

U/E

UTILITY EASEMENT

CURB & GUTTER

P/L PROPERTY LINES

—— STO—— STORM SEWER

TREELINE

- 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

SANITARY SEWER MAIN - EXIST.

—— UGE, —— UNDERGROUND ELECTRIC - EX.

LIGHT - EXISTING

EXISTING MANHOLE

EXISTING AREA INLET

EXISTING CURB INLET

EXISTING GRATE INLET

EXISTING JUNCTION BOX EXISTING STORM MANHOLE

EXISTING SANITARY MANHOLE

PROPOSED SANITARY MANHOLE

STORM SEWER - EXISTING

—— T_X—— TELEPHONE LINE - EXIST.

GAS LINE - EXISTING

CLEANOUT

ELECTRIC LINE - EXISTING

---- CATV_x ---- CABLE TV - EXISTING

WATERLINE EASEMENT

UTILITY CONTACTS:

MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT) Steve Holloway 600 NE Colbern Road

600 NE Colbern Road Lee's Summit, MO 64086 (816) 607-2186

MISSOURI GAS ENERGY (MGE)

Brent Jones 3025 SE Clover Drive Lee's Summit, MO 64082 (816) 399-9633 brent.jones@spireenergy.com

KANSAS CITY POWER & LIGHT COMPANY (KCP&L)

Ron Dejarnette 1300 SE Hamblin Road Lee's Summit, MO 64081 Office: (816) 347-4316 Cell: (816) 810-5234 ron.dejarnette@kcpl.com

CITY OF LEES SUMMIT PUBLIC WORKS
Dena Mezger

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

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

COMCAST CABLE John Meadows 4700 Little Blue Parkway Independence, MO 64057 (816) 795-2257

CITY OF LEE'S SUMMIT WATER UTILITIES

Mark Schaufler 1200 SE Hamblen Road Lee's Summit, MO 64081 (816) 969-1900

SUMMARY OF QUANTITIES				
	ITEM	QUANTITY	UNITS	
1	8" PVC SDR 26	2,638	LF	
2	8" (CLASS 50) PROTECTO 401 D.I.	452	LF	
3	6" PVC SDR 26	977	LF	
4	8" x 6" WYE	30	EA	
5	REINFORCED CONCRETE ENCASEMENT	72	LF	
6	STANDARD 4' DIAMETER MANHOLE	16	EA	
7	SEWER CONNECTION	2	EA	
8	POST-CONST. BARREL ADJUSTMENT	8	EA	
9	POST-CONST. RING (3"-12") ADJUSTMENT	8	EA	
10	EXTRA DEPTH IN MANHOLE	146	VF	
11	CLEARING & GRUBBING	1	LS	
12	MANHOLE IN PAVED AREA	6	EA	
13	MOBILIZATION	1	LS	
14	EROSION CONTROL	1	LS	
15	BONDS	1	LS	

SANITARY SEWER MAIN PLANS FOR PERGOLA PARK, 5TH PLAT

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

GENERAL NOTES:

- 1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- 2. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
- 3. LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.
- 4. NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE.
- 5. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND APPARENT FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 6. THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583, 78TH GENERAL ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING 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 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 MISSOURI. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED.
- 7. 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 SIGNED SHOP DRAWINGS SHALL BE PROVIDED TO THE CITY INSPECTOR UPON REQUEST.
- 8. THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE.
- CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED 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
- CONTRACTOR, OR AS DIRECTED BY THE OWNER.
- 11. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK EXCAVATION.
- 12. THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION, AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
- 13. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
- 14. THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES INSPECTIONS AT: 816-969-1200 TO OBTAIN A DEVELOPMENT SERVICES CONSTRUCTION PERMIT. A MINIMUM 48 HOUR NOTICE SHALL BE GIVEN PRIOR TO PERMIT ISSUANCE.
- THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC HANDLING MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION).

UTILITIES:

- 1. 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 Engineer.
- The contractor shall be responsible for coordinating any required utility relocations. Utilities damaged through the negligence of the contractor shall be repaired at the contractor's expense.
- 3. Contractor shall verify flow-lines and structure tops prior to construction, and shall notify Engineer of any discrepancies. Provide shop drawings for all precast and manufactured utility structures for review by the Engineer prior to construction of the structures.
- 4. 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 measured from edge to edge. If minimum separations can not be obtained, concrete encasement of the sanitary line shall be required 10 feet in each direction of the conflict.
- 5. 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 shall be included in the contract price for the utility installation.
- other items necessary for the construction of the utility line shall be included in the contract price for the utility installation.

 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 connection to any existing main.
 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 for utility trenching is 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 has the authority to identify and define the physical characteristics to determine the classification. Unit price quantities for rock excavation will be paid at a trench width of the

trenches by disposing it in areas as specified by the Project Engineer.

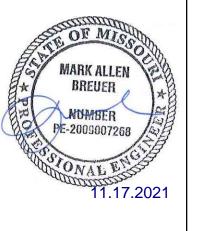
nominal pipe diameter of the installed main plus 18 inches. Contractor is required to dispose of excess rock from their

Sheet List Table				
Sheet Number	Sheet Title			
1	COVER			
2	LAYOUT & GRADING PLAN			
3	LINE A			
4	LINE A CONT.			
5	LINE A CONT. & LINE B			
6	LINE C & D			
7	SANITARY DETAILS			



ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCH 14920 West 107th Street • Lenexa, Kansas 66215 (913) 492-5158 • Fax: (913) 492-8400 WWW.SCHLAGELASSOCIATES.COM Missouri State Certificates of Authority

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A

H

A E R

APPROVED BY:

CITY ENGINEER
APPROVED FOR ONE YEAR FROM THIS DATE

DATE



OWNER/DEVELOPER:

NLV DEVELOPMENT COMPANY LLC RUSSELL PEARSON 3152 SW GRANDSTAND CIRCLE LEE'S SUMMIT, MO 64081 p 816-589-4415 f ----

RPEARSON@BOXDEVCO.COM

MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

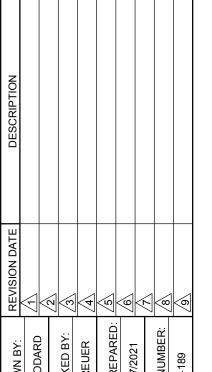
BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.

ELEV. 935.18

PROJECT BENCHMARK:

CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

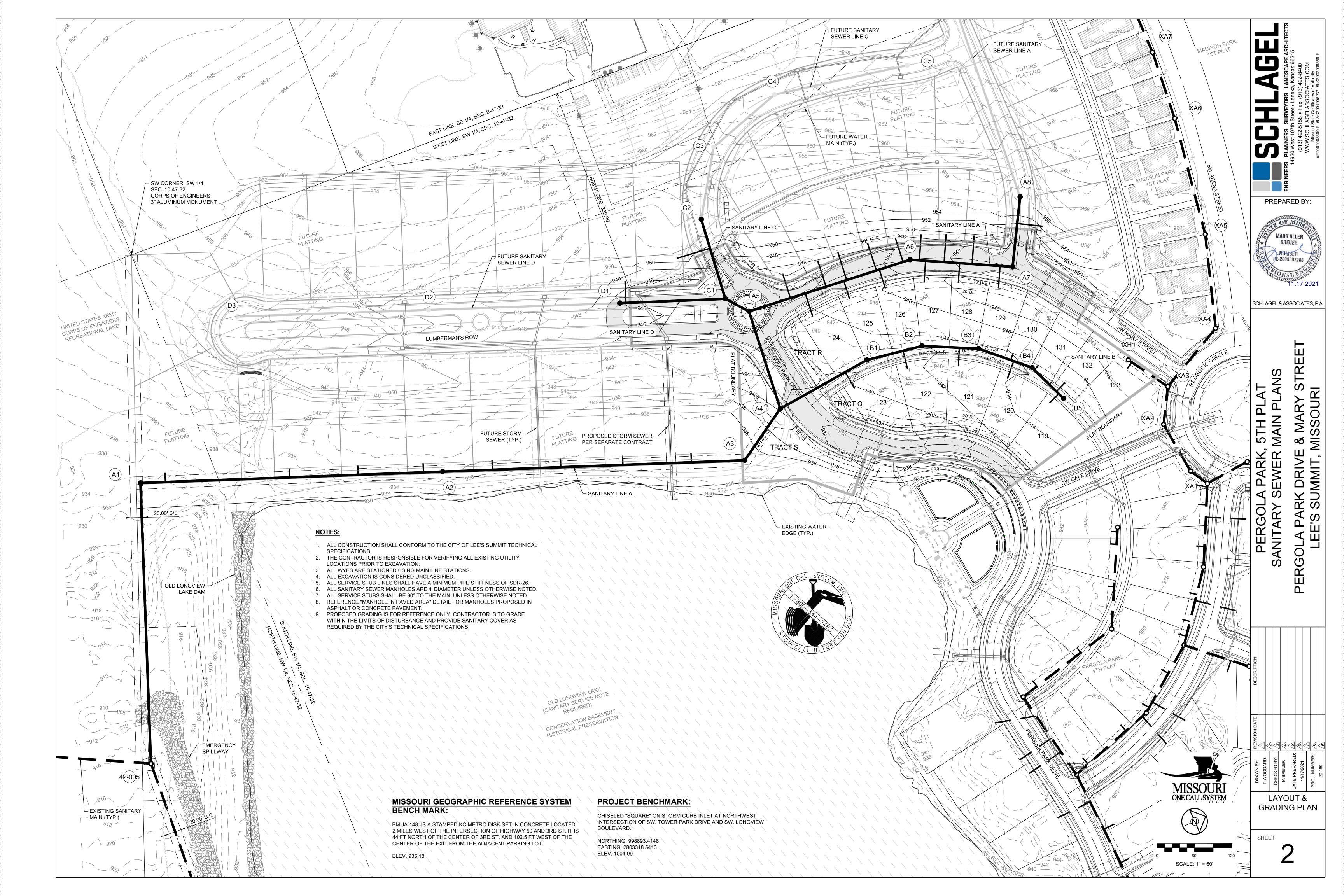
NORTHING: 998893.4148 EASTING: 2803318.5413 ELEV. 1004.09



COVER

SHEET

1



MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

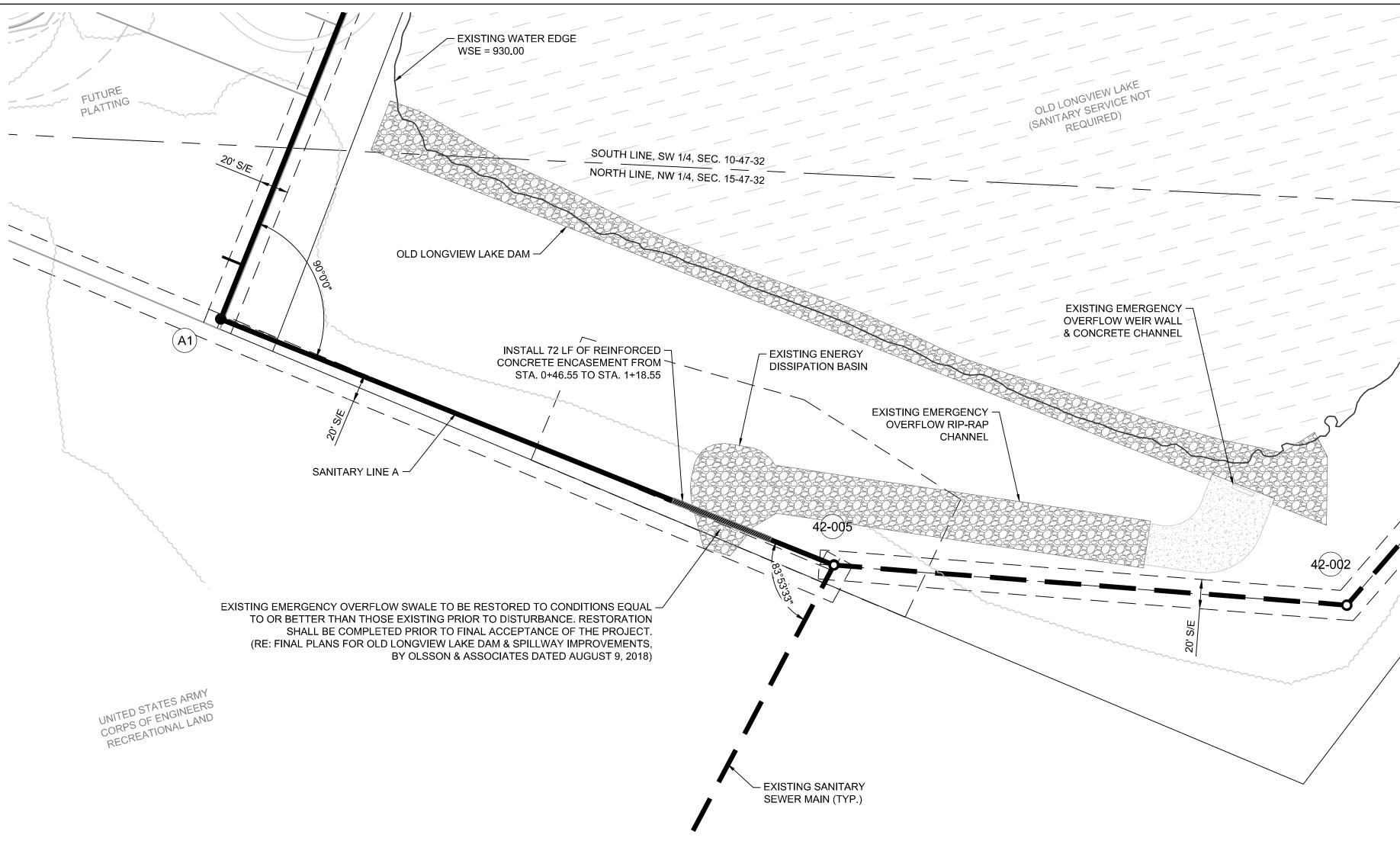
BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.

ELEV. 935.18

PROJECT BENCHMARK:

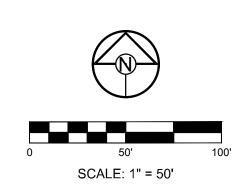
CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 998893.4148 EASTING: 2803318.5413 ELEV. 1004.09







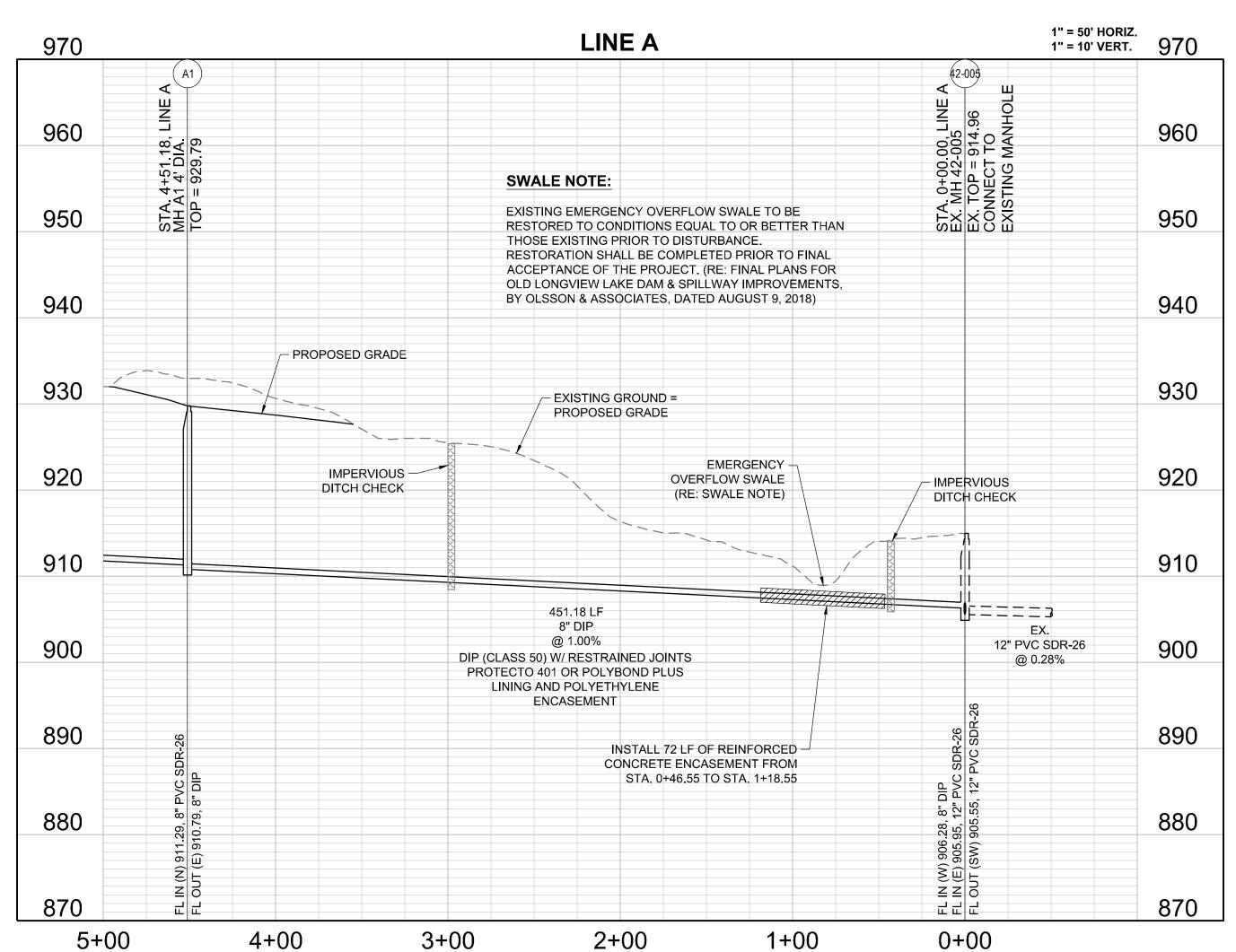


NOTES:

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S
- SUMMIT TECHNICAL SPECIFICATIONS.

 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL
- EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.

 3. ALL WYES ARE STATIONED USING MAIN LINE STATIONS.
- 4. ALL EXCAVATION IS CONSIDERED UNCLASSIFIED.
- 5. ALL SERVICE STUB LINES SHALL HAVE A MINIMUM PIPE STIFFNESS OF SDR-26.
- 6. MSFE = MINIMUM SERVICEABLE FLOOR ELEVATION7. SSNR = SEWER SERVICE NOT REQUIRED
- 8. DDS = DISTANCE DOWNSTREAM
- 9. WSE = WATER SURFACE ELEVATION
 10. ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS OTHERWISE NOTED.
- 11. TRACER WIRE SHALL BE INSTALLED ALONG THE TOP OF SERVICE STUBS. THE WIRE SHALL HAVE HDPE INSULATION, BE NO SMALLER THAN 12 GAUGE, AND INTENDED FOR
- NO SMALLER THAN 12 GAUGE, AND INTENDED FOR UNDERGROUND APPLICATIONS. THE TRACER WIRE SHALL BE GREEN IN COLOR. TRACER WIRES SHALL TERMINATE AT THE GROUND SURFACE INSIDE A TRACER BOX. TRACER BOX LIDS SHALL BE GREEN IN COLOR. TRACER WIRE SHALL BE GROUNDED A MINIMUM ONE POUND MAGNESIUM ANODE AT THE
- 12. ALL SERVICE STUBS SHALL BE 90° TO THE MAIN, UNLESS OTHERWISE NOTED.



ENGINEERS PLANNERS SURVEYORS LANDSCAPE AR 14920 West 107th Street • Lenexa, Kansas 66215 (913) 492-5158 • Fax: (913) 492-8400 WWW.SCHLAGELASSOCIATES.COM Missouri State Certificates of Authority

MARK ALLEN
BREUER

MUMBER
PE-2009007268

11.17.2021

SCHLAGEL & ASSOCIATES, P.A.

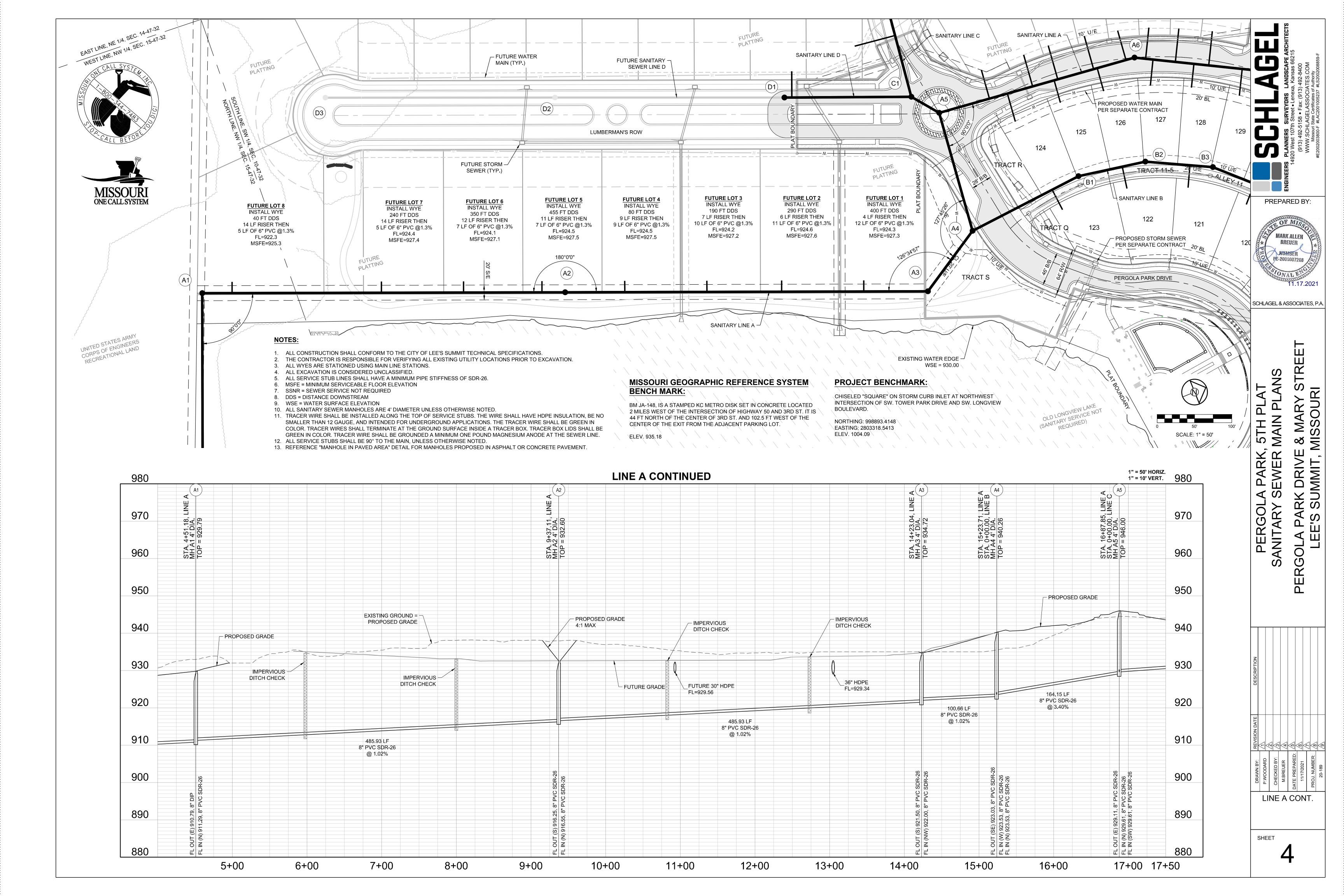
PERGOLA PARK, 5TH PLAT
SANITARY SEWER MAIN PLANS
PERGOLA PARK DRIVE & MARY STREE

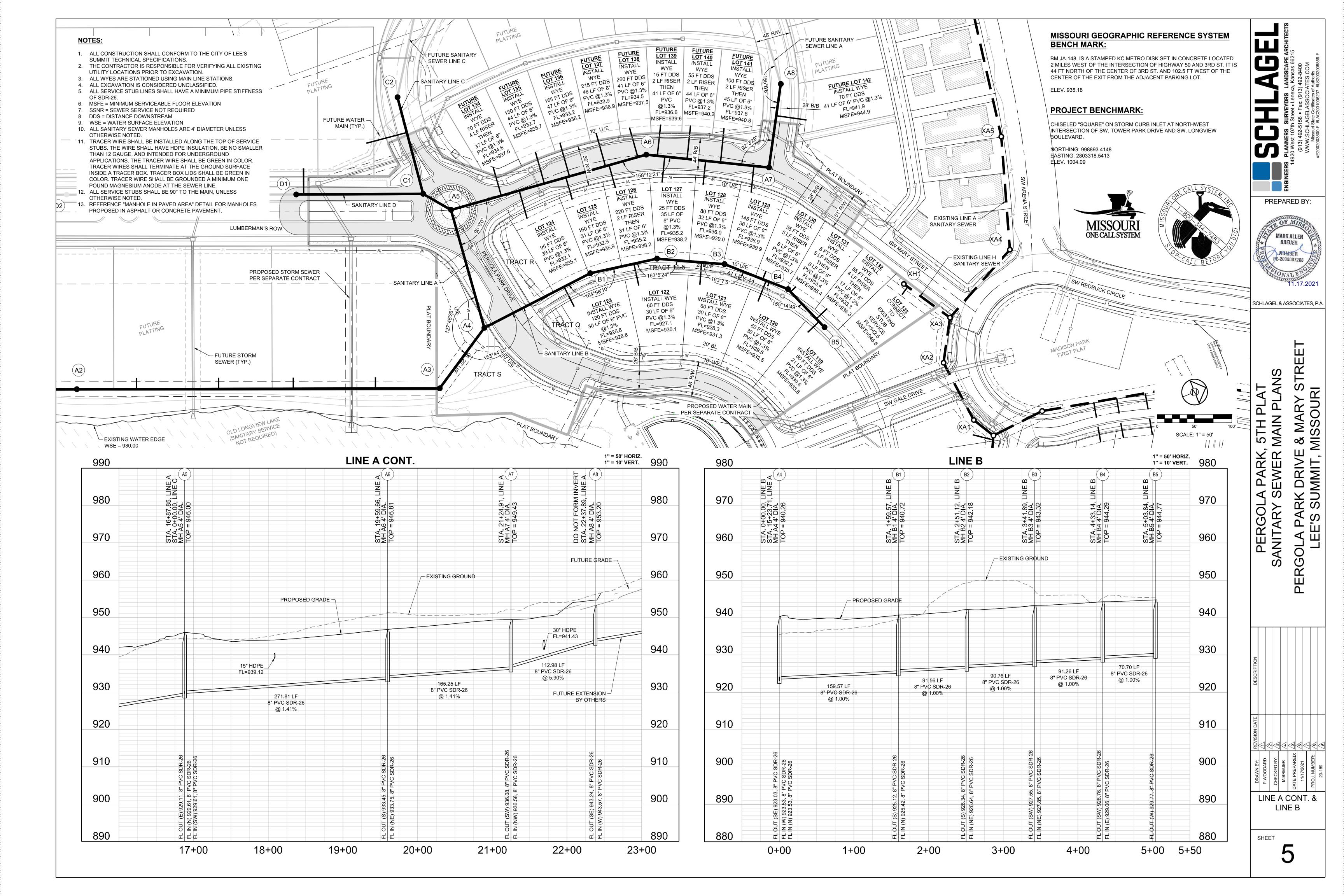
\$\frac{1}{2}\cong\frac{1}{2

CHECKED BY:
M.BREUER
DATE PREPARED:
11/17/2021

LINE A

SHEET 3





MISSOURI GEOGRAPHIC REFERENCE SYSTEM **BENCH MARK:**

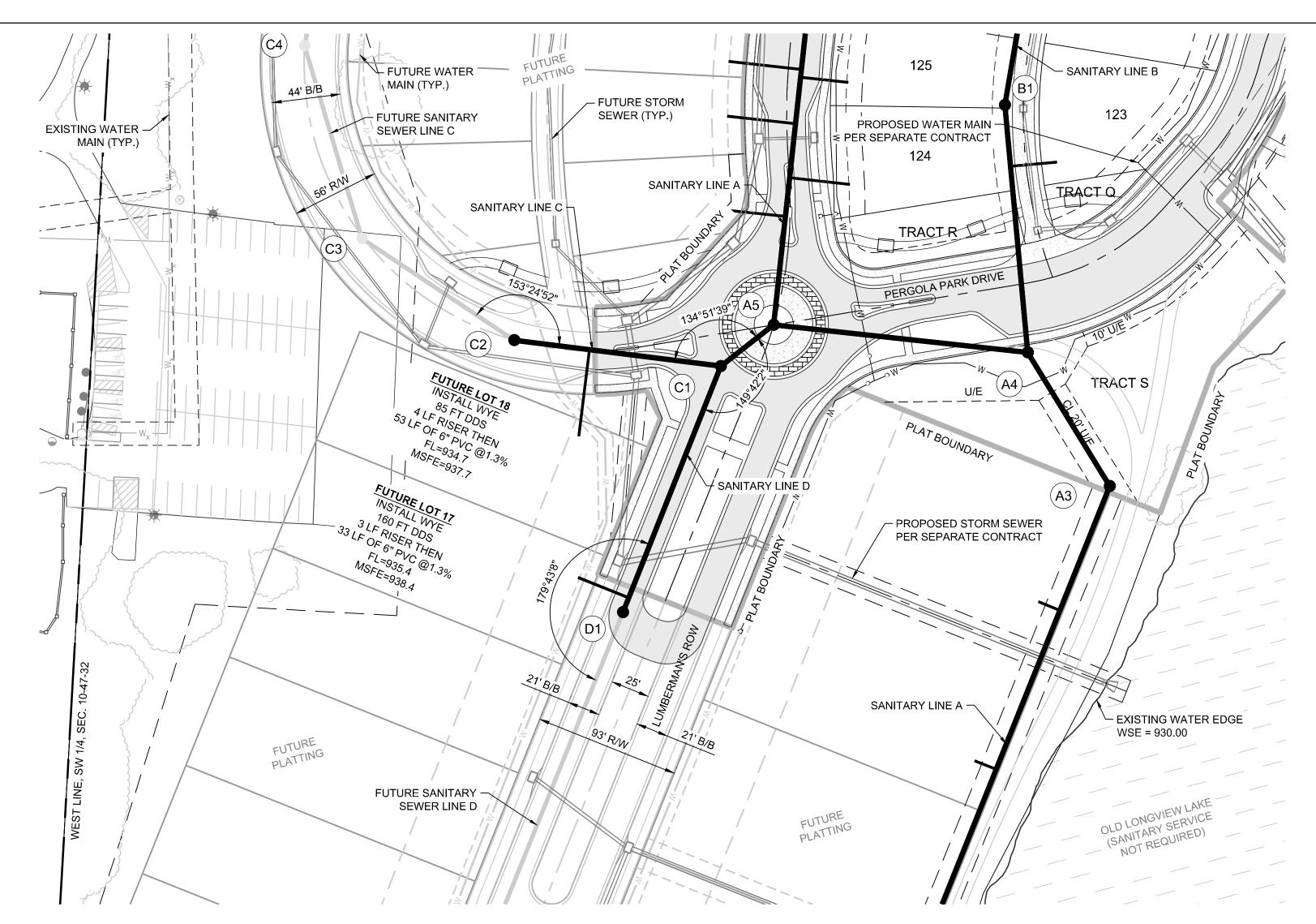
BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.

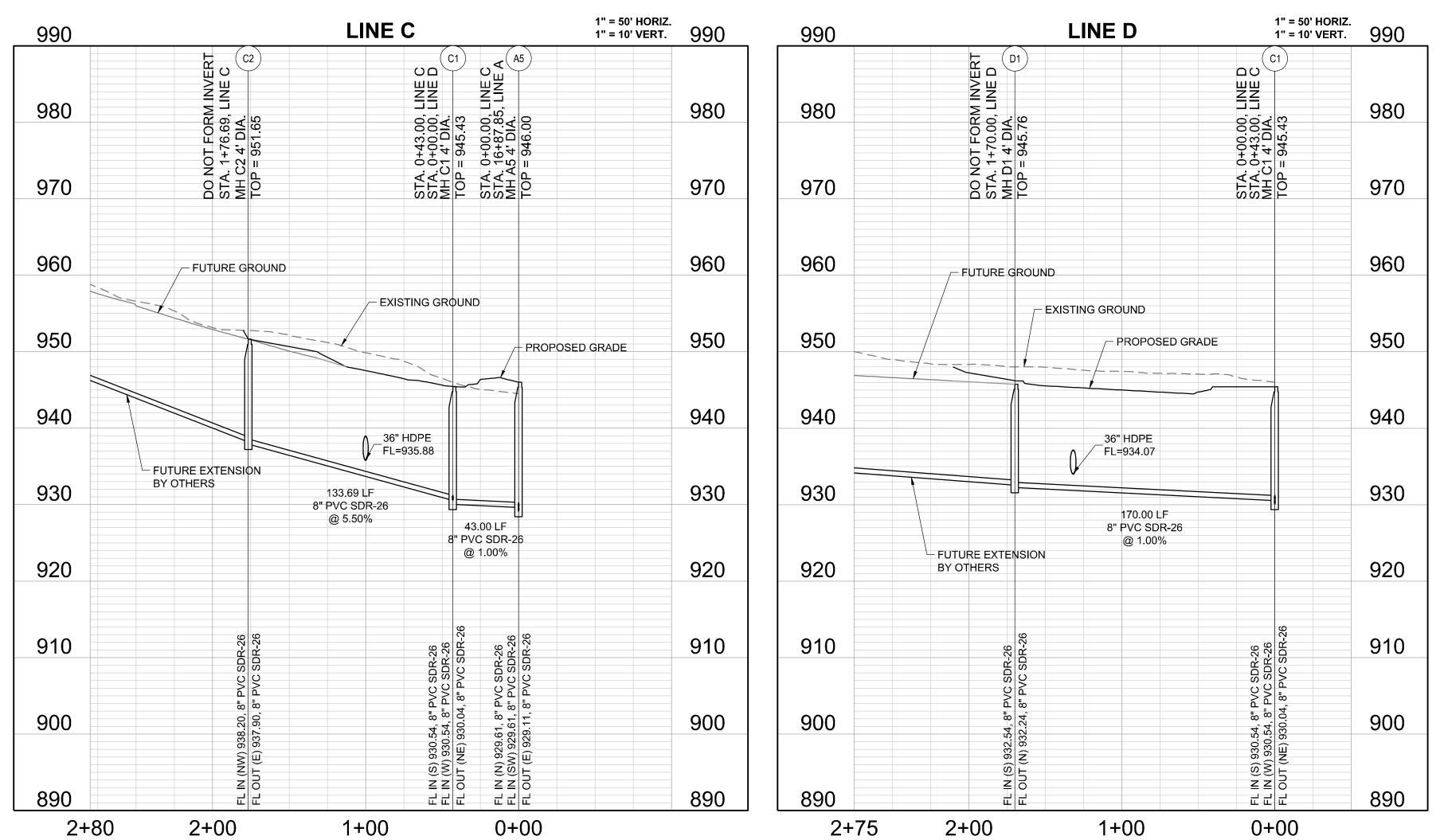
ELEV. 935.18

PROJECT BENCHMARK:

CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 998893.4148 EASTING: 2803318.5413 ELEV. 1004.09



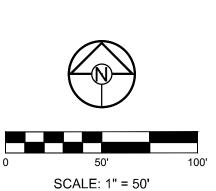




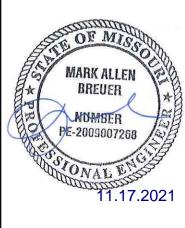
- 1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S
- SUMMIT TECHNICAL SPECIFICATIONS. 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING
- UTILITY LOCATIONS PRIOR TO EXCAVATION.
- 3. ALL WYES ARE STATIONED USING MAIN LINE STATIONS. 4. ALL EXCAVATION IS CONSIDERED UNCLASSIFIED.
- 5. ALL SERVICE STUB LINES SHALL HAVE A MINIMUM PIPE STIFFNESS
- 6. MSFE = MINIMUM SERVICEABLE FLOOR ELEVATION
- SSNR = SEWER SERVICE NOT REQUIRED
- 8. DDS = DISTANCE DOWNSTREAM
- 9. WSE = WATER SURFACE ELEVATION 10. ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS
- OTHERWISE NOTED. 11. TRACER WIRE SHALL BE INSTALLED ALONG THE TOP OF SERVICE STUBS. THE WIRE SHALL HAVE HDPE INSULATION, BE NO SMALLER
- THAN 12 GAUGE, AND INTENDED FOR UNDERGROUND APPLICATIONS. THE TRACER WIRE SHALL BE GREEN IN COLOR. TRACER WIRES SHALL TERMINATE AT THE GROUND SURFACE INSIDE A TRACER BOX. TRACER BOX LIDS SHALL BE GREEN IN COLOR. TRACER WIRE SHALL BE GROUNDED A MINIMUM ONE
- 12. ALL SERVICE STUBS SHALL BE 90° TO THE MAIN, UNLESS OTHERWISE NOTED.

POUND MAGNESIUM ANODE AT THE SEWER LINE.

13. REFERENCE "MANHOLE IN PAVED AREA" DETAIL FOR MANHOLES PROPOSED IN ASPHALT OR CONCRETE PAVEMENT.



PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

RK, ER

PERGOLA PAF SANITARY SEWE PERGOLA PARK DRI LEE'S SUMMI

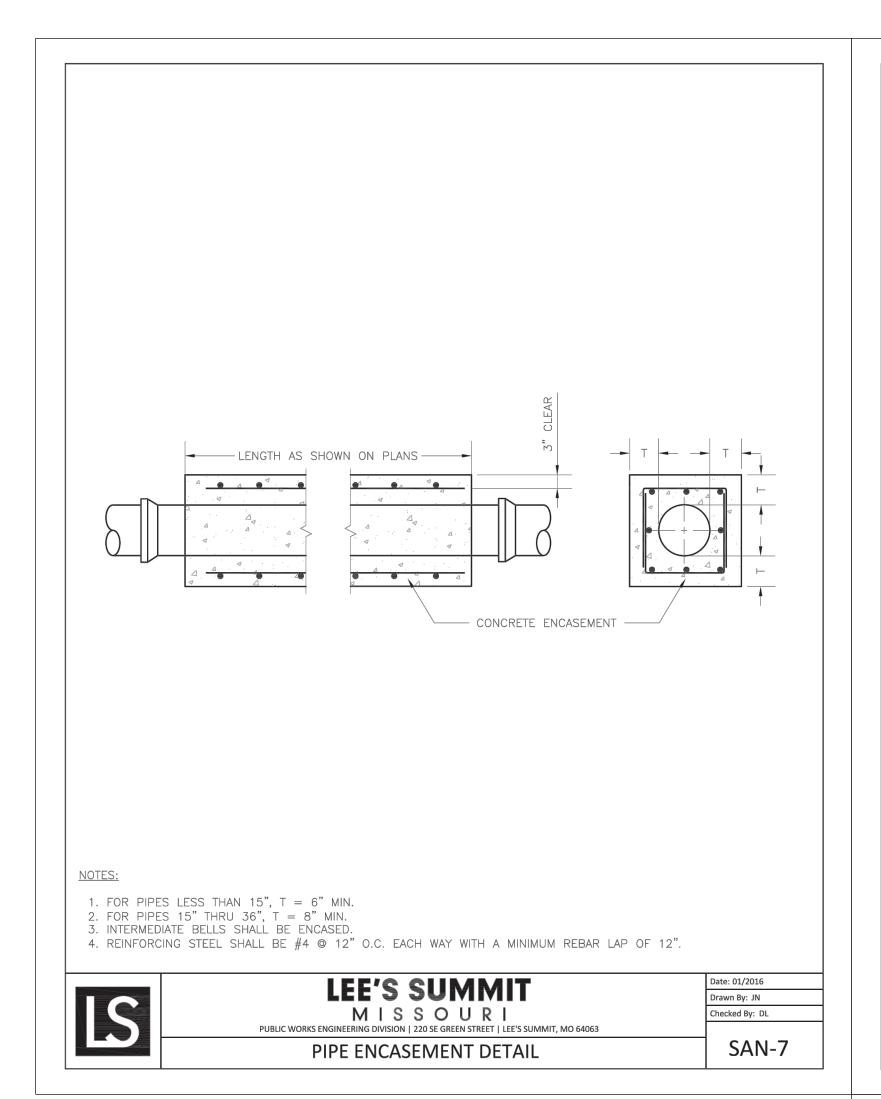
	$\langle \overline{z} \rangle$
	\ <u>\</u>
	4
. C	(2)
: _	9
نذ	8

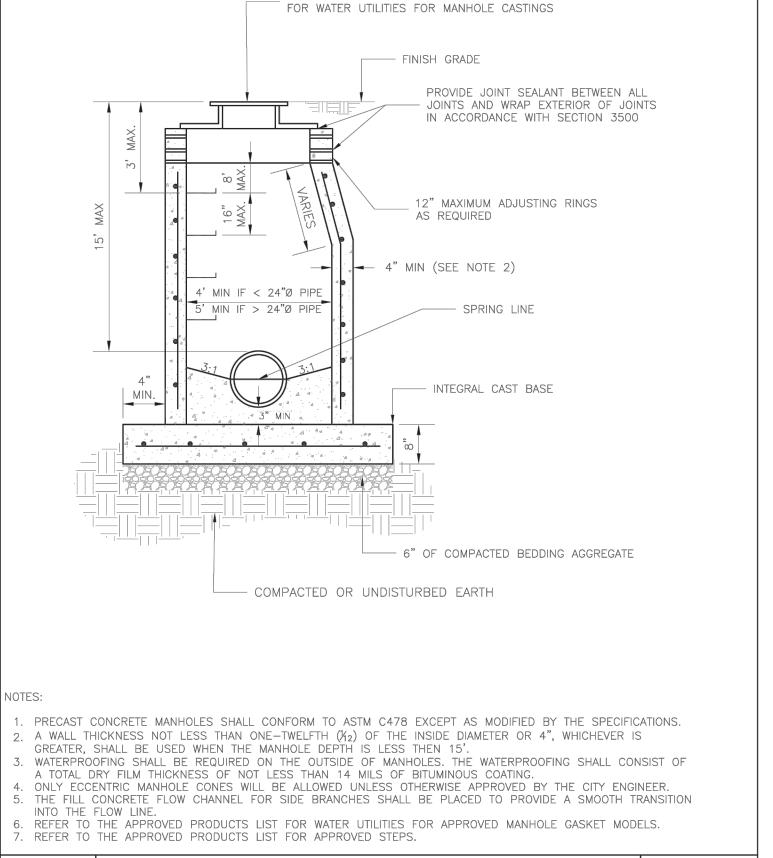
LINE C & D

SHEET 6









LEE'S SUMMIT

STANDARD SANITARY PRECAST MANHOLE

MISSOURI

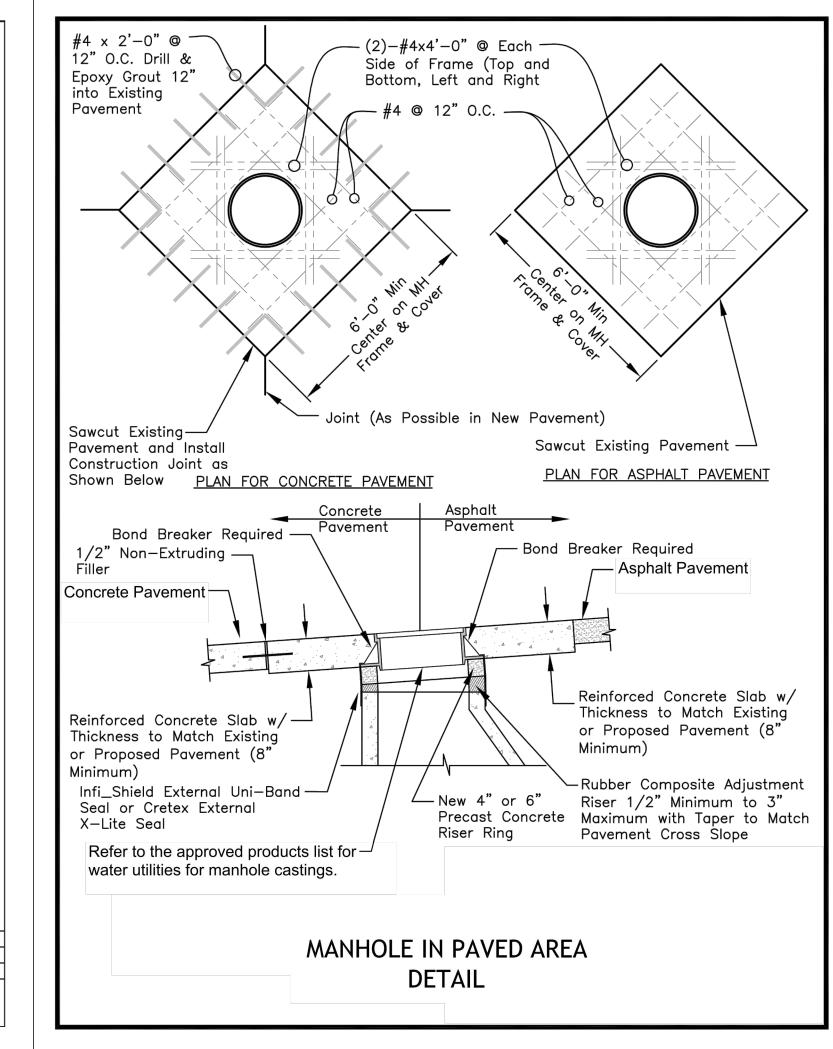
Date: 12/2015

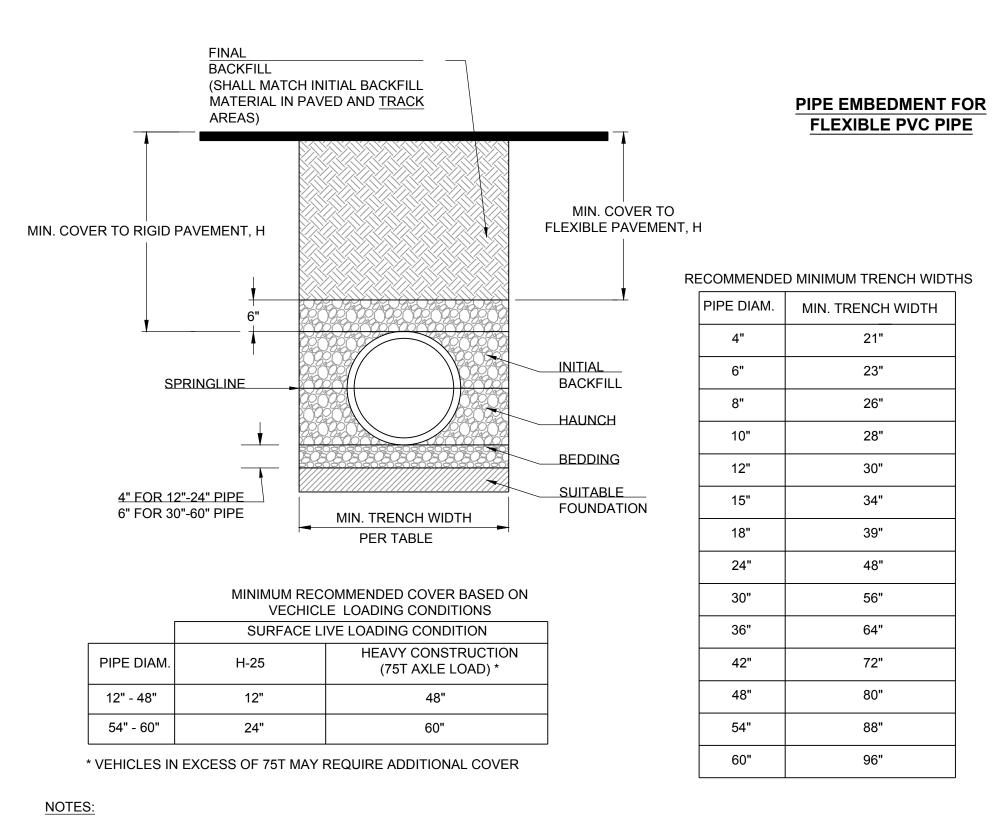
Drawn By: SC

necked By: DL

SAN-2

REFER TO THE APPROVED PRODUCTS LIST





1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF

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.

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 4" (100mm) FOR 4"-24" (100mm-600mm); 6"

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

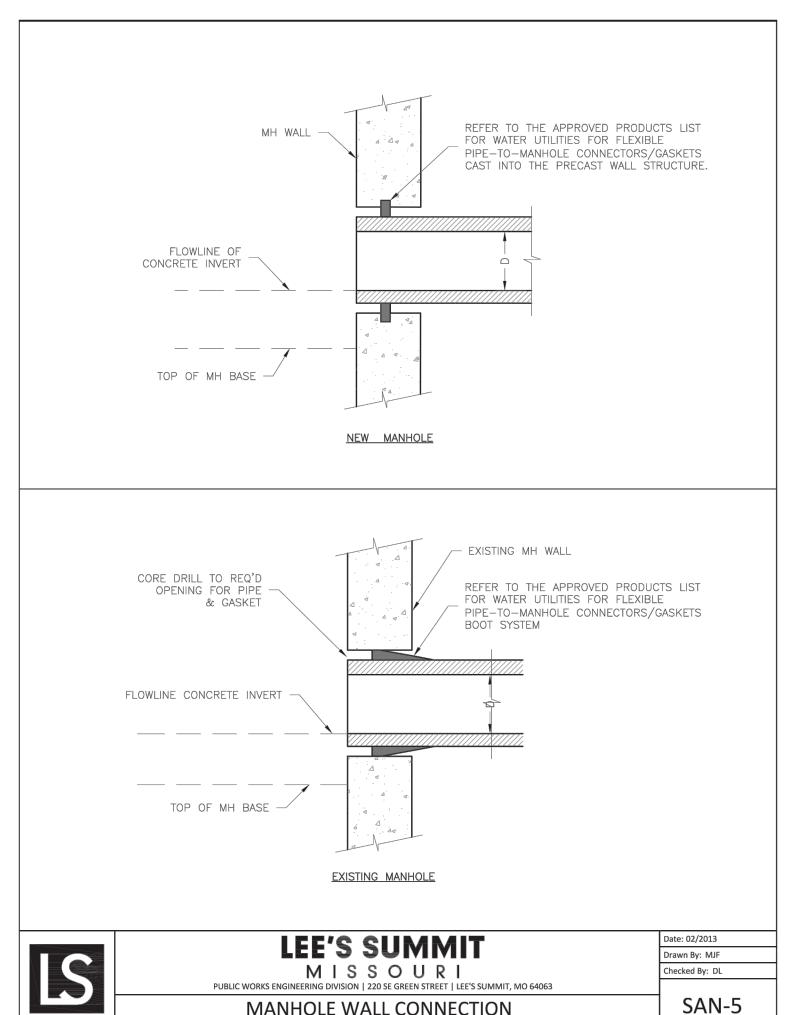
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION

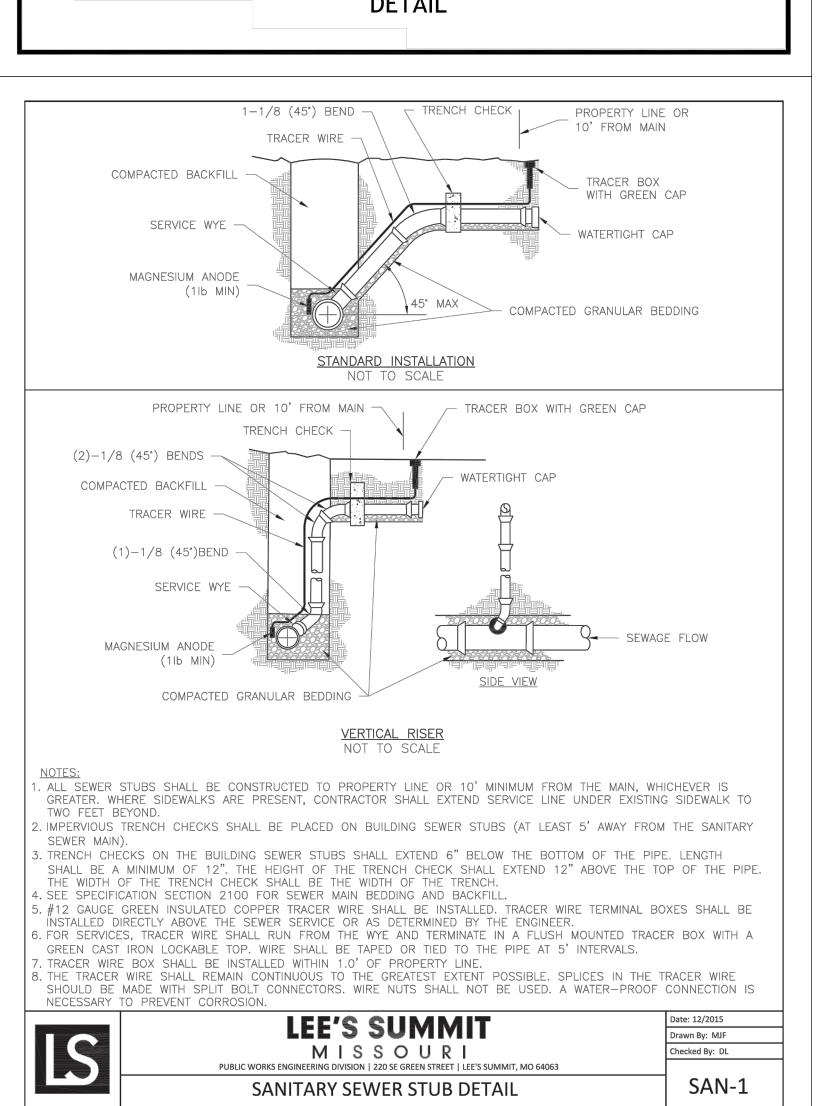
THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

(150mm) FOR 30"-60" (750mm-900mm).

ASTM D2321, LATEST EDITION.

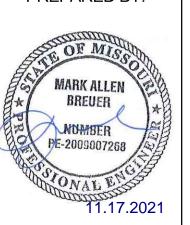


MANHOLE WALL CONNECTION





PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

A RK, ER PAI EWI

SANITARY DETAILS

SHEET