

WATER MAIN PLANS FOR WHISPERING WOOD 2ND PLAT

CITY OF LEE'S SUMMIT JACKSON COUNTY, MISSOURI

LEGAL DESCRIPTION

PROPERTY DESCRIPTION-WHISPERING WOODS SECOND PLAT
CONTAINING 248,599 SQUARE FEET OR 5.71 ACRES

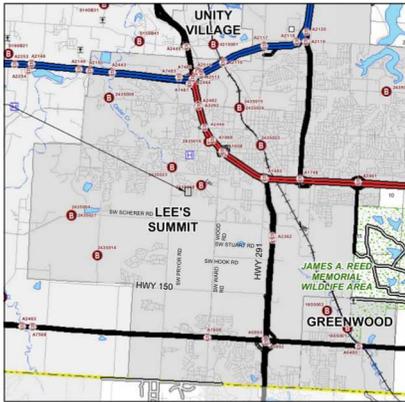
PART OF THE SOUTHWEST QUARTER OF SECTION 24, TOWNSHIP 47 NORTH, RANGE 32 WEST, LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, BEING DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 24; THENCE N87°38'05"W, ALONG THE SOUTH LINE OF THE NORTH HALF OF SAID SOUTHWEST QUARTER, A DISTANCE OF 572.29 FEET TO THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE N87°38'05"W, CONTINUING ALONG SAID LINE, A DISTANCE OF 819.48 FEET TO THE SOUTHEAST CORNER OF TRACT D, WHISPERING WOODS FIRST PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT, JACKSON COUNTY, MISSOURI; THENCE N02°21'55"E, ALONG THE EASTERLY LINE OF SAID PLAT OF WHISPERING WOODS FIRST PLAT, A DISTANCE OF 180.00 FEET; THENCE N87°38'05"W, CONTINUING ALONG SAID LINE, A DISTANCE OF 11.45 FEET; THENCE N02°21'55"E, CONTINUING ALONG SAID LINE, A DISTANCE OF 120.00 FEET TO THE NORTHEAST CORNER OF LOT 28, SAID PLAT OF WHISPERING WOODS FIRST PLAT; THENCE S87°38'05"E, A DISTANCE OF 677.89 FEET; THENCE S02°31'15"W, A DISTANCE OF 21.63 FEET; THENCE S87°40'43"E, A DISTANCE OF 202.02 FEET; THENCE S02°19'17"W, A DISTANCE OF 73.39 FEET; THENCE SOUTHWESTERLY, ALONG A CURVE TO THE RIGHT BEING TANGENT TO THE LAST DESCRIBED COURSE, HAVING A RADIUS OF 25.00 FEET, AN ARC DISTANCE OF 39.27 FEET; THENCE N87°40'43"W, A DISTANCE OF 24.00 FEET; THENCE S02°21'55"W, A DISTANCE OF 180.09 FEET TO THE POINT OF BEGINNING.

PROJECT BENCH MARK

ELEV. 1006.89 (NAVD 1988 DATUM)

MISSOURI DEPARTMENT OF NATURAL RESOURCES GRS
ALUMINUM DISK STAMPED "JA-47" LOCATED NEAR THE
INTERSECTION OF HWY 150 WITH REGGATA DRIVE AND HWY 291

PROJECT LOCATION



LOCATION MAP
N.T.S.

SUMMARY OF QUANTITIES

ITEM	UNIT	PLAN	AS-BUILT
8" C900 PVC	LF	993	
8" Gate Valve	EA	2	
6" Gate Valve	EA	3	
8"x8"x8" TEE	EA	1	
8"x8"x6" TEE	EA	3	
6" 90° Bend	EA	3	
8" Plug	EA	2	
Fire Hydrant Assembly	EA	3	
Connect to Existing	EA	1	
Utility Marker Tape	LF	993	
Tracer Wire	LF	993	

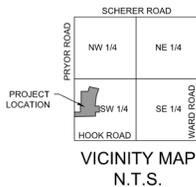
Summary of Quantities as indicated above and any quantities as shown within the plans have been provided for permitting purposes only and are not intended for use in preparation of contract documents. Quantities intended for, but not limited to, the preparation of proposals and bid documents shall be independently evaluated by the estimating party based upon the contents of these plans.

INDEX TO SHEETS

- 1 TITLE SHEET
- 2 GENERAL NOTES
- 3 GENERAL LAYOUT
- 4 WATER MAIN PLAN AND PROFILE
- 5-6 DETAILS

UTILITY SERVICE NUMBERS

SPECTRUM	888-874-2389
EVERGY	816-220-5213
SPIRE GAS	816-399-9633
LEE'S SUMMIT PUBLIC WORKS	816-969-1600
CITY PLANNING & DEVELOPMENT	816-969-1600
FIRE DEPARTMENT	816-969-1300



VICINITY MAP
N.T.S.

APPROVED:

City Engineer

Date

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

12/16/2020

DEVELOPER:

WHISPERING WOODS LAND, L.L.C.
803 P.C.A. ROAD
WARRENSBURG, MO 64093
AGENT: RICK FRYE
PHONE: 816.564.2230
FAX: 660.429.1801

REVISIONS TO WATERLINE	08/16/20	SD	BY
REVISION	DATE	SCALE	N/A
Engineer: SD	Checked By: N/A	Scale: N/A	Field Bk.
Traffician: JS	Date: 7-26-20	Field Bk.	Py.
Snyder & Associates Engineers & Planners, Inc.			Sheet
Missouri State Certificate of Authority #000000654			1

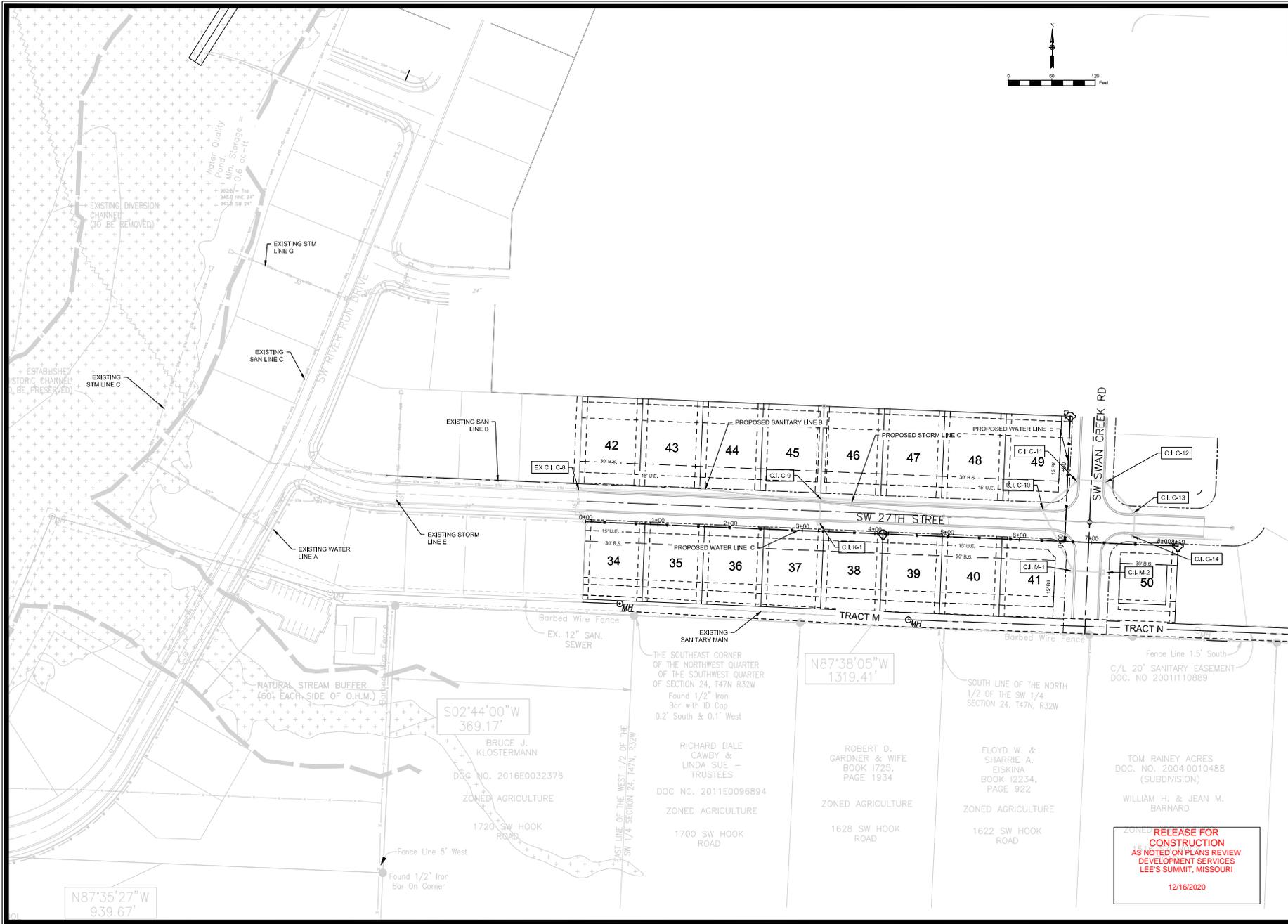
SHAWN DUKE - ENGINEER
MO PE#2013006489

LEE'S SUMMIT, MO
802 FRANCIS STREET
ST. JOSEPH, MO 64501
816-964-9222

WHISPERING WOODS 2ND PLAT
WATER MAIN PLANS

TITLE SHEET
SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.
www.snyder-associates.com





NO.	REVISION	DATE	BY

STATE OF MISSOURI
 SHAWN DUKE - ENGINEER
 MO PE#2013006489

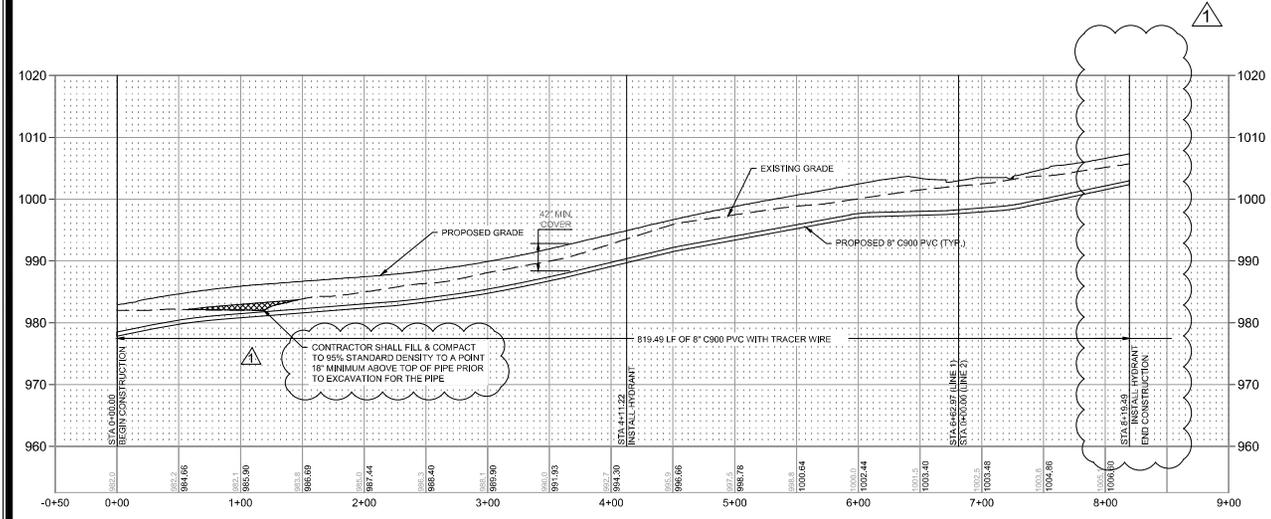
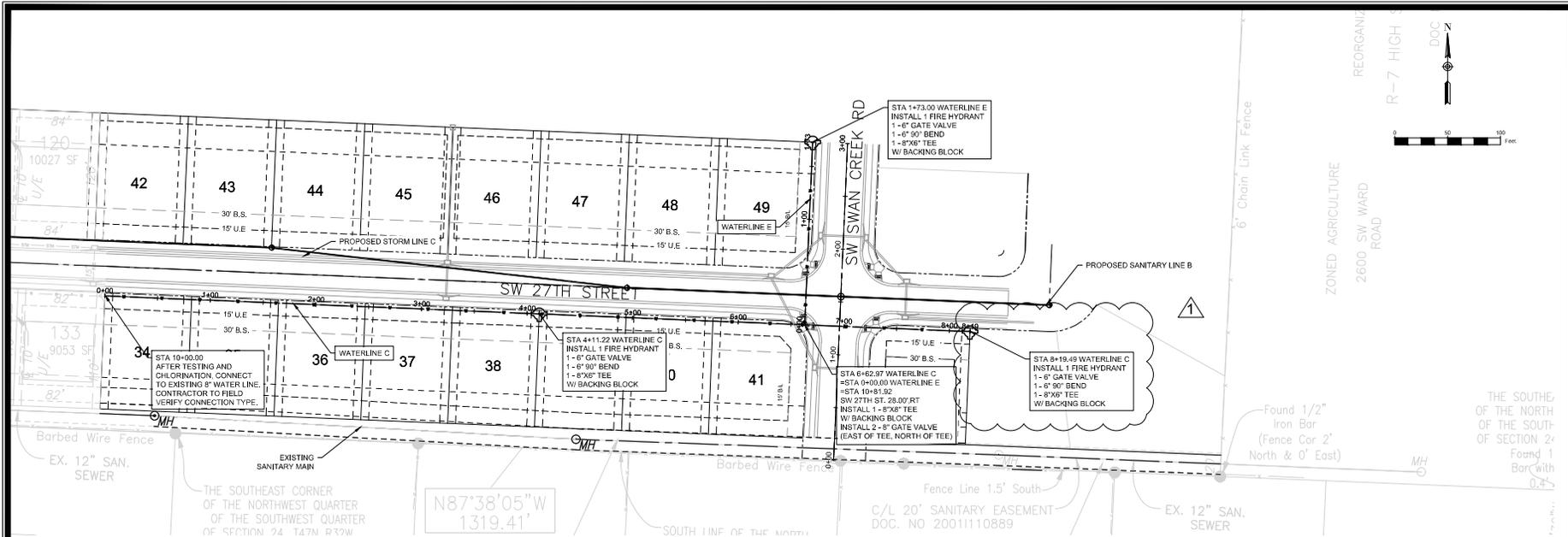
LEES SUMMIT, MO
 802 FRANCIS STREET
 ST. JOSEPH, MO 64501
 816-961-9222
 www.snyder-associates.com

WHISPERING WOODS 2ND PLAT
WATER MAIN PLANS
 GENERAL LAYOUT
SNYDER & ASSOCIATES
 ENGINEERS & PLANNERS, INC.



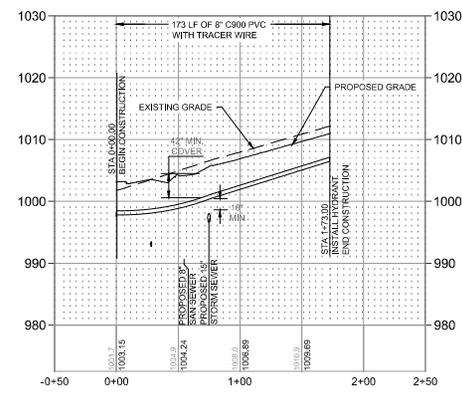
Project No: 120.0484.11
 Sheet 3

RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 12/16/2020



LINE C

RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEES SUMMIT, MISSOURI
 12/16/2020



LINE E

REVISION TO PROFILE	SD	Scale: 1" = 50'	Field Bk.	Sheet	4
REVISION	SD	Date: 7-28-20	Field Bk.		
DATE	BY				
08/02					
1					



SHAWN DUKE - ENGINEER
 MO PE2013006489
 LEES SUMMIT, MO
 802 FRANCIS STREET
 ST. JOSEPH, MO 64501
 816-964-9222
 www.snyder-associates.com

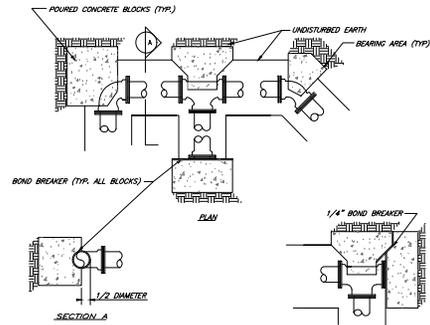
WHISPERING WOODS 2ND PLAT
WATER MAIN PLANS
WATER MAIN PLAN & PROFILE
SNYDER & ASSOCIATES
 ENGINEERS & PLANNERS, INC.



REQUIRED CONCRETE BEARING AREA (SQUARE FEET - SF)					
NOM. DIA. (INCHES)	180	90	45	22.5	11.25
6	4.7	6.7	4.0	4.0	4.0
8	6.4	11.4	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.8	26.7	14.4	7.4	4.0
14	25.5	40.4	20.6	11.1	6.0
16	32.2	54.1	28.8	15.8	6.0
18	38.9	67.8	39.6	22.5	6.0
20	45.6	81.5	52.8	31.2	6.0
24	64.8	111.6	72.0	43.2	14.8

NOTES:

1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. WEDGE 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.

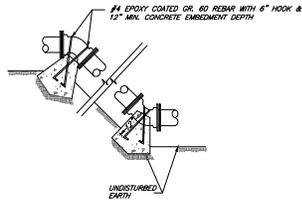


LS	LEE'S SUMMIT MISSOURI	Drawn: 02/13
	HORIZONTAL THRUST BLOCKS	Drawn By: JR
		Checked: RY DL
		FILE: WP-1
		Rev: 1/14
		Rev:

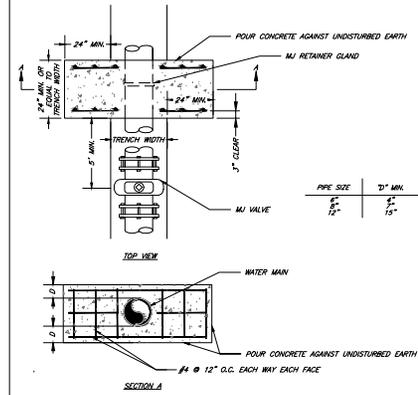
REQUIRED CONCRETE VOLUME (CUBIC FEET - CF)					
NOM. DIA. (INCHES)	180	90	45	22.5	11.25
6	50.5	71.4	38.6	19.7	9.9
8	69.8	126.3	64.6	35.0	17.6
10	140.5	258.3	107.4	54.7	27.5
12	205.0	403.3	154.4	78.8	39.6
14	282.0	561.3	212.4	109.1	53.9
16	370.0	742.3	284.4	145.1	70.9
18	468.0	946.3	376.4	191.1	96.9
20	576.0	1173.3	488.4	247.1	128.9
24	816.0	1626.3	672.4	343.1	178.9

NOTES:

1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. WEDGE 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.



LS	LEE'S SUMMIT MISSOURI	Drawn: 02/13
	VERTICAL THRUST BLOCKS	Drawn By: JR
		Checked: RY DL
		FILE: WP-1
		Rev: 1/14
		Rev:



NOTE:

THIS DETAIL NOT TO BE USED FOR PIPE GREATER THAN 12"

LS	LEE'S SUMMIT MISSOURI	Drawn: 02/13
	STRADDLE BLOCK	Drawn By: JR
		Checked: RY DL
		FILE: WP-1
		Rev: 1/14
		Rev:

REVISION	SD	Scale:	N/A	DATE	BY
Engineer	JS	Date:	7-28-20	Field Bk.	Py:
Snyder & Associates Engineers & Planners, Inc. Missouri State Certificate of Authority: 000000054					
					Sheet 5



SHAWN DUKE - ENGINEER
MO PE#2013006489

LEE'S SUMMIT, MO
802 FRANCIS STREET
ST. JOSEPH, MO 64501
816-964-9222
www.snyder-associates.com

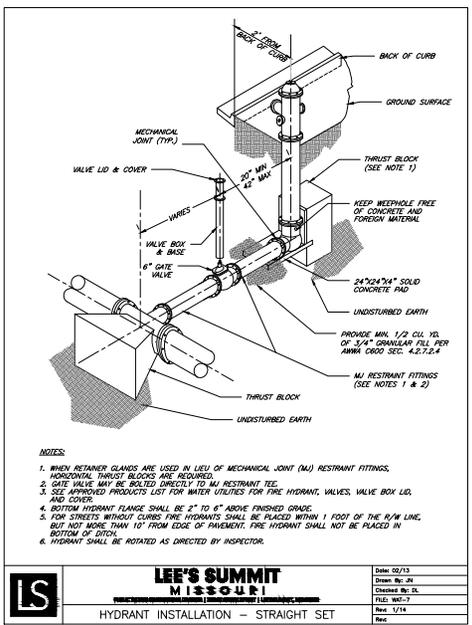
WHISPERING WOODS 2ND PLAT
WATER MAIN PLANS
DETAILS
SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.



Project No: 120.0484.11

Sheet 5

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

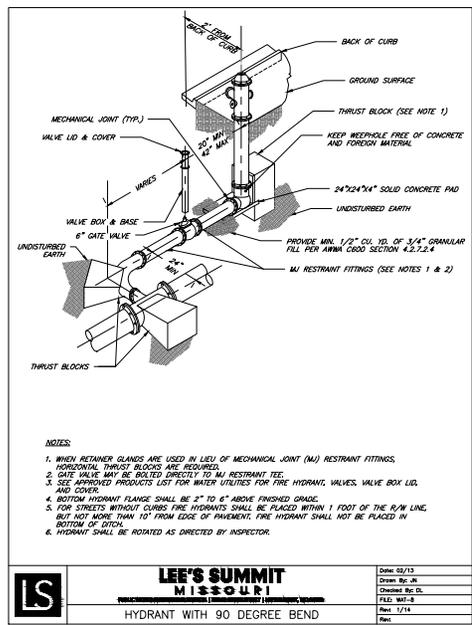


- NOTES:**
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
 2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
 3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
 4. 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

HYDRANT INSTALLATION - STRAIGHT SET

Date:	02/13
Drawn By:	JH
Checked By:	SL
File No.:	1
Rev.:	1/14
Rev.:	

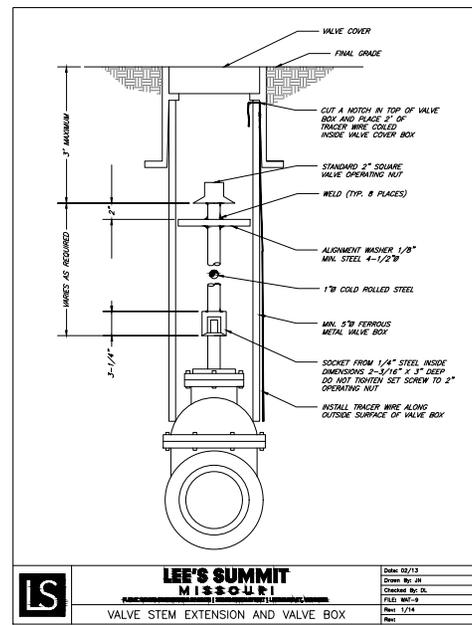


- NOTES:**
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
 2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
 3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
 4. 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

HYDRANT WITH 90 DEGREE BEND

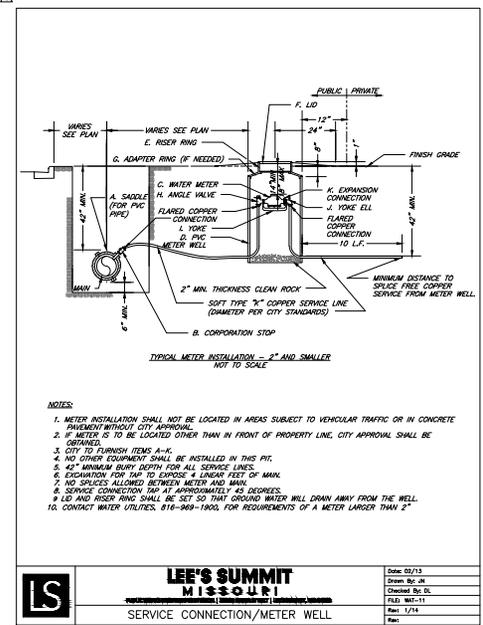
Date:	02/13
Drawn By:	JH
Checked By:	SL
File No.:	1
Rev.:	1/14
Rev.:	



LEE'S SUMMIT MISSOURI

VALVE STEM EXTENSION AND VALVE BOX

Date:	02/13
Drawn By:	JH
Checked By:	SL
File No.:	1
Rev.:	1/14
Rev.:	



- NOTES:**
1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
 2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
 3. CITY TO FURNISH ITEMS A-K.
 4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
 5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
 6. COOPERATION TOP TAP TO EXPOSE 4 LEGS FEET OF MAIN.
 7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
 8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
 9. LD AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
 10. CONTACT WATER UTILITIES: 616-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

LEE'S SUMMIT MISSOURI

SERVICE CONNECTION/METER WELL

Date:	02/13
Drawn By:	JH
Checked By:	SL
File No.:	1
Rev.:	1/14
Rev.:	

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

12/16/2020

REVISION	SD	Scale:	N/A
DATE		Field Bk.	
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field Bk.			
Scale:			
SD			
REVISION			
DATE			
BY			
8/4/20			
US			
Field B			