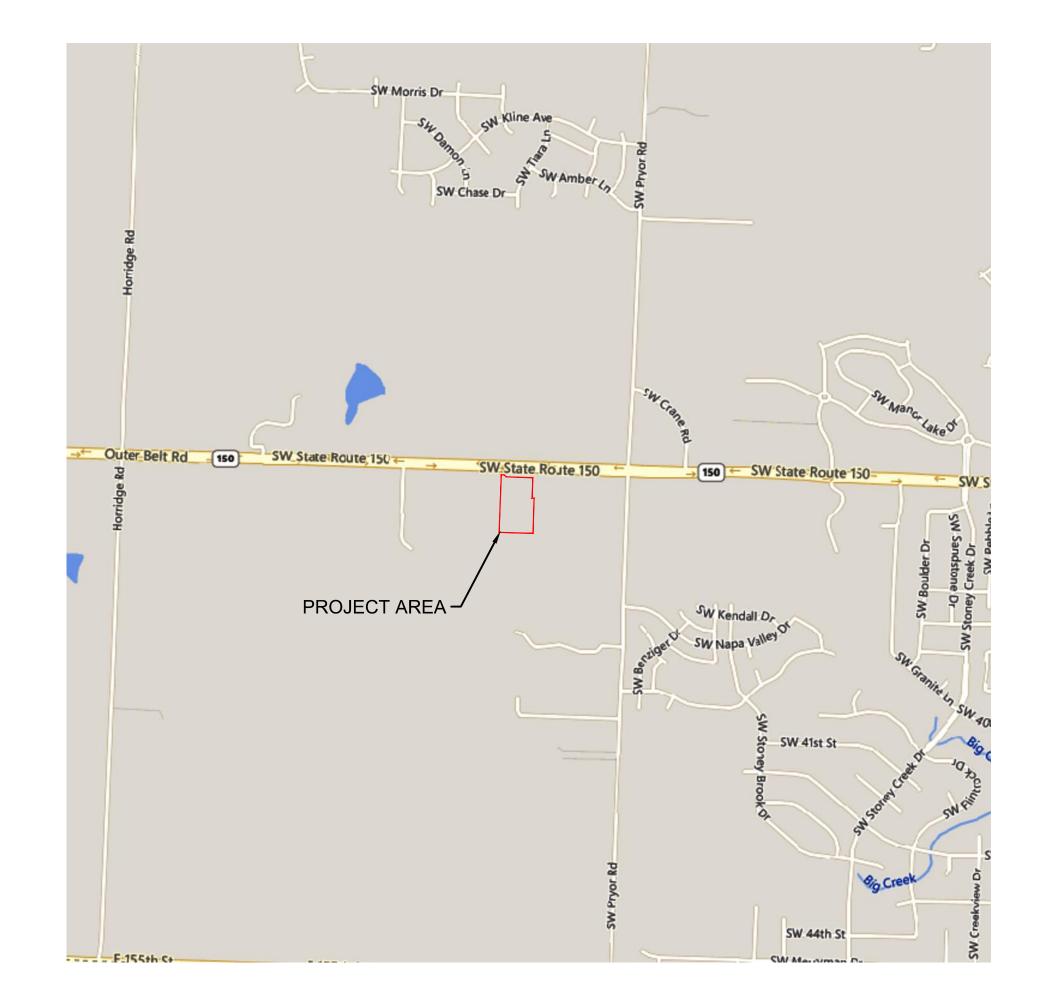


EMAIL: JROUDEBUSH@OLSSON.COM



OSAGE THIRD PLAT SANITARY SEWER PLANS

NE 1/4 SECTION 35, TOWNSHIP 47 N, RANGE 32 W. IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



PROPERTY DESCRIPTION:

ALL OF THE WEST HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 35, TOWNSHIP 47 NORTH, RANGE 32 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY MISSOURI EXCEPT THAT PART IN MISSOURI STATE HIGHWAY NO. 150

ALSO

A TRACT OF LAND IN THE WEST HALF OF THE SOUTHWEST QUARTER AND EAST HALF OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 35, TOWNSHIP 47 NORTH, RANGE 32 WEST OF THE 5TH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI BEING BOUNDED AND DESCRIBED BY OR UNDER THE DIRECT SUPERVISION OF JASON S. ROUDEBUSH, P.L.S. 2002014092, AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER; THENCE NORTH 88°07'14" WEST, ON THE NORTH LINE OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER, 1,319.40 FEET TO THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER; THENCE SOUTH 0210'22" WEST, ON THE WEST LINE OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER, 659.27 FEET TO THE NORTHWEST CORNER OF SAID SOUTHWEST QUARTER OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER ALSO BEING A POINT ON THE WESTERLY LINE OF PROPOSED OSAGE 2ND PLAT; THENCE SOUTH 88'08'29" EAST ON THE NORTH LINE OF SAID SOUTHWEST QUARTER OF SAID NORTHEAST QUARTER, AND ALONG SAID WESTERLY LINE, 326.96 FEET TO THE NORTHEAST CORNER OF SAID WEST HALF OF SAID SOUTHWEST QUARTER OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER, ALSO BEING THE SOUTHWEST CORNER OF SAID EAST HALF OF SAID NORTHWEST QUARTER OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER; THENCE NORTH 02°09'46" EAST ON THE WEST LINE OF SAID EAST HALF OF SAID NORTHWEST QUARTER OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER, AND ALONG SAID WESTERLY LINE 346.14 FEET; THENCE LEAVING SAID EAST LINE AND SAID WESTERLY LINE, SOUTH 88*1'07" EAST, ALONG THE NORTH LINE OF PROPOSED TRACT I OF SAID PROPOSED OSAGE 2ND PLAT, 21.17 FEET; THENCE SOUTH 01°48'53" WEST ALONG THE EASTERLY LINE OF SAID PROPOSED TRACT I, A DISTANCE OF 366.13 FEET; THENCE NORTH 88"11"O7" WEST, ALONG SAID EASTERLY LINE AND ITS WESTERLY EXTENSION 353.36 FEET TO A POINT ON SAID WEST LINE OF SAID NORTHEAST QUARTER OF SAID NORTHEAST QUARTER; THENCE NORTH 02*10'22" EAST ON SAID WEST LINE, 20.25 FEET TO THE POINT OF BEGINNING. CONTAINING 14,798 SQUARE FEET OR 0.34 ACRES, MORE OR LESS.

BENCHMARK

BENCHMARK NO. 1
CHISELED PLUS ON THE EAST FLANGED BOLT OF THE FIRE HYDRANT ON THE WEST SIDE OF SW PRYOR ROAD ON ADJOINING PROPERTY SOUTH OF THE SOUTHWEST CORNER OF SUBJECT PROPERTY.
ELEVATION = 1014.830

BENCHMARK NO. 2
RAILROAD SPIKE IN THE NORTH FACE OF POWER POLE LOCATED ON THE SOUTH SIDE MISSOURI STATE HIGHWAY 150 AT THE WEST SIDE OF THE DRIVEWAY TO 2025 MISSOURI STATE HIGHWAY 150, LEE'S SUMMIT, MO. ELEVATION = 1031.313

She	et List Table
Sheet Number	Sheet Title
C201	TITLE SHEET
C202	GENERAL NOTES
C203	GENERAL LAYOUT
C204	SANITARY PLAN & PROFILE
C205	SANITARY PLAN & PROFILE
C206	DESIGN TABLES
C207	DETAIL SHEET
C208	DETAIL SHEET

OLSSON HAS BEEN RETAINED TO PROVIDE AS-BUILT DRAWINGS FOR THIS PROJECT.

JULIE E. SELLERS, P.E.
CIVIL ENGINEER

MO# PE-2019000237

7/12/21 DATE

DATE

drawn by: MJD
checked by: JES
designed by: MJD
QA/QC by: JES
project no.: D19-2339
drawing no.: C TTL01 D192339
date: 6/24/2021

SHEET C201

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GENERAL NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION ARE THE MOST CURRENT VERSION ISSUED, ARE FULLY COORDINATED WITH ALL SUBCONTRACTORS, AND PRESENT ON SITE AT ALL TIMES. CURRENT PLANS PREPARED BY OLSSON MAY BE OBTAINED AT THE DIRECTION OF OLSSON'S CLIENT. DIRECT REQUESTS TO OLSSON MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR INFORMATION.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
- 3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
- 7. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
- 8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY THROUGHOUT THE PROJECT AND NOT BE LIMITED BY WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
- 9. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
- 12. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK—THROUGH OF THE CONSTRUCTION SITE.

REFERENCES

- 1. UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY:
- A. ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.
- B. ALL CONSTRUCTION IN MODOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MODOT.
- C. ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- D. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES.
- E. ALL EXTERIOR PAVEMENT (PCC, ASPHALT, ETC.) SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS OF LEE'S SUMMIT. MISSOURI
- 4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DELIVERY MANAGER AND COORDINATING ANY MAILBOXES THAT MAY BE DISTURBED. FAILURE TO DO SO MAY SUBJECT THE CONTRACTOR TO PROSECUTION

EXISTING CONDITIONS

BY THE FEDERAL GOVERNMENT.

- THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN INVESTIGATIONS AND MAKING THEIR OWN ASSUMPTIONS REGARDING SITE SURFACE AND SUBSURFACE CONDITIONS. THIS INCLUDES THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. CONTACT THE ENGINEER REGARDING ANY DISCREPANCIES THAT MAY AFFECT THE ABILITY TO CONSTRUCT FROM THESE PLANS AS DESIGNED.
- 3. EXISTING CONDITIONS WERE DETERMINED THROUGH A VARIETY OF METHODS THAT MAY INCLUDE SURVEY, AERIAL IMAGERY, AVAILABLE RECORDS, GIS DATA, ETC. SUBSURFACE CONDITIONS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES AND OTHER SITE IMPROVEMENTS PRESENT ON SITE. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS WHEN CONFLICTS AND DISCREPANCIES ARE FOUND.

CONSTRUCTION

- 1. THE CONTRACTOR SHALL INSTALL TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT—OF—WAY AS SHOWN IN THESE PLANS. IF PLANS ARE NOT PROVIDED, CONTRACTOR SHALL COORDINATE AND PROVIDE CONTROLS TO THE SATISFACTION OF THE RIGHT—OF—WAY OWNER.
- 2. THE CONTRACTOR SHALL PROTECT ALL TREES OVER 3" CALIPER FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
- 3. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING

FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.

- 4. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED. NOT ALL ADJUSTMENTS ARE INDICATED IN THE PLANS.
- 5. THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

SHOP DRAWINGS

- 1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING A MINIMUM OF 7 DAYS PRIOR TO THE REQUESTED DATE OF APPROVAL. ENGINEER SHALL REVIEW SHOP DRAWINGS OR SAMPLES CONFORMANCE WITH THE DESIGN FOR THIS PROJECT AS DESCRIBED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS. THE ENGINEER'S REVIEW SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS NOTIFIED ENGINEER OF EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND OBTAINED ENGINEER'S WRITTEN APPROVAL OF EACH SUCH VARIATION. PRIOR TO SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE REVIEWED AND VERIFIED:
- A. ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT
- THERETO;

 B. ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION
- PERTAINING TO THE PERFORMANCE OF THE WORK;
 C. ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO;
- SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES, AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.

 E. ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC

WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY

D. CONTRACTOR SHALL ALSO HAVE REVIEWED AND COORDINATED EACH

COMPLETED THE ABOVE TASKS.

2. SHOP DRAWINGS AS DESCRIBED ABOVE ARE REQUIRED FOR, BUT NOT LIMITED TO, THE FOLLOWING:

A. ALL SANITARY SEWER STRUCTURES TO BE INSTALLED WITH THIS

B. ANY ITEMS IN THESE PLANS THAT ALLOW FOR AN "APPROVED EQUAL" ALTERNATIVE.

SANITARY SEWER GENERAL NOTES

- PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH CITY OF LEE'S SUMMIT, MISSOURI
- 2. ALL PIPE LENGTHS ARE CALCULATED LINEARLY FROM CENTER OF
- STRUCTURE TO CENTER OF STRUCTURE.

 4. ALL STRUCTURE DIMENSIONS ARE TO INSIDE FACE OF STRUCTURE.
- 5. COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE.
 ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND
 ORDINANCES OR AS AN AID WHEN ORIENTING THE LID DURING
 INSTALLATION.
- 6. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF SANITARY SEWER.
- 7. SANITARY SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
- 8. MANHOLE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO ½ THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE MANHOLE.
- 9. PIPE PENETRATIONS SHALL BE USE GASKETS TO ENSURE WATERTIGHT SEALS.
- 10. TRACING TAPE SHALL BE INSTALLED ALONG ALL NON-METALLIC SURFACES OR AS DIRECTED BY LOCAL CODES AND ORDINANCES.
- 11. SEWER LINE INSPECTIONS AND TESTING MUST BE SCHEDULED A MINIMUM OF TWO FULL BUSINESS DAYS IN ADVANCE. CONTRACTOR SHALL FURNISH ALL TESTING EQUIPMENT. TESTING SHALL INCLUDE

 A. MANDREL TEST OF ALL GRAVITY SEWERS. IF THE MANDREL TEST FAILS ON ANY SECTION OF PIPE, THAT SECTION SHALL BE
 - UNCOVERED AND REPLACED.

 B. AIR PRESSURE TEST OF ALL GRAVITY SEWERS.
- C. VACUUM TEST OF ALL MANHOLES.
- 12. REFER TO SHEET C206 FOR SANITARY DESIGN & SEWER LATERAL INFORMATION.
- 13. ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X4" PVC WYE, 4"PVC 45" BEND, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP. SEE DETAIL SHEET
- 14. MSFE- INDICATES LOWEST FLOOR SERVICEABLE BY PROPOSED SANITARY SEWER.
- 15. MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.
- 16. SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IT IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE
- 17. REFER TO CURRENT CITY SPECIFICATIONS FOR MINIMUM PIPE SLOPES.
- 18. CONTRACTOR MAY BE REQUIRED TO RECONSTRUCT PIPE AND STRUCTURE IF MINIMUM INVERT DROP OR PIPE SLOPE REQUIREMENTS ARE NOT MET.
- 19. SANITARY STRUCTURES SHALL BE PER CURRENT CITY DETAILS. IF CITY DOES NOT HAVE PUBLISHED DETAILS STRUCTURES SHALL BE PER CURRENT APWA SPECIFICATIONS.
- 20. GRAVITY SANITARY SEWER AND WATER LINES SHALL BE SEPARATED BY A MINIMUM OF 10'HORIZONTALLY WHEN PARALLEL AND 2'VERTICALLY WHEN CROSSING. WATER LINES SHALL CROSS ABOVE SANITARY SEWERS.

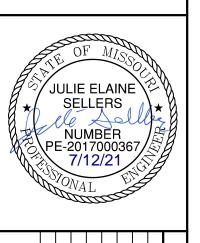
		(JONTROL	POINT TABLE
POINT NUMBER	NORTHING	EASTING	POINT ELEVATION	DESCRIPTION
11	978424.224	2811650.442	1030.85	IB/CAP SET IN THE CENTER MEDIAN OF ROUTE 150. IT IS DUE NORTH OF THE CENTER LINE OF THE DRIVEWAY TO PROPERTY ADDRESS 2025 ROUTE 150. IT IS 12.15 FT WEST OF A LIGHT POLE, 8.5 FT SOUTH OF THE BACK OF CURB, AND 8.1 FT NORTH OF THE BACK OF CURB.
12	978340.573	2812332.280	1036.11	IB/CAP SET ON THE EAST SIDE OF SW PRYOR RD AT THE SOUTHEAST CORNER OF THE INTERSECTION OF ROUTE 150 AND SW PRYOR RD. IT IS 2.15 FT EAST OF THE BACK OF CURB, 19 FT WEST OF THE TRAFFIC SIGNAL POLE, AND 9.6 FT WEST OF A VAULT.
13	977064.448	2812265.992	1012.10	IB/CAP SET ON THE NORTHEAST CORNER OF THE INTERSECTION OF SW PRYOR RD AND SW NAPA VALLEY DR. IT IS 6 FT EAST OF THE BACK OF CURB, 10.2 FT NORTH OF THE CORNER OF THE SIDEWALK, AND 7.25 FT WEST OF ROCK LANDSCAPE BORDER.
14	977092.478	2810924.856	1040.93	3" IB/CAP SET IN THE NORTHWEST CORNER OF THE SOUTH ADJOINING PROPERTY. IT IS 7.5 FT EAST OF THE FENCE LINE, AND 45 FT SOUTH OF OF THE TREE LINE.
18	978446.811	2810956.695	1050.47	BY IB/CAP SET IN THE CENTER MEDIAN OF ROUTE 150. THE POINT IS DIRECTLY SOUTH OF A WHITE MAILBOX ON AN ORANGE POST FOR HOUSE ADDRESS 2144 ROUTE 150. IT IS 6.6 FT SOUTH OF THE BACK OF CURB, 5.8 FT NORTH OF THE BACK OF CURB, AND 31 FT EAST OF A LIGHT POLE.
			BENC	CHMARK
BMK1	977045.350	2812211.924	1014.83	CHISELED PLUS ON THE EAST FLANGED BOLT OF THE FIRE HYDRANT ON THE WEST SIDE OF SW PRYOR ROAD ON ADJOINING PROPERTY SOUTH OF THE SOUTHWEST CORNER OF SUBJECT PROPERTY.
BMK2	978357.416	2811627.737	1031.31	RAILROAD SPIKE IN THE NORTH FACE OF POWER POLE LOCATED ON THE SOUTH SIDE MISSOURI STATE HIGHWAY 150 AT THE WEST SIDE OF THE DRIVEWAY TO 2025 MISSOURI STATE HIGHWAY 150, LEE'S SUMMIT, MO.

CONTROL POINT TARLE

	ESTIMATE OF QUANT	TITIES		
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
	STREET			
	8" SANITARY PVC (SDR-26)	L.F.	697.85	
	MANHOLES, STD. 4' DIA.	EA.	4	
	CONNECTION TO EXISTING STRUCTURE	EA.	1	
	TRACER WIRE	L.F.	1053.54	
	TRACER WIRE BOX	EA.	24	
	SERVICE WYE	EA.	24	
	4" LATERAL PIPE	L.F.	1053.54	_

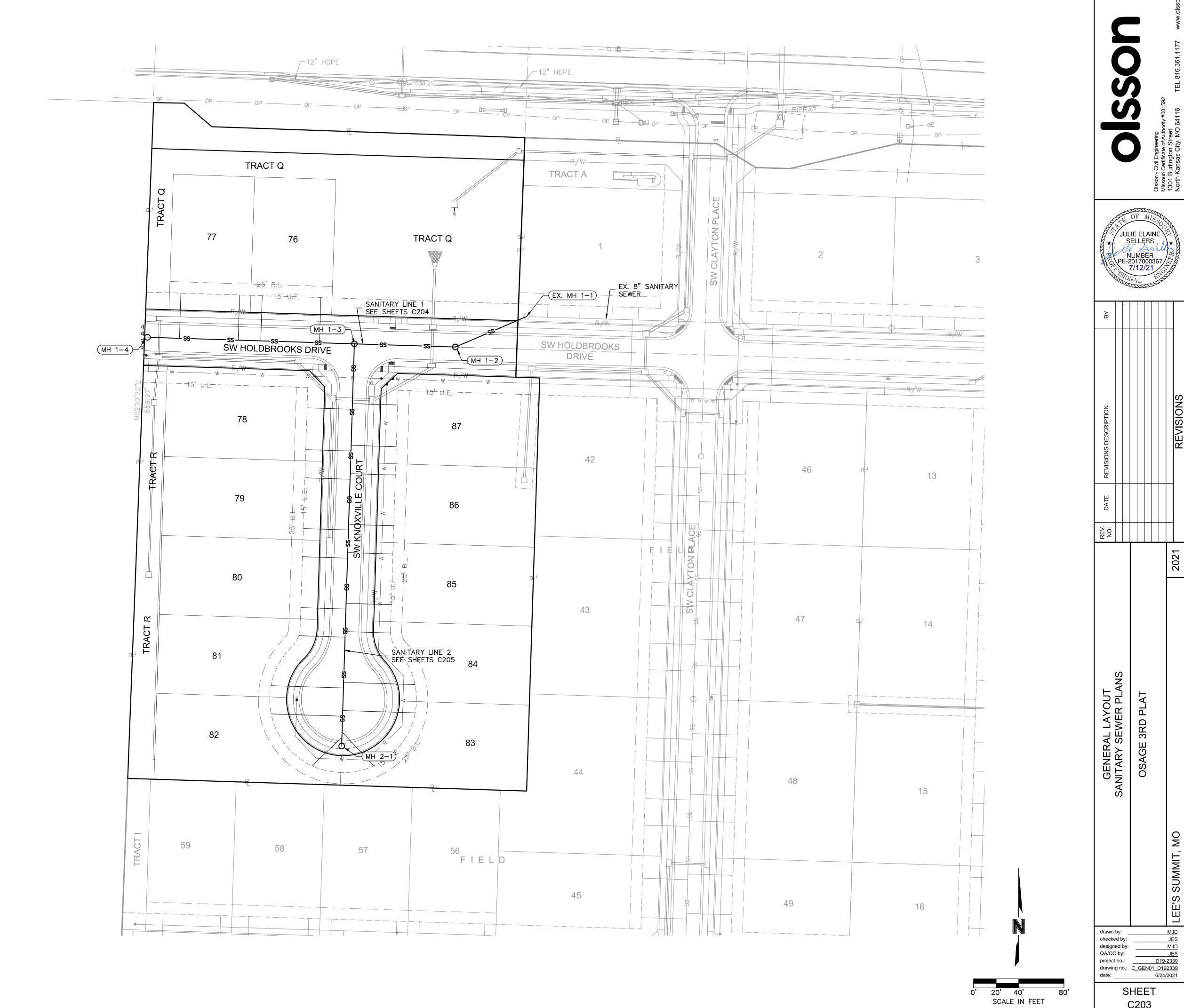
SUMMARY OF QUANTITIES AS INDICATED ABOVE AND ANY QUANTITIES AS SHOWN WITHIN THE PLANS HAVE BEEN PROVIDED FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR USE IN PREPARATION OF CONTRACT DOCUMENTS. QUANTITIES INTENDED FOR, BUT NOT LIMITED TO, THE PREPARATION OF PROPOSALS AND BID DOCUMENTS SHALL BE INDEPENDENTLY EVALUATED BY THE ESTIMATING PARTY BASED UPON THE CONTENTS OF THESE PLANS.

on - Civil Engineering



GENERAL NOTES	REV. NO.	DATE	REVISIONS DESCRIPTION	ВҮ
SANITARY SEWER PLANS				
OSAGE 3RD PLAT				
SUMMII, MO			REVISIONS	

SHEET C202



Structure Table

STRUCTURE ID NORTHING EASTING

978172.5676 2811145.0852

978169.7342 2811234.5095

978196.7501 2811297.5874

977816.2465 2811133.7951

978178.3715 2810961.9123

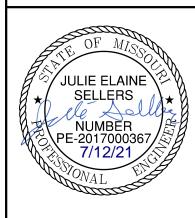
MH 1-3

MH 1-2

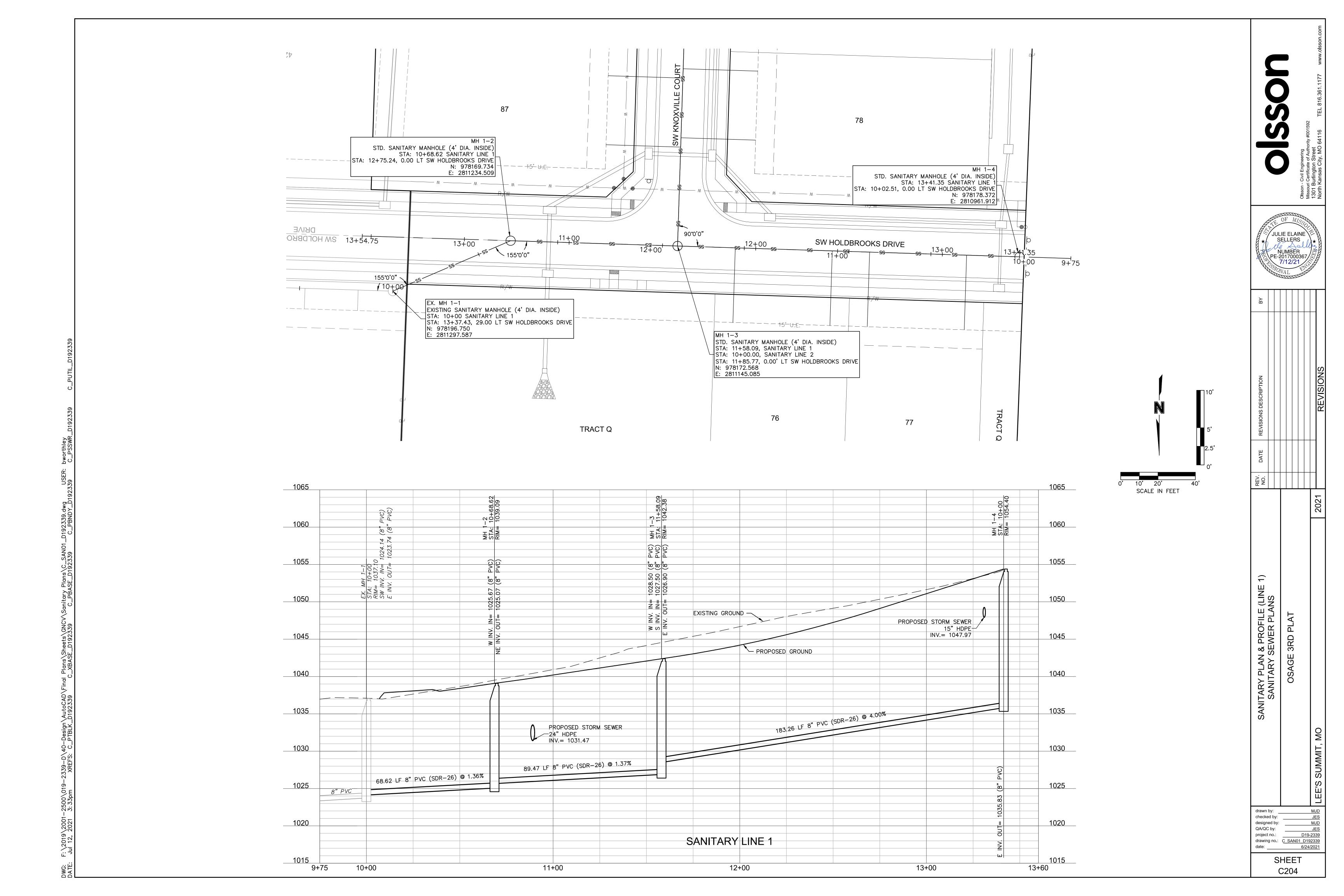
EX. MH 1-1

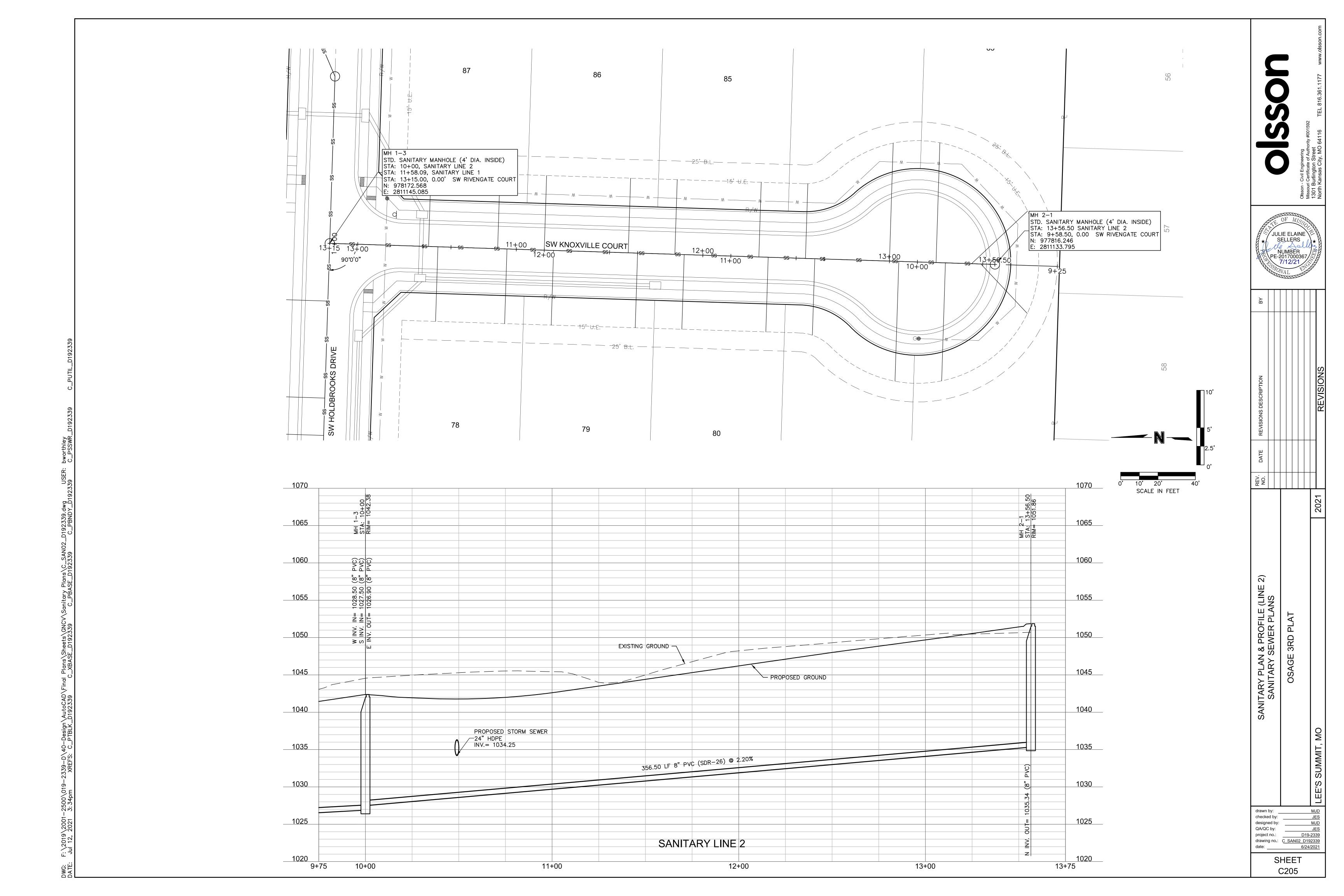
MH 2-1

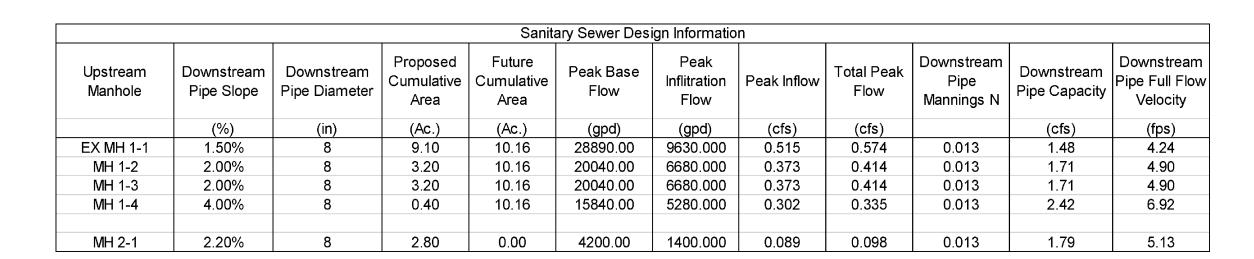
MH 1-4



C203

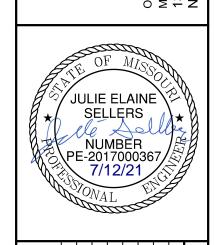






		Sanita	ry Sewer L	aterals		
Lot Number	Lateral Station	Lateral Length	Riser	Flowline at Main	Flowline at End of Lateral	Minimum Servicable Floor Elevation
		(ft)	(ft)	(ft)	(ft)	(ft)
76A	11+89.02	40.00	2.0	1029.7	1033.5	1036.20
76B	12+41.02	40.00	0.0	1031.8	1033.6	1036.32
77A	12+61.02	40.00	4.0	1032.6	1038.3	1041.04
77B	13+13.02	40.00	2.0	1034.7	1038.5	1041.16
78A	10+58.00	40.00	0.0	1028.8	1030.6	1033.28
78B	10+95.00	40.00	0.0	1029.6	1031.4	1034.09
79A	11+20.00	40.00	0.0	1030.1	1031.9	1034.64
79B	11+65.00	40.00	0.0	1031.1	1032.9	1035.63
80A	11+90.00	40.00	1.0	1031.7	1034.5	1037.16
80B	12+35.00	40.00	0.0	1032.7	1034.5	1037.17
81A	12+60.00	41.00	1.0	1033.2	1036.0	1038.72
81B	13+05.00	64.23	1.0	1034.2	1037.5	1040.17
82A	13+30.00	63.25	2.0	1034.8	1039.0	1041.69
82B	13+49.00	36.35	2.0	1035.2	1038.9	1041.57
83A	13+25.00	64.23	2.0	1034.7	1038.9	1041.59
83B	13+44.00	41.17	2.0	1035.1	1038.9	1041.55
84A	12+55.00	40.07	2.0	1033.1	1036.9	1039.57
84B	13+00.00	63.25	1.0	1034.1	1037.3	1040.05
85A	11+85.00	40.00	1.0	1031.6	1034.4	1037.05
85B	12+30.00	40.00	0.0	1032.6	1034.4	1037.06
86A	11+15.00	40.00	0.0	1030.0	1031.8	1034.53
86B	11+60.00	40.00	0.0	1031.0	1032.8	1035.52
87A	10+53.00	40.00	0.0	1028.7	1030.5	1033.17
87B	10+90.00	40.00	0.0	1029.5	1031.3	1033.98

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DESIGN TABLES	REV. NO.	DATE	REVISIONS DESCRIPTION	ВУ
SANITARY SEWER PLANS				
OSAGE 3RD PLAT				
	, 50			
	2021		REVISIONS	

drawn by: MJD checked by: JES designed by: MJD QA/QC by: JES project no.: D19-2339 drawing no.: C SAN02 D192339 date: 6/24/2021

SHEET C206

REFER TO THE APPROVED PRODUCTS LIST

— PROVIDE JOINT SEALANT BETWEEN ALL JOINTS AND WRAP EXTERIOR OF

— 12" MAXIMUM ADJUSTING RINGS

AS REQUIRED

SPRING LINE

— INTEGRAL CAST BASE

4" MIN (SEE NOTE 2)

1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS. 2. A WALL THICKNESS NOT LESS THAN ONE-TWELFTH ($^{\prime}\!\!\!\!/_1$ 2) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS

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

MISSOURI

STANDARD PRECAST MANHOLE — SANITARY SEWER Rev.

4' MIN IF < 24"0 PIPE

5' MIN IF > 24"0 PIPE

GREATER, SHALL BE USED WHEN THE MANHOLE DEPTH IS LESS THEN 15'.

INTO THE FLOW LINE.

JOINTS IN ACCORDANCE WITH SECTION

FOR WATER UTILITIES FOR MANHOLE CASTINGS

— 6" OF COMPACTED BEDDING AGGREGATE

- COMPACTED OR UNDISTURBED EARTH

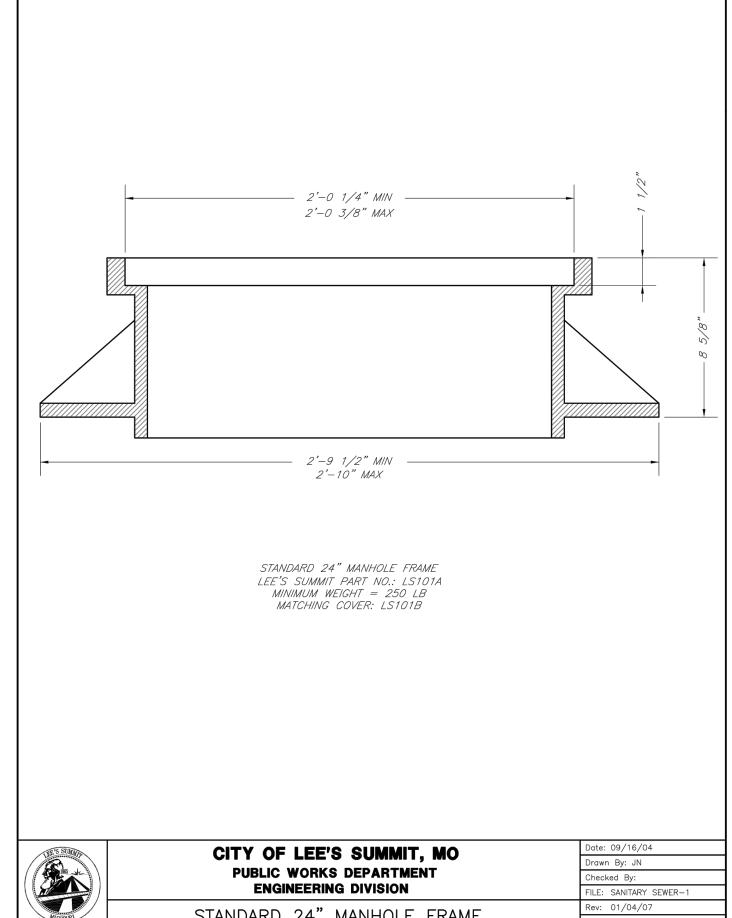
Drawn By: JN

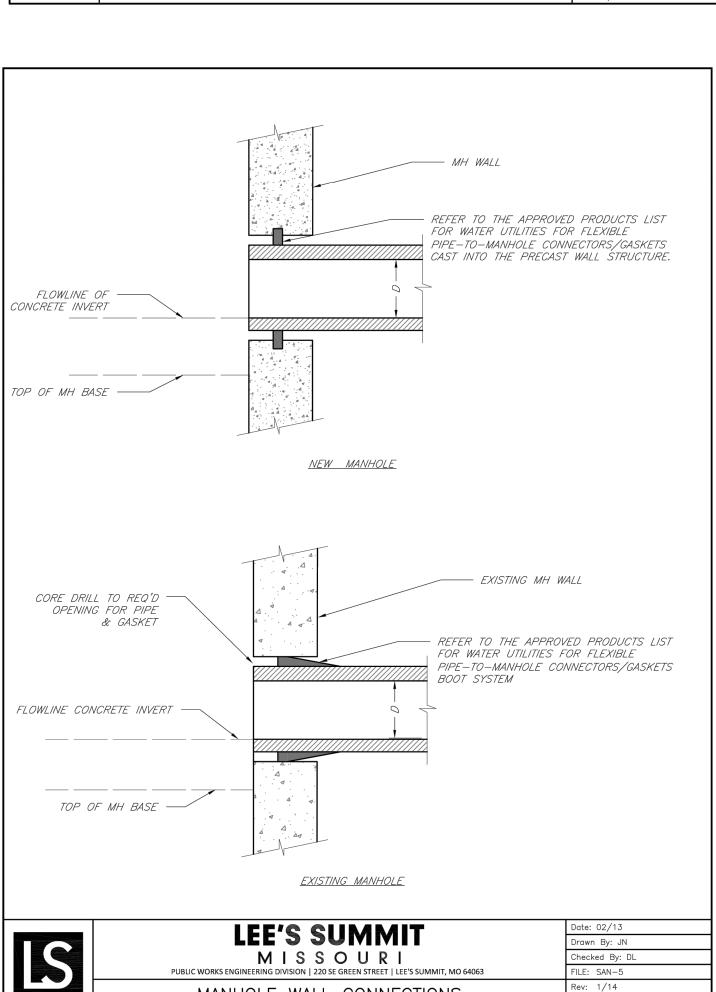
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project no.: <u>D19-2339</u> drawing no.: <u>C DTL01 D192339</u>

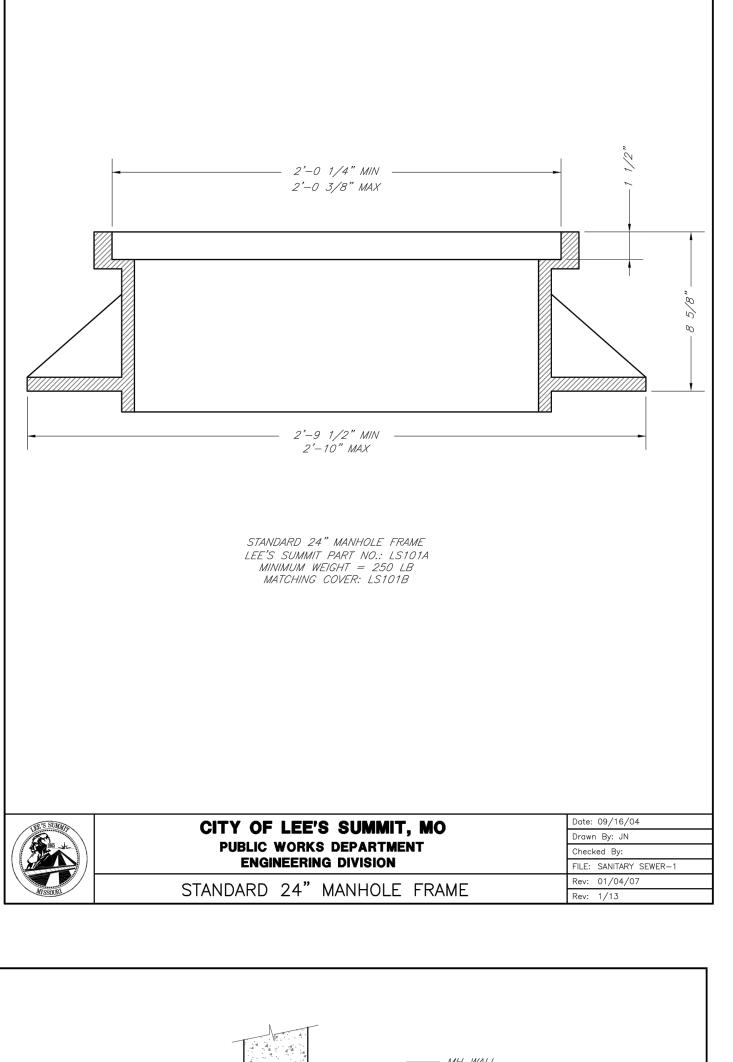
PROPERTY LINE OR TRENCH CHECK -10' FROM MAIN 1-1/8 (45°) BEND — TRACER BOX TRACER WIRE -WITH GREEN CAP WATERTIGHT CAP COMPACTED BACKFILL -SERVICE WYE -MAGNESIUM ANODE (1lb MIN) - COMPACTED GRANULAR BEDDING NOT TO SCALE PROPERTY LINE OR 10' FROM MAIN — TRACER BOX WITH GREEN CAP TRENCH CHECK -(2)-1/8 (45°) BENDS -WATERTIGHT CAP COMPACTED BACKFILL -TRACER WIRE - $(1)-1/8 (45^{\circ})BEND$ SERVICE WYE -MAGNESIUM ANODE (1lb MIN) SEWAGE FLOW SIDE VIEW COMPACTED GRANULAR BEDDING 1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN. WHERE SIDEWALKS ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND. 2. ALL NEW CONSTRUCTION OFF SEWER STUBS SHALL BE TEMPORARILY MARKED WITH A MARKING STAKE, 36" ABOVE GROUND AND PAINTED GREEN. 3. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY 4. 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. 5. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL. 6. #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. 7. 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. B. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE. D. 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 **LEE'S SUMMIT** Drawn By: MJF MISSOURI Checked By: DL

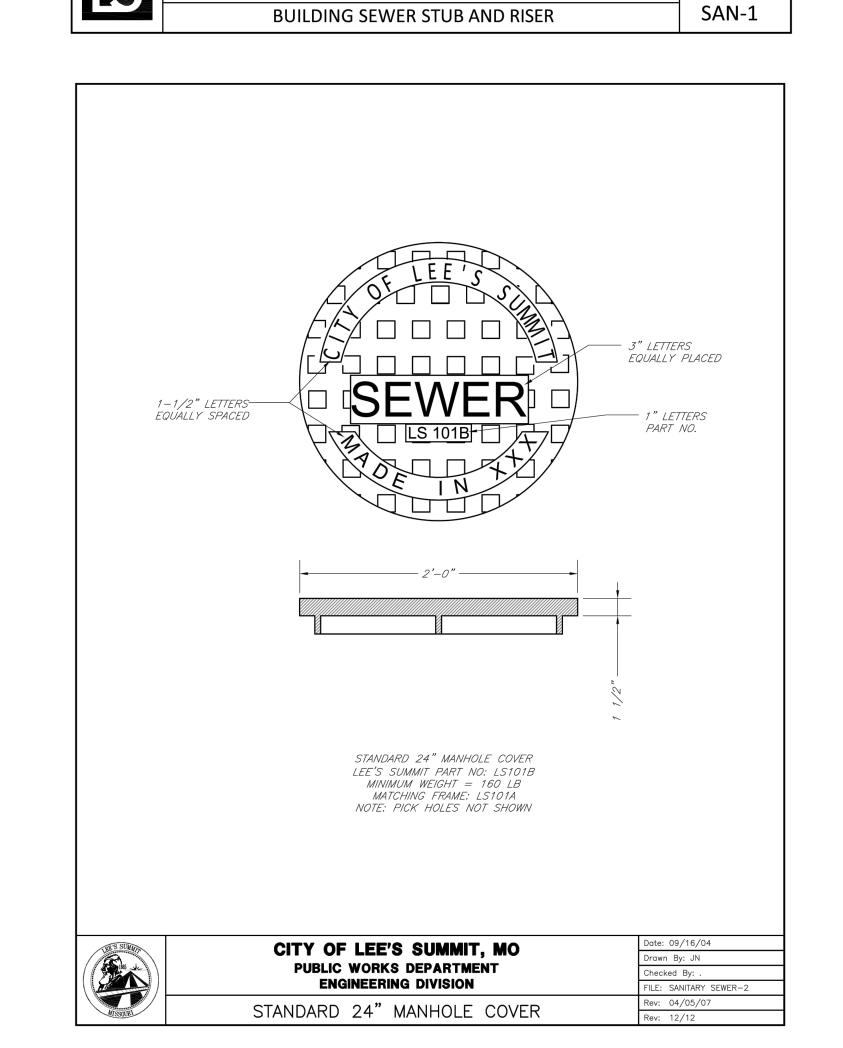
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

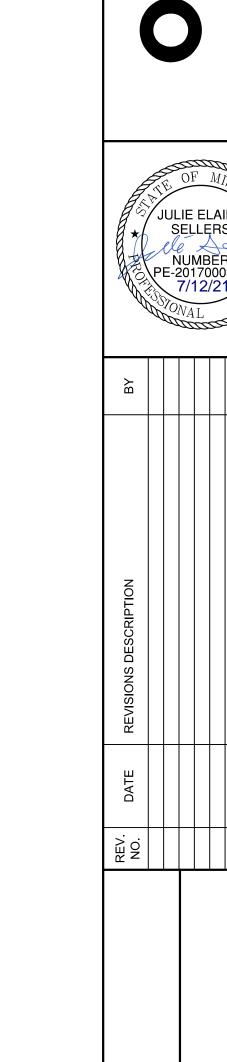


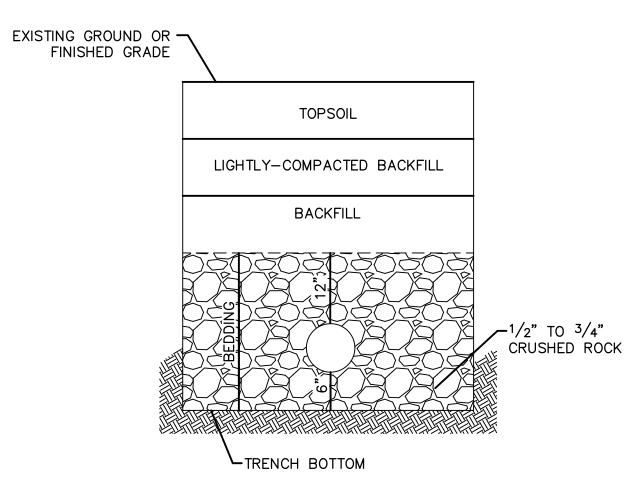


MANHOLE WALL CONNECTIONS









UNDERGROUND PIPE INSTALLATION FOR SANITARY SEWER

- NOTES:

 1. A MINIMUM OF 36 INCHES OF COVER SHALL BE OVER THE TOP OF THE PIPE. THIS MINIMUM OF COVER SHALL BE FROM THE TOP OF PIPE TO THE FINISHED GRADE.

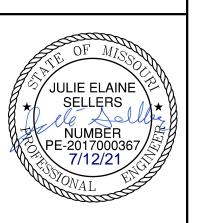
 2. BEDDING AGGREGATE MATERIAL SHALL BE PER SECTION 6900 AND 2102 OF THE CITY DESIGN AND CONSTRUCTION MANUAL. BEDDING AGGREGATE SHALL BE PLACED FROM A LEVEL 6 INCHES BELOW THE BOTTOM OF THE PIPE TO A LEVEL 12 INCHES ABOVE THE TOP OF THE PIPE.

 3. BACKFILL MATERIAL AND PLACEMENT SHALL BE PER SECTION 6900 AND 2102 OF THE CITY DESIGN AND CONSTRUCTION MANUAL.

 4. TRENCHING SHALL BE IN ACCORDANCE WITH CURRENT OSHA REGULATIONS. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING.

- TOP OF BEDDING.

 5. MINIMUM AND MAXIMUM TRENCH WIDTHS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURERS RECOMMENDATION AS APPROVED ON ENGINEERING PLANS.



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