

NW CORNER, NE 1/4,
SECTION 16, 47N, 31W

NE CORNER, NE 1/4,
SECTION 16, 47N, 31W

EASEMENT FOR SITE TRIANGLE
I108100 B I-320, P 1923

CL RANSON ROAD PER
DOC #1972I0108100 &
#1972I0108102

10' W/E
DOC # 1972I-0128542

(UNPLATTED)
OWNER: CONSERVATION
COMMISSION OF MISSOURI

25' W/E
DOC # 2016E0120482

PLAT BOUNDARY

**MISSOURI GEOGRAPHIC REFERENCE SYSTEM
BENCHMARK:**

BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND
ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE
RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

GENERAL NOTES:

1. ALL WYES ARE STATIONED USING MAIN LINE STATIONS.
2. M.S.F.E DENOTES MINIMUM SEWERABLE FLOOR ELEVATION.
3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATIONS.
4. ALL SERVICE LINES ARE TO BE 90° TO THE MAIN UNLESS OTHERWISE NOTED.
5. ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS OTHERWISE NOTED.

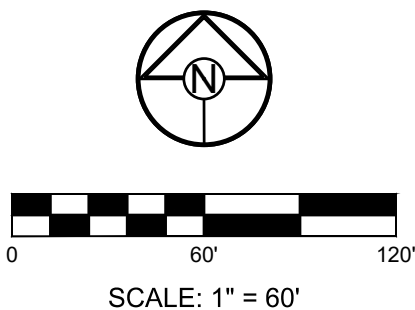


RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

"400-00 100.10", "4.00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. All other data is as designed and has not been field verified.

Date: 04/02/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.



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ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
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Missouri State Certificates of Authority
#E2002003600-F #LAC2001005237 #LS2002008659-F

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT
SANITARY MAIN EXTENSION PLANS
SE BAILEY ROAD & SE RANSON ROAD
LEE'S SUMMIT, MO

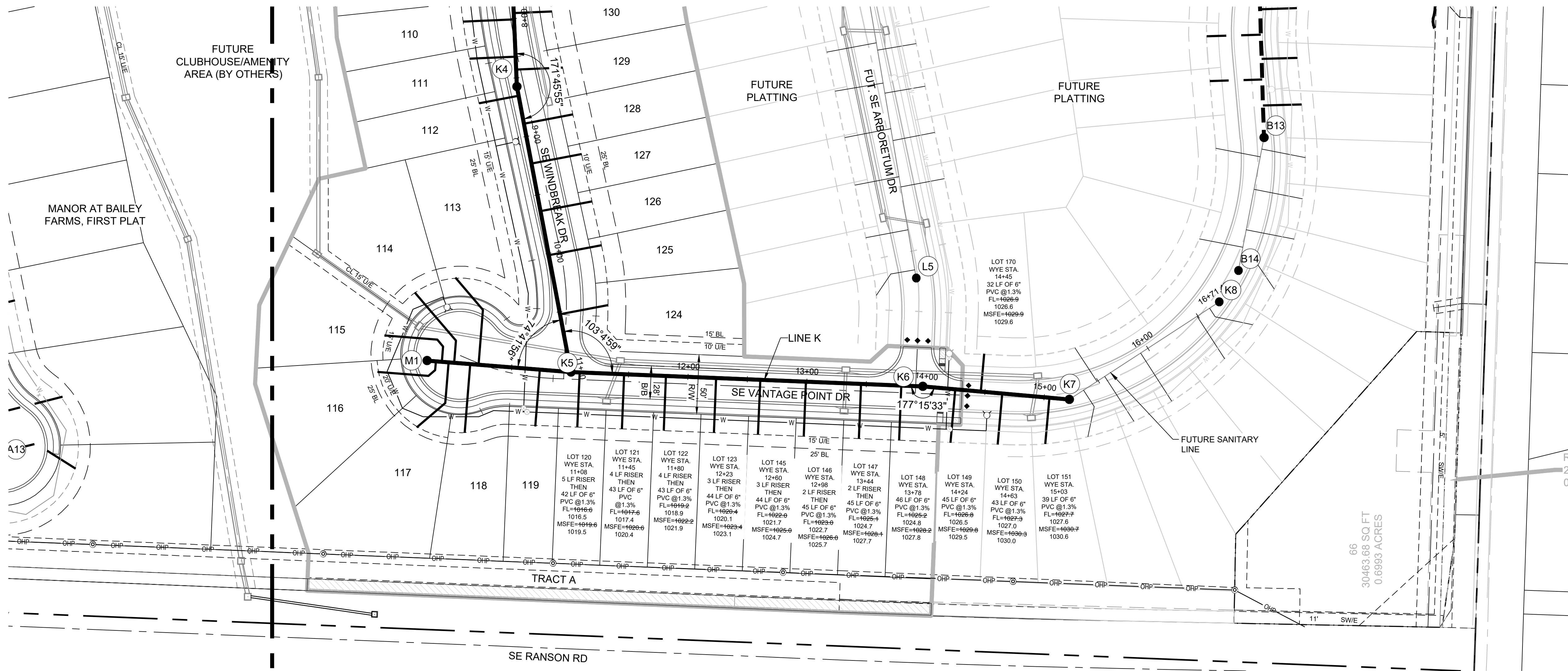
REVISION	DATE	DESCRIPTION
1	04/02/2025	PER CITY COMMENTS DATED 02/25/2025
2	10/27/2023	Updated City Details to 2023 Details
3	11/30/2023	Added "New City Requirements" note
4	01/17/2024	per MNR Comments (Added details Sheet 7)
5	04/02/2025	As-Built
6		
7		
8		
9		
10		

DRAWN BY:	JRL
CHECKED BY:	JLL
DATE PREPARED:	02/09/2022
PROJ. NUMBER:	21-133

GENERAL
LAYOUT

SHEET

2



MISSOURI GEOGRAPHIC REFERENCE SYSTEM
BENCHMARK:

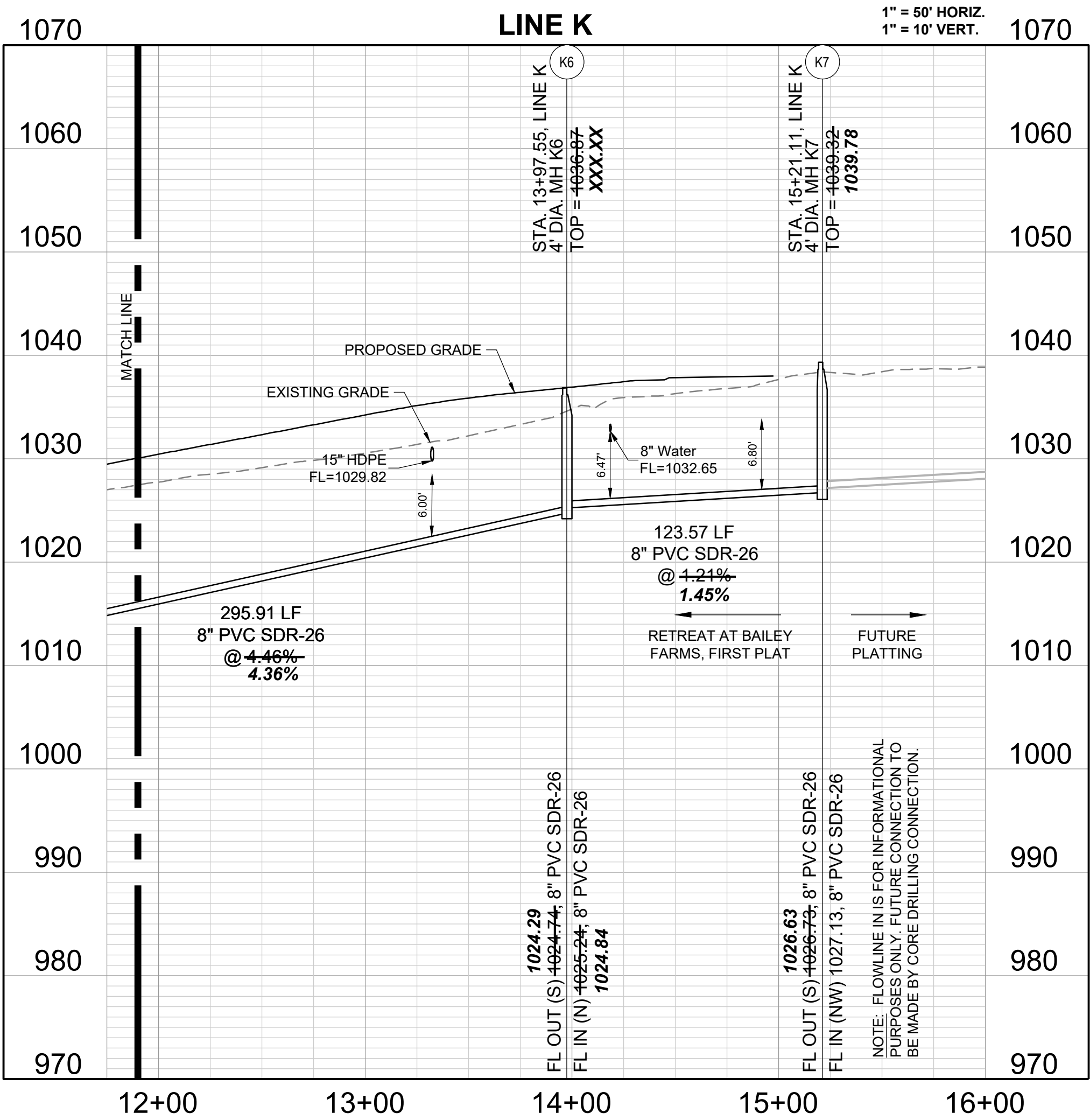
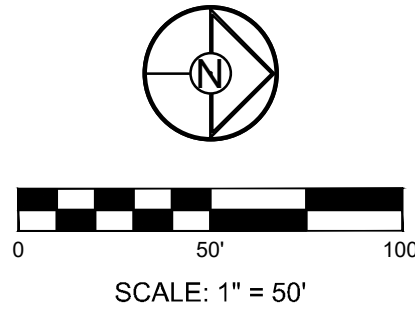
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CONTRACTOR SHALL OBTAIN ELEVATIONS AND LOCATIONS FOR ALL SANITARY SEWER SERVICE LINES AND SHALL SUPPLY THIS INFORMATION TO THE DESIGN ENGINEER FOR INCLUSION IN THE AS-BUILT RECORD DRAWINGS.



RECORD DRAWING

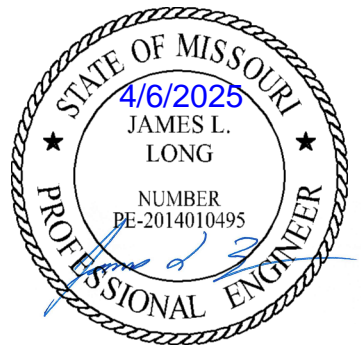
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RETREAT AT BAILEY FARMS, FIRST PLAT
SANITARY MAIN EXTENSION PLANS
SE BAILEY ROAD & SE RANSON ROAD
LEE'S SUMMIT, MO

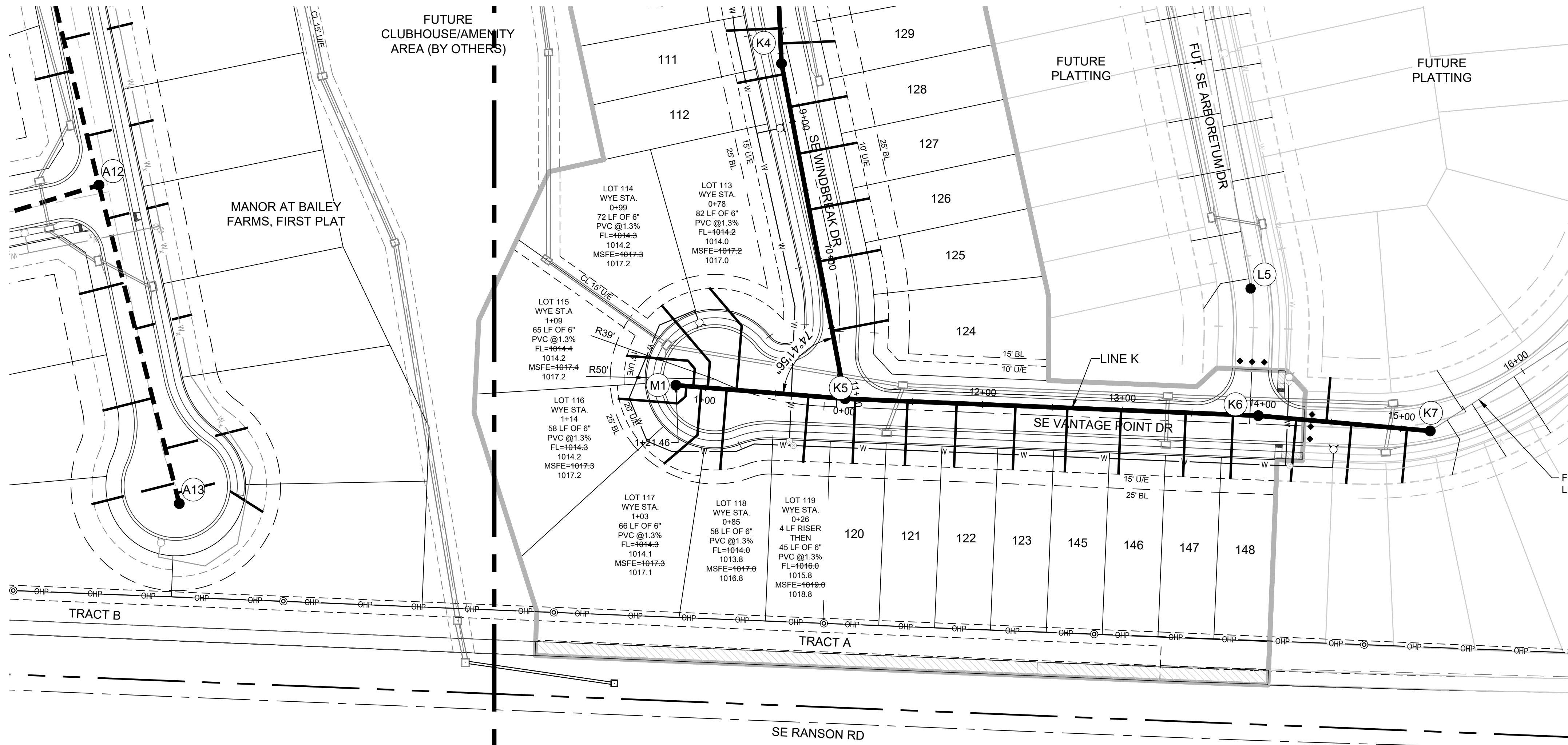
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11/30/2023	Added "New City Requirements" note
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04/02/2025	As-Built

DRAWN BY:	JLL
CHECKED BY:	JLL
DATE PREPARED:	02/09/2022
PROJ. NUMBER:	21-133

LINE K PLAN AND
PROFILE (2)

SHEET

4



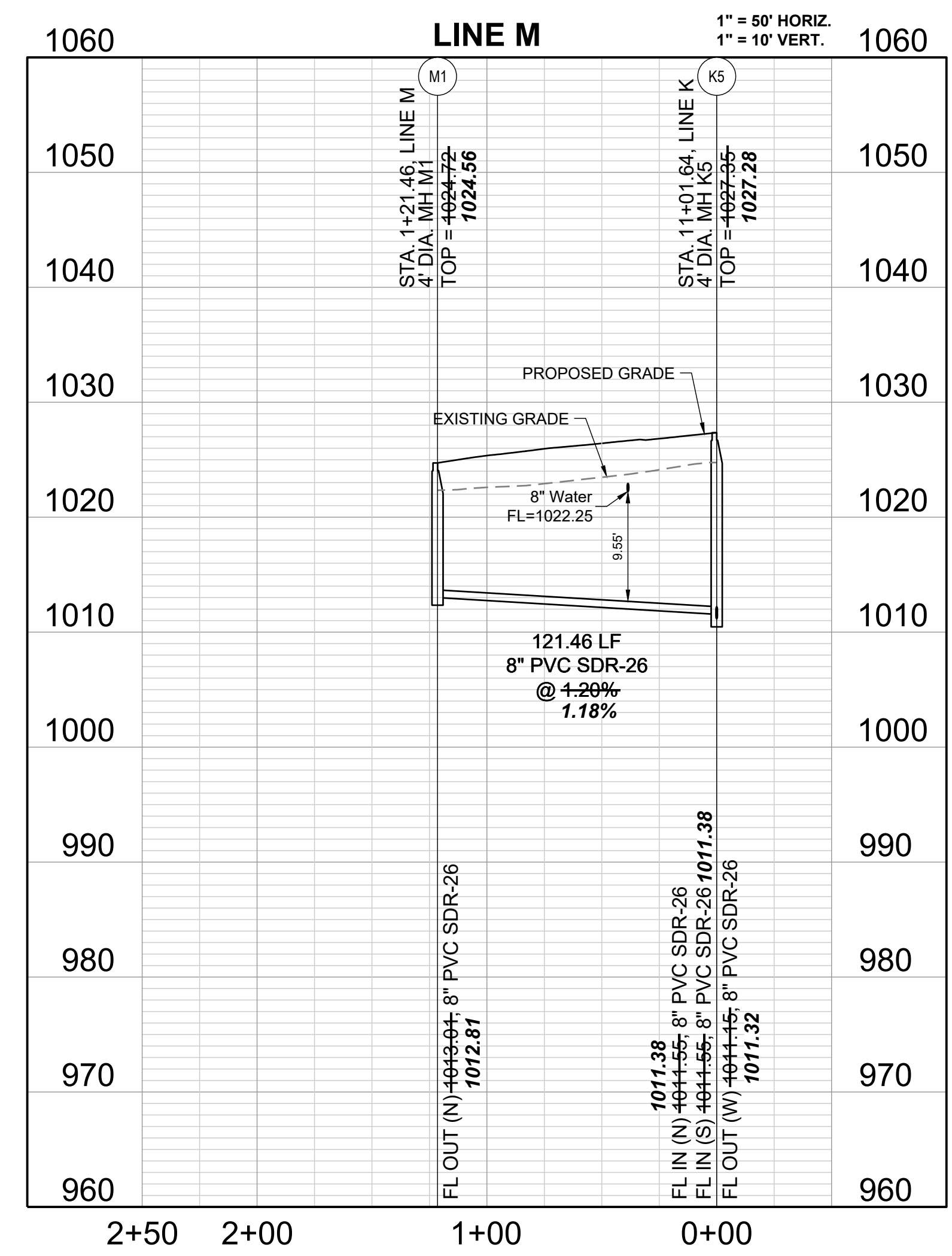
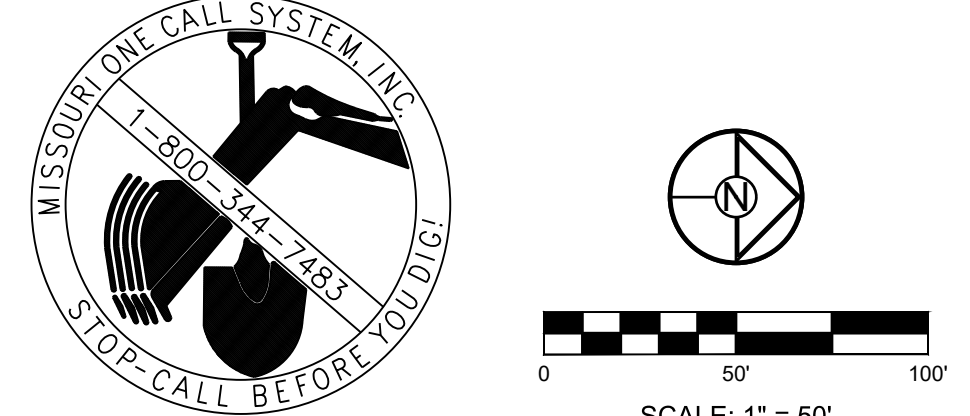
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RETREAT AT BAILEY FARMS, FIRST PLAT
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SE BAILEY ROAD & SE RANSON ROAD
LEE'S SUMMIT, MO

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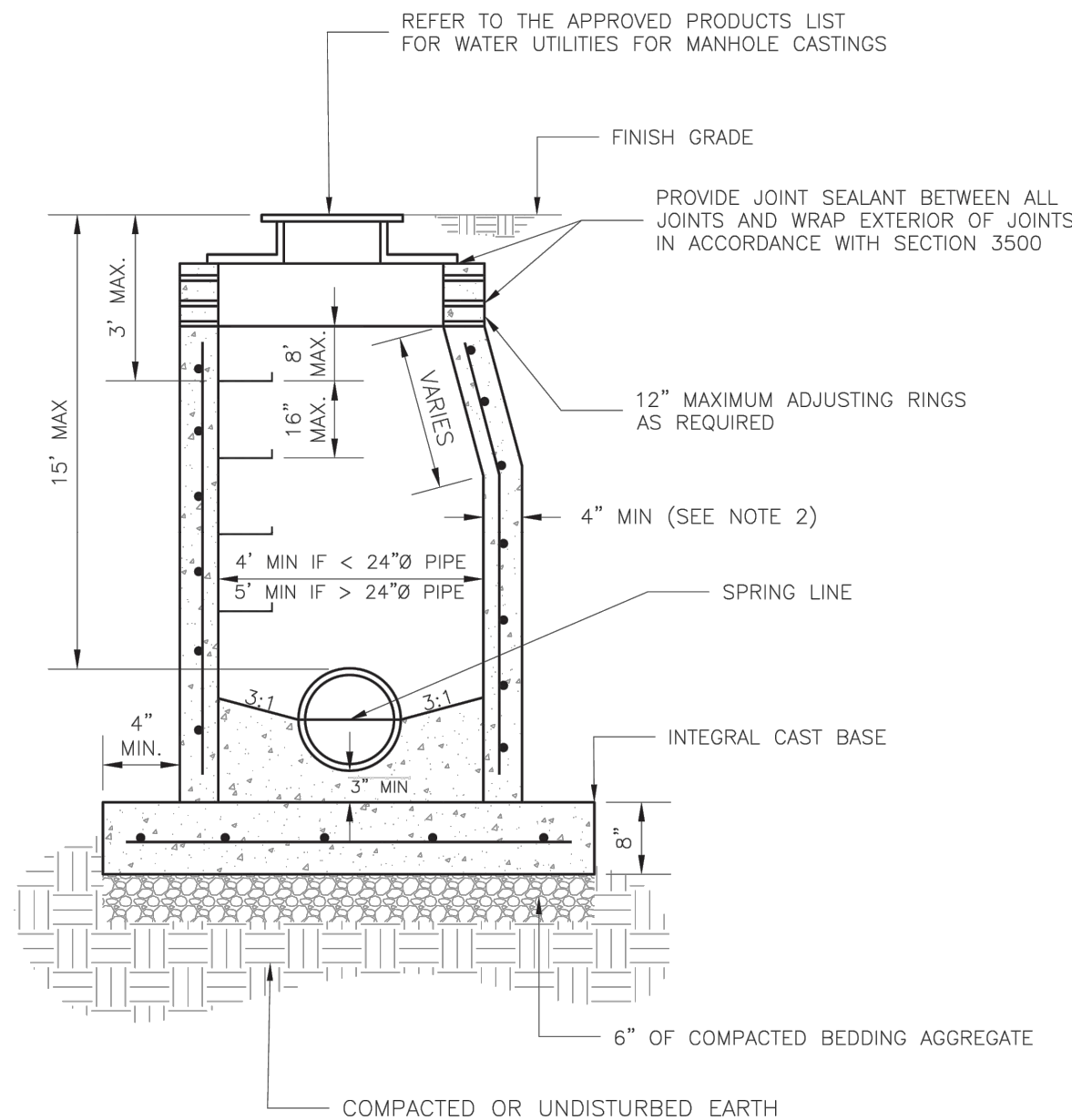
LINE M PLAN AND PROFILE

RECORD DRAWING

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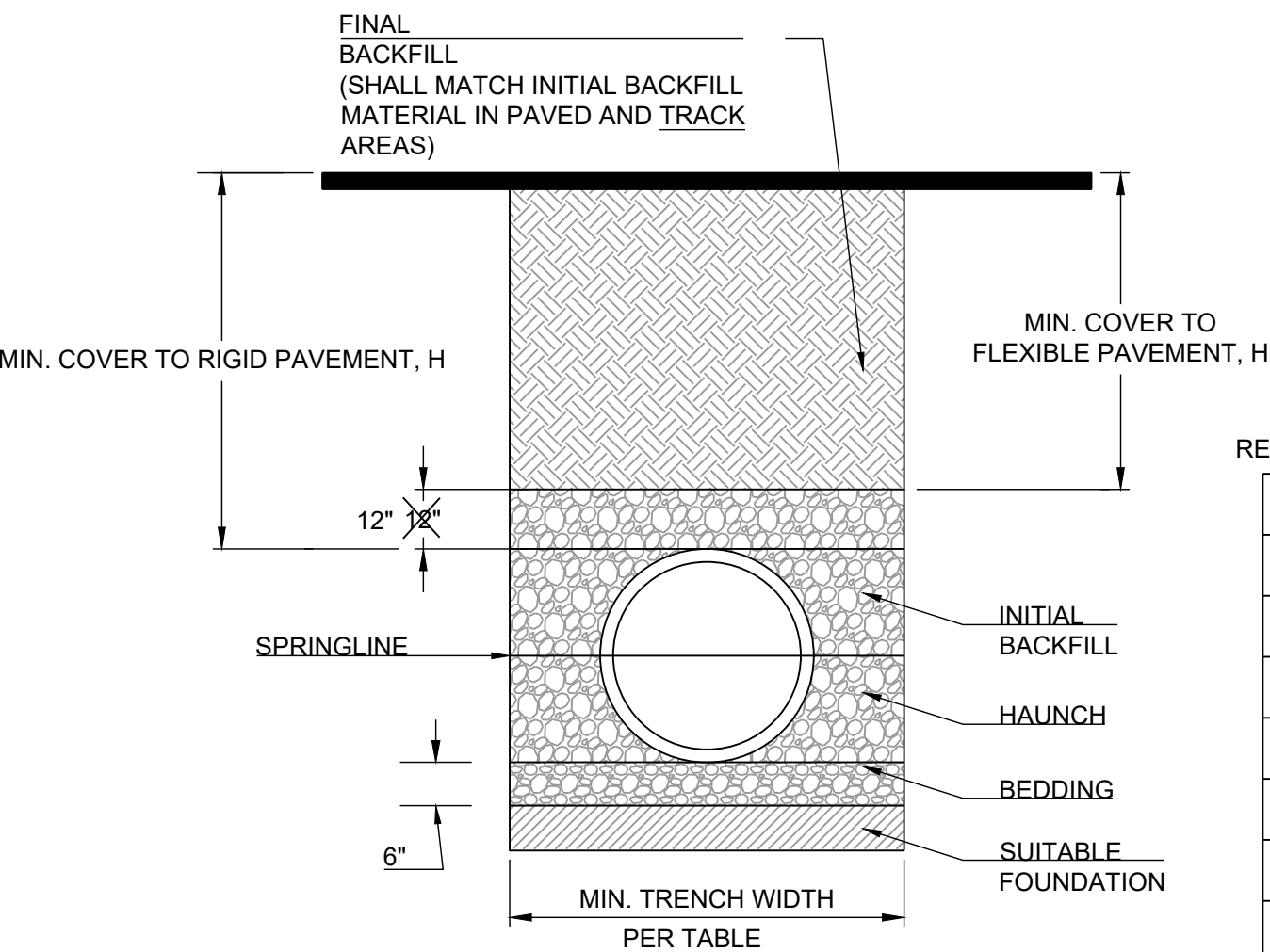
NOTES:

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 WHEN THE MANHOLE DEPTH IS LESS THAN 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 INTO THE FLOW LINE.
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
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 12/2015
Drawn By: SC
Checked By: DL
SAN-2



PIPE EMBEDMENT FOR FLEXIBLE PVC PIPE

RECOMMENDED MINIMUM TRENCH WIDTHS

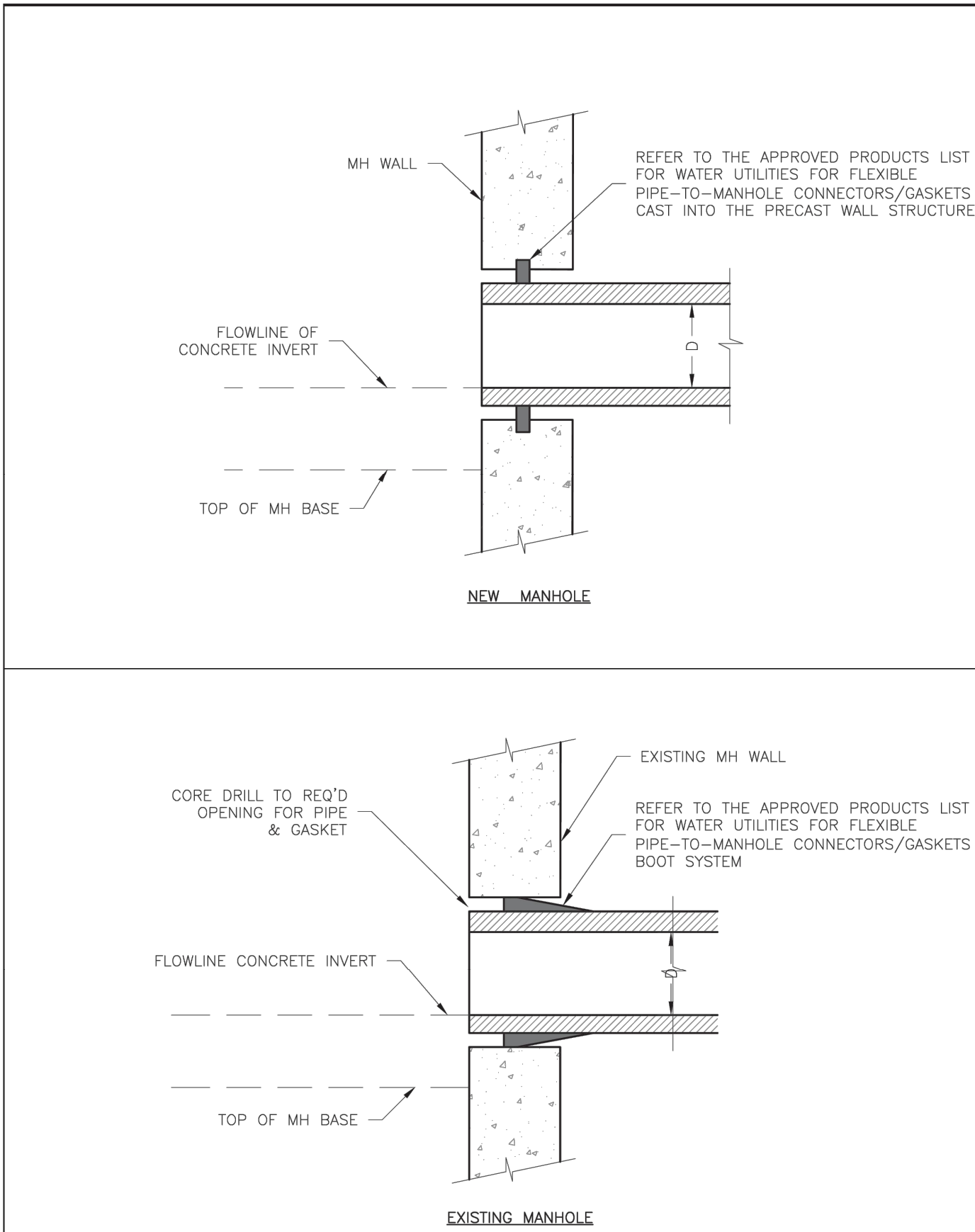
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS		
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

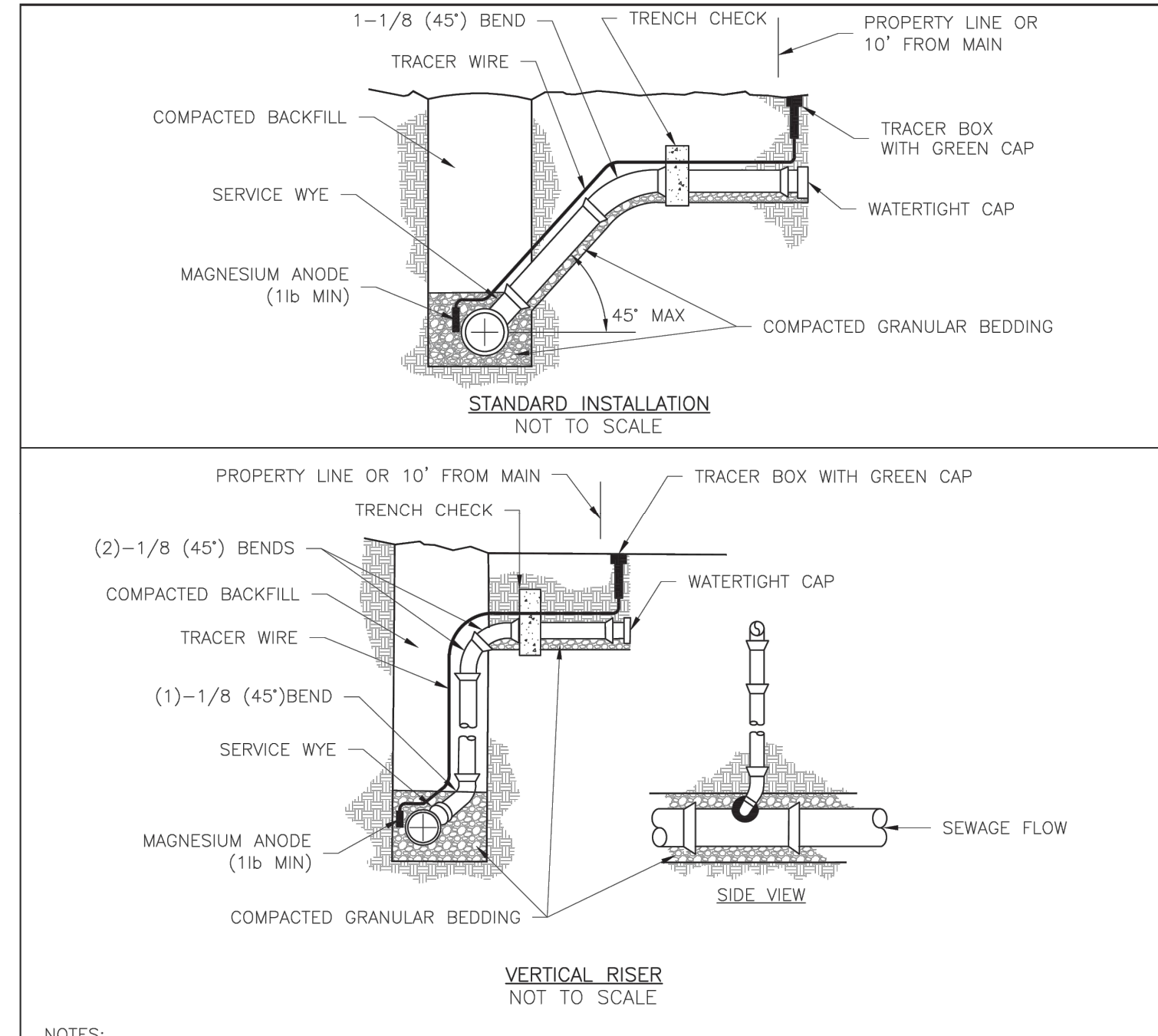
NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. **FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. **BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 6" (100mm) .
5. **INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. **MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND.



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Date: 02/2013
Drawn By: MIF
Checked By: DL
SAN-5



NOTES:

1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN, WHICHEVER IS GREATER, WHERE SIDEWALKS 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 SANITARY SEWER MAIN).
3. TRENCH CHECKS ON THE BUILDING SEWER STUBS SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH.
4. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
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 GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.
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 CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.



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

Date: 12/2015
Drawn By: MIF
Checked By: DL
SAN-1

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT
SANITARY MAIN EXTENSION PLANS
SE BAILEY ROAD & SE RANSON ROAD LEE'S
SUMMIT, MO

REVISION	DATE	DESCRIPTION
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7		
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SANITARY
SEWER DETAILS

SHEET

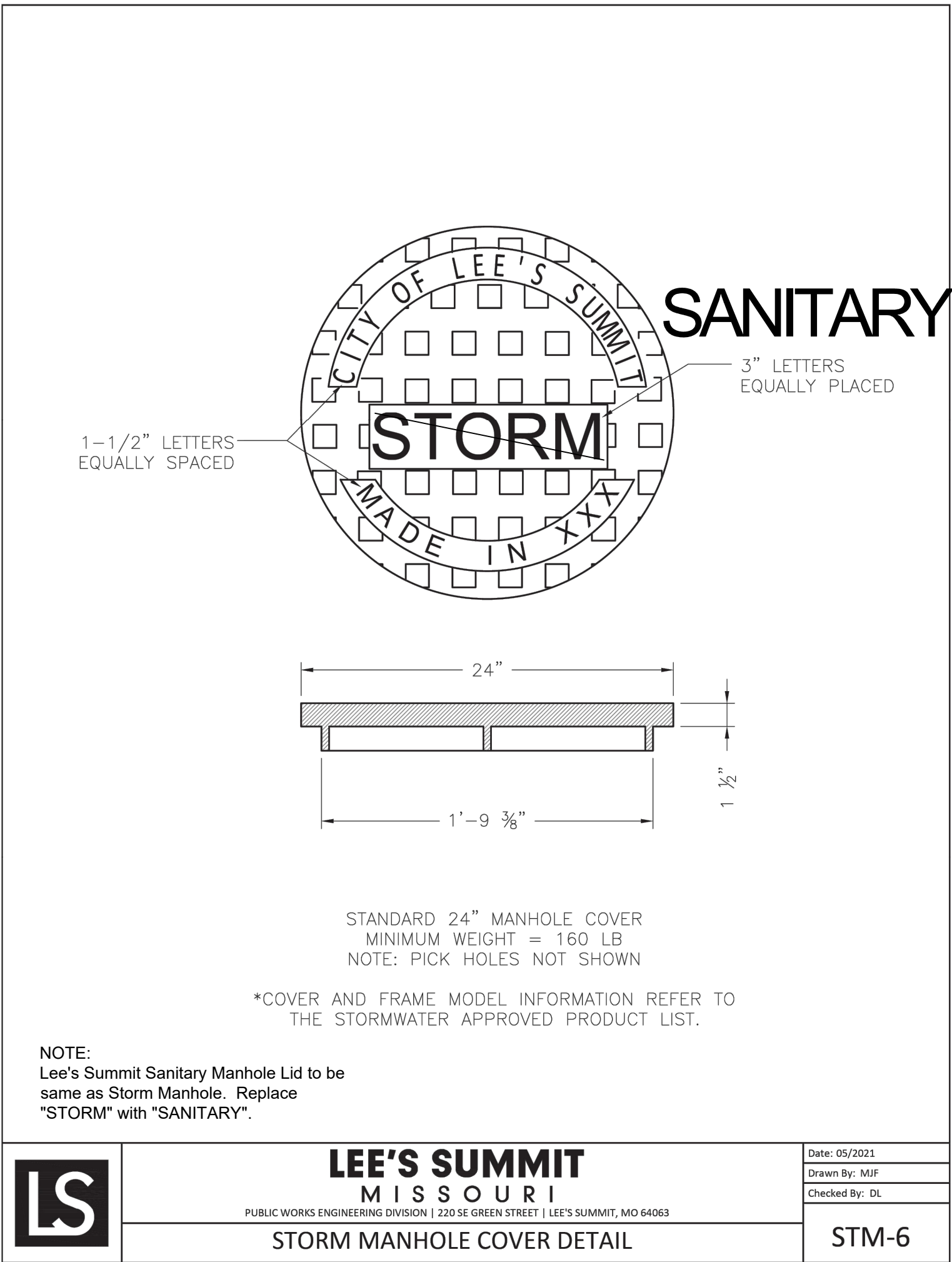
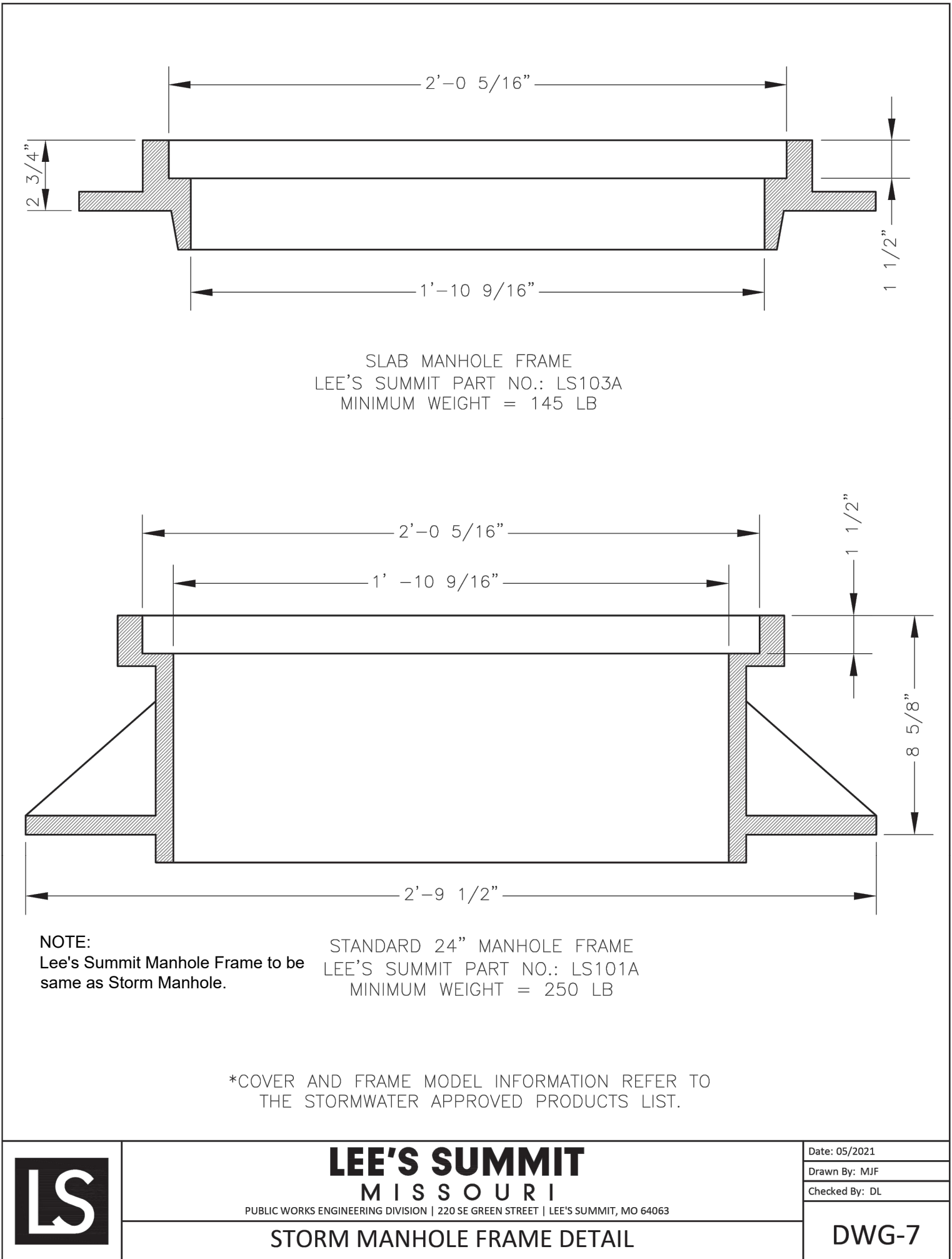
6

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PREPARED BY:

STATE OF MISSOURI

4/6/2025

JAMES L. LONG

NUMBER

PE-2014010495

PROFESSIONAL ENGINEER

SCHLAGEL & ASSOCIATES, P.A.

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DRAWN BY:	JRJ
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SANITARY SEWER DETAILS

SHEET

7