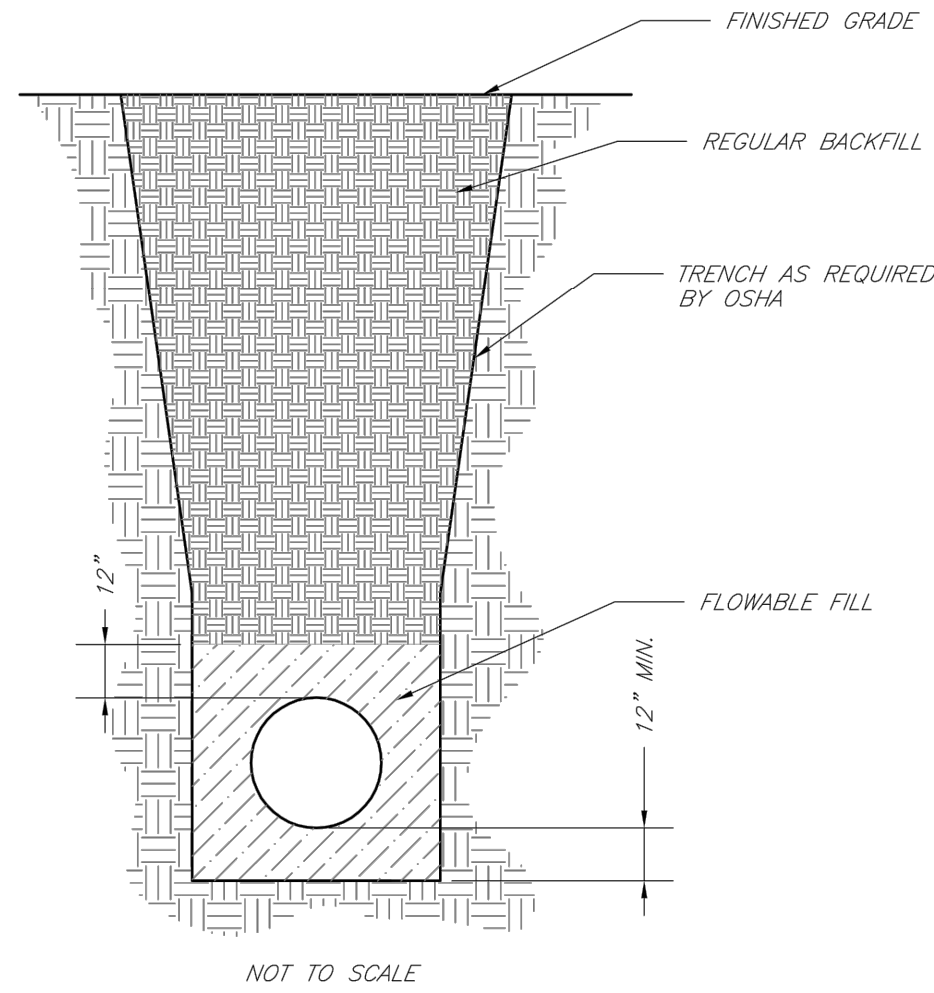
**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063  
**VERTICAL THRUST BLOCKS**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-2  
Rev: 1/14  
Rev:



**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063  
**STRADDLE BLOCK**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-3  
Rev: 1/14  
Rev:

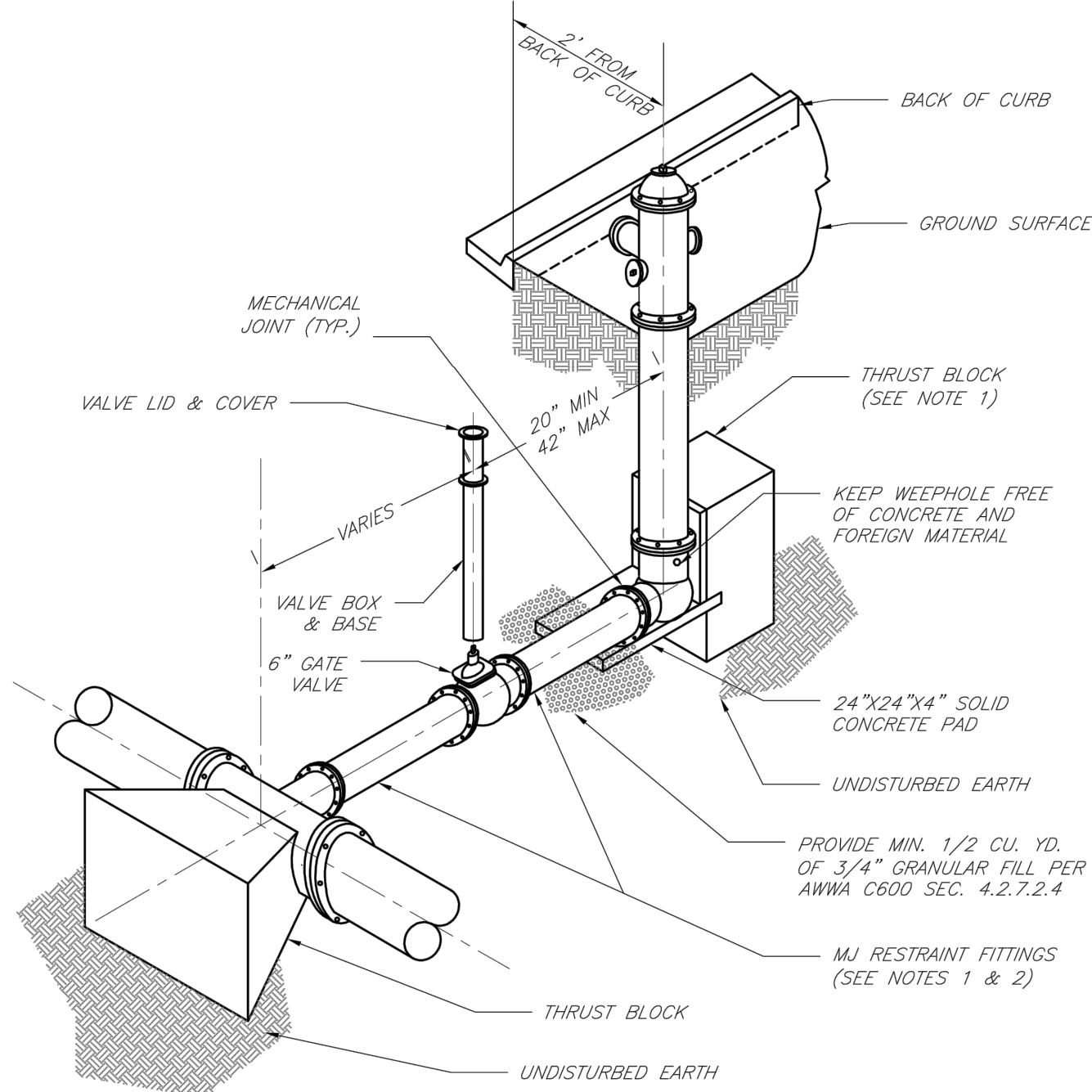


- NOTES:
1. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
  2. REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
  3. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
  4. LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12".



**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063  
**TRENCH CHECK**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-6  
Rev: 1/14  
Rev:

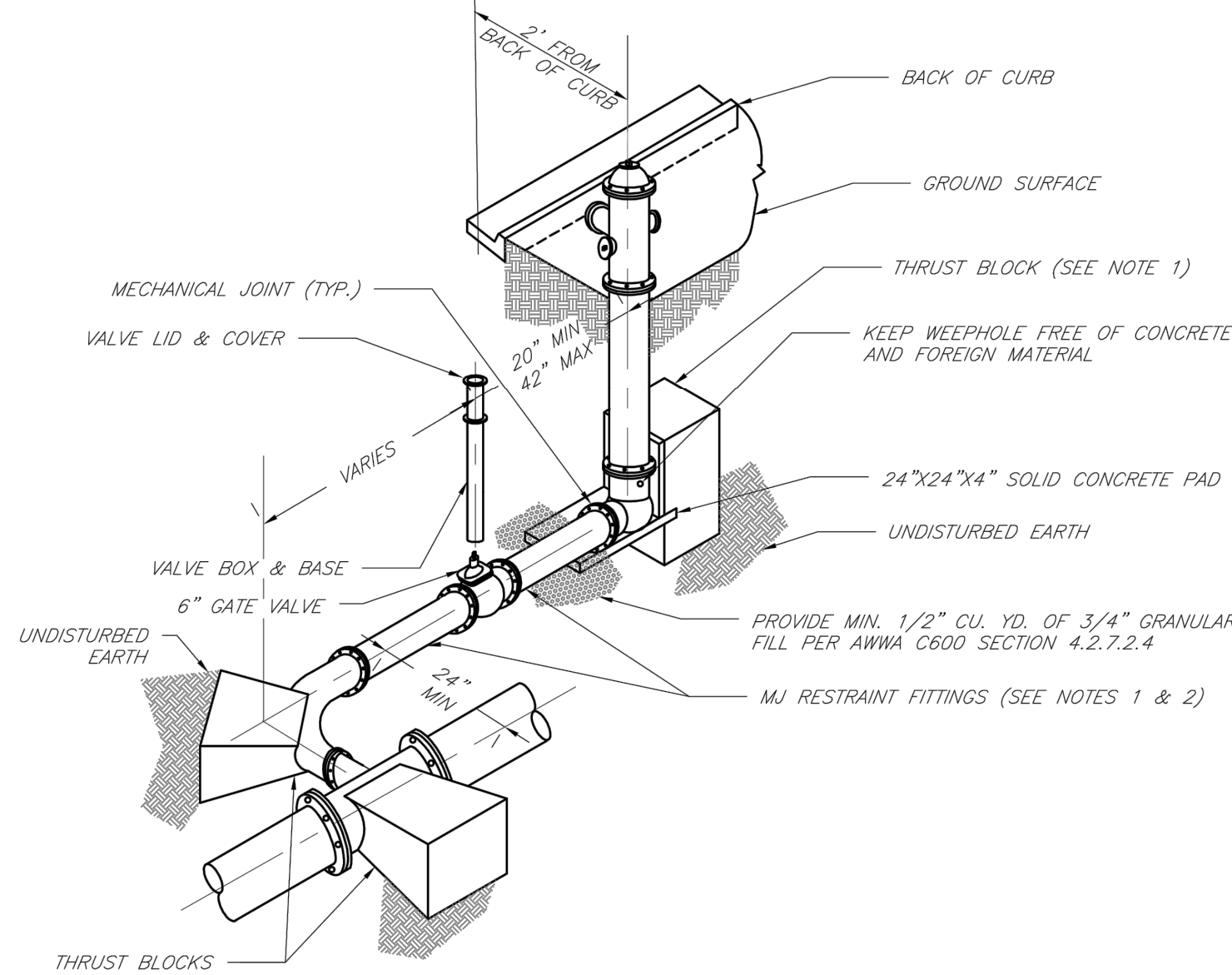


- NOTES:
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
  2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
  3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
  4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
  5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
  6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.



**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063  
**HYDRANT INSTALLATION - STRAIGHT SET**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-7  
Rev: 1/14  
Rev:



- NOTES:
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
  2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
  3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
  4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
  5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
  6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.



**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063  
**HYDRANT WITH 90 DEGREE BEND**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-8  
Rev: 1/14  
Rev:

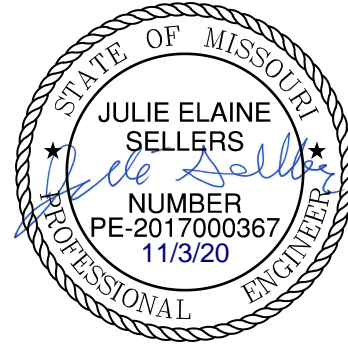
RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
01/27/2021

DETAIL SHEET  
WATER MAIN EXTENSION PLANS

OSAGE  
SECOND PLAT

2020

REVISIONS



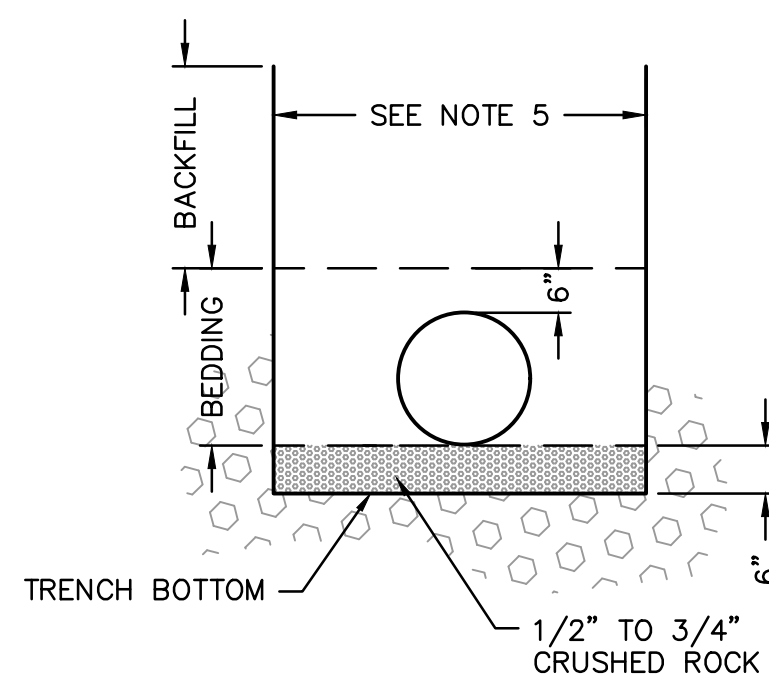
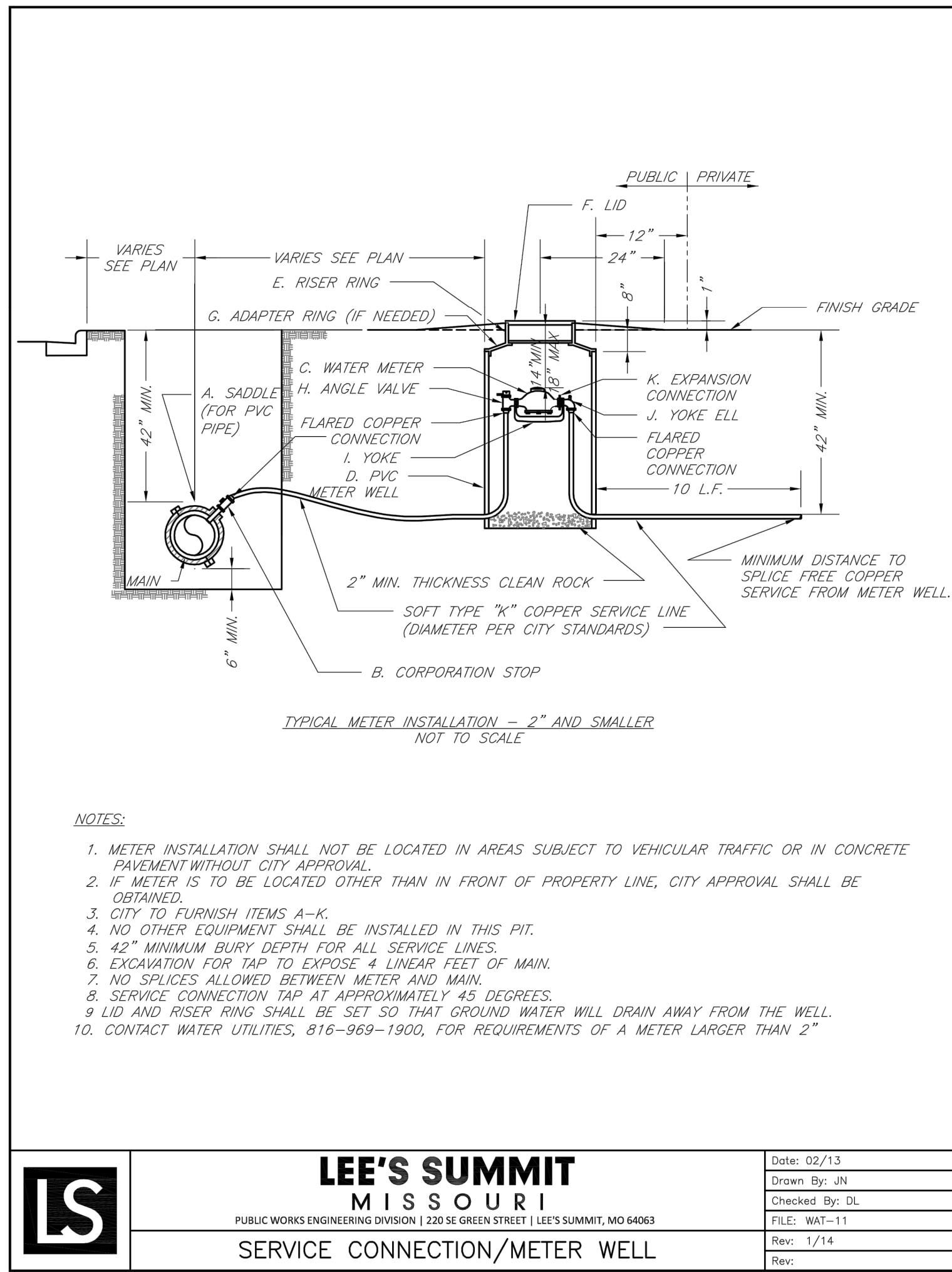
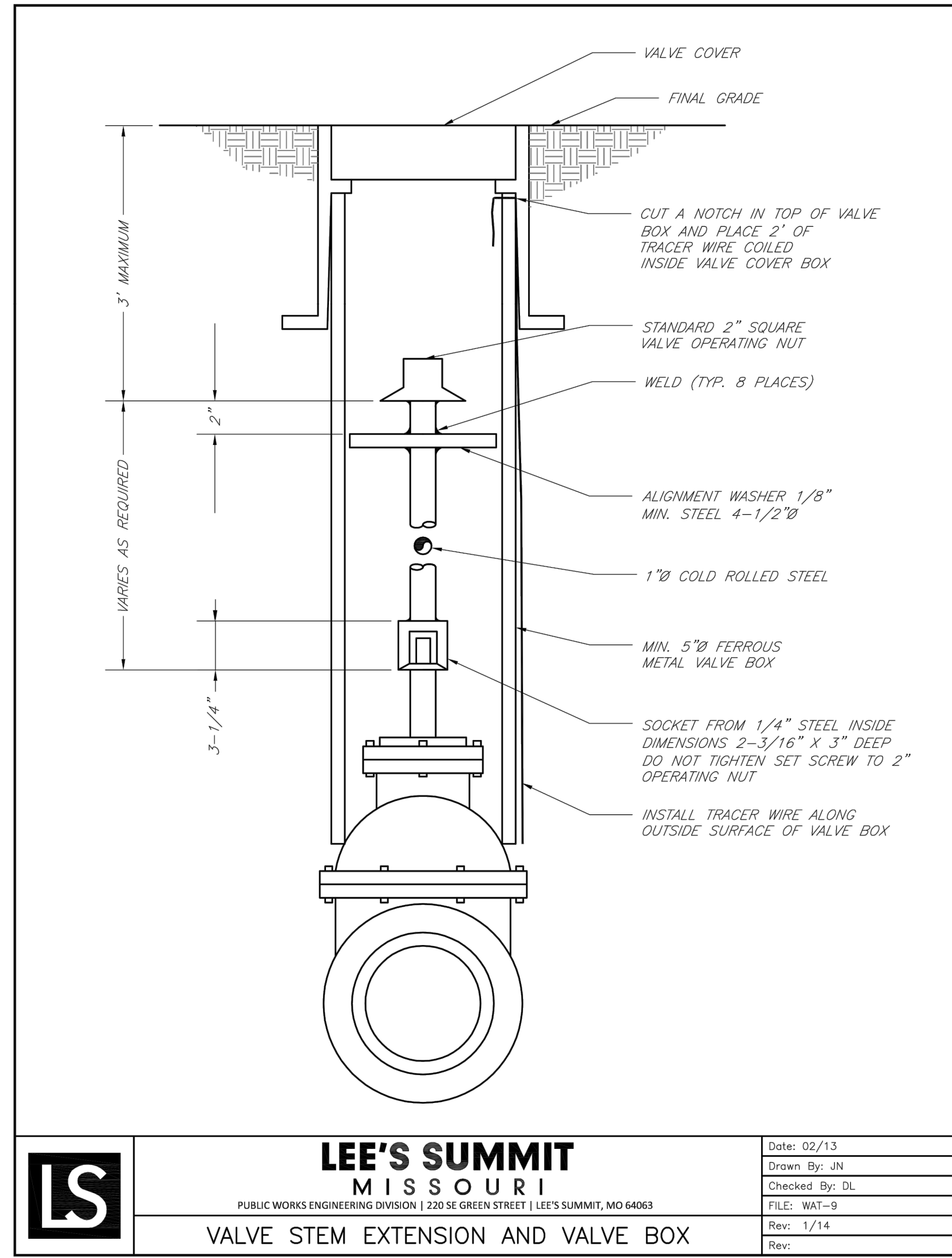
**olsson**

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1301 Burlington Street  
North Kansas City, MO 64116  
TEL 816.361.1177  
www.olson.com

drawn by: D.F./M.O./A.A.  
checked by: C.G.W.  
QA/QC by: A.A.  
project no.: J.E.S.  
drawing no.: C19-2339  
date: 2020.11.03

SHEET  
C309





### TYPICAL TRENCH SECTION

NOTES:

1. BELL HOLES SHALL BE DUG SO THAT NO PART OF THE BELL SHALL BE IN CONTACT WITH THE TRENCH BOTTOM.
2. BEDDING AGGREGATE MATERIAL SHALL BE PER SECTION 6900 AND 2102 OF THE CITY DESIGN AND CONSTRUCTION MANUAL. BEDDING AGGREGATE SHALL BE PLACED FROM A LEVEL 6 INCHES BELOW THE BOTTOM OF THE PIPE TO A LEVEL 6 INCHES ABOVE THE TOP OF THE PIPE AS SHOWN ABOVE.
3. BACKFILL MATERIAL AND PLACEMENT SHALL BE PER SECTION 6900 AND 2102 OF THE CITY DESIGN AND CONSTRUCTION MANUAL.
4. TRENCHING SHALL BE IN ACCORDANCE WITH CURRENT OSHA REGULATIONS. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING.
5. MINIMUM AND MAXIMUM TRENCH WIDTHS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATION AS APPROVED ON ENGINEERING PLANS.

## UNDERGROUND PIPE INSTALLATION FOR WATER PIPING

**RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI**

01/27/2021

drawn by: _____ D.F./M.O./A.A. checked by: _____ C.G.W./ designed by: _____ A.A./ QA/QC by: _____ J.E.S./ project no.: _____ C19-2338 drawing no.: _____ date: _____ 2020.11.03					
DETAIL SHEET WATER MAIN EXTENSION PLANS				REV. NO.	
OSAGE SECOND PLAT				DATE	
				REVISIONS	
2020					
SHEET C310					