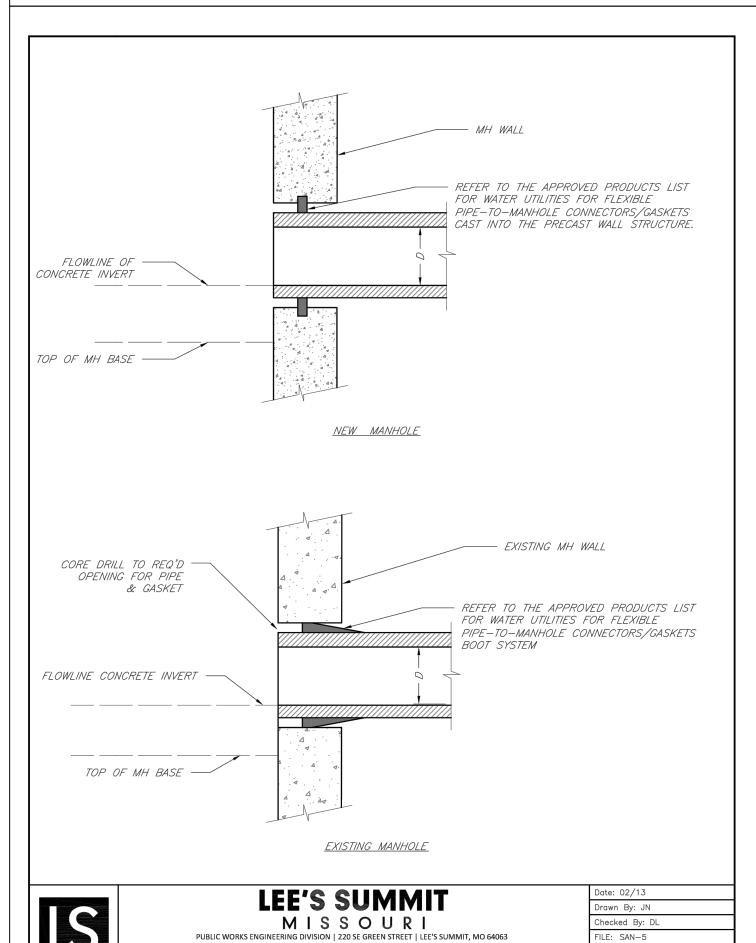


1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS. 2. A WALL THICKNESS NOT LESS THAN ONE—TWELFTH ($^{\prime}\!\!\!/_{12}$) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS GREATER, SHALL BE USED WHEN THE MANHOLE DEPTH IS LESS THEN 15'.

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
		Drawn By: JN
	MISSOURI	Checked By: DL
	PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063	FILE: SAN-2
	STANDARD PRECAST MANHOLE - SANITARY SEWER	Rev: 1/14
	STANDARD PRECAST MANHOLE - SANITART SEWER	Rev:



MANHOLE WALL CONNECTIONS

ELEVATION - - COMPACTED OR UNDISTURBED EARTH	
<u>NOTES:</u>	
1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS.	
2. A WALL THICKNESS NOT LESS THAN ONE—TWELFTH (1/12) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS GREATER SHALL BE USED.	
3. WATERPROOFING SHALL BE REQUIRED ON THE OUTSIDE OF MANHOLES. THE WATERPROOFING SHALL CONSIST OF A TOTAL DRY FILM THICKNESS OF NOT LESS THEN 14 MILS OF BITUMINOUS COATING.	
4. THE FILL CONCRETE FLOW CHANNEL FOR SIDE BRANCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION INTO THE FLOW LINE.	
5. REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR MANHOLE GASKET MODELS. 6. PROVIDE STEPS AS SHOWN ON THE APPROVED PRODUCTS LIST FOR MANHOLE DEPTHS GREATER THAN 4'.	
Date: 02/13	\dashv
LEE'S SUMMIT MISSOURI Checked By: DL	
PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 FILE: SAN-3	
SHALLOW PRECAST MANHOLE — SANITARY SEWER Rev: 1/14	_
TRENCH CHECK 1-1/8 (45°) BEND TRACER WIRE TRACER BOX WITH GREEN CAP	
WITH GREEN CAP WATERTIGHT CAP	
COMPACTED BACKFILL	
SERVICE WYE	
MAGNESIUM ANODE (11b MIN) MAX COMPACTED GRANULAR BEDDING	
STANDARD INSTALLATION	
NOT TO SCALE	
NOT TO SCALE TRACER BOX WITH GREEN CAP ———————————————————————————————————	
PROPERTY LINE OR 10' FROM MAIN	
TRACER BOX WITH GREEN CAP PROPERTY LINE OR 10' FROM MAIN TRENCH CHECK	
TRACER BOX WITH GREEN CAP PROPERTY LINE OR 10' FROM MAIN	
TRACER BOX WITH GREEN CAP PROPERTY LINE OR 10' FROM MAIN TRENCH CHECK (2)-1/8 (45') BENDS	
TRACER BOX WITH GREEN CAP PROPERTY LINE OR 10' FROM MAIN TRENCH CHECK (2)-1/8 (45') BENDS WATERTIGHT CAP	
TRACER BOX WITH GREEN CAP PROPERTY LINE OR 10' FROM MAIN TRENCH CHECK (2)-1/8 (45') BENDS WATERTIGHT CAP COMPACTED BACKFILL TRACER WIRE (1)-1/8 (45')BEND	
TRACER BOX WITH GREEN CAP PROPERTY LINE OR 10' FROM MAIN TRENCH CHECK (2)-1/8 (45') BENDS WATERTIGHT CAP COMPACTED BACKFILL TRACER WIRE (1)-1/8 (45')BEND SERVICE WYE	
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TRACER BOX WITH GREEN CAP PROPERTY LINE OR 10' FROM MAIN TRENCH CHECK (2)-1/8 (45') BENDS COMPACTED BACKFILL TRACER WIRE (1)-1/8 (45')BEND SERVICE WYE MAGNESIUM ANODE (1ib Min) COMPACTED GRANULAR BEDDING VERTICAL RISER NOT TO SCALE NOTES: 1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN. WHERE SIDEWALK ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND. 2. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITAR SEWER MAIN).	
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NECESSARY TO PREVENT CORROSION.

Rev: 1/14

5. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER SERVICE OR AS DETERMINED BY THE ENGINEER.

6. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A

7. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.

8. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. SPLICES IN THE TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT CONNECTIORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS

Date: 12/13 Drawn By: SC

Checked By: DL

FILE: SAN-1

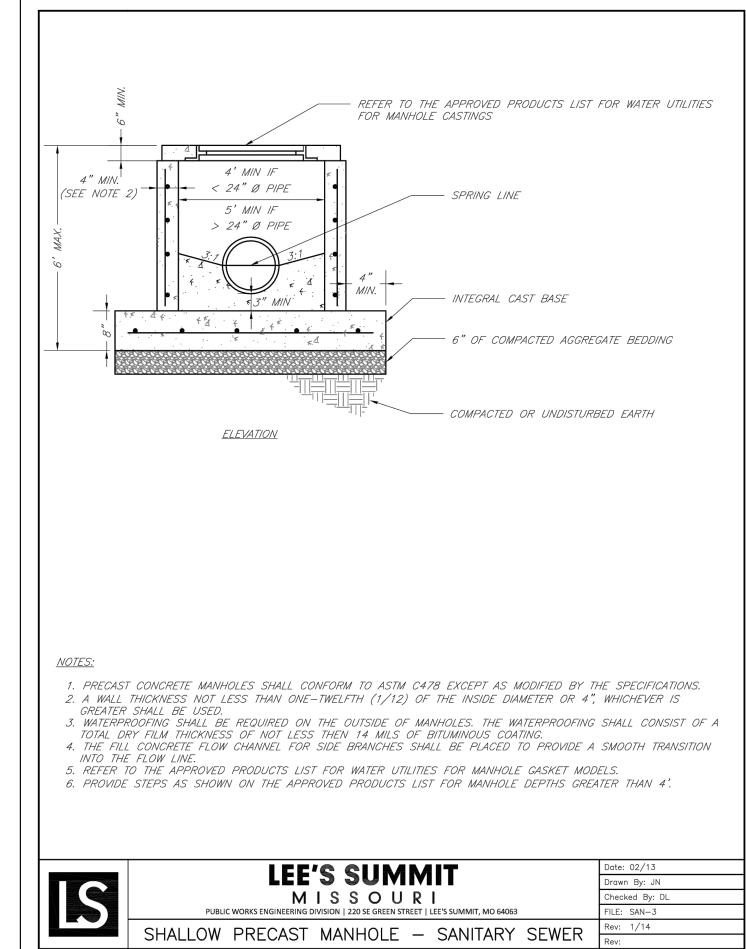
Rev: 10/15 Rev: 12/15

GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.

LEE'S SUMMIT

MISSOURI

BUILDING SEWER STUB AND RISER



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.

Matthew J. Schlicht MO PE 2006019708 KS PE 19071 OK PE 25226

REVISIONS REV. 5-1-17

C.407

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

> Stoney (Jackson it, at

Oklahoma Engineering 6254

Nebraska Engineering CA2821

Project:
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