CO

G/E

U/E

SERVICE LINE - SIDEWALK

- TOP ELEVATION

CURB & GUTTER

TREELINE

P/L PROPERTY LINES

—— STO—— STORM SEWER

---- CATV<sub>x</sub> ---- CABLE TV - EXISTING

——Ty—— TELEPHONE LINE - EXIST.

GAS LINE - EXISTING

——W<sub>x</sub> — WATERLINE - EXISTING

CLEANOUT

ELECTRIC LINE - EXISTING

- UTILITY EASEMENT

- WATER SURFACE ELEVATION

**ASPHALT PAVEMENT - EXISTING** 

**ASPHALT PAVEMENT - PROPOSED** 

**CONCRETE PAVEMENT - EXISTING** 

ASPHALT PAVEMENT - EXISTING

CONCRETE SIDEWALK - EXISTING

CONCRETE SIDEWALK - PROPOSED

**CURB & GUTTER - EXISTING** 

EXISTING LOT AND R/W LINES

**EXISTING PLAT LINES** 

— SANITARY SEWER MAIN

STORM SEWER - EXISTING

—— SANITARY SEWER MAIN - EXIST.

FIBER OPTIC CABLE - EXISTING

----- OHP<sub>x</sub> ----- OVERHEAD POWER LINE - EXIST

—— UGE<sub>x</sub> —— UNDERGROUND ELECTRIC - EX.

LIGHT - EXISTING

**EXISTING MANHOLE** 

EXISTING AREA INLET

**EXISTING CURB INLET** EXISTING GRATE INLET EXISTING JUNCTION BOX

EXISTING SANITARY MANHOLE

EXISTING STORM MANHOLE

PROPOSED SANITARY MANHOLE

WATERLINE EASEMENT

### **UTILITY CONTACTS:**

Steve Holloway 600 NE Colbern Road Lee's Summit, MO 64086

(816) 607-2186 SPIRE Brent Jones 3025 SE Clover Drive

**EVERGY** Philip Ingram 1300 SE Hamblin Road Lee's Summit, MO 64081

Office: (816) 347-347-4339 philip.inghram@evergy.com

Dena Mezger

Mark Manion or Marty Loper 500 E. 8th Street, Room 370 Kansas City, MO 64106 (816) 275-2341 or (816) 275-1550

(816) 795-2257

Lee's Summit, MO 64081 (816) 969-1900



811 or mo1call.com

SUMMARY OF QUANTITIES					
	ITEM	QUANTITY	UNITS		
1	INSTALL 24" PVC SDR-26	440	LF		
2	INSTALL 12" PVC SDR-26	1270	LF		
3	INSTALL 8" PVC SDR-26	689	LF		
4	INSTALL 6" PVC SDR-26	341	LF		
5	INSTALL 12" D.I.P. W/ RESTRAINED JOINTS	319	LF		
6	INSTALL 4' DIA. MANHOLE	10	EA		
7	INSTALL 5' DIA. MANHOLE	4	EA		
8	EXTRA DEPTH IN MANHOLES	152	VF		
9	TRENCHING UNDER FUTURE STREET	762	LF		
10	POST-CONSTRUCTION MANHOLE BARREL ADJUSTMENTS (ESTIMATED)	4	EA		
11	POST-CONSTRUCTION RING (3"-12") ADJUSTMENT (ESTIMATED)	4	EA		
12	REMOVE AND REPLACE CONCRETE STILLING BASIN	1	LS		
13	INSTALL PIPE ENCASEMENT	28	LF		
14	INSTALL CONCRETE COLLAR (FOR MANHOLE IN PAVED AREA)	4	EA		
15	INSTALL STONE RIP-RAP	120	CY		
16	SEED & MULCH DISTURBED AREAS	1	LS		

# PUBLIC SANITARY SEWER MAIN PLANS

IN THE CITY OF LEE'S SUMMIT JACKSON COUNTY, MO

ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS

ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE

LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE

THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND

THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583, 78TH GENERAL

CONTRACTOR MAY ALSO UTILIZE THE FOLLOWING TOLL FREE PHONE NUMBER PROVIDED BY "MISSOURI ONE

CALL SYSTEM, INC.": 1-800-DIG-RITE. THIS PHONE NUMBER IS APPLICABLE ANYWHERE WITHIN THE STATE OF

ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING

PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWING SHALL BE SUBMITTED TO THE DESIGN

ENGINEER FOR APPROVAL. AFTER APPROVAL OF THE SHOP DRAWINGS, A COPY OF THE APPROVED AND

CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED

THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION,

DEVELOPMENT SERVICES CONSTRUCTION PERMIT. A MINIMUM 48 HOUR NOTICE SHALL BE GIVEN PRIOR TO

ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO

EXISTING UTILITIES HAVE BEEN SHOWN TO THE GREATEST EXTENT POSSIBLE BASED UPON INFORMATION PROVIDED TO THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANIES AND FIELD LOCATING UTILITIES PRIOR TO CONSTRUCTION AND IDENTIFYING ANY

POTENTIAL CONFLICTS. ALL CONFLICTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ANY REQUIRED UTILITY RELOCATIONS.

CONTRACTOR SHALL VERIFY FLOW-LINES AND STRUCTURE TOPS PRIOR TO CONSTRUCTION, AND SHALL

MANUFACTURED UTILITY STRUCTURES FOR REVIEW BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE

UTILITY SEPARATION: WATERLINES SHALL HAVE A MINIMUM OF 10 FEET HORIZONTAL AND 2 FEET VERTICAL SEPARATION FROM ALL SANITARY SEWER LINES, MANHOLES, AND SANITARY SEWER SERVICE LATERALS, AS

ENCASEMENT OF THE SANITARY LINE SHALL BE REQUIRED 10 FEET IN EACH DIRECTION OF THE CONFLICT.

PAYMENT FOR TRENCHING, BACKFILLING, PIPE EMBEDMENT, FLOWABLE FILL, BACKFILL MATERIALS, CLEAN UP, SEEDING, SODDING AND ANY OTHER ITEMS NECESSARY FOR THE CONSTRUCTION OF THE UTILITY LINE

TRENCH SPOILS SHALL BE NEATLY PLACED ONSITE ADJACENT TO THE TRENCH, AND COMPACTED TO PREVENT SATURATION AND EXCESS SEDIMENT RUNOFF. UNSUITABLE MATERIALS, EXCESS ROCK AND SHALE, ASPHALT, CONCRETE, TREES, BRUSH ETC. SHALL BE PROPERLY DISPOSED OF OFFSITE. MATERIALS

MAY BE WASTED ONSITE AT THE DIRECTION OF THE OWNER OR HIS APPOINTED REPRESENTATIVE. 8. ALL EXCAVATION IS CONSIDERED UNCLASSIFIED, UNLESS NOTED OTHERWISE. UNCLASSIFIED EXCAVATION

HAS THE AUTHORITY TO IDENTIFY AND DEFINE THE PHYSICAL CHARACTERISTICS TO DETERMINE THE

OF EXCESS ROCK FROM THEIR TRENCHES BY DISPOSING IT IN AREAS AS SPECIFIED BY THE PROJECT

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING RESPECTIVE UTILITY COMPANIES 48-HOURS IN ADVANCE FOR THE INSPECTION OF ANY PROPOSED UTILITY MAIN EXTENSION OR SERVICE LINE OR SERVICE

SUBSIDIARY TO THE UNIT PRICE PROVIDED FOR THE PIPE. ANY QUANTITY PROVIDED FOR ROCK EXCAVATION IS ESTIMATED BASED ON THE BEST INFORMATION PROVIDED TO THE PROJECT ENGINEER. THE ENGINEER

CLASSIFICATION. UNIT PRICE QUANTITIES FOR ROCK EXCAVATION WILL BE PAID AT A TRENCH WIDTH OF THE

NOMINAL PIPE DIAMETER OF THE INSTALLED MAIN PLUS 18 INCHES. CONTRACTOR IS REQUIRED TO DISPOSE

UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR SHALL BE REPAIRED AT THE

NOTIFY ENGINEER OF ANY DISCREPANCIES. PROVIDE SHOP DRAWINGS FOR ALL PRECAST AND

MEASURED FROM EDGE TO EDGE. IF MINIMUM SEPARATIONS CAN NOT BE OBTAINED, CONCRETE

SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE UTILITY INSTALLATION.

13. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE

14. THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES INSPECTIONS AT: 816-969-1200 TO OBTAIN A

15. THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC HANDLING MEASURES NECESSARY TO

DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT.

THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION).

THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED

EXCAVATION ON PUBLIC RIGHT OF WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. THE

WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED

SIGNED SHOP DRAWINGS SHALL BE PROVIDED TO THE CITY INSPECTOR UPON REQUEST.

BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.

10. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE

11. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK

MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.

ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.

NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE.

NITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE

CONTRACTOR, OR AS DIRECTED BY THE OWNER.

AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.

**GENERAL NOTES** 

EXCAVATION.

PERMIT ISSUANCE

CONTRACTOR'S EXPENSE.

CONNECTION TO ANY EXISTING MAIN.

FOR UTILITY TRENCHING IS

**UTILITIES**:

ADOPTED BY ORDINANCE 5813.

## RELEASED FOR CONSTRUCTION

As Noted on Plan Review

**Development Services Department** Lee's Summit, Missouri

05/09/2024

Sheet List Table				
Sheet Number	Sheet Title			
1	COVER SHEET			
2	GENERAL LAYOUT & GRADING			
3	TRIB MAP			
4	LINE A			
5	LINE A			
6	EXISTING LINE			
7	LINE B			
8	DETAILS			

MARK ALLEN BREUER MOMBER PE-2009007268

PREPARED BY

SCHLAGEL & ASSOCIATES, P.A.

### **APPROVED BY**

CITY ENGINEER APPROVED FOR ONE YEAR FROM THIS DATE

### OWNER/DEVELOPER:

GRIFFIN RILEY PROPERTY GROUP JAKE LOVELESS, VICE PRESIDENT 21 SE 29TH TERRACE LEE'S SUMMIT p 816-366-7900 JAKE@GRIFFINRILEY.COM

### MO GRS BENCHMARK STATION NAME - JA-90

KC METRO ALUMINUM GRS DISK SET IN CONCRETE STAMPED "JA-90, 1988" LOCATED NEAR THE INTERSECTION OF LANGSFORD ROAD AND OLD LANGSFORD ROAD, 43 FEET SOUTHEAST OF THE CENTER OF LANGSFORD ROAD AND 32 FEET NORTH OF THE CENTER OF OLD LANGSFORD ROAD. N:1001052.8503, E:2845604.8272

ELEV. 997.045

PL2022416

PRSUBD20232899

### **PROJECT BENCHMARK:**

"SQUARE" CUT IN TOP OF CONCRETE STORM MANHOLE STORM MANHOLE IS LOCATED APPROX. 130 FEET EAST OF THE INTERSECTION OF SE JOEL AVE & BLUE PARKWAY AND 26 FEET SOUTH OF THE CENTERLINE OF BLUE PARKWAY. N:996874.9690, E:2840937.1365

ELEV. 1005.719

REIC C

**COVER SHEET** 

SHEET

# RESIDENCES AT BLACKWELL

MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT)

Lee's Summit, MO 64082 (816) 399-0663brent.jones@spireenergy.com

CITY OF LEES SUMMIT PUBLIC WORKS

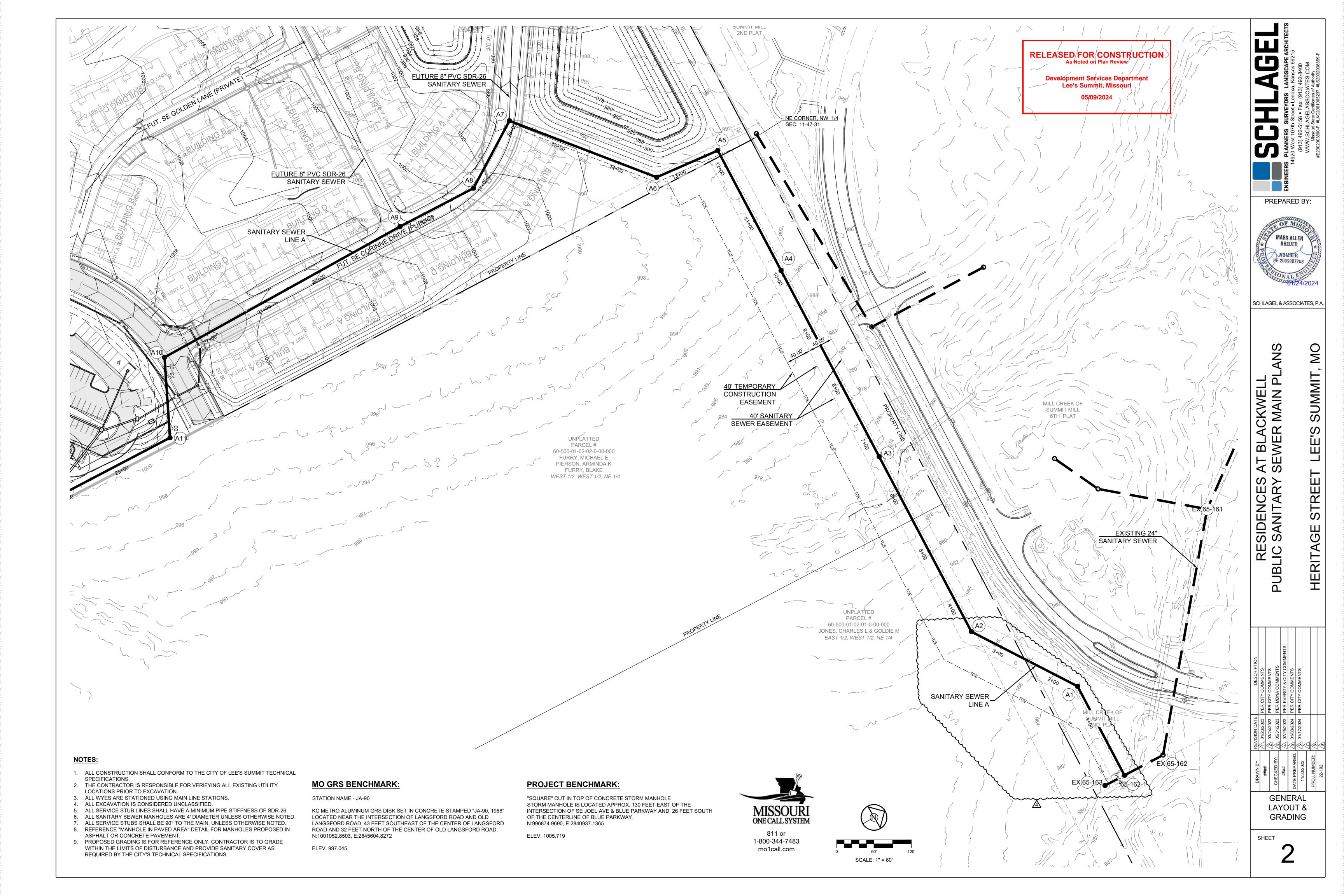
220 SE Green Street Lee's Summit, MO 64063 (816) 969-1800

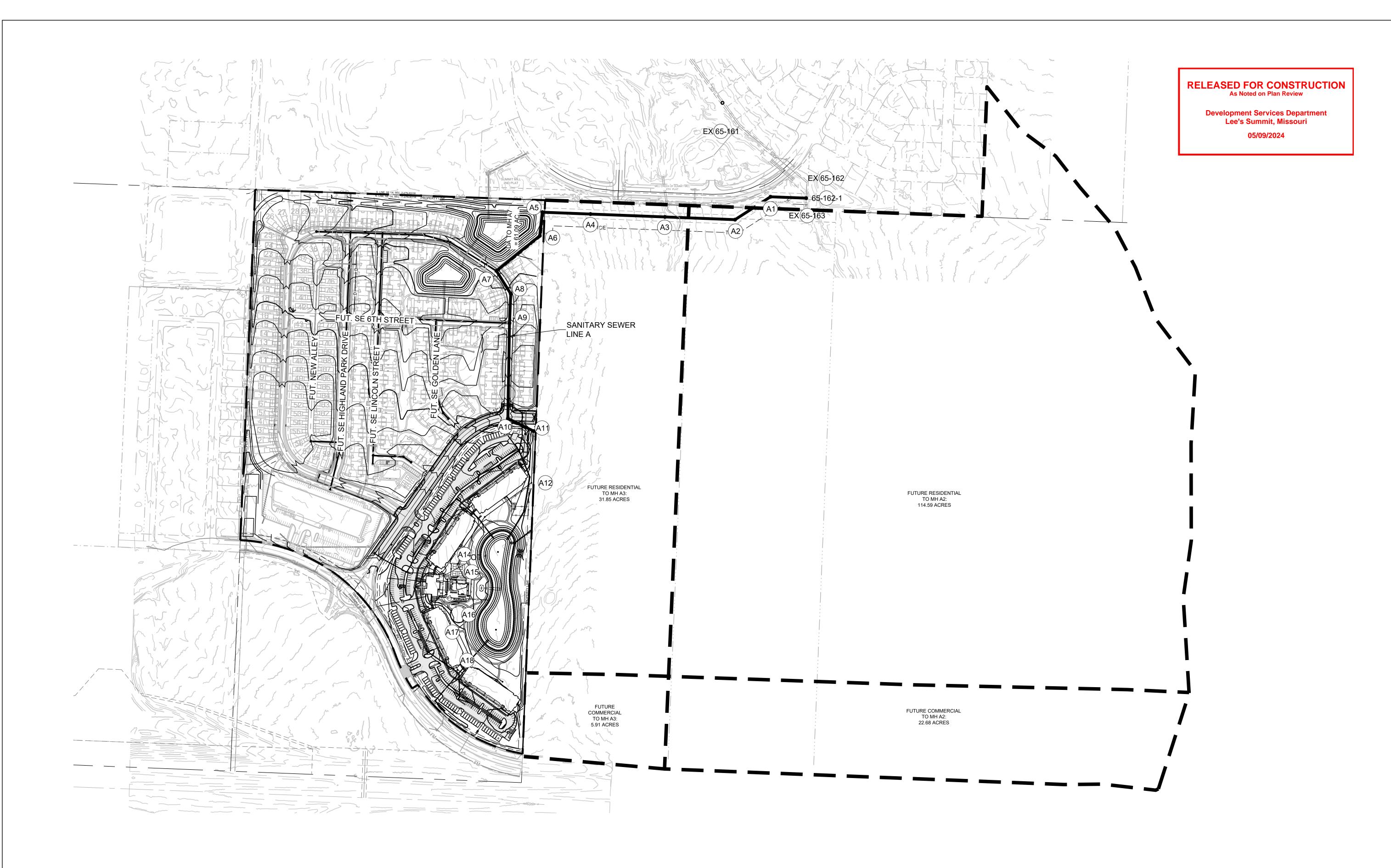
COMCAST CABLE John Meadows 4700 Little Blue Parkway

CITY OF LEE'S SUMMIT WATER UTILITIES Mark Schaufler 1200 SE Hamblen Road



1-800-344-7483





NOTE:
CITY OF LEE'S SUMMIT TO PROVIDE
SANITARY SEWER CALCULATIONS.

### MO GRS BENCHMARK:

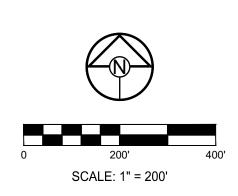
STATION NAME - JA-90

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ELEV. 1005.719



SHEET 3

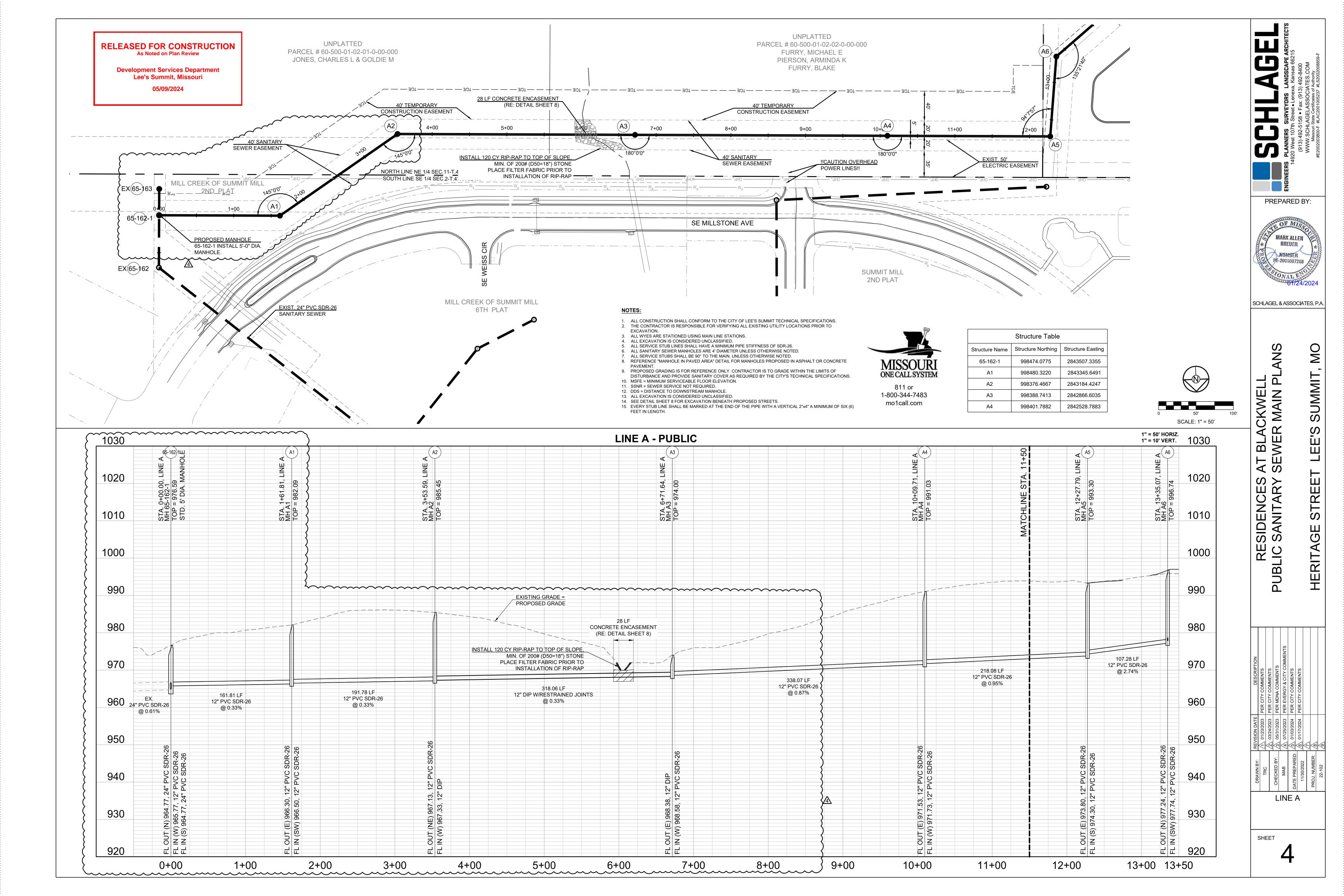
TRIB MAP

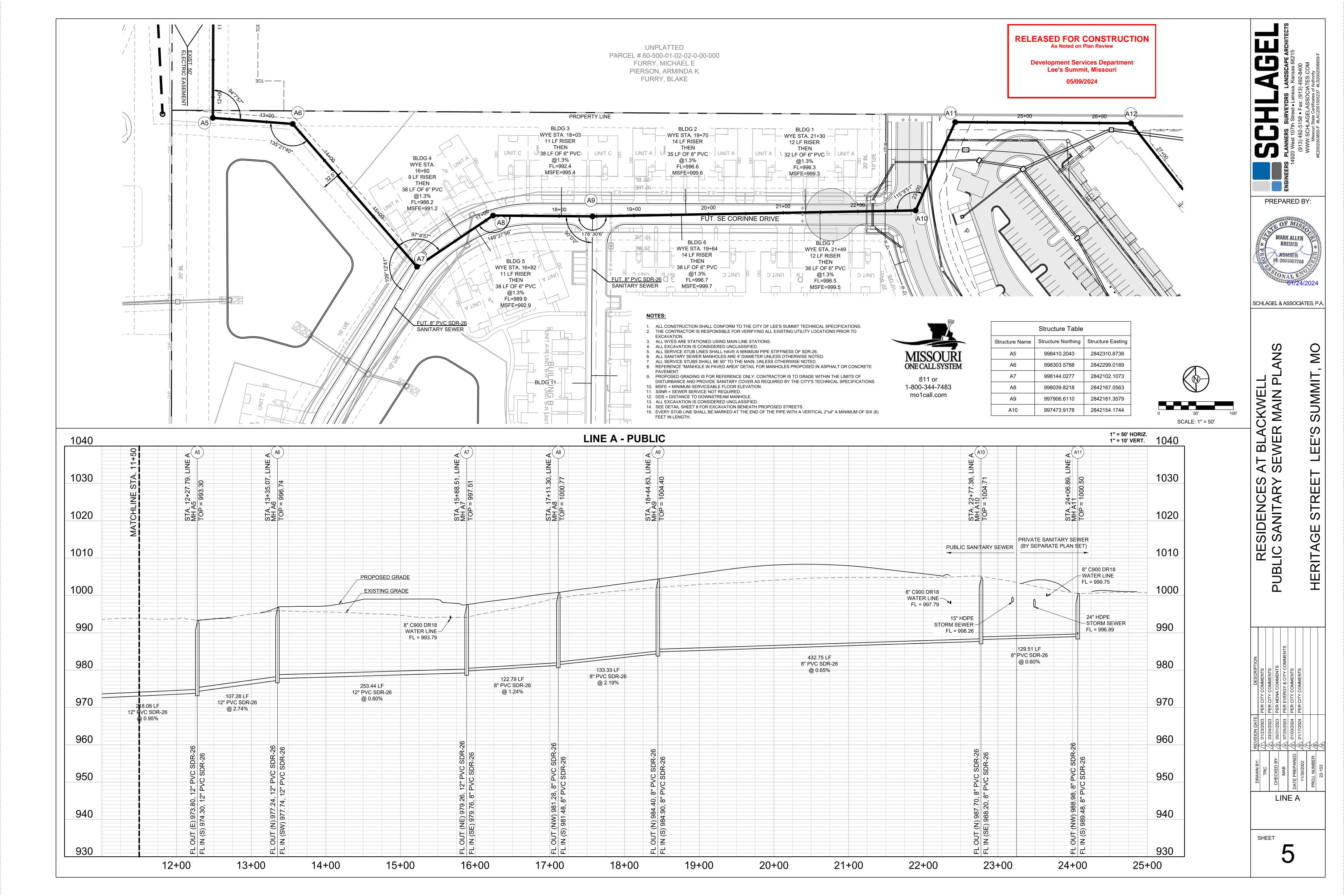
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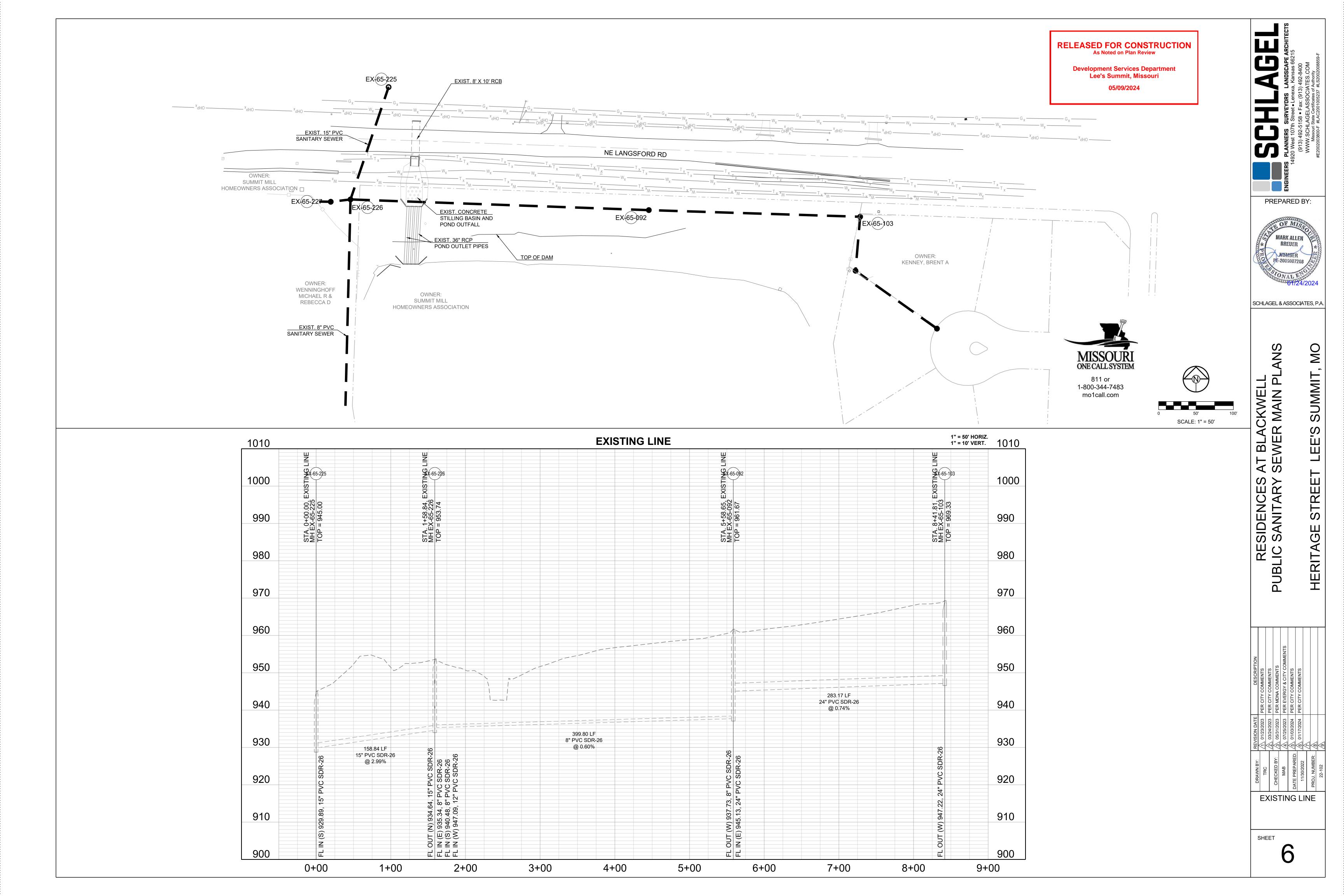
BREUER

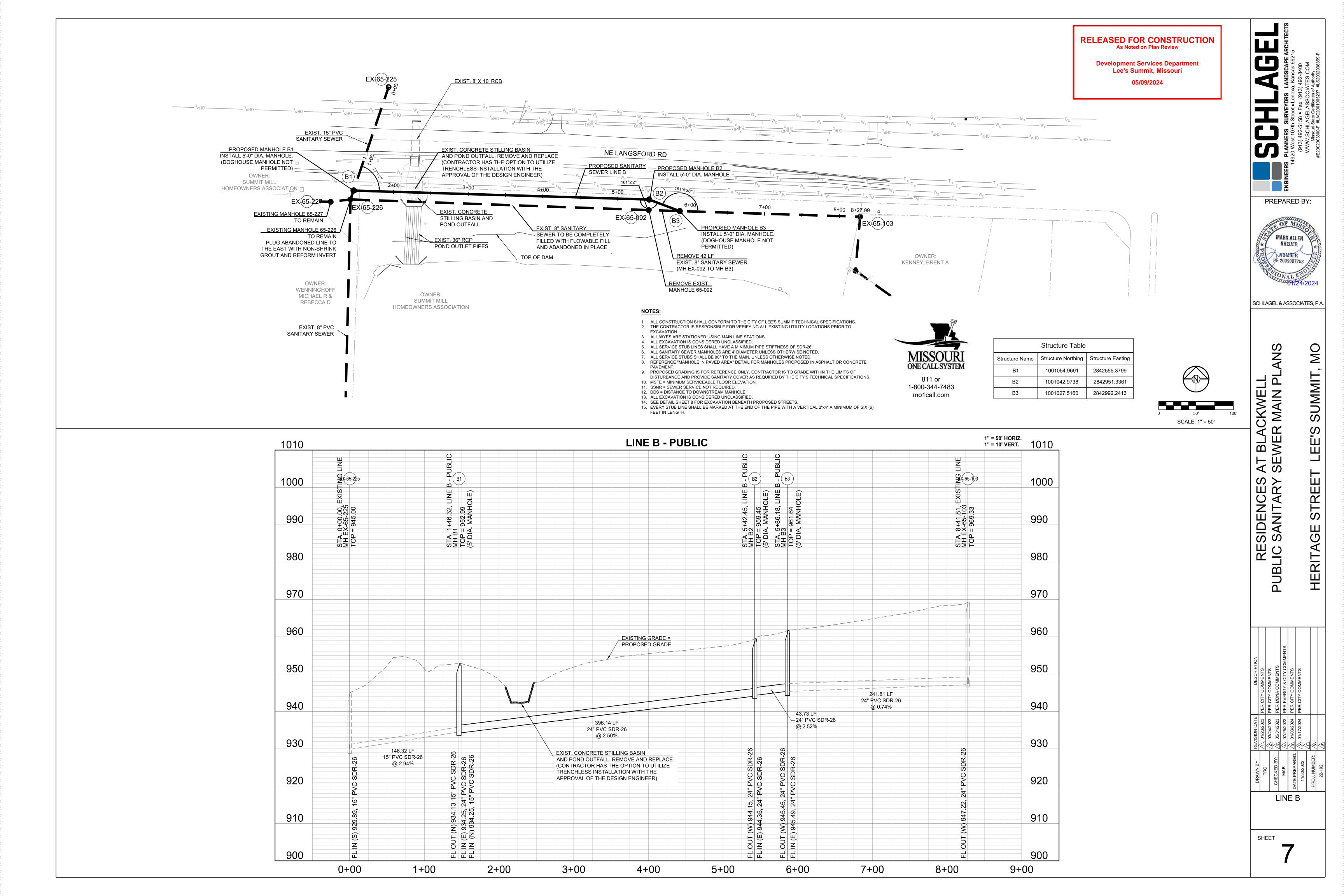
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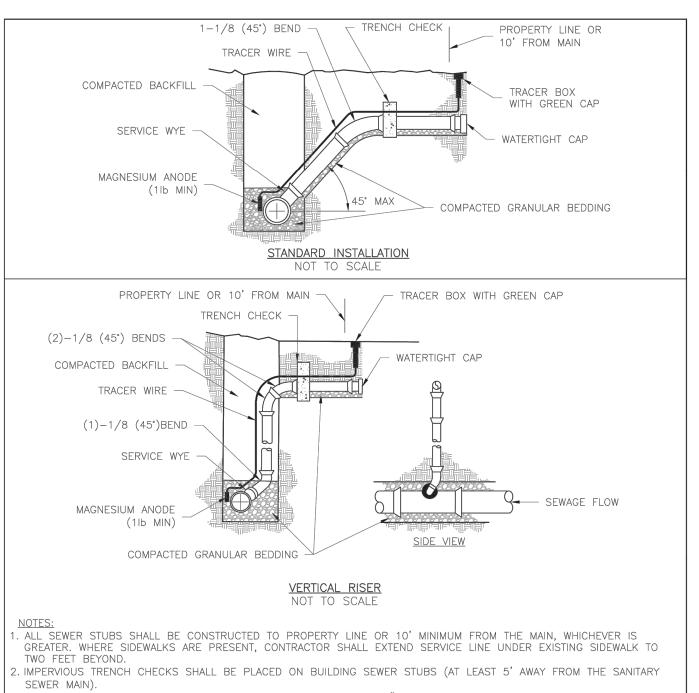
SCHLAGEL & ASSOCIATES, P.A.







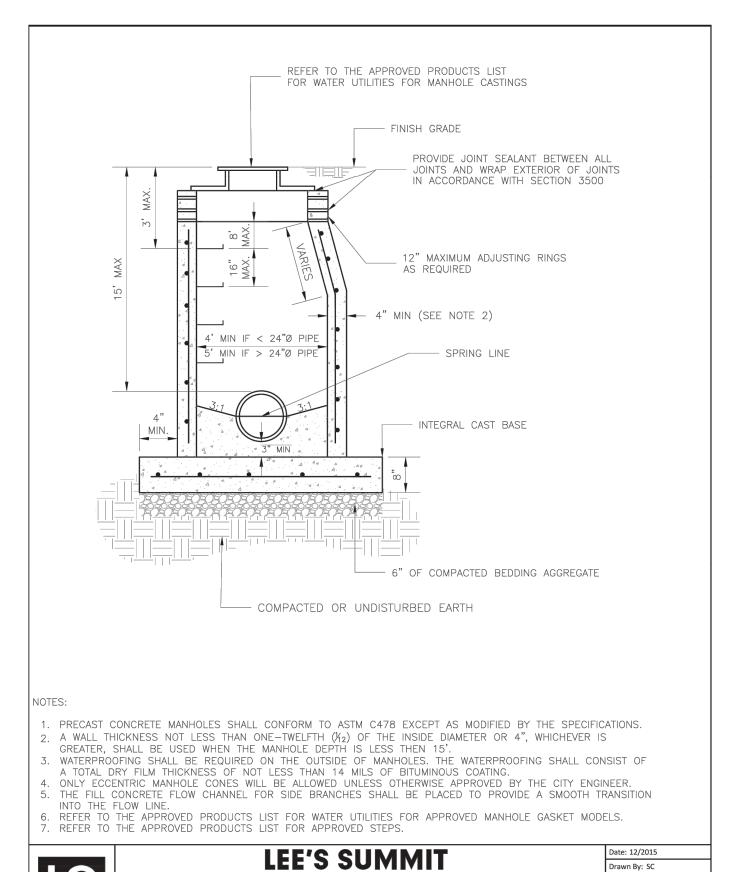




- 5. TRENCH CHECKS ON THE BUILDING SEWER STUBS SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH. 4. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL
- 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. . TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE. . 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

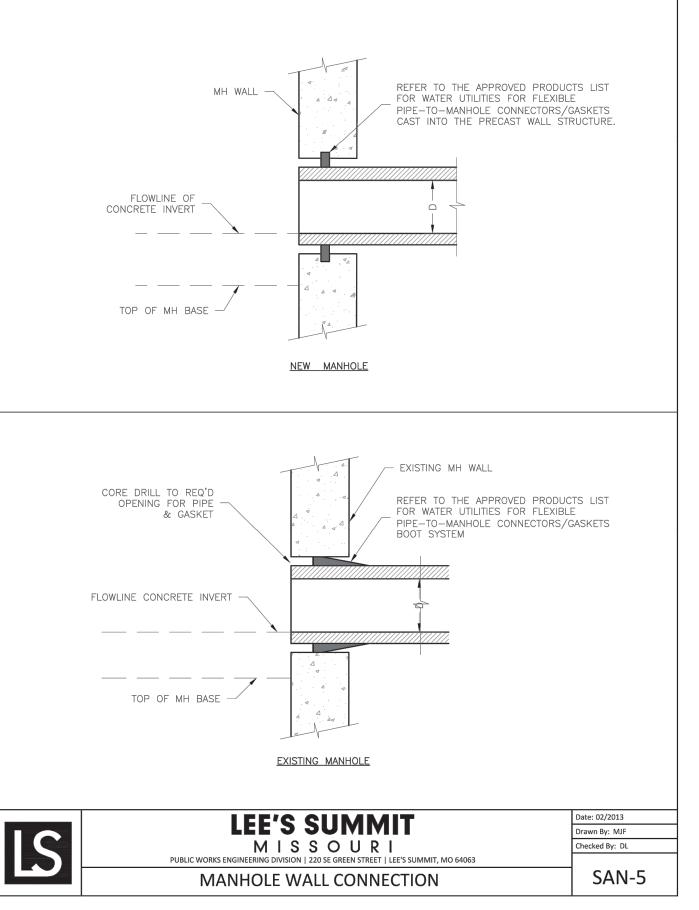
5. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE

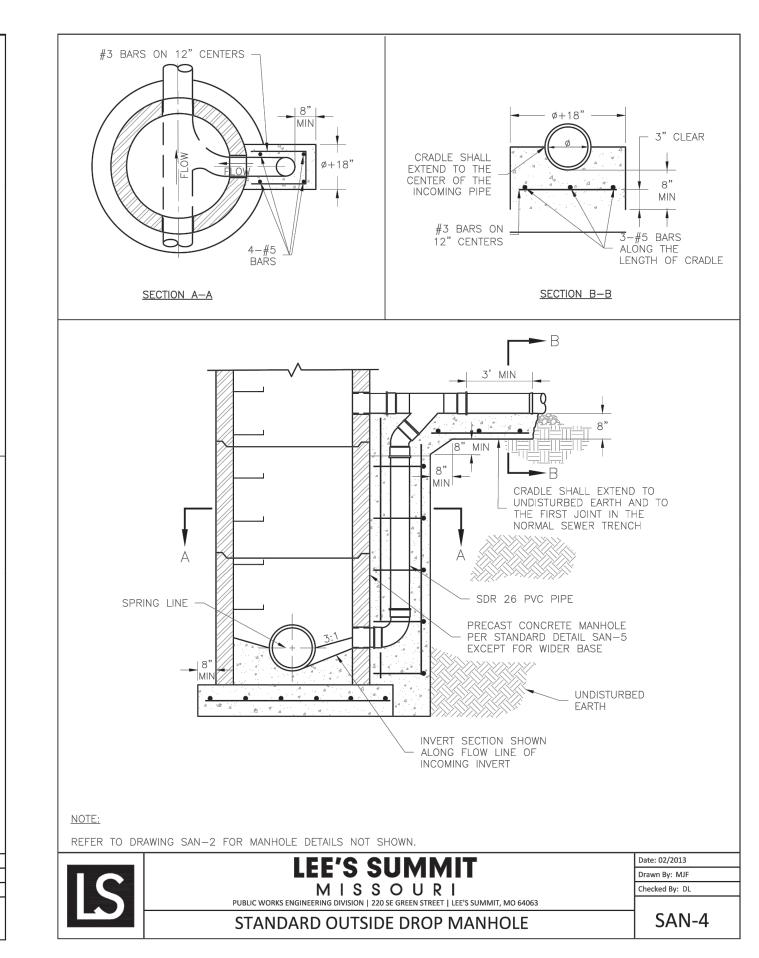


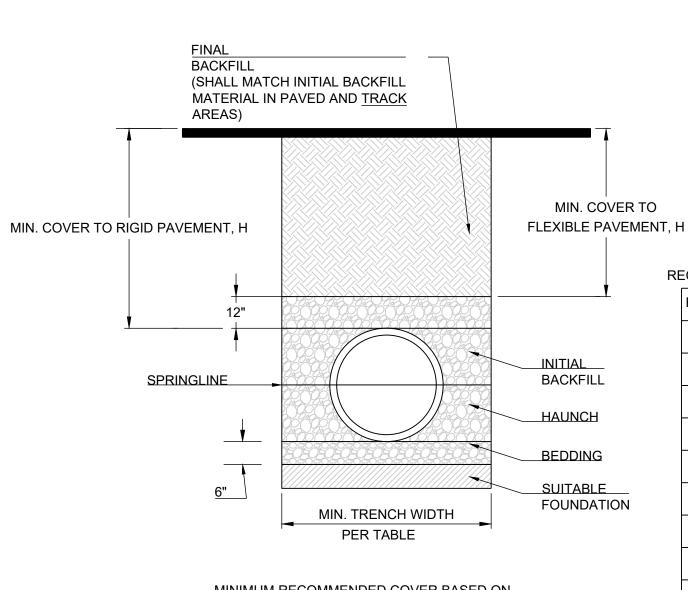


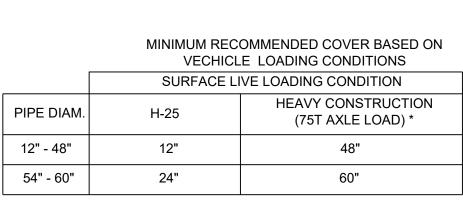
MISSOURI

STANDARD SANITARY PRECAST MANHOLE





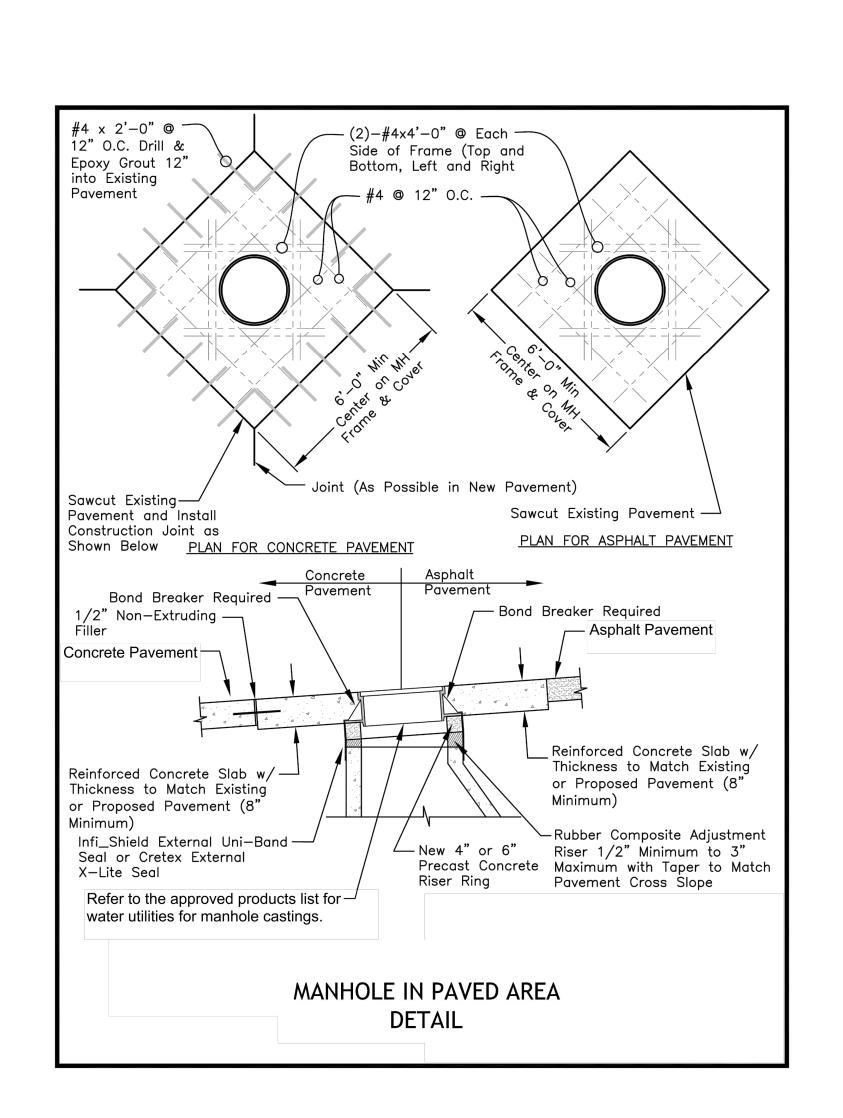




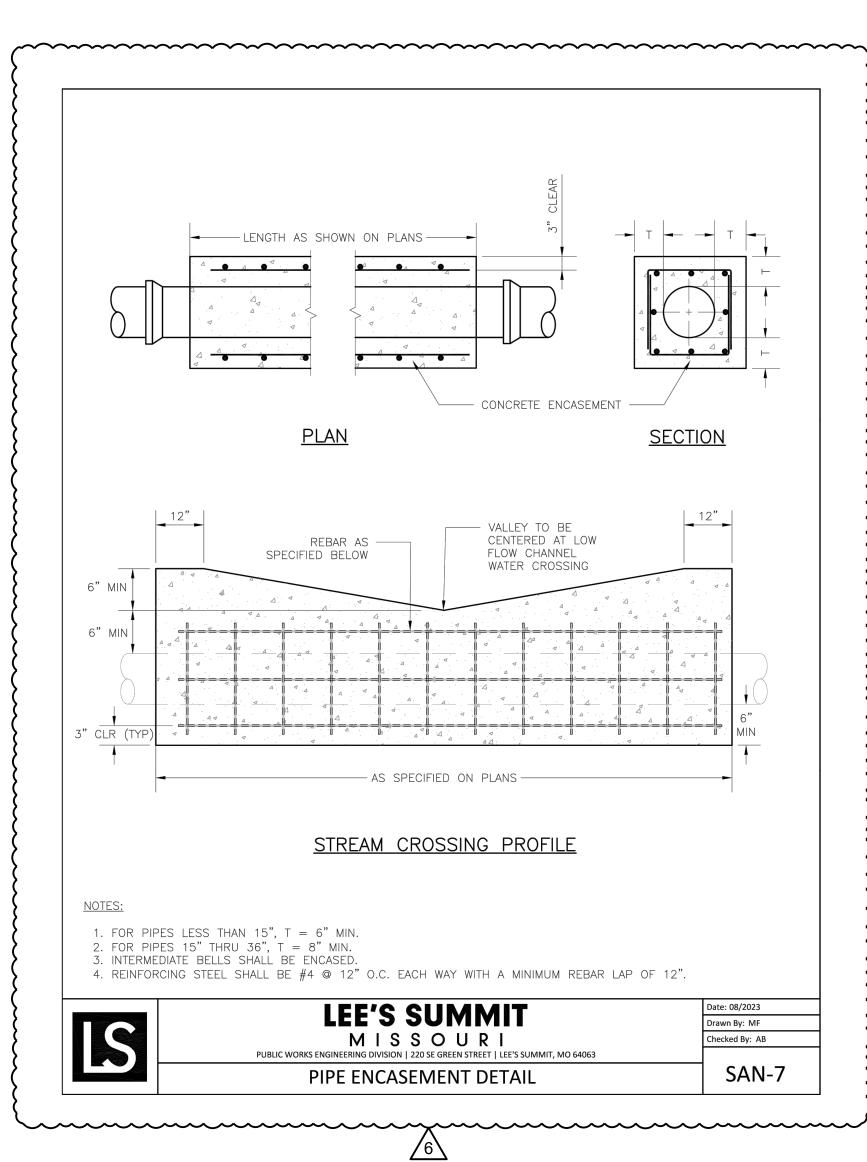
# RELEASED FOR CONSTRUCTION As Noted on Plan Review **Development Services Department**

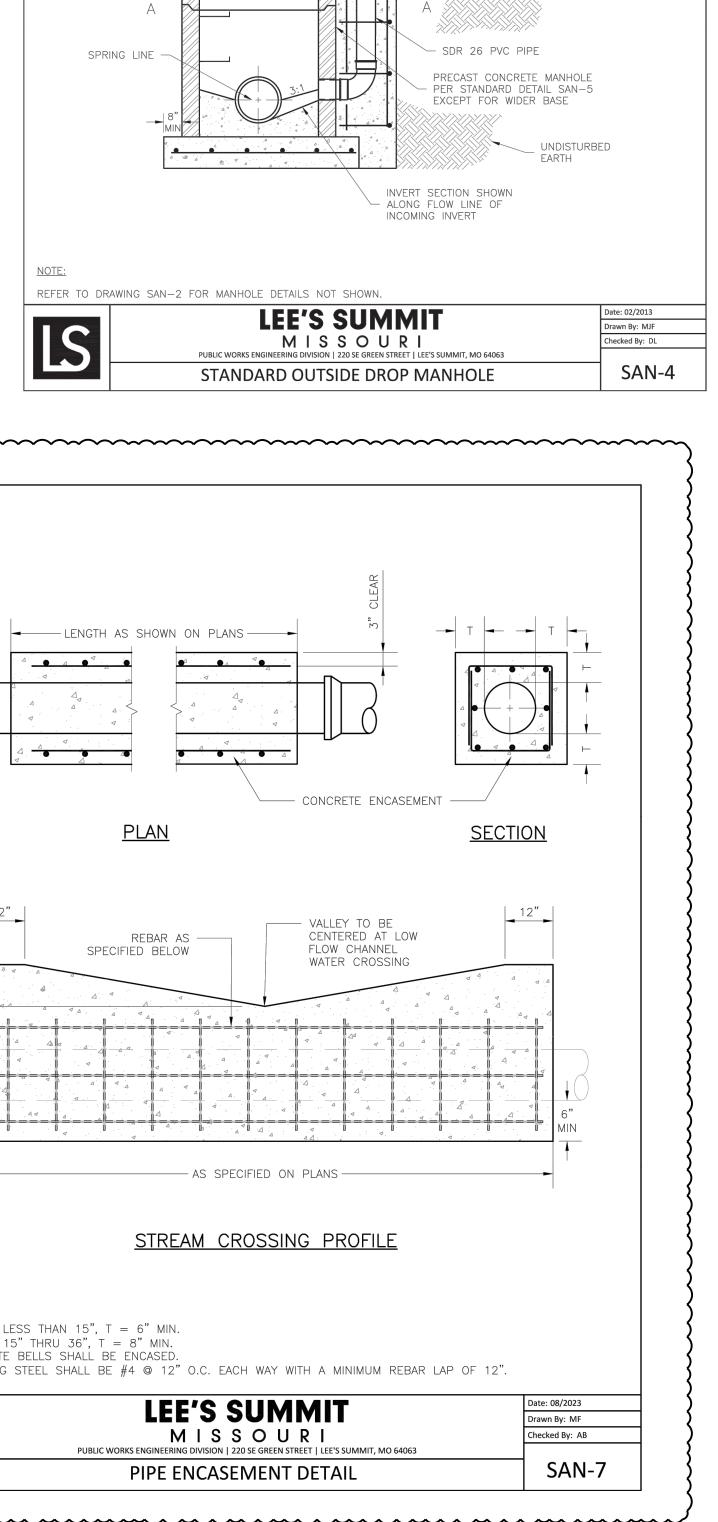
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

- 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 SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



SAN-2





PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

SLACKWELL VER MAIN PI

AG

SIDENCE SANITARY

REC LC

**DETAILS** 

SHEET