# THE RIDGE AT WINTERSET SUMMIT

## LOTS 1601-1605 SANITARY SEWER CONSTRUCTION PLANS

Part of Section 2 & 3, Township 47 North, Range 32 West

Lee's Summit, Jackson County, Missouri

#### CONSTRUCTION AND DESIGN NOTES:

#### SANITARY SEWERS:

1. SANITARY SEWER PIPE SHALL BE POLY VINYL CHLORIDE (PVC). SDR-26. UNLESS NOTED OTHERWISE IN THESE PLANS.

2. HOUSE SEWER LATERALS SHALL BE 4 INCH PVC, SDR-26. LATERALS SHALL BE CONSTRUCTED USING A TOP ORIENTED "WYE" AT THE SEWER STATION SHOWN IN THESE PLANS. LATERALS SHALL BE LAID AT A GRADE OF 2.0% FROM THE SEWER MAIN TO THE STREET RIGHT-OF-WAY LINE OR EASEMENT LINE AS REPRESENTED BY THE LATERAL LENGTH SHOWN IN THESE PLANS. THE ELEVATION SHOWN FOR THE END OF THE LATERAL IN THESE PLANS IS APPROXIMATE.

3. THE CONTRACTOR SHALL MAINTAIN A LOG OF THE "AS BUILT" STATION AND LENGTH OF EACH HOUSE LATERAL AND SHALL PROVIDE ENGINEERING SOLUTIONS, L.L.C. WITH A COPY OF SAID LOG UPON COMPLETION OF SEWER CONSTRUCTION.

4. ALL MANHOLES INSTALLED IN THE STREET RIGHT-OF-WAY SHALL BE FINISHED 1/2" PER FOOT ABOVE THE NEAREST ADJACENT BACK OF CU

5. A STAKE SHALL BE PLACED AT THE END OF EACH WYE CONNECTION WITH THE END ELEVATION WRITTEN ON THE STAKE

6. FILL AREAS SHALL HAVE 18" OF COMPACTED FILL IN PLACE PRIOR TO TRENCHING

7. A TRENCH CHECK CONSISTING OF FLOWABLE FILL MUST BE INSTALLED ON EVERY PRIVATE LATERAL

#### GENERAL NOTE:

1 ~ ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
2 ~ TRENCH CHECKS SHALL BE INSTALL AT ALL SANITARY WYES LOCATION.

#### OIL - GAS WELLS

ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

#### FLOOD INFORMATION:

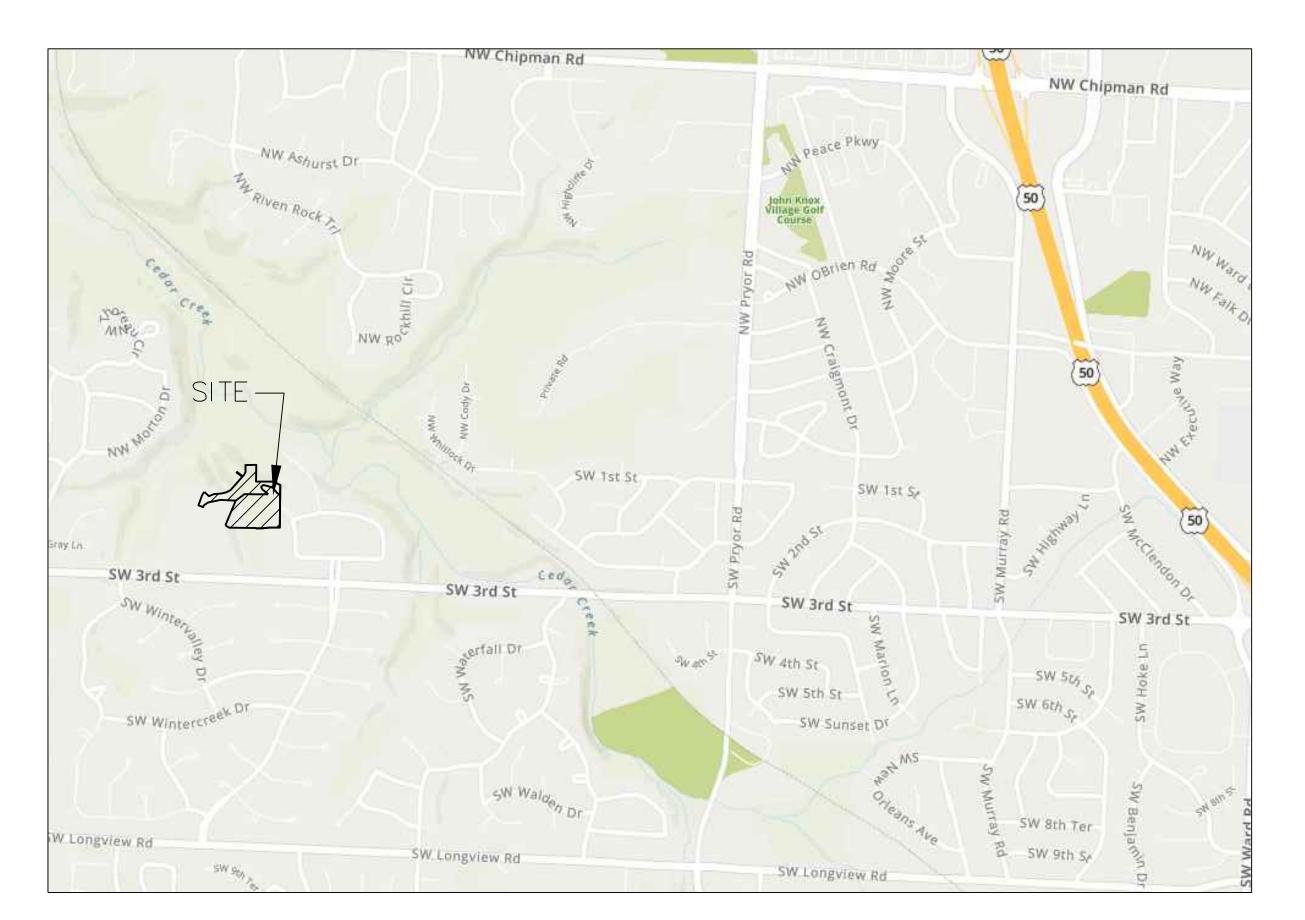
The property is located in Zone "X" areas outside the 100 year flood plain per FEMA Map 29095C0416G, dated January 20, 2017

CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200

CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900 MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

## **UTILITY COMPANIES:**

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS. EVERGY ~ 298-1196 MISSOURI GAS ENERGY ~ 756-5261 SOUTHWESTERN BELL TELEPHONE ~ 761-5011 COMCAST CABLE ~ 795-1100 WILLIAMS PIPELINE ~ 422-6300 CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800



## SITE LOCATION MAP

#### **INDEX OF SHEETS:**

C.400 ~ SANITARY SEWER COVER SHEET
C.401 ~ SANITARY SEWER GENERAL LAYOUT
C.402 ~ SANITARY SEWER PLAN & PROFILE
C.403 ~ SANITARY SEWER DETAILS

#### **Summary of Quantities:**

ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
SANITARY		
4" PVC SDR 26 Service Line	LF	218.95
8" PVC SDR 26	LF	709.04
4' DIA Manhole	EA	6.00
PIPE ANCHORS	LS	5.00
TEES, BENDS, WYES	LS	5.00
CONNECTION TO EXISTING SANITARY SEWER	LS	1.00
TRACER WIRE AND EQUIPMENT	L.F.	709.04

LEGEND:

B/L - BUILDING SET-BACK

C/A - COMMON AREA

D/E - DRAINAGE EASEMENT

FND. - FOUND

L/E - LANDSCAPE EASEMENT

L.N.A. - LIMITS OF NO ACCESS

R/W - RIGHT OF WAY

SAN - SANITARY SEWER LINE

S/W - SIDEWALK

U/E - UTILITY EASEMENT

W - WATER LINE

ST - STORM SEWER LINE

#### **ENGINEER'S CERTIFICATION:**

I HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DESIGNED AND THESE PLANS PREPARED IN ACCORDANCE WITH THE CURRENT DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT, MISSOURI AND THE STATE OF MISSOURI. I FURTHER CERTIFY THAT THESE PLANS WERE DESIGNED IN ACCORDANCE TO AASHTO STANDARDS.

#### CITY OF LEE'S SUMMIT, MISSOURI

APPROVED: DATE: \_\_\_\_\_\_

BY: \_\_\_\_\_

CITY ENGINEER

SOLUTIONS & SURVEYING OLUTIONS

50 SE 30TH STREET
LEE'S SUMMIT, MO 64082

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Missouri
nineering 2005002186-D
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Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska

The Ridge at Winterset Summit ee's Summit, Jackson County, Miss

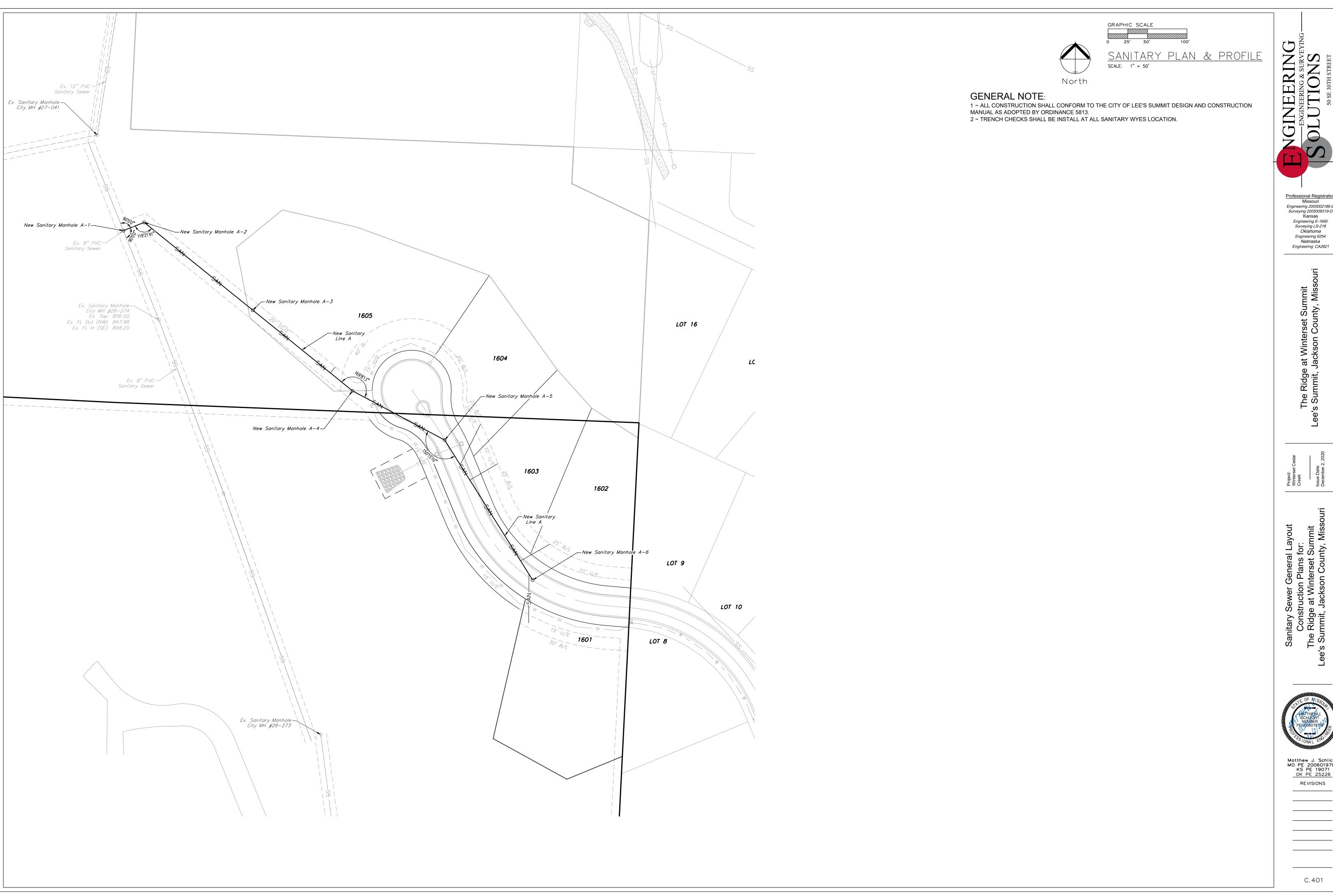
Project:
Winterset Cedar
Creek
Issue Date:

Cover Sheet
Construction Plans for:
The Ridge at Winterset Summit



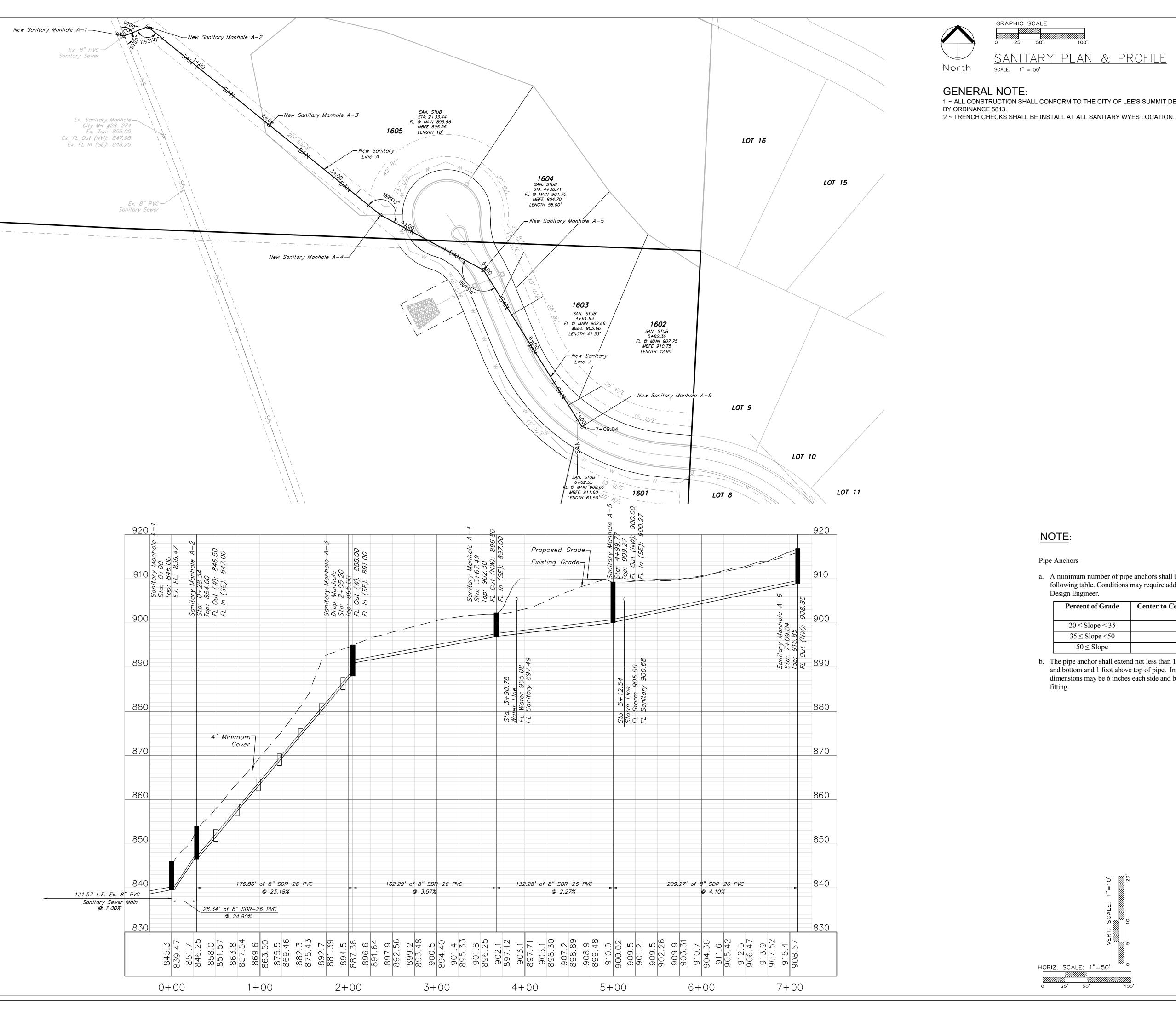
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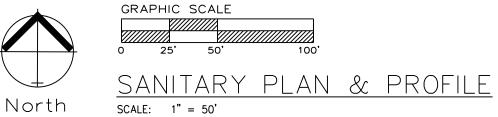
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Surveying 2005008319-D
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Oklahoma Engineering 6254 Nebraska

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### NOTE:

### Pipe Anchors

HORIZ. SCALE: 1"=50'

a. A minimum number of pipe anchors shall be provided in accordance with the following table. Conditions may require additional anchors as determined by the Design Engineer.

Percent of Grade	Center to Center Max. Spacing (ft)
$20 \le \text{Slope} < 35$	36
$35 \le \text{Slope} < 50$	24
50 ≤ Slope	16

b. The pipe anchor shall extend not less than 1 foot into undisturbed earth on the sides and bottom and 1 foot above top of pipe. In incompressible material, the above dimensions may be 6 inches each side and bottom. The anchor shall support a joint



Professional Registration Engineering 2005002186-D Surveying 2005008319-D Kansas Engineering E-1695 Surveying LS-218

Oklahoma Engineering 6254 Nebraska Engineering CA2821

The Ridge is Summit, J

Project:
Winters
Creek

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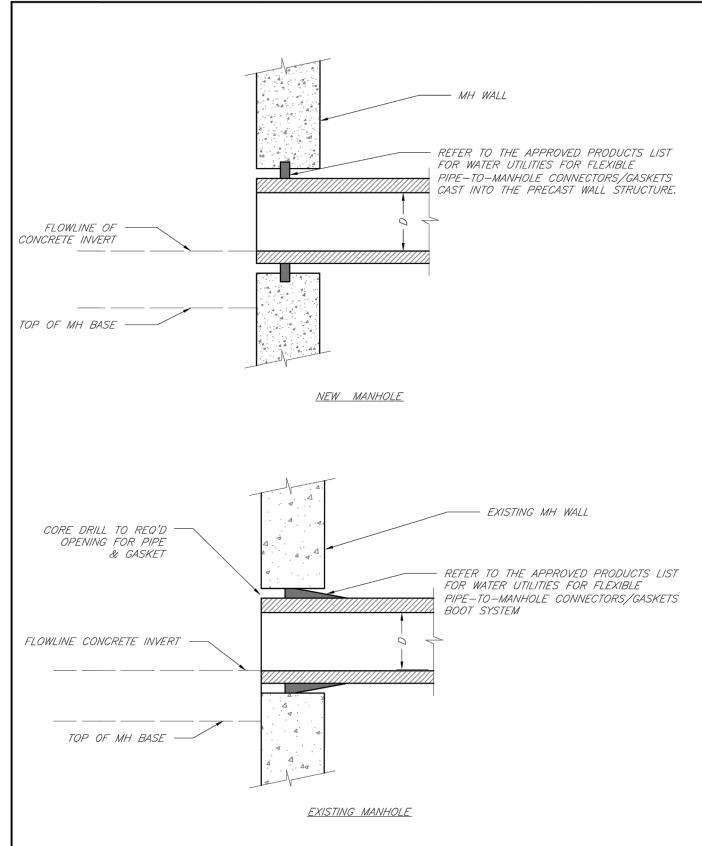
REVISIONS

C.402

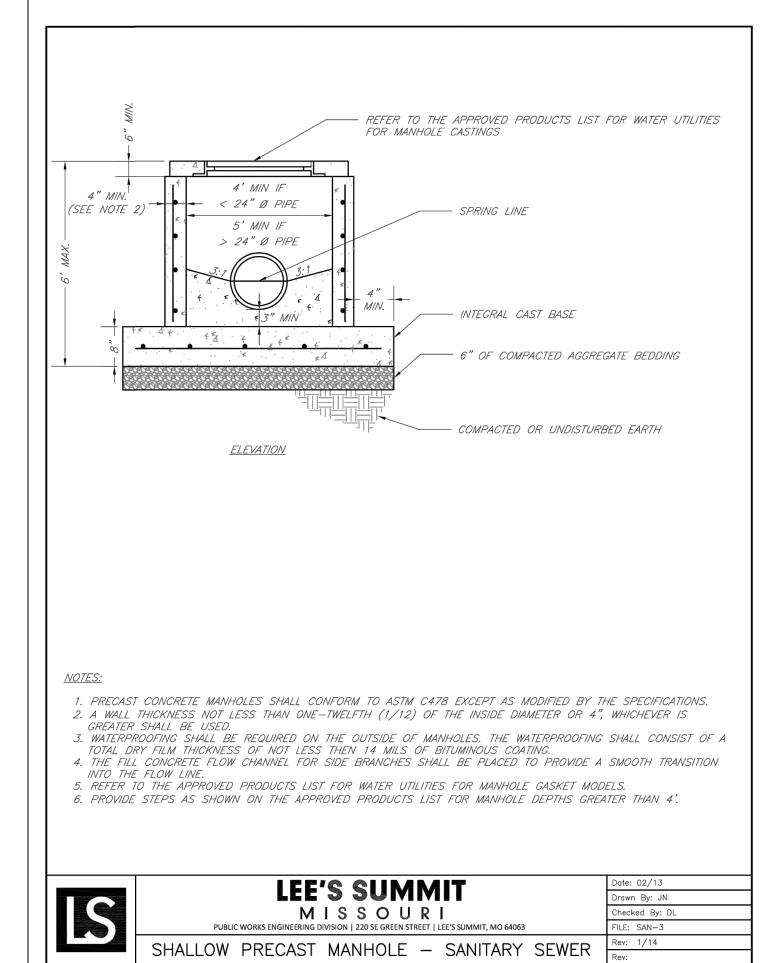
1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS. 2. A WALL THICKNESS NOT LESS THAN ONE—TWELFTH ( $^{\prime}\!\!\!/_{12}$ ) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS

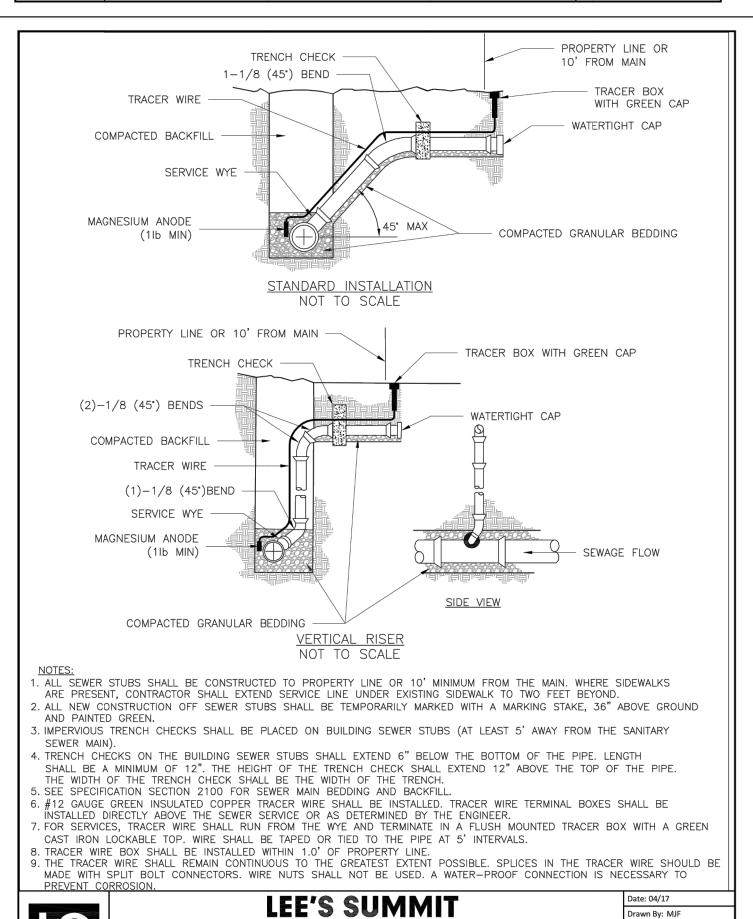
- GREATER, SHALL BE USED WHEN THE MANHOLE DEPTH IS LESS THEN 15'. 3. WATERPROOFING SHALL BE REQUIRED ON THE OUTSIDE OF MANHOLES. THE WATERPROOFING SHALL CONSIST OF
- A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 14 MILS OF BITUMINOUS COATING. 4. ONLY ECCENTRIC MANHOLE CONES WILL BE ALLOWED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. 5. THE FILL CONCRETE FLOW CHANNEL FOR SIDE BRANCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION
- 6. REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR APPROVED MANHOLE GASKET MODELS.
- 7. REFER TO THE APPROVED PRODUCTS LIST FOR APPROVED STEPS.

LEE'S SUMMIT		Date: 02/13
M I S S O U R I  PUBLIC WORKS ENGINEERING DIVISION   220 SE GREEN STREET   LEE'S SUMMIT, MO 64063  STANDARD PRECAST MANHOLE — SANITARY SEWER	FEE 3 20 IAIIAII I	Drawn By: JN
	Checked By: DL	
	PUBLIC WORKS ENGINEERING DIVISION   220 SE GREEN STREET   LEE'S SUMMIT, MO 64063	FILE: SAN-2
	STANDADD DDECAST MANIHOLE _ SANITADY SEWED	Rev: 1/14
	STANDARD FRECAST MAINTICLE - SAINTART SEWER	Rev:



LS	LEE'S SUMMII MISSOURI	Date: 02/13
		Drawn By: JN
		Checked By: DL
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	MANHOLE WALL CONNECTIONS F	Rev: 1/14
		Rev:
		rev:





MISSOURI

BUILDING SEWER STUB AND RISER

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