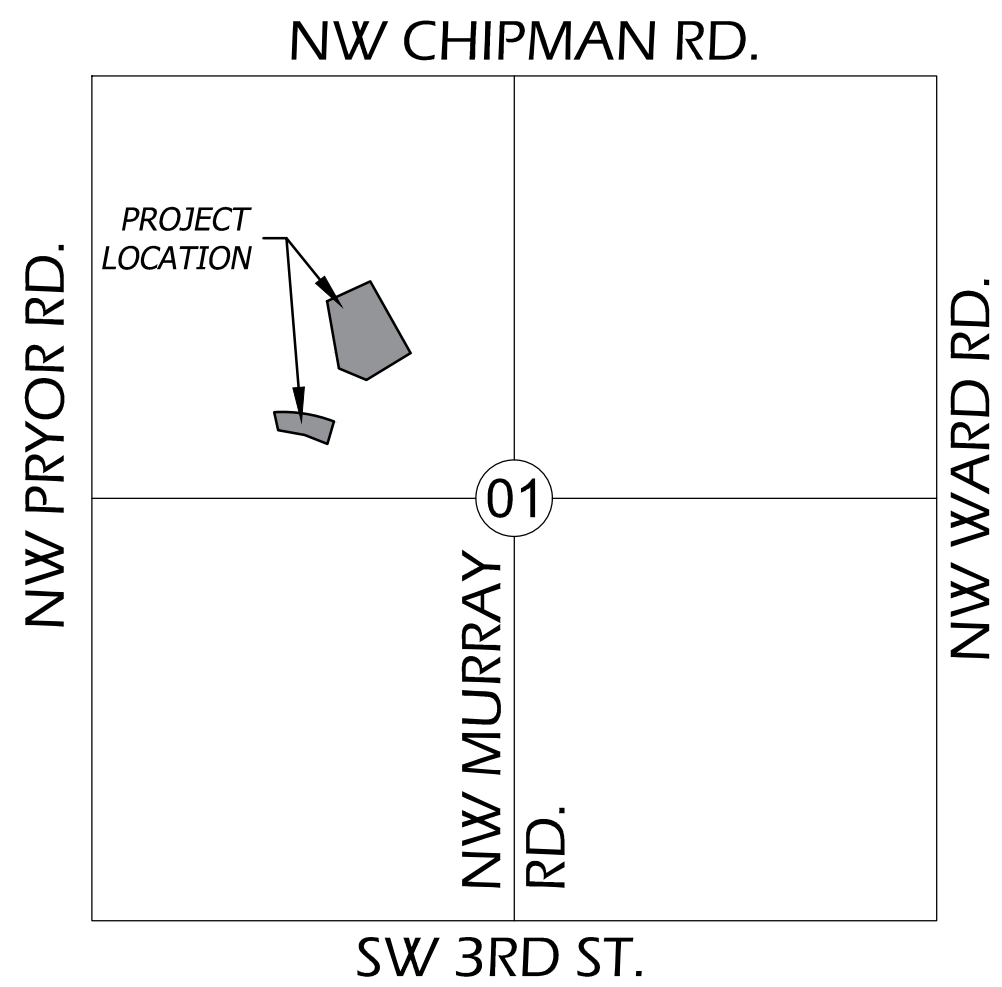


Mar 29, 2022 - 2:30pm Plotted By: Eric Byrd V:\028800--John Knox Village Ph I\04-DWG\Eng\Sheet\PIP\028800--SHTS--COVER.dwg Layout: Cover Sheet



VICINITY MAP
SEC 01-- TWP 47N-- RNG 32W
NOT TO SCALE

UTILITY CONTACTS CITY OF LEE'S SUMMIT, MO

PLANNING AND DEVELOPMENT
CITY HALL
JOSH JOHNSON
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1600
FAX: (816) 969-1619

PUBLIC WORKS
CITY HALL
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1800
FAX: (816) 969-1809

LEE'S SUMMIT FIRE DEPARTMENT
207 SE DOUGLAS ROAD
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1300

TELEPHONE COMPANY
AT&T
TEL: (800) 464-7928

CODES ADMINISTRATION
CITY HALL
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1200
FAX: (816) 969-1201

WATER UTILITIES
CITY HALL
1200 SE HAMBLEN RD
LEE'S SUMMIT, MO 64063
TEL: (816) 969-1900
FAX: (816) 969-1935

ELECTRIC COMPANY
EVERGY
TEL: (888) 471-5275

GAS COMPANY
MISSOURI GAS ENERGY
TEL: (816) 756-5252

All existing utility locations shown are approximate only and are not guaranteed to be accurate or all inclusive. Contractor shall be responsible for contacting all utility companies and verifying the actual field locations of all utilities prior to any construction activity. Contractor shall keep all utility locations current. Utilities damaged through the negligence of the contractor to obtain the proper field locations shall be the responsibility of the contractor to repair or replace at their expense and at the direction of the utility company. The contractor shall pothole and survey all utility crossings prior to construction of any portion of storm sewer, sanitary sewer laterals, underdrains, conduit and any other subsurface element of the project. The survey information shall be forwarded to the project engineer for review. The contractor shall not begin construction on any subsurface element on the project without the approval of the project engineer. Utility coordination, potholing/surveying shall be subsidiary to other bid items.

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CITY OF LEE'S SUMMIT, MISSOURI

JOHN KNOX VILLAGE MEADOWS

PUBLIC WATER MAIN IMPROVEMENTS

CITY PROJECT NO. PL2021150



VICINITY MAP
Not to Scale

BENCHMARKS / CONTROL POINTS (DATUM: NAVD88)

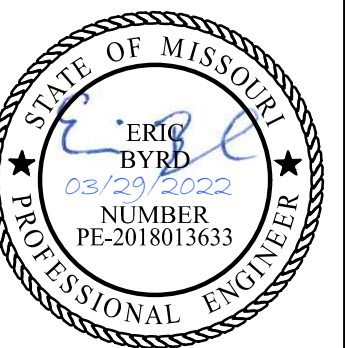
BM/CP #5002
SET CUT "+" ± 6" OF CONCRETE SIDEWALK IN EAST CURB
RETURN, NORTH SIDE OF NORTHWEST O'BRIEN ROAD
NORTH = 1002910.185
EAST = 2814693.406
ELEVATION = 963.93

BM/CP #13314
SET CUT "+" IN CONCRETE SIDEWALK, SOUTHWEST
CORNER OF NORTHWEST MOORE STREET &
NORTHWEST HOPE LANE (NOT SHOWN HEREON)
NORTH = 1003090.460
EAST = 2815069.800
ELEVATION = 974.62

BM/CP #13315
SET CUT "+" IN CONCRETE SIDEWALK, NORTHEAST
CORNER OF NORTHWEST O'BRIEN ROAD &
NORTHWEST MOORE STREET (NOT SHOWN HEREON)
NORTH = 1002830.710
EAST = 2814916.010
ELEVATION = 974.65

**RECORD
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DATA OBTAINED BY:
**PHOENIX
ENGINEERING &
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DATE: 03/29/2022

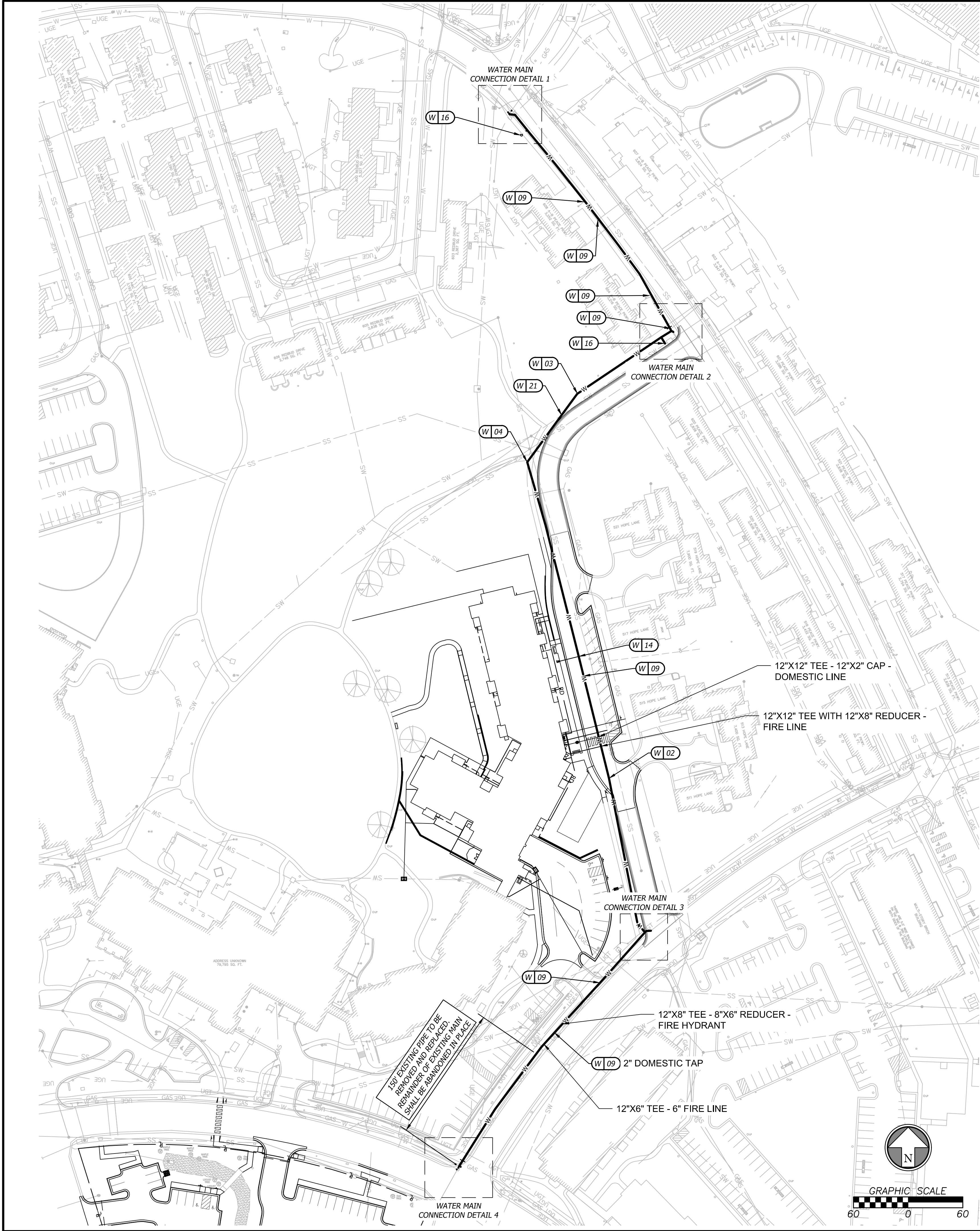
Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	OVERALL WATER MAIN PLAN
3	WATER MAIN PLAN & PROFILE
4	EROSION CONTROL PLAN
5	WATER MAIN DETAILS
6	WATER MAIN DETAILS 2



Prepared For:
JOHN KNOX VILLAGE
1001 NW CHIPMAN RD.
LEE'S SUMMIT, MO 64081
816-251-8000

PUBLIC WATER MAIN IMPROVEMENTS
JOHN KNOX VILLAGE MEADOWS
LEE'S SUMMIT, MO 64081
COVER SHEET

Design: SKT Drawn: SKT
Checked: ERB
Issue Date: 09/24/2021
Project Number: 028800



UTILITY CONSTRUCTION NOTES

W - WATER SERVICE INFORMATION - CITY OF LEE'S SUMMIT

- 01 INSTALL 12"X6" REDUCER.
- 02 REPLACE 1,380 LF OF EXISTING 6" WATER MAIN WITH 640 LF OF 12" C900 WATER MAIN AND 740 LF OF 8" C900 WATER MAIN. INSTALL AT A MINIMUM DEPTH OF 42". REFER TO SHEET 3.
- 03 INSTALL 8" 22.5° BEND WITH THRUST BLOCKING.
- 04 INSTALL 8" 60° BEND WITH THRUST BLOCKING.
- 05 INSTALL 8"X8" TEE WITH THRUST BLOCKING. SEE WATER MAIN NOTE 1.
- 06 INSTALL 12"X12" TEE WITH THRUST BLOCKING. SEE WATER MAIN NOTE 1.
- 07 INSTALL 12"X8" CROSS. SEE WATER MAIN NOTE 1.
- 08 INSTALL STRADDLE BLOCK. SEE DETAIL WAT-3 ON SHEET 4 FOR DETAIL. STRADDLE BLOCK SHALL BE INSTALLED ON PIECE OF PIPE THAT CONNECTS TO THE CLOSET MECHANICAL JOINT AND TEE/CROSS CONNECTIONS. SEE JOINT RESTRAINT NOTE.
- 09 APPROXIMATE LOCATION OF EXISTING SERVICE CONNECTION. SEE DETAIL WAT-11 ON SHEET 4.
- 10 EXISTING 8" GATE VALVE TO REMAIN.
- 11 INSTALL 12" GATE VALVE.
- 12 INSTALL 8" GATE VALVE.
- 13 INSTALL 8"X6" REDUCER.
- 14 INSTALL 12"X8" TEE - 8"X6" REDUCER. INSTALL FIRE HYDRANT WITH 6" ISOLATION VALVE.
- 15 INSTALL 6" GATE VALVE.
- 16 NEW FIRE HYDRANT WITH NEW 6" ISOLATION VALVE.
- 17 INSTALL 8" 45° BEND WITH THRUST BLOCKING.
- 18 INSTALL 12" 45° BEND WITH THRUST BLOCKING.
- 19 INSTALL 6" 45° BEND WITH THRUST BLOCKING.
- 20 12" GATE VALVE TO BE SUPPLIED AND INSTALLED BY LEE'S SUMMIT WATER UTILITY.
- 21 WATER MAIN CROSSES OVER STORM LINE THEN DROPS DOWN.

UTILITY GENERAL NOTES

1. CONTRACTOR SHALL REFER TO ALL SPECIFICATIONS, GUIDELINES, AND INSTALLATION DRAWINGS FROM THE CITY OF LEE'S SUMMIT, EVERGY, AND SPIRE FOR THE INSTALLATION OF ALL SERVICE LINES.
2. CONTRACTOR TO ENSURE 18" MINIMUM SEPARATION BETWEEN WATER MAIN AND STORM/SANITARY LINES AT CROSSINGS PER LEE'S SUMMIT DESIGN STANDARDS. CONTRACTOR TO CALL CIVIL IF ANY CONFLICTS BETWEEN UTILITIES ARE FOUND.
3. CONTRACTOR TO RESTORE EXISTING CONDITIONS IF DEMOLISHED/DAMAGED DURING CONSTRUCTION TO MEET CITY OF LEE'S SUMMIT STANDARDS.
 - 3.1. REFER TO DETAILS ON SHEET 5 FOR RESTORATION DETAILS

JOINT RESTRAINT NOTE

1. ALL JOINTS BETWEEN STRADDLE BLOCKS AND REDUCERS SHALL BE RESTRAINED. ANY JOINT BETWEEN THE STRADDLE BLOCK AND THE CLOSEST MECHANICAL JOINT SHALL BE RESTRAINED IF THE STRADDLE BLOCK IS MOVED FARTHER FROM THE CONNECTION.

SERVICE LINE RECONNECTION NOTE

1. CONTRACTOR SHALL RECONNECT ALL EXISTING WATER SERVICE LINES THAT ARE DISCONNECTED DURING THE WATER MAIN DEMOLITION AND CONSTRUCTION. SEE DETAIL WAT-11 ON SHEET 4.

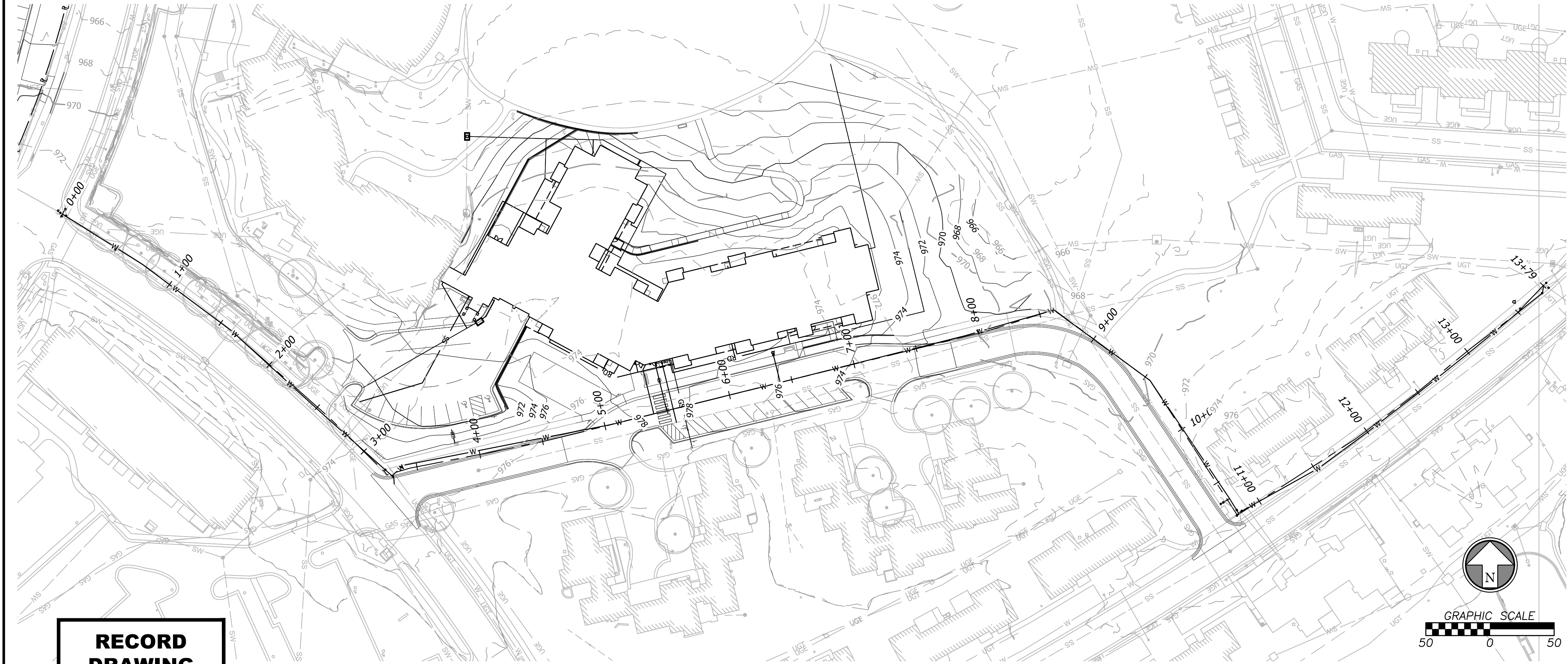
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DATA OBTAINED BY:
**PHOENIX
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DATE: 03/29/2022



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LEE'S SUMMIT, MO 64081
816-251-8000**

**PUBLIC WATER MAIN IMPROVEMENTS
JOHN KNOX VILLAGE MEADOWS
LEE'S SUMMIT, MO 64081
OVERALL WATER MAIN PLAN**

Design: SKT Drawn: SKT
Checked: ERB
Issue Date: 09/24/2021
Project Number: 028800



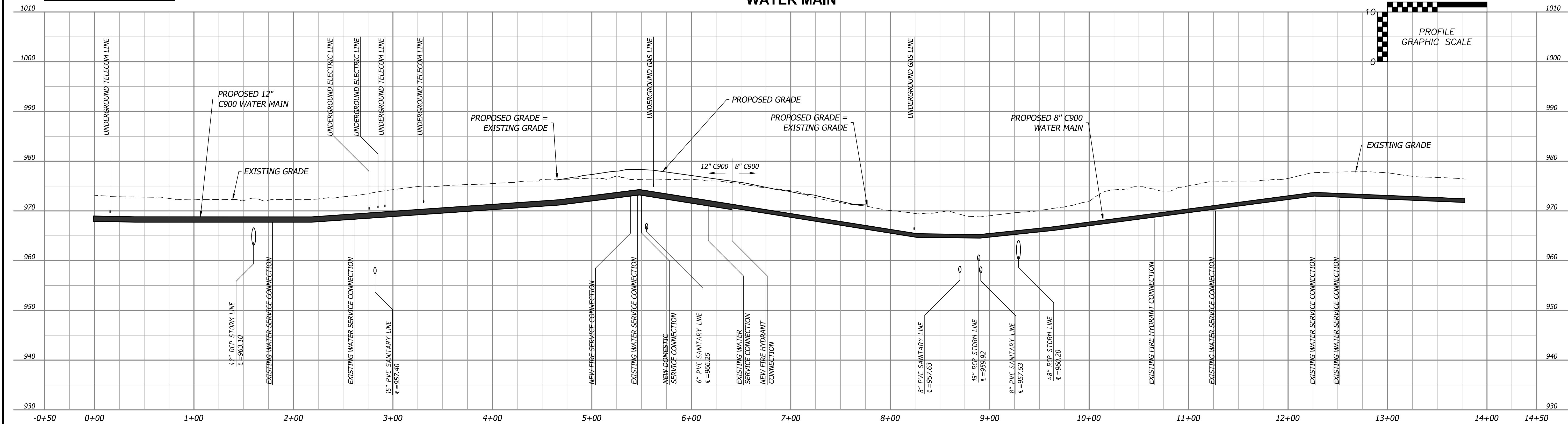
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DRAWING**
DATA OBTAINED BY:
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DATE: 03/29/2022

PHASING NOTES

1. IN ORDER TO LIMIT THE AMOUNT OF TIME WATER USERS ARE WITHOUT WATER, THE CONSTRUCTION OF THIS WATER MAIN SHALL BE PHASED AS FOLLOWS:
 - INSTALL STRADDLE BLOCK ON EXISTING WATER MAIN AT STATION 1+60.
 - CUT AND CAP EXISTING WATER MAIN AT STATION 1+60.
 - REMOVE THE FIRST 150' OF EXISTING WATER MAIN DURING THE INSTALLATION OF NEW 12" MAIN. THE REMAINDER OF THE WATER MAIN SHALL BE ABANDONED IN PLACE.
 - START CONSTRUCTION OF NEW 12" WATER MAIN AT STATION 0+00, PER WATER MAIN CONNECTION DETAIL 4 ON SHEET 2.
 - INSTALL THE NEW 12" WATER MAIN FROM STATION 0+00 TO STATION 6+40. INSTALL THE NEW 8" WATER MAIN FROM STATION 6+40 TO STATION 13+75.
 - TEST AND FLUSH INSTALLED 8" AND 12" WATER MAIN.
 - CONNECT TO EXISTING WATER MAIN PER WATER MAIN CONNECTION DETAIL 1 ON SHEET 2.
 - USING VARIOUS VALVE CLOSING AND OPENING PATTERNS, TRANSFER SERVICE TO ALL CUSTOMERS WITH A MAXIMUM SHUTDOWN TIME OF 8 HOURS.
 - UPON COMPLETION OF ALL SERVICE TRANSFERS, INSTALL CONNECTIONS SHOWN IN WATER MAIN CONNECTION DETAILS 2 AND 3 (ON SHEET 2).
 - ABANDON EXISTING LINE FROM STATION 1+50 TO 13+75. WATER MAIN TO BE ABANDONED SHALL BE PLUGGED AT EACH END. A SECTION OF PIPE 10 FEET LONG SHALL BE CUT OUT OF THE EXISTING LINE AND WATER SHALL BE DRAINED OUT TO THE FULLEST EXTENT POSSIBLE. THE ENDS SHALL BE SEALED WITH A 1-FOOT THICK PLUG OF NON-SHRINK GROUT SEALED WITH A PORTLAND CEMENT GROUT.
2. CONTRACTOR TO PROVIDE SUFFICIENT NOTICE TO WATER USERS PRIOR TO SHUT DOWN OF THEIR SERVICE.
3. CONTRACTOR TO NOTIFY DEVELOPMENT SERVICES INSPECTIONS PRIOR TO PERFORMING ANY SHUT-DOWNS.
4. THE CITY OF LEE'S SUMMIT IS THE ONLY PARTY ALLOWED TO TURN VALVES ON OR OFF.
5. DOOR HANGERS MUST BE PLACED ON AFFECTED CUSTOMERS AT LEAST 24 HOURS PRIOR TO THE SCHEDULED DISRUPTION.
6. MINIMUM NOTICE OF 48 HOURS SHALL BE GIVEN TO THE CITY OF LEE'S SUMMIT PRIOR TO ANY SHUTDOWN.
7. ONCE WORK BEGINS ON A GIVEN PHASE, ALL WORK WITHIN THAT PHASE MUST BE CONTINUOUS UNTIL THE COMPLETION OF THAT PHASE.
8. THE MAXIMUM AMOUNT OF TIME FOR ANY WATER CUSTOMER TO BE WITHOUT SERVICE IS 8 HOURS.

WATER MAIN



Prepared For:
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LEE'S SUMMIT, MO 64081
816-251-8000

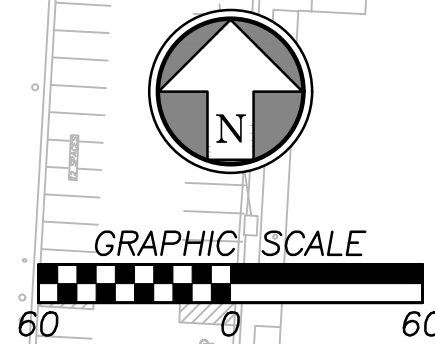
PUBLIC WATER MAIN IMPROVEMENTS
JOHN KNOX VILLAGE MEADOWS
LEE'S SUMMIT, MO 64081

WATER MAIN PLAN & PROFILE

Design: SKT Drawn: SKT
Checked: ERB
Issue Date: 09/24/2021
Project Number: 028800



Rev.	Date	Description	By	App.
03/29/22		Record Drawing		



EROSION CONTROL LEGEND

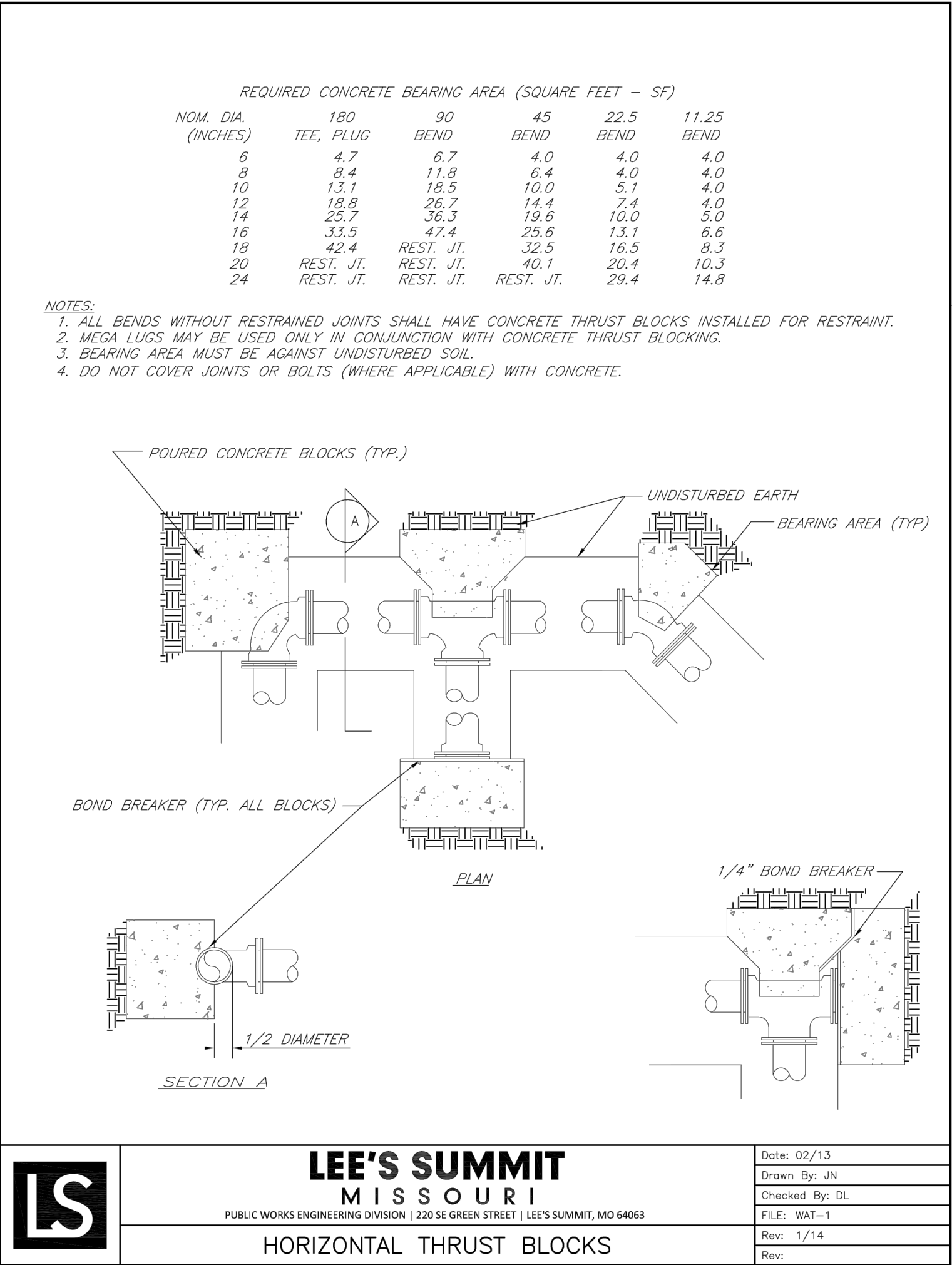
- 000 **DETAILS**

- SEE EROSION CONTROL DETAIL SHEET FOR THE FOLLOWING

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DATE: 03/29/2022

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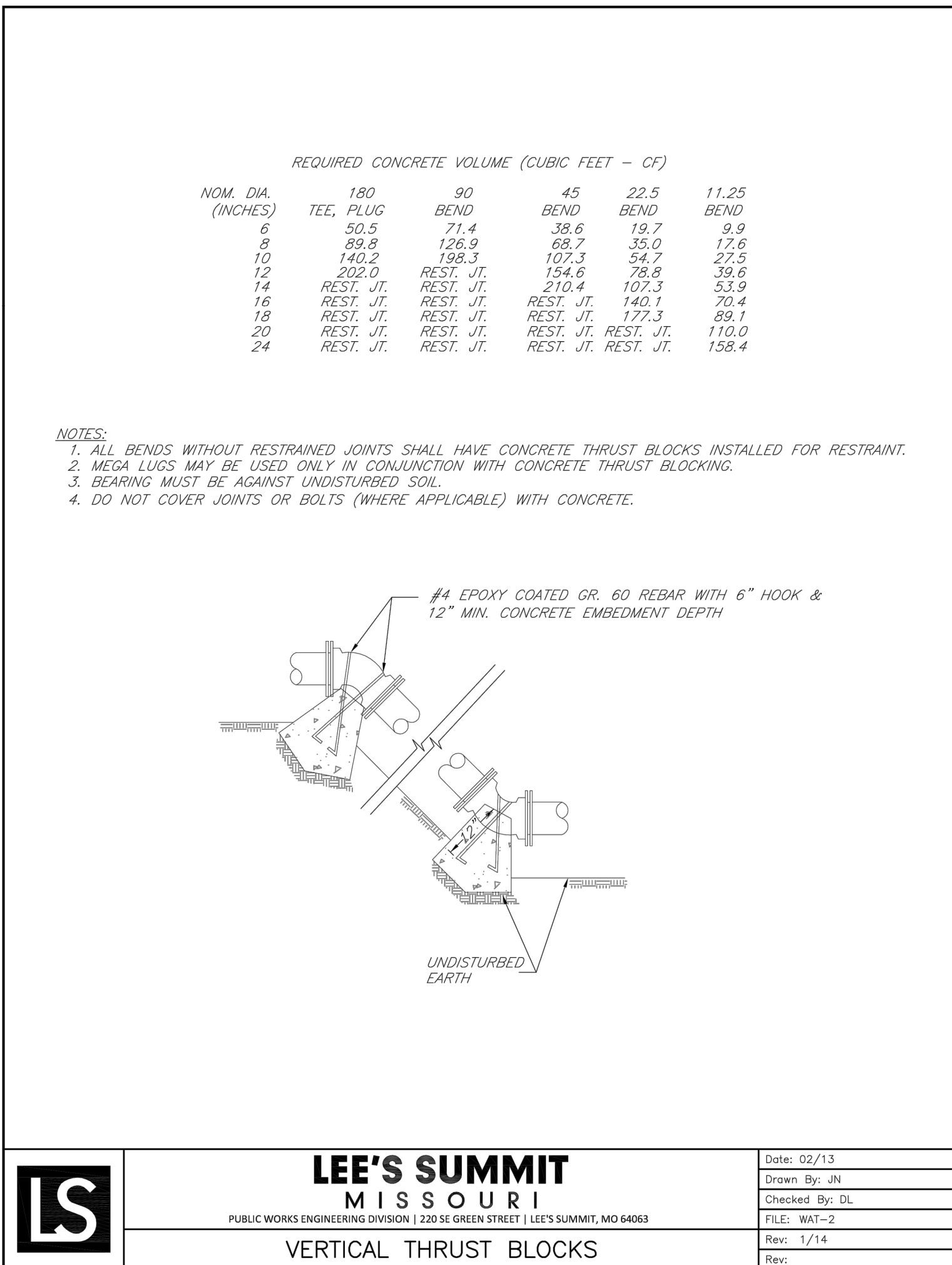
LEE'S SUMMIT

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:



LS

LEE'S SUMMIT

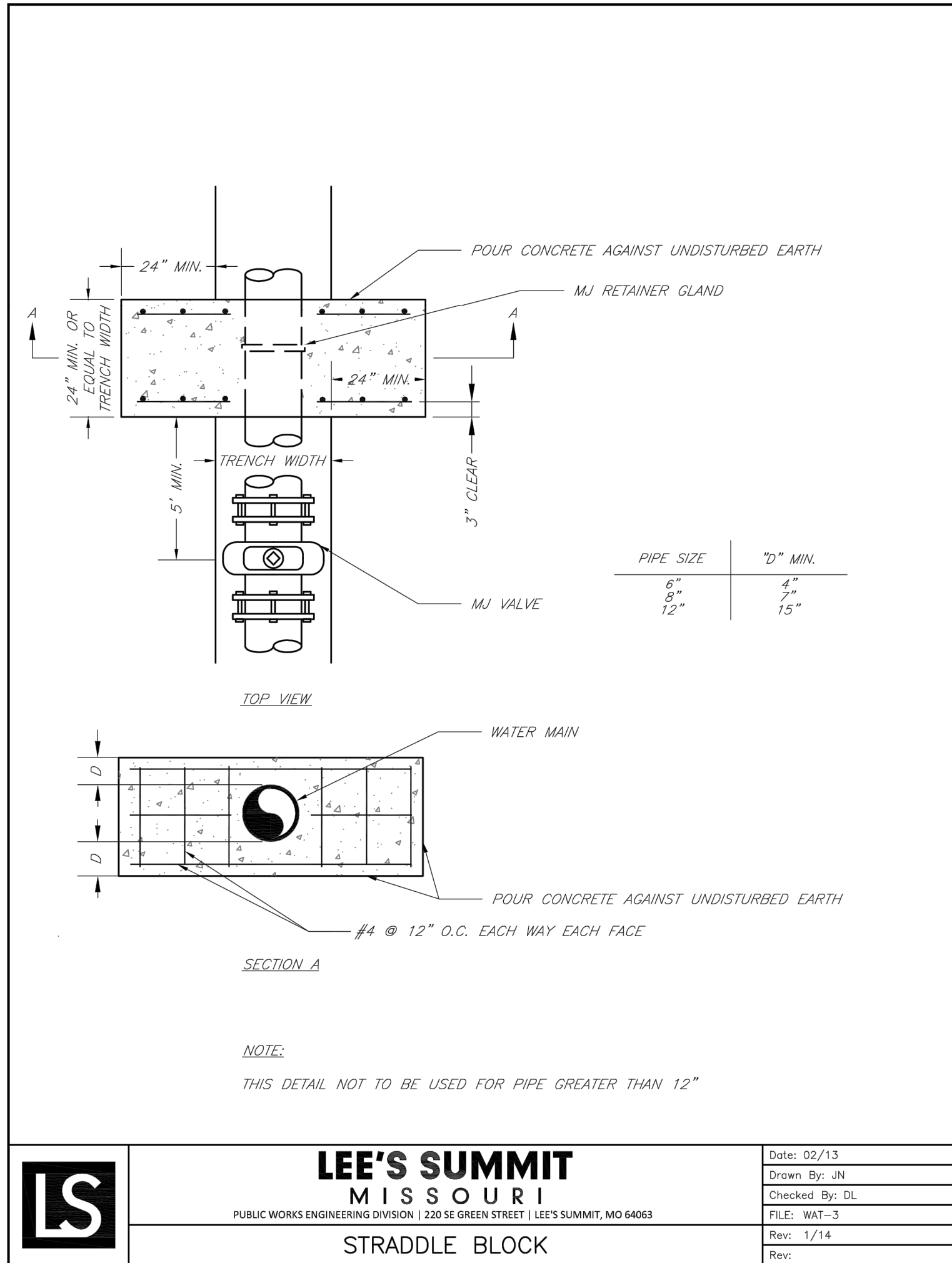
MISSOURI

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VERTICAL THRUST BLOCKS

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

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DATE: 03/29/2022



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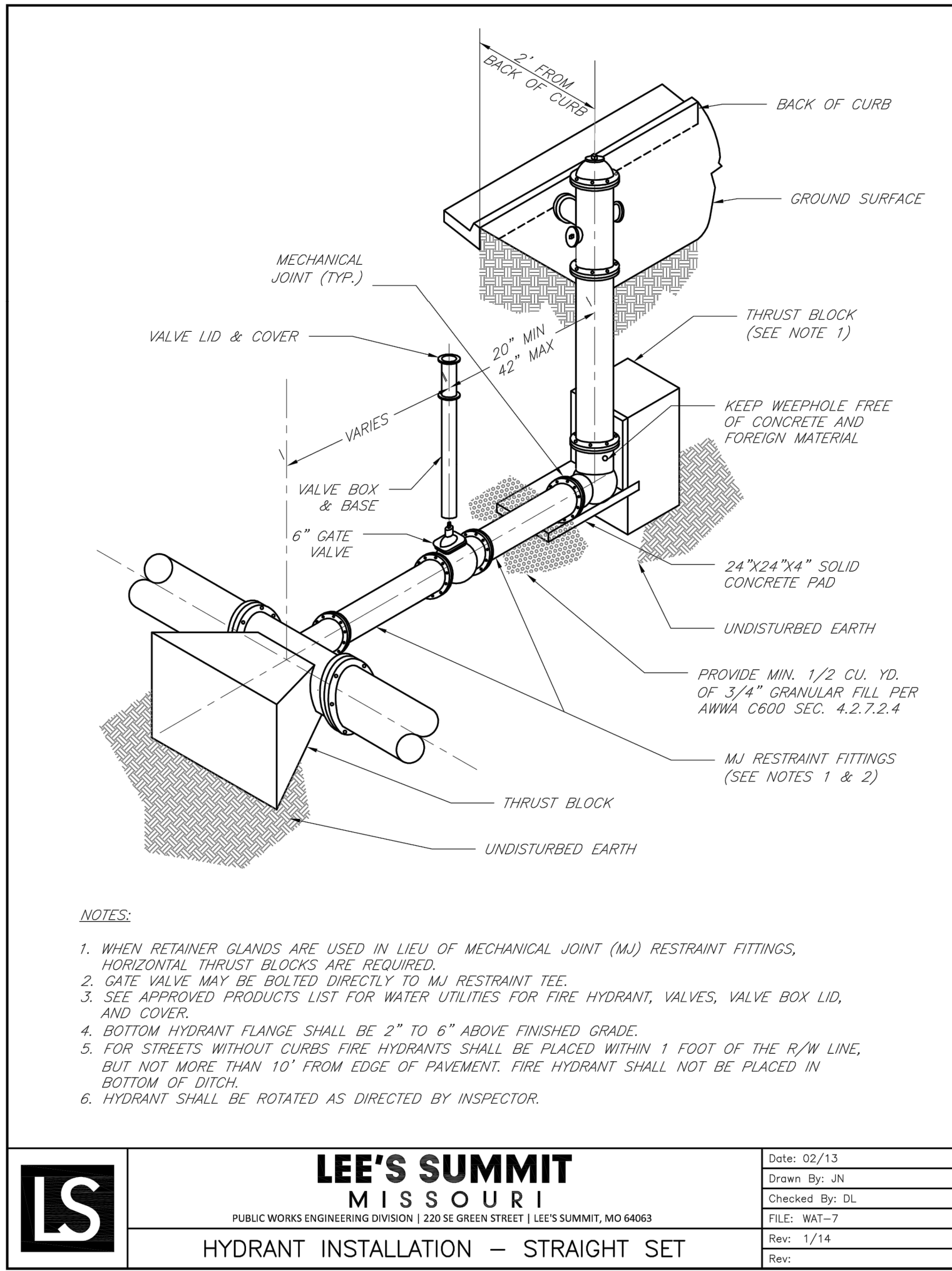
LEE'S SUMMIT

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:



LS

LEE'S SUMMIT

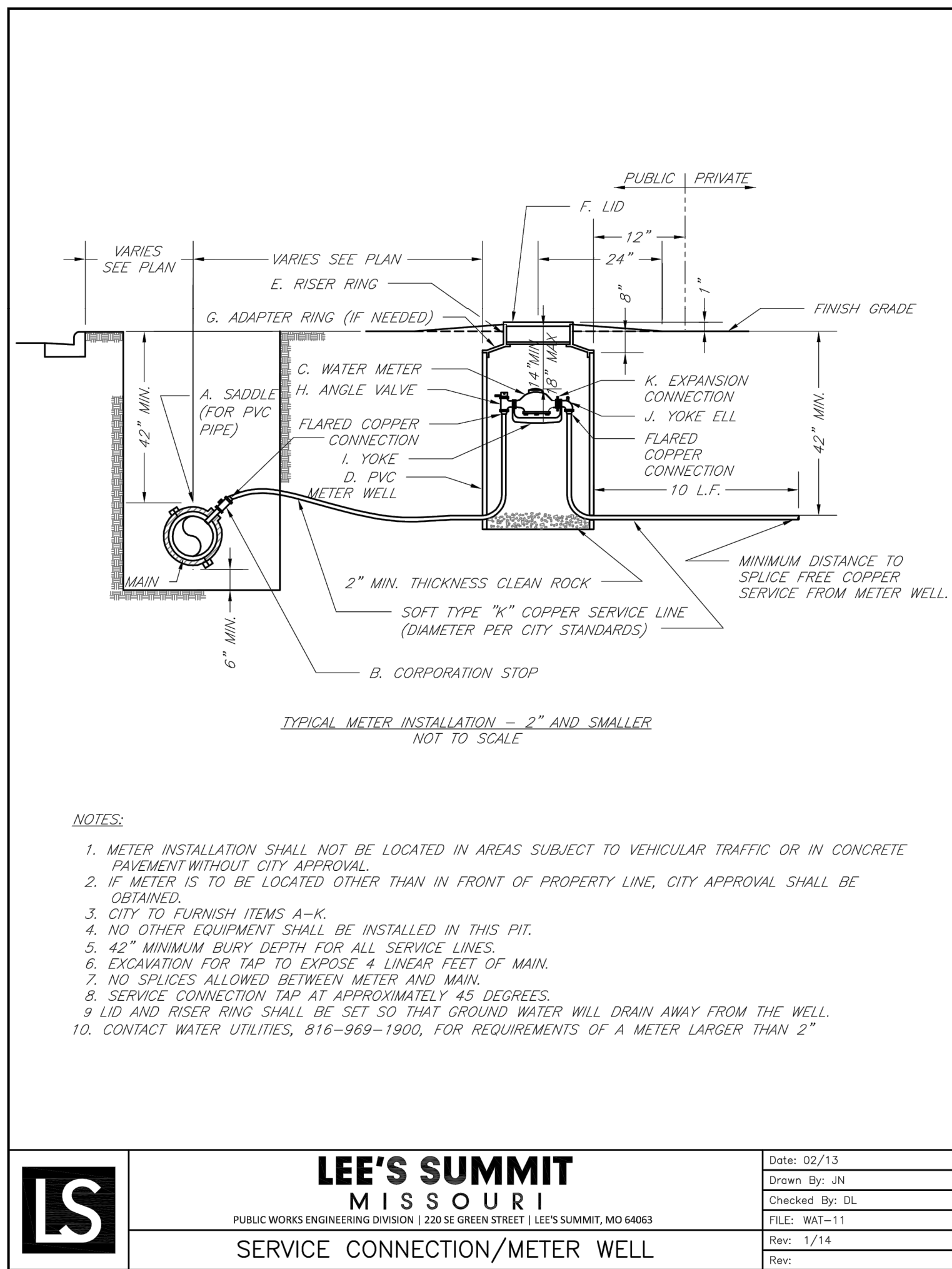
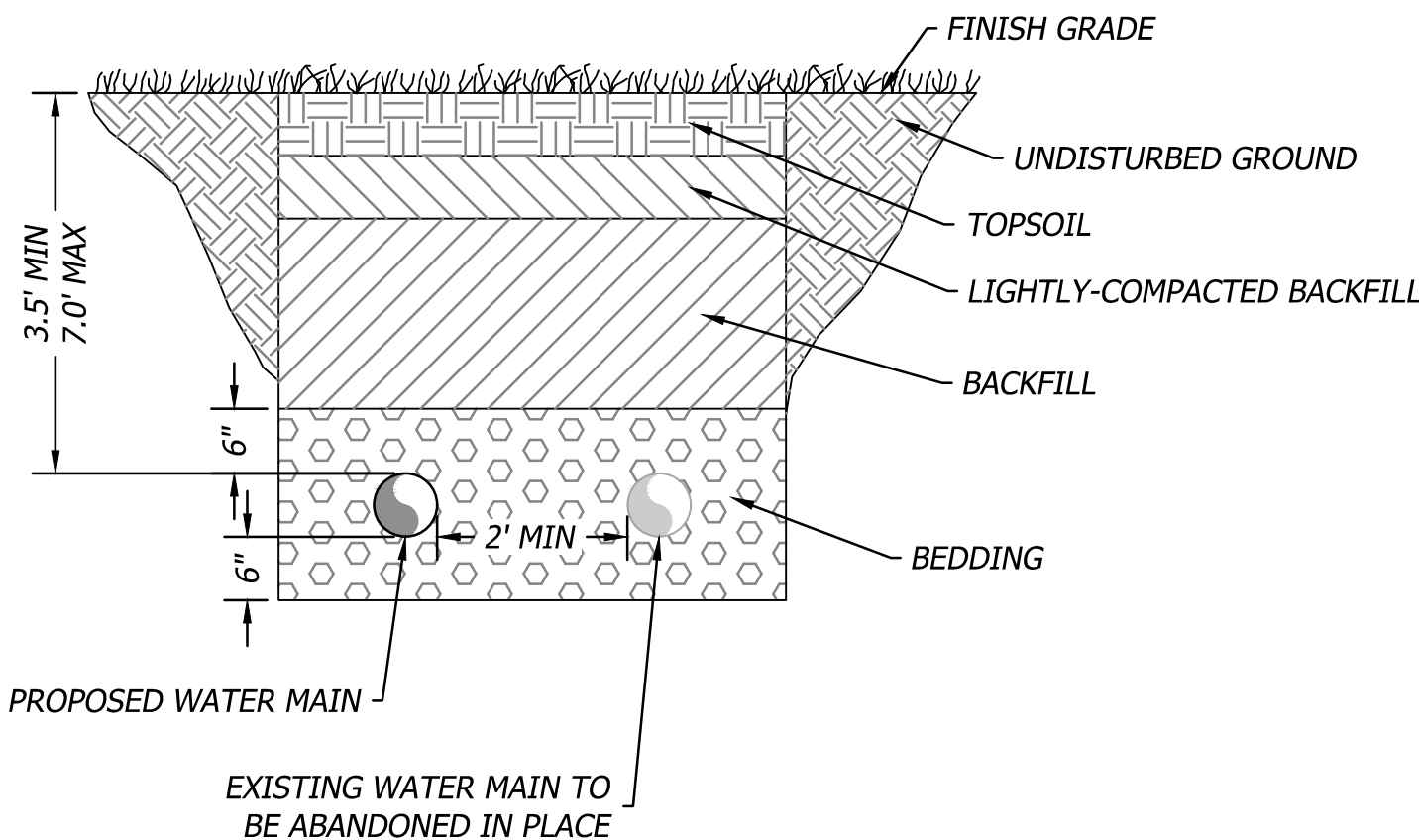
MISSOURI

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HYDRANT INSTALLATION - STRAIGHT SET

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

TYPICAL WATER MAIN TRENCH WITH ABANDONED IN PLACE PIPE
Not to Scale



LS

LEE'S SUMMIT

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SERVICE CONNECTION/METER WELL

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-11
Rev: 1/14
Rev:

STATE OF MISSOURI

ERIC BYRD

02/29/2022

NUMBER

PE-2018013633

PROFESSIONAL ENGINEER

PHOENIX

ENGINEERING & SURVEYING, LLC

ONE SHERWOOD AVENUE, SUITE 400

710 COLLEGE BLVD., SUITE 400

OVERLAND PARK, KANSAS 66210

P. 913.663.1900

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PUBLIC WATER MAIN IMPROVEMENTS

JOHN KNOX VILLAGE MEADOWS

LEE'S SUMMIT, MO 64081

WATER MAIN DETAILS

Design: SKT

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Checked: ERB

Issue Date: 09/24/2021

Project Number: 028800

5

Record Drawing

03/29/22

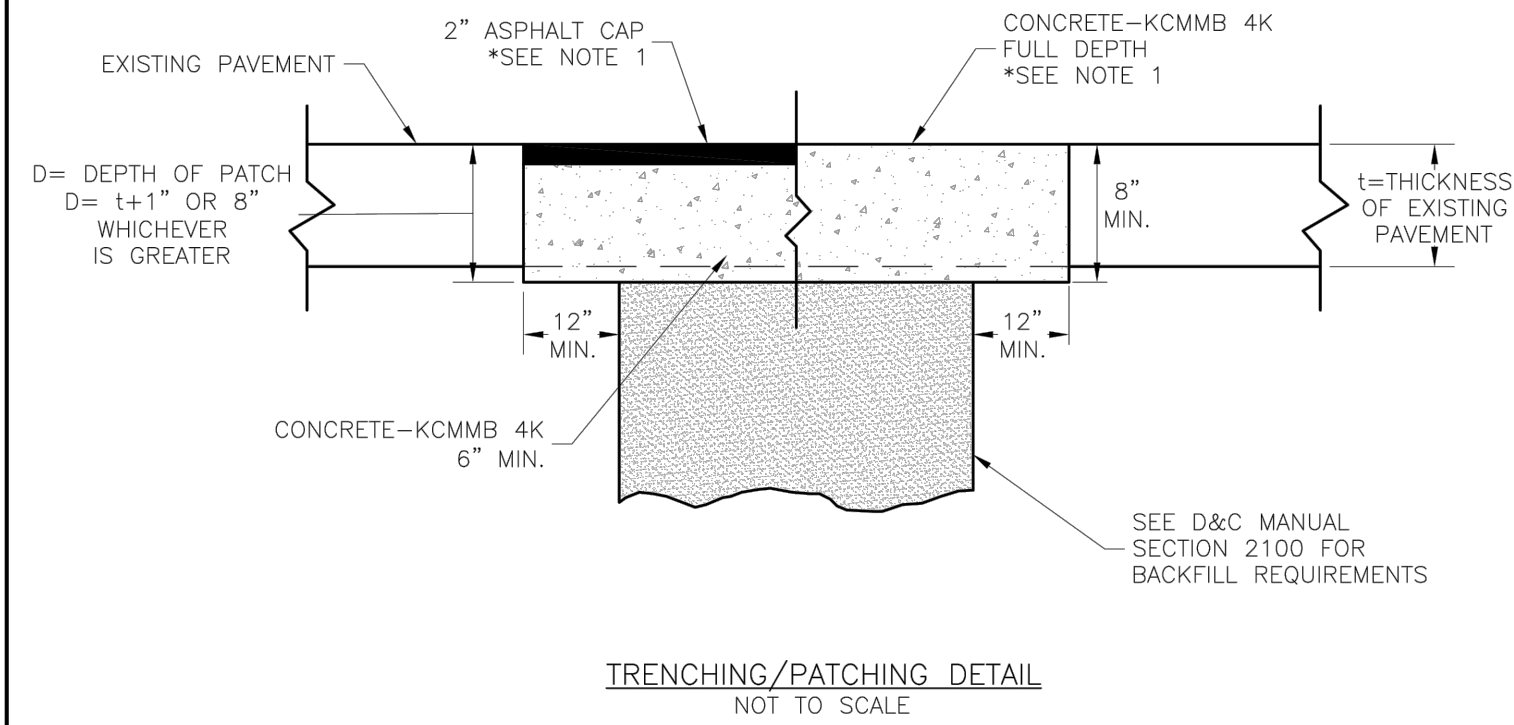
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Date

By

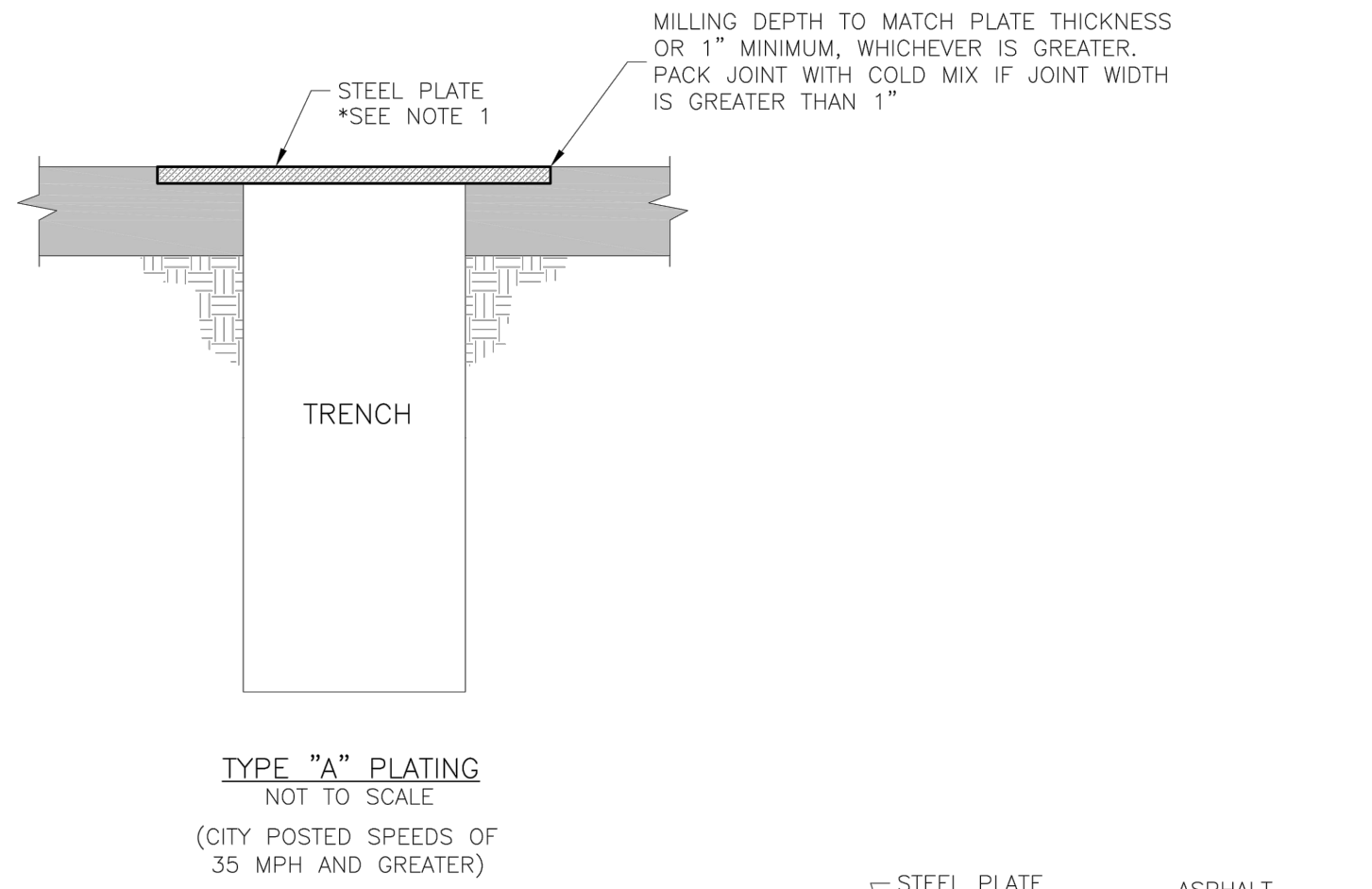
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Mar 29, 2022 3:15 pm Plotted By: Eric Byrd V:\028800-John Knox Village Ph \04-DWG\Eng\Sheet\PIE\028800-SHTS-WMAIN.dwg Layout: DETAILS (2)



NOTE:
1. ASPHALT CAP OR FULL DEPTH CONCRETE SHALL BE DETERMINED BY CITY INSPECTOR.

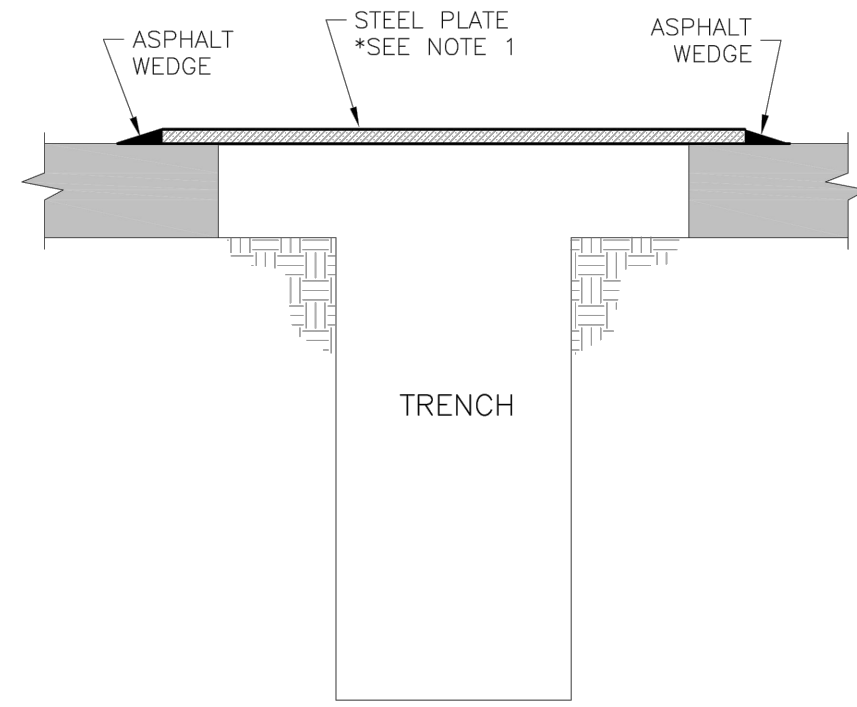
LS	LEE'S SUMMIT MISSOURI <small>PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063</small>	Date: 04/17
	TRENCHING/PATCHING ROADWAYS DETAIL	Drawn By: MJF
		Checked By: DL
		GEN-5



TYPE "A" PLATING
NOT TO SCALE
(CITY POSTED SPEEDS OF
35 MPH AND GREATER)

GENERAL NOTES:

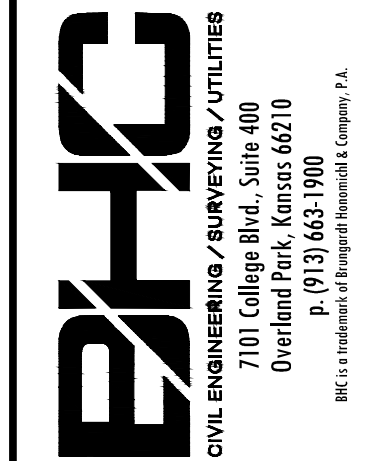
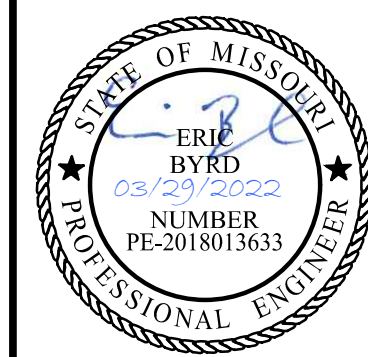
1. THE CONTRACTOR SHALL PROVIDE ADEQUATE OVERLAP OF PLATE ON ASPHALT TO ASSURE NO SLIPPAGE OF PLATE AND NO COLLAPSING OF TRENCH.
2. ALL PLATES SHALL BE ANCHORED SO PLATES DO NOT MOVE OR SHIFT UNDER TRAFFIC.



TYPE "B" PLATING
NOT TO SCALE
(CITY POSTED SPEEDS OF
30 MPH OR LESS)

LS	LEE'S SUMMIT MISSOURI <small>PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063</small>	Date: 04/17
	TRENCHING PLATE DETAIL	Drawn By: MJF
		Checked By: DL
		GEN-6

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PUBLIC WATER MAIN IMPROVEMENTS
JOHN KNOX VILLAGE MEADOWS
LEE'S SUMMIT, MO 64081
WATER MAIN DETAILS 2

Design: SKT Drawn: SKT
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Issue Date: 09/24/2021
Project Number: 028800