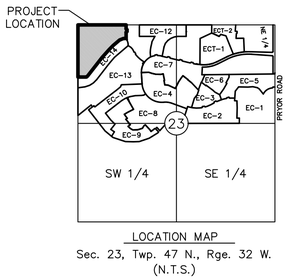
EAGLE CREEK
15TH PLAT

Lee's Summit, Jackson County, Missouri

SANITARY SEWER PLANS

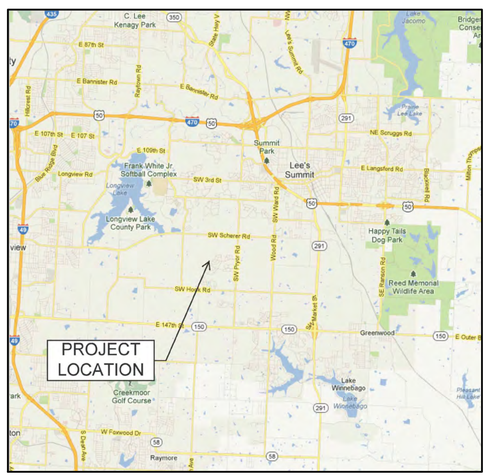
PROJECT BENCHMARK
KC Metro Monument JA-74, 1988 Monument located in the NW. ¼, NW. ¼ Sec. 35, T47N, R32W on the South R/W of Route 150. 56.5' South of the Centerline of Route 150 and 90' West of a private drive into a farmhouse on the North R/W. Elevation: 1057.70



LOCATION MAP
Sec. 23, Twp. 47 N., Rge. 32 W.
(N.T.S.)

LEGAL DESCRIPTION:

A tract of land in the Northwest Quarter of Section 23, Township 47 North, Range 32 West of the 5th Principal Meridian in Lee's Summit, Jackson County, Missouri being bounded and described as follows: Beginning at the Northwest corner of said Northwest Quarter; thence South 87°35'47" East, along the North line of said Northwest Quarter, 1,301.52 feet; thence South 02°24'13" West, 105.00 feet; thence South 42°35'47" East, 35.36 feet; thence South 02°24'13" West, 50.00 feet; thence South 47°24'13" West, 35.36 feet; thence South 02°24'13" West, 134.41 feet; thence Southerly, along a curve to the left, being tangent with the last described course with a radius of 800.00 feet, a central angle of 01°54'39", and an arc distance of 26.68 feet to the Northeast corner of said EAGLE CREEK-FOURTEENTH PLAT; thence North 89°30'27" West, along the North line of said EAGLE CREEK-FOURTEENTH PLAT, 75.00 feet; thence South 71°15'03" West, continuing along said North line, 107.13 feet; thence South 51°50'15" West, continuing along said North line, 234.72 feet; thence South 46°51'05" West, continuing along said North line, 149.10 feet; thence South 44°22'31" West, continuing along said North line, 282.93 feet; thence South 40°22'50" West, continuing along said North line, 643.07 feet; thence South 52°02'51" West, continuing along said North line, 40.24 feet; thence North 87°23'50" West, continuing along said North line, 233.69 feet to a point on the West line of said Northwest Quarter; thence North 02°36'10" East, along said West line, 1,408.84 feet to the Point of Beginning. Containing 1,180,138 square feet or 27.09 acres, more or less.



VICINITY MAP
N.T.S.

SUMMARY OF QUANTITIES			
ITEM	UNIT	PLAN	AS-BUILT
8" Sanitary PVC (SDR-26)	L.F.	1,858.90 -	1,860.33
Manholes, Std. 4' Dia.	Ea.	~~6~~	6
Drop Manholes, Std. 4' Dia.	Ea.	~~1~~	1
Connections to existing M.H.	Ea.	~~1~~	1
Service Wye	Ea.	~~46~~	46*
4" Lateral Pipe	L.F.	~~2,186.27~~	2,186.27*

* As Provided By Contractor

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.

AS-BUILT / SERVICE LINE NOTE

1.) Contractor shall place 2"x4" timber or metallic tape at end of each service line stub. Standard 8' length may be varied with 3' exposed when placed directly over the service line termination point. 2"x4" timber shall be marked appropriately to identify sewer service stub.

2.) Contractor shall be responsible for recording of Rock Elevations at 25' intervals where encountered. Contractor shall also be responsible for recording service line locations from the downstream or upstream manhole and service line lengths during construction operations. Contractor shall also record vertical elevations with a reference point. All information shall be provided to the engineer of record for preparation of As-Built plans.

AS BUILT
DATE: 11.14.2017

INDEX OF SHEETS

DEVELOPER:

Hunt Midwest Real Estate Development Inc.
8300 NE Underground Drive
Kansas City, MO 64161
Phone #: 816.455.2900
Contact Person: Aaron Schmidt

REVIEWED BY:

City of Lee's Summit — Date

Olsson Associates. has been retained to provide as-built drawings for this project.

Melissa G DeGonia, P.E. — 3-5-18 — Date
Civil Engineer
MO# 2011000892

The Policy of the "Plan Preparation Criteria and Procedure" and Policy Document No. 880544 "As-Built Drawings for Sewer Built by Permit" stipulate the following regarding "as-built" drawings: 1. Drawings are to be provided within thirty (30) days after the date the "Request for As-Builts" letter is issued by the City to the contractor. 2. Drawings must be accepted by the City before any service connections will be allowed. 3. Drawings are part of the permit obligations making them the responsibility of the permittee. 4. The cost of preparing "as-built" drawings shall be included in the performance bond.

CALL BEFORE YOU DIG 1-800-DIG-RITE MISSOURI ONE CALL SYSTEM

UTILITY SERVICE NUMBERS	
LEE'S SUMMIT PUBLIC WORKS	816-969-1800
LEE'S SUMMIT WATER & SEWER DEPARTMENT	816-696-1940
MISSOURI GAS ENERGY	816-756-5252
TIME WARNER CABLE	816-358-5360
AT&T	800-286-8313
KCP&L	816-471-5275

OLSSON ASSOCIATES
Olsson Associates - Civil Engineering
Missouri Certificate of Authority # 2002022824
1301 Burlington, Suite 100 — North Kansas City, MO 64116
TEL 816.587.4320 — FAX 816.587.1393
www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DeGONIA
NUMBER PE-2011000892
3-5-18
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
	01.17.2017	Prepared for city Submittal	
	11.14.2017	As-builts Submittal	

COVER SHEET
EAGLE CREEK 15TH PLAT
LEE'S SUMMIT, MISSOURI
2016

drawn by: D.A.H.O
design by: P.M.D
approved by: M.G.D
QA/QC by: M.G.D
project no.: 016-3432
date: 2016/12/05

SHEET C201

DWG: F:\2016\3001-3500\016-3432\Lutjen\Plans\Construction Documents\Sanitary 34x22\CSA-016-3432.dwg
DATE: Feb 23, 2017 6:07pm
USER: dhernandez

GENERAL NOTES:

1. LINEAR FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS (NOT SLOPE MEASUREMENTS) FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

2. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE CURRENT "CITY STANDARDS" AND SPECIFICATIONS OF THE CPD-DS-LDD, LEE'S SUMMIT, EXCEPT AS NOTED.

3. THE DEVELOPER SHALL PERFORM ALIGNMENT AND GRADE, INFILTRATION - EXFILTRATION, DEFLECTION, SOIL DENSITY, AND MANHOLE TESTS AS CALLED OUT IN SECTION 2500 OF THE CURRENT APWA (AMERICAN PUBLIC WORKS ASSOCIATION) STANDARDS AND SPECIFICATIONS. ANY SECTION OF SEWER FAILING ANY OF THE ABOVE MENTIONED TESTS SHALL BE RETESTED BY THE DEVELOPER AFTER REPLACEMENT OR REPAIR.

4. THE DEVELOPER MAY, AS AN ALTERNATE, SUBSTITUTE A.B.S. OR V.C.P. PIPE FOR P.V.C. PIPE. THE FOLLOWING PIPE DEFLECTION TEST SHALL BE IMPLEMENTED ON A.B.S. AND P.V.C. PIPE:

THE DEVELOPER SHALL PERFORM DIAMETRICAL DEFLECTION TESTS ON FLEXIBLE AND SEMI-FLEXIBLE (I.E. POLY-VINYL-CHLORIDE AND ACRYLONITRILLE BUTADIENE STYRENE) PIPE WHEN USED AS A PUBLIC DIAMETER. ALL TESTS HALL BE CONDUCTED BETWEEN MANHOLES.
SEWER TESTS SHALL BE CONDUCTED BETWEEN MANHOLES.
SEWER TESTED SHALL BE 100% OF THE TOTAL SEWER INSTALLED.
A MANDREL WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE BEING INSTALLED SHALL BE USED.

5. THE DEVELOPER SHALL PERFORM DIAMETRICAL DEFLECTION TESTS ON FLEXIBLE AND SEMI-FLEXIBLE (I.E. POLY-VINYL-CHLORIDE AND ACRYLONITRILE BUTADIENE STYRENE) PIPE WHEN USED AS A PUBLIC SEWER PRIOR TO FINAL ACCEPTANCE. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE 5% OF THE INSIDE DIAMETER. ALL TESTS SHALL BE CONDUCTED BETWEEN MANHOLES. SEWER TESTED SHALL BE 100% OF THE TOTAL SEWER INSTALLED. A MANDREL WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE BEING INSTALLED SHALL BE USED.

6. PRIOR TO ORDERING PRE-CAST STRUCTURES, SHOP DRAWINGS ARE TO BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. THE DESIGN ENGINEER SHALL INDICATE APPROVAL OF THE SHOP DRAWINGS.

7. DEVELOPER SHALL PROVIDE EARTHWORK AND MATERIAL TESTING TO COMPLY WITH THE STANDARD SPECIFICATIONS OF THE CPD-DS-LDD.

8. DURING CONSTRUCTION OF THE PROJECT, THE DEVELOPER SHALL KEEP ONE RECORD COPY OF ALL SPECIFICATIONS, DRAWINGS, ADDENDA, MODIFICATIONS, AND SHOP DRAWINGS AT THE SITE IN GOOD CONDITION. THESE DOCUMENTS SHALL BE ANNOTATED TO SHOW ALL CHANGES MADE DURING CONSTRUCTION. THE EXACT LOCATION OF ALL SEWER WYES, TEES, AND SERVICE LINES SHALL BE RECORD ON THESE DOCUMENTS. AT THE CONCLUSION OF CONSTRUCTION, THESE DOCUMENTS SHALL BE FORWARDED TO THE DESIGN ENGINEER FOR PREPARATION OF AS-BUILT DRAWINGS.

9. THE PROJECT BENCHMARKS AND ALL ELEVATIONS SHOWN ON THE PROFILES ARE N.G.V.D.

10. THE DEVELOPER IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE DEVELOPER MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT IS THE DEVELOPERS RESPONSIBILITY TO RELOCATE AND/OR ADJUST ALL EXISTING UTILITIES, CONFLICT WITH PROPOSED SITE IMPROVEMENTS.

11. THE DEVELOPER SHALL 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. THE NAMES AND TELEPHONE NUMBERS OF UTILITY COMPANIES, EVEN IF ONLY REMOTELY INVOLVED WITH THIS HIS PROJECT ARE LISTED UNDER "UTILITY CONTACTS" THIS SHEET.

12. THE DEVELOPER SHALL PROVIDE AND MAINTAIN ALL TRAFFIC CONTROL MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION).

13. THE SITE PLAN IS BASED ON SURVEY BY OLSSON ASSOCIATES, COMPLETED 12-13-16. CONDITIONS ON SITE AT THE TIME OF CONSTRUCTION MAY VARY FROM THE SURVEYED CONDITIONS. DEVELOPER SHALL VERIFY EXISTING SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.

14. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL PERMITS (EXCEPT LAND DISTURBANCE), BONDS, INSURANCE, ETC. AND PAYING ALL FEES. THE COST OF DEVELOPERS BONDS AND INSURANCE AS REQUIRED BY THE CITY OF LEE'S SUMMIT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER.

15. DEVELOPER SHALL COMPLY WITH ALL APPLICABLE REGULATIONS REQUIRED BY THE CITY AND THE STATE.

16. THE DEVELOPER MUST REMOVE AT HIS COST ANY BAD SUBSURFACE SOIL WHICH WOULD NOT BE ABLE TO SUPPORT ANY PROPOSED PUBLIC IMPROVEMENT. BACKFILL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTIONS 2100 AND 2201 ENTITLED "GRADING AND SITE PREPARATION" AND "SUBGRADE PREPARATION".

17. VERTICAL CONTROL IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE DEVELOPER IS ADVISED TO USE BENCHMARK INFORMATION FOR VERTICAL CONTROL.
HORIZONTAL CONTROL (CONTROL POINT INFORMATION) IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83). THE DEVELOPER IS ADVISED TO USE CONTROL POINT INFORMATION FOR HORIZONTAL CONTROL.

PLUMBING NOTES:

1. ALL LOTS HAVE BEEN SUPPLIED WITH WYES, TEES OR LATERALS. PLUMBER SHALL CONNECT HOUSE SERVICE TO MAIN AT LOCATIONS INDICATED.

2. ALL SERVICE LINES SHALL BE LAID AT 2% MINIMUM SLOPE, UNLESS OTHERWISE NOTED.

3. M.S.E. ELEVATION - INDICATES BASEMENT FLOOR ELEVATION OR LOWEST FLOOR ELEVATION SERVICEABLE BY PROPOSED SANITARY SEWER.

EXCAVATING NOTES:

1. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTROL DOWNSTREAM EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION.

2. THE DEVELOPER SHALL BE RESPONSIBLE FOR RECORDING ROCK ELEVATIONS AT 25 FOOT (MAXIMUM) INTERVALS WHERE ENCOUNTERED, AND FURNISHING THIS INFORMATION TO THE DESIGN ENGINEER FOR USE ON AS-BUILTS.

3. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES. EROSION CONTROL PLANS AND PROCEDURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION.

4. NO SUBSURFACE EXPLORATION FOR THE DETERMINATION OF AND/OR THE LOCATION OF EXISTING ROCK HAS BEEN MADE.

5. WHEN SEWER LINES CROSS A LOW POINT IN A CREEK, THE SEWER LINE MUST BE ENCASED ACCORDING TO LEE'S SUMMIT.

6. DEVELOPER IS RESPONSIBLE FOR KEEPING ALL PUBLIC ROADWAYS ADJACENT TO THE CONSTRUCTION SITE FREE OF DIRT AND DEBRIS RESULTING FROM ACTIVITIES RELATED TO THE CONSTRUCTION OF THIS PROJECT. INSPECTIONS AND CLEANUP TO OCCUR ON A DAILY BASIS.

7. DEVELOPER SHALL KEEP THE ENTIRE PROJECT SITE FREE OF DEBRIS AND TRASH AT ALL TIMES. DEVELOPER SHALL EXECUTE WORK USING METHODS THAT MINIMIZE EXCESSIVE NOISE OR DUST EMISSIONS. DEVELOPER SHALL PROVIDE METHODS, MEANS AND FACILITIES TO PREVENT CONTAMINATION OF SOIL OR WATER FROM DISCHARGE OF REGULATED MATERIALS (I.E. FUEL) USED DURING CONSTRUCTION.

8. THE DEVELOPER SHALL ERECT AND MAINTAIN ORANGE COLORED TEMPORARY CONSTRUCTION FENCE AROUND ALL AREAS INDICATED ON THE PLANS TO BE LEFT UNDISTURBED BOTH TEMPORARY AND PERMANENTLY THE DEVELOPER WILL BE GIVEN NOTICE WHEN HE MAY ENTER THESE AREAS MARKED TEMPORARY BY THE OWNER ONCE PERMITS HAVE BEEN OBTAINED. THE FENCE MATERIAL SHALL BE 48" TALL. HIGH DENSITY POLYETHYLENE (HDPE) WITH NOMINAL MESH OPENING SIZE OF 1.25 INCHES X 1.25 INCHES.

PLAN LEGEND:

CABLE TV
- CTVP CABLE TV PEDESTAL
- SD SATELLITE DISH

ELECTRIC
- AC AIR CONDITIONER
- EB ELECTRIC BOX
- EMT ELECTRIC METER
- EMH ELECTRIC MANHOLE
- EP ELECTRIC PEDESTAL
- EV ELECTRIC VAULT
- GA GUY ANCHOR
- GUY GUY POLE
- LP LIGHT POLE
- PP POWER POLE
- YL YARD LIGHT\FLOOD LIGHT

GAS
- GK GAS LINE MARKER
- GM GAS METER
- GR GAS REGULATOR
- GV GAS VALVE

SANITARY
- CO SANITARY CLEANOUT
- SMH SANITARY MANHOLE

STORM
- AI AREA INLET
- CI CURB INLET
- FD FLOOR DRAIN
- FI FIELD INLET
- GI GRATE INLET
- JB JUNCTION BOX
- RD ROOF DRAIN
- STMH STORM MANHOLE

TELEPHONE
- FOM FIBER OPTIC MARKER
- TMK TELEPHONE CABLE MARKER
- TLP TELEPHONE POLE
- TP TELEPHONE PEDESTAL
- TV TELEPHONE VAULT

WATER
- FH FIRE HYDRANT
- HB HOSE BIB
- MW MONITOR WELL
- PIV POST INDICATOR VALVE
- SB SPRINKLER CONTROL BOX
- SV SPRINKLER VALVE
- WM WATER METER
- WH WATER MANHOLE
- WMV WATER METER VAULT
- WV WATER VALVE

PARKING
- & HANDICAP STALL
- WLS WHEEL STOP
- DYS DOUBLE YELLOW STRIPE
- WS WHITE STRIPE
- YS YELLOW STRIPE

TRAFFIC
- SLCB STREET LIGHT BOX
- TSP TRAFFIC SIGNAL POLE
- TSC TRAFFIC SIGNAL CONTROLS
- TSV TRAFFIC SIGNAL VAULT

SIGNS
- HS HANDICAP SIGN
- SL SPEED LIMIT SIGN
- SN SIGN
- SS STOP SIGN

EASEMENTS
- A.E. ACCESS EASEMENT
- B.M.P. BEST MANAGEMENT PRACTICE
- D.E. STORM DRAINAGE EASEMENT
- L.E. LANDSCAPE EASEMENT
- M.E. MONUMENT EASEMENT
- N.B.E. NO BUILD EASEMENT
- P.E. PEDESTRIAN EASEMENT
- S.D.E. SURFACE DRAINAGE EASEMENT
- S.E. SANITARY SEWER EASEMENT
- U.E. UTILITY EASEMENT
- W.E. WATER EASEMENT

SETBACKS
- B.S. BUILDING SETBACK
- D.S. DECK SETBACK
- dBA SOUND SETBACK
- F.Y.S FRONT YARD SETBACK
- L.B. LANDSCAPE BUFFER
- P.S. PARKING SETBACK
- R.Y.S. REAR YARD SETBACK
- S.Y.S. SIDE YARD SETBACK

SURVEY MARKERS
- ⊡ FOUND SECTION CORNER (MONUMENTATION AS NOTED)
- O FOUND PROPERTY CORNER (MONUMENTATION AS NOTED)
- △ FOUND RIGHT-OF-WAY MARKER
- ■ SET 5/8" IRON REBAR WITH ALUMINUM CAP
- ● SET 1/2" IRON BAR WITH PLASTIC CAP
- ◆ BENCHMARK

BOUNDARIES
- SECTION LINE
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- FUTURE PROPERTY LINE
- EXISTING LOT LINE
- PROPOSED LOT LINE
- FUTURE LOT LINE
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- FUTURE RIGHT-OF-WAY

UTILITY LINES
- EXISTING CABLE TV, UNDERGROUND
- PROPOSED CABLE TV, UNDERGROUND
- FUTURE CABLE TV, UNDERGROUND
- EXISTING ELECTRIC, OVERHEAD
- EXISTING ELECTRIC, UNDERGROUND
- PROPOSED ELECTRIC, OVERHEAD
- PROPOSED ELECTRIC, UNDERGROUND
- FUTURE ELECTRIC, OVERHEAD
- FUTURE ELECTRIC, UNDERGROUND
- EXISTING FIBER OPTIC, UNDERGROUND
- PROPOSED FIBER OPTIC, UNDERGROUND
- FUTURE FIBER OPTIC, UNDERGROUND
- EXISTING GAS LINE
- PROPOSED GAS LINE
- FUTURE GAS LINE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER, PRIVATE
- PROPOSED SANITARY SEWER, PUBLIC
- FUTURE SANITARY SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER, PRIVATE
- PROPOSED STORM SEWER, PUBLIC
- FUTURE STORM SEWER
- EXISTING TELEPHONE, UNDERGROUND
- PROPOSED TELEPHONE, UNDERGROUND
- FUTURE TELEPHONE, UNDERGROUND
- EXISTING WATER LINE
- PROPOSED WATER LINE, PRIVATE
- PROPOSED WATER LINE, PUBLIC
- FUTURE WATER LINE

CONTOURS
- 100 EXISTING INDEX CONTOURS
- 100 EXISTING INTERMEDIATE CONTOURS
- 100 PROPOSED INDEX CONTOURS
- 100 PROPOSED INTERMEDIATE CONTOURS
- 100 FUTURE INDEX CONTOURS
- 100 FUTURE INTERMEDIATE CONTOURS

MISCELLANEOUS
- BB BASKETBALL GOAL
- BH BORE HOLE
- FENCE; CHAIN LINK, STEEL OR ALUMINUM
- FENCE; STOCKADE, WOOD, VINYL OR PLASTIC
- FENCE; BARBED WIRE OR WOVEN WIRE TOPPED
- FP FLAG POLE
- GP GUARD POST
- GUARD RAIL
- HDRL HANDRAIL
- HSP HORSESHOE PIT
- LSCP LANDSCAPING
- MB MAILBOX
- MH UTILITY MANHOLE
- PB PARK BENCH
- PT PICNIC TABLE
- RAILROAD TRACKS
- TREE
- TREE, EVERGREEN
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING SIDEWALK
- PROPOSED SIDEWALK
- FUTURE SIDEWALK
- EXISTING BUILDINGS
- PROPOSED BUILDINGS
- FUTURE BUILDINGS
- EXISTING EDGE OF PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- FUTURE EDGE OF PAVEMENT
- EXISTING ROADWAY CENTER LINE
- PROPOSED ROADWAY CENTER LINE
- FUTURE ROADWAY CENTER LINE
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- FUTURE CURB & GUTTER

NOT AS BUILT

ALL NOTES REFERENCED ON THIS PLAN SHEET MAY HAVE APPLICATIONS TO EVERY FACET OF THE CONSTRUCTION PLANS. THE NOTE HEADINGS OR TITLES ARE TO BE USED AS A GENERAL GUIDE TO APPLICABLE SITUATIONS.

OLSSON ASSOCIATES
Olsson Associates - Civil Engineering
Missouri Certificate of Authority # 2007022824
1301 Burlington, Suite 100 TEL 816.587.4320
North Kansas City, MO 64116 FAX 816.587.1393
www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
3-5-18
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
	01.17.2017	Prepared for city Submittal	
	11.14.2017	As-Builts Submittal	

SANITARY GENERAL NOTES

EAGLE CREEK
15TH PLAT

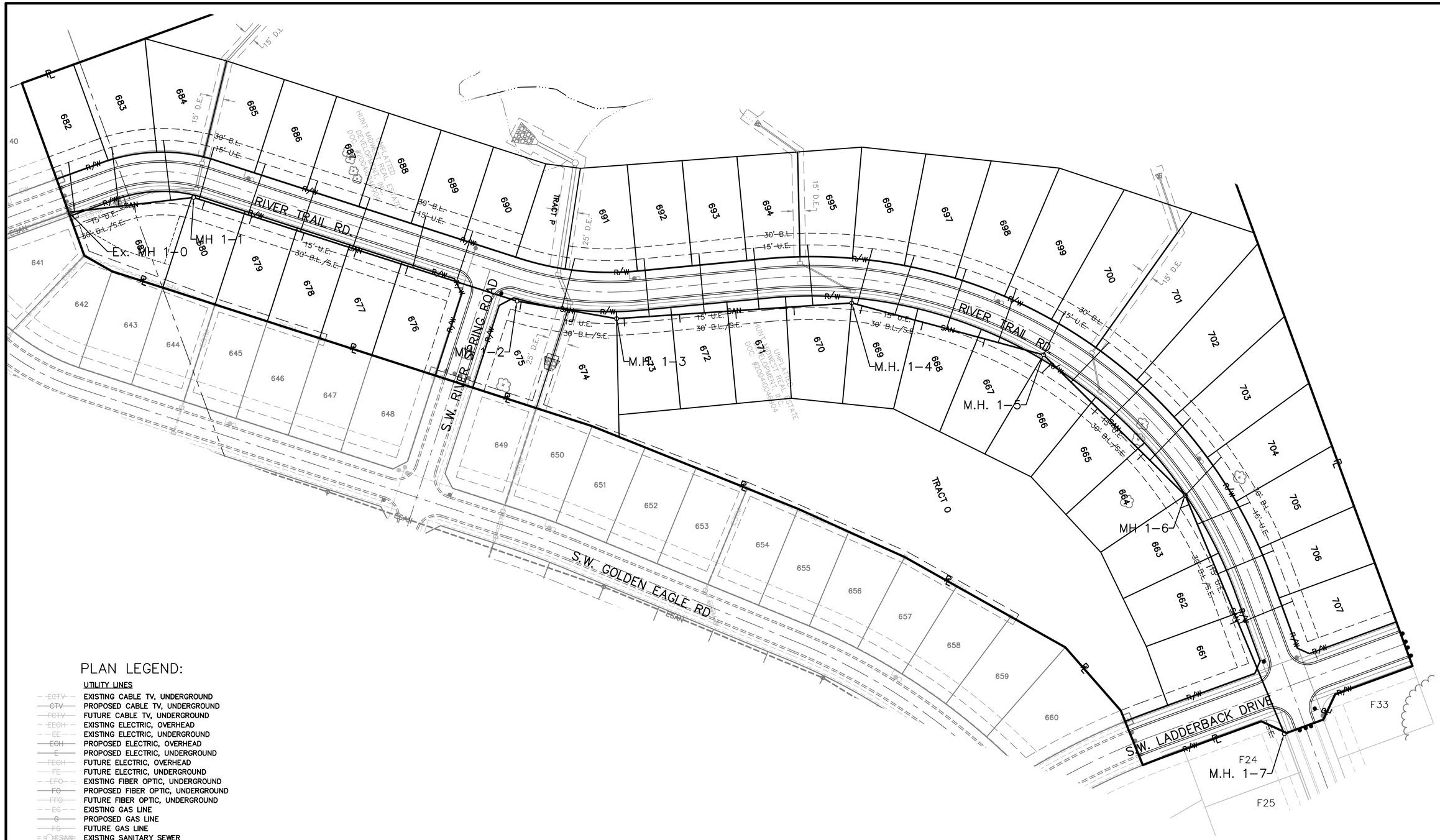
LEE'S SUMMIT, MISSOURI

2016

drawn by: D.A.H.O
design by: P.M.D
approved by: M.G.D
QA/QC by: M.G.D
project no.: 016-3432
date: 2016/12/05

SHEET
C202

DWG: F:\2016\3001-3500\016-3432\Lutjen\Plans\Construction Documents\Sanitary 34x22\GEN-016-3432.dwg USER: dhernandez
DATE: Feb 23, 2017 6:07pm



PLAN LEGEND:

UTILITY LINES

- EXISTING CABLE TV, UNDERGROUND
- PROPOSED CABLE TV, UNDERGROUND
- FUTURE CABLE TV, UNDERGROUND
- EXISTING ELECTRIC, OVERHEAD
- EXISTING ELECTRIC, UNDERGROUND
- PROPOSED ELECTRIC, OVERHEAD
- PROPOSED ELECTRIC, UNDERGROUND
- FUTURE ELECTRIC, OVERHEAD
- FUTURE ELECTRIC, UNDERGROUND
- EXISTING FIBER OPTIC, UNDERGROUND
- PROPOSED FIBER OPTIC, UNDERGROUND
- FUTURE FIBER OPTIC, UNDERGROUND
- EXISTING GAS LINE
- PROPOSED GAS LINE
- FUTURE GAS LINE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER, PRIVATE
- PROPOSED SANITARY SEWER, PUBLIC
- FUTURE SANITARY SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER, PRIVATE
- PROPOSED STORM SEWER, PUBLIC
- FUTURE STORM SEWER
- EXISTING TELEPHONE, UNDERGROUND
- PROPOSED TELEPHONE, UNDERGROUND
- FUTURE TELEPHONE, UNDERGROUND
- EXISTING WATER LINE
- PROPOSED WATER LINE, PRIVATE
- PROPOSED WATER LINE, PUBLIC
- FUTURE WATER LINE

SCALE
0' 60' 120'
1"=60' HORIZ.
(for 22"x34" sheet)

NOT AS BUILT

OLSSON ASSOCIATES
Olsson Associates - Civil Engineering
Missouri Certificate of Authority # 2007022824
1301 Burlington, Suite 100 TEL 816.587.4320
North Kansas City, MO 64116 FAX 816.587.1393
www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
3-5-18
PROFESSIONAL ENGINEER

REVISIONS

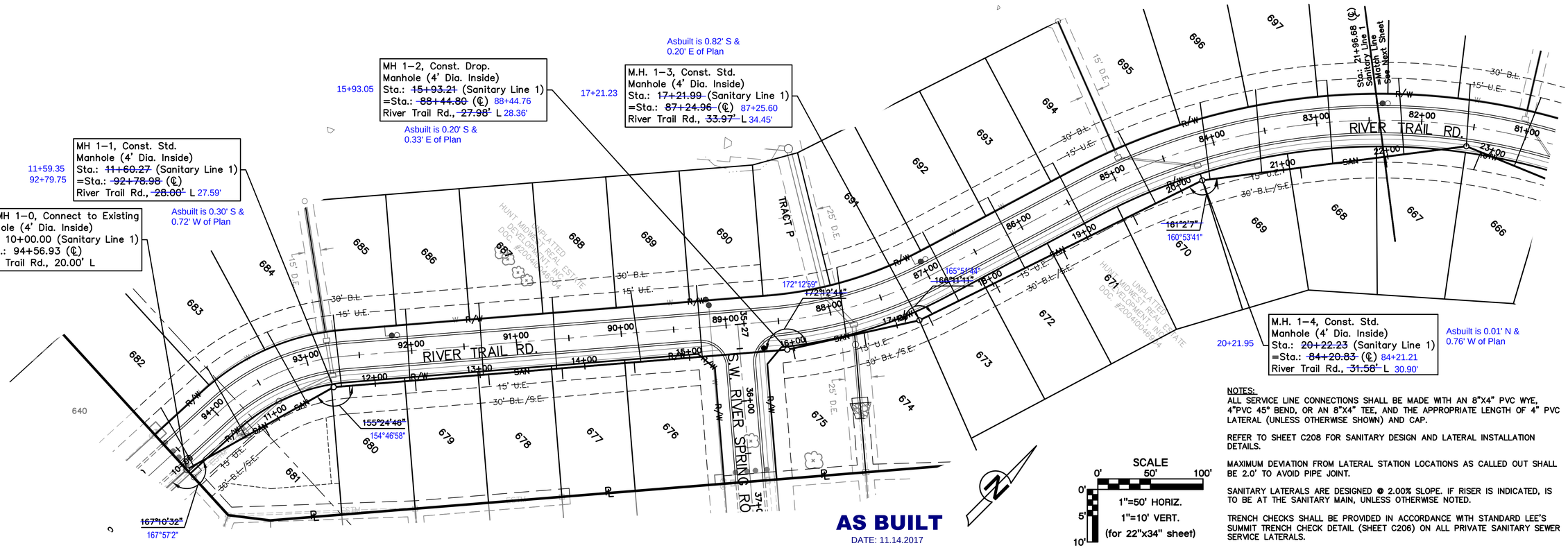
NO. REV.	DATE	REVISIONS DESCRIPTION	BY
	01.17.2017	Prepared for city Submittal	
	11.14.2017	As-builts Submittal	

SANITARY GENERAL LAYOUT
EAGLE CREEK 15TH PLAT
LEE'S SUMMIT, MISSOURI
2016

drawn by: D.A.H.O
design by: P.M.D
approved by: M.G.D
QA/QC by: M.G.D
project no.: 016-3432
date: 2016/12/05

SHEET C203

USER: dhernandez
DWG: F:\2016\3001-3500\016-3432\Lutjen\Plans\Construction Documents\Sanitary 34x22\CSA-016-3432.dwg
DATE: Feb 23, 2017 6:11pm



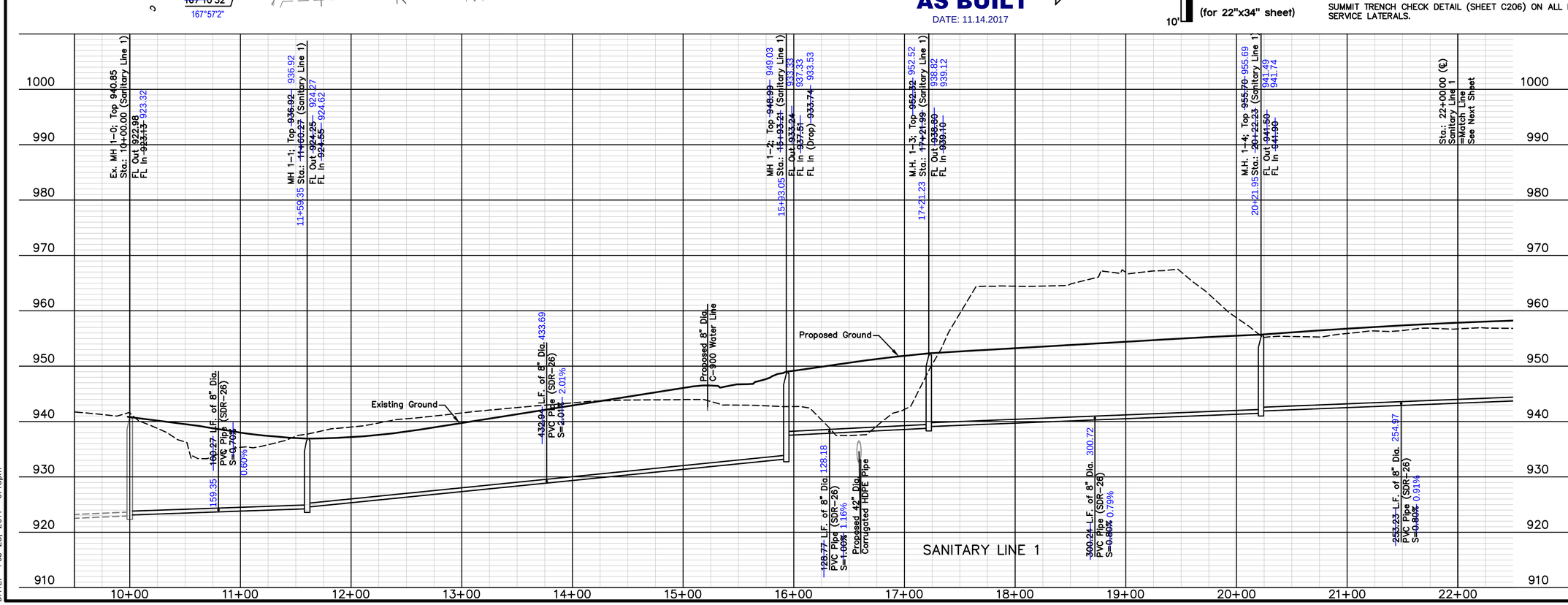
NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X4" PVC WYE, 4"PVC 45° BEND, OR AN 8"X4" TEE, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.

REFER TO SHEET C208 FOR SANITARY DESIGN AND LATERAL INSTALLATION DETAILS.

MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.

SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.

TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARD LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C206) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.



OLSSON ASSOCIATES
Olsson Associates - Civil Engineering
Missouri Certificate of Authority # 2002022824
1301 Burlington, Suite 100 TEL: 816.587.4320
North Kansas City, MO 64116 FAX: 816.587.1393
www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DeGONIA
NUMBER PE–2011000892
3-5-18
PROFESSIONAL ENGINEER

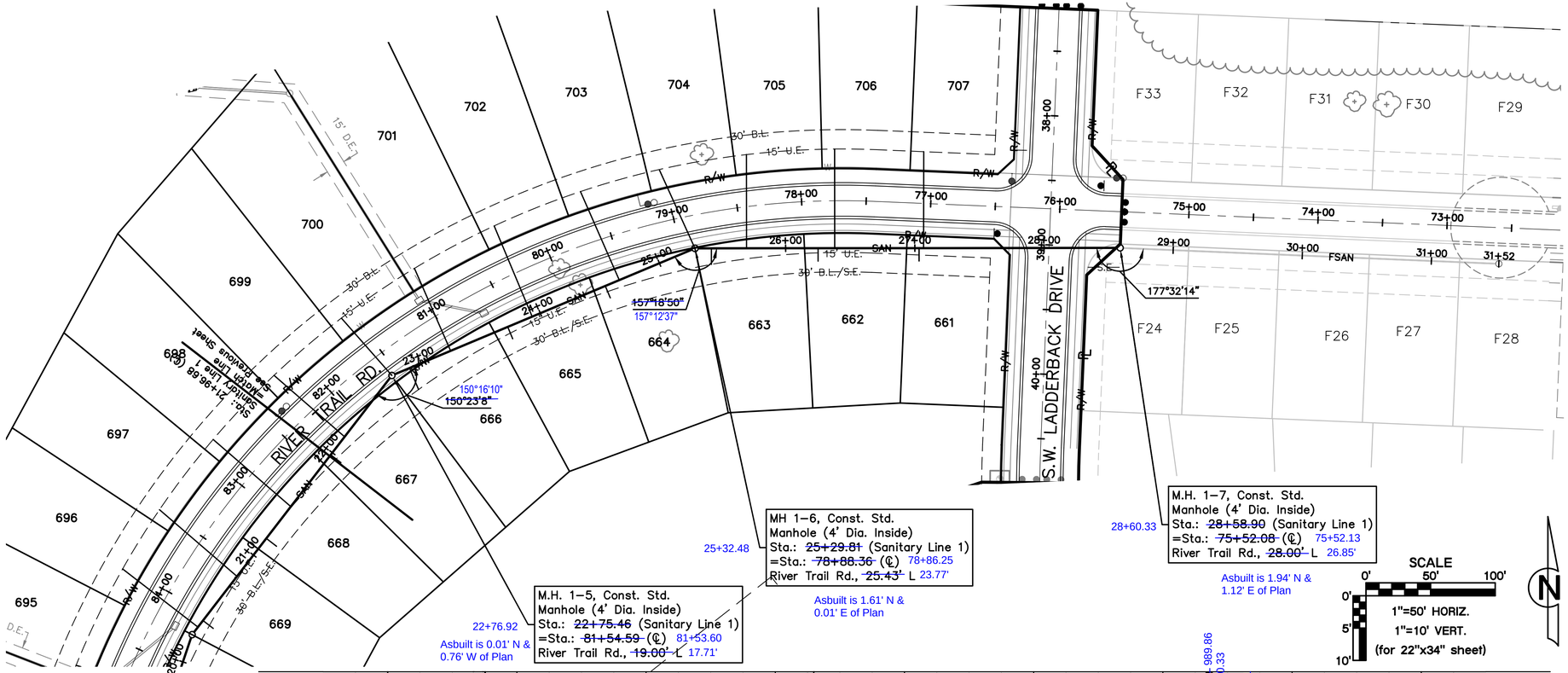
NO. REV.	DATE	REVISIONS DESCRIPTION	BY
	01.17.2017	Prepared for city Submittal	
1	01.17.2017	Sanitary notes added	
	11.14.2017	As-builts Submittal	

SANITARY PLAN & PROFILE
EAGLE CREEK 15TH PLAT
LEE'S SUMMIT, MISSOURI
2016

drawn by: D.A.H.O
design by: P.M.D
approved by: M.G.D
QA/QC by: M.G.D
project no.: 016-3432
date: 2016/12/05

SHEET C204

DWG: F:\2016\3001-3500\016-3432\Lutjen\Plans\Construction Documents\Sanitary 34x22\SA1-016-3432.dwg
DATE: Feb 23, 2017 6:15pm
USER: dhernandez



NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X4" PVC WYE, 4"PVC 45° BEND, OR AN 8"X4" TEE, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.

REFER TO SHEET C208 FOR SANITARY DESIGN AND LATERAL INSTALLATION DETAILS.

MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.

SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.

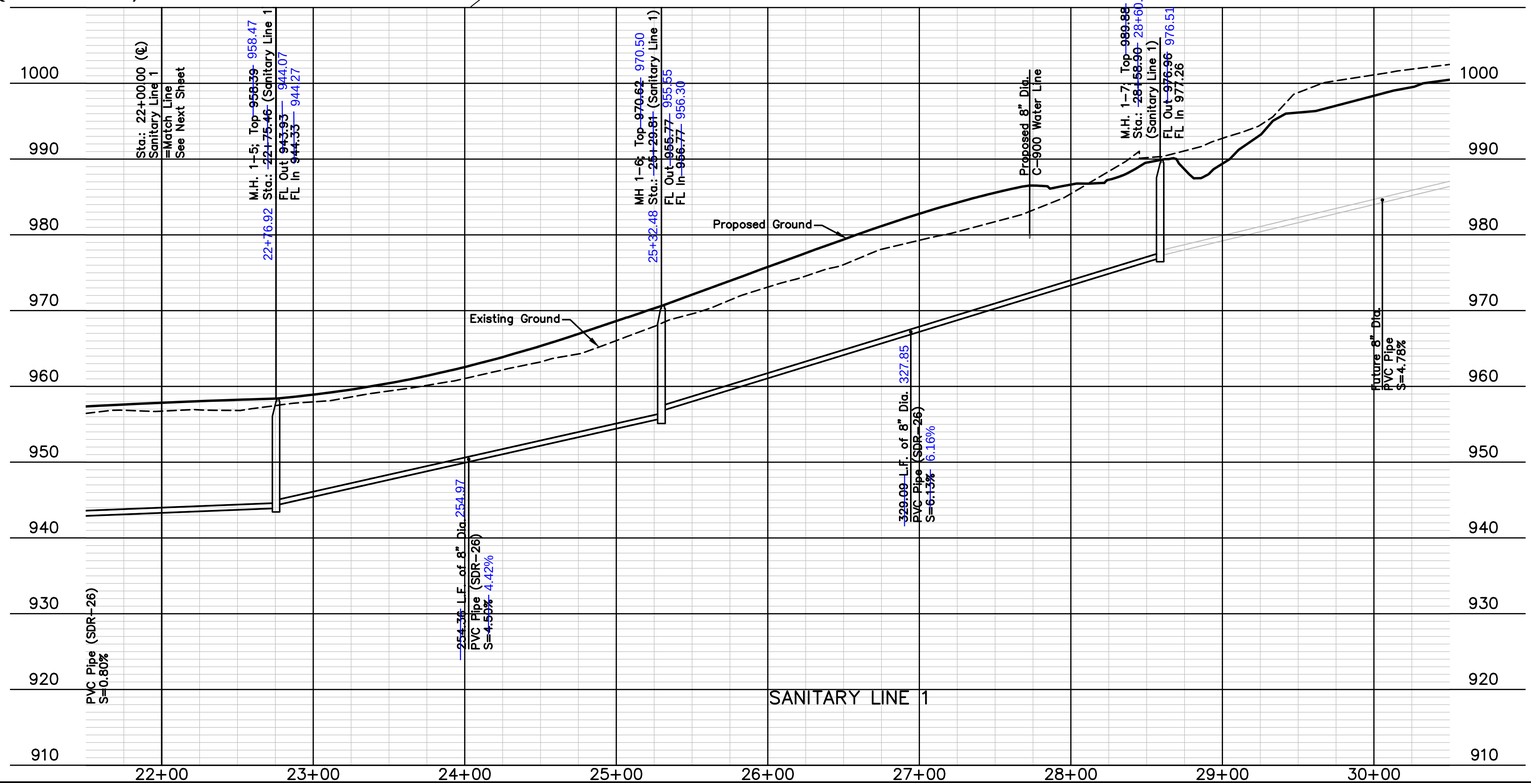
TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARD LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C206) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

M.H. 1–5, Const. Std.
Manhole (4' Dia. Inside)
Sta.: ~~22+75.46~~ (Sanitary Line 1)
=Sta.: ~~81+54.59~~ (℄) 81+53.60
River Trail Rd., ~~19.00'~~ L 17.71'
22+76.92
Asbuilt is 0.01' N & 0.76' W of Plan

MH 1–6, Const. Std.
Manhole (4' Dia. Inside)
Sta.: ~~25+29.81~~ (Sanitary Line 1)
=Sta.: ~~78+88.36~~ (℄) 78+86.25
River Trail Rd., ~~25.43'~~ L 23.77'
25+32.48
Asbuilt is 1.61' N & 0.01' E of Plan

M.H. 1–7, Const. Std.
Manhole (4' Dia. Inside)
Sta.: ~~28+58.90~~ (Sanitary Line 1)
=Sta.: ~~75+52.08~~ (℄) 75+52.13
River Trail Rd., ~~28.00'~~ L 26.85'
28+60.33
Asbuilt is 1.94' N & 1.12' E of Plan

SCALE
0' 50' 100'
1"=50' HORIZ.
1"=10' VERT.
(for 22"x34" sheet)



AS BUILT
DATE: 11.14.2017

OLSSON ASSOCIATES
Olsson Associates - Civil Engineering
Missouri Certificate of Authority # 2002022824
1301 Burlington, Suite 100 TEL: 816.587.4320
North Kansas City, MO 64116 FAX: 816.587.1393
www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE–2011000892
PROFESSIONAL ENGINEER
3-5-18

REVISIONS

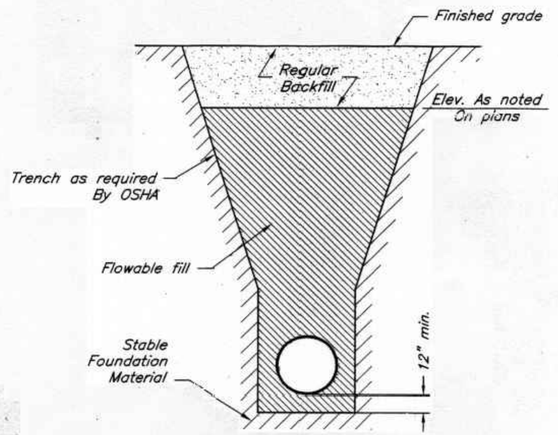
NO. REV.	DATE	REVISIONS DESCRIPTION	BY
	01.17.2017	Prepared for city Submittal	JES
1	01.17.2017	Sanitary notes added	
	11.14.2017	AS-Builts Submittal	

SANITARY PLAN & PROFILE
EAGLE CREEK 15TH PLAT
LEE'S SUMMIT, MISSOURI
2016

drawn by: D.A.H.O
design by: P.M.D
approved by: M.G.D
QA/QC by: M.G.D
project no.: 016-3432
date: 2016/12/05

SHEET C205

DWG: F:\2016\3001-3500\016-3432\Lutjen\Plans\Construction Documents\Sanitary 34x22\SA1-016-3432.dwg
DATE: Feb 23, 2017 6:15pm
USER: dhernandez



NOTES

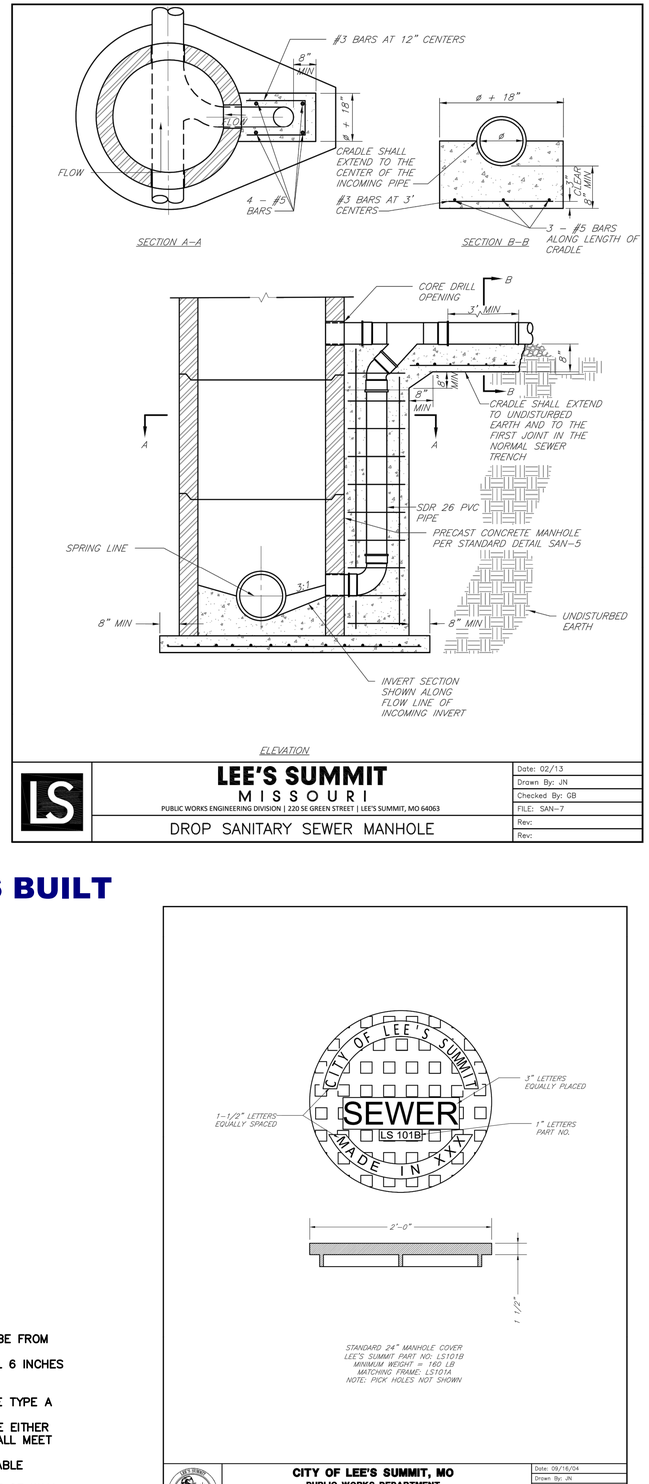
1. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT STANDARD SPECIFICATIONS.
2. REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
3. TOP OF FLOWABLE BACKFILL SHALL BE A MINIMUM OF 2 FEET BELOW FINISHED GRADE.

Subject to revision without notice.

CITY OF LEE'S SUMMIT, MISSOURI

TRENCH CHECK

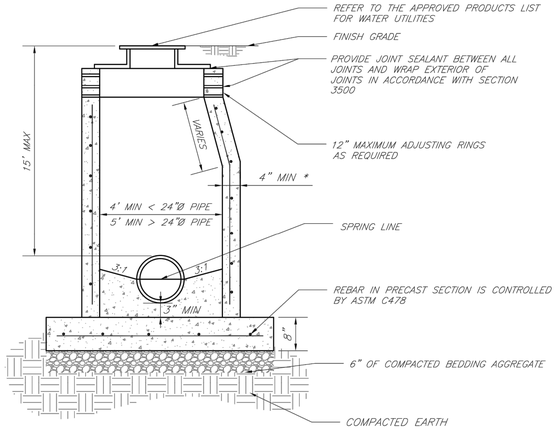
Date: 09/16/04
Rev:
Rev:
Rev:



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

DROP SANITARY SEWER MANHOLE

Date: 02/13
Drawn By: JN
Checked By: GB
FILE: SAN–7
Rev:
Rev:



* 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 THEN 15'.

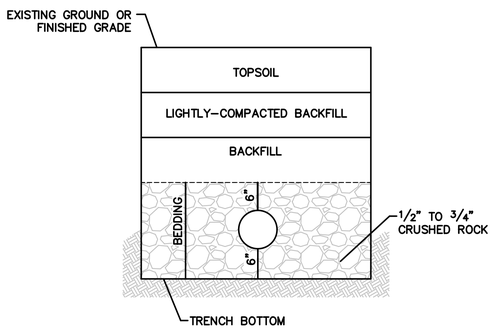
NOTES:
1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS NOTED BY THE SPECIFICATIONS.
2. WATERPROOFING SHALL BE REQUIRED ON THE OUTSIDE OF MANHOLES. THE WATERPROOFING SHALL CONSIST OF A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 14 MILS OF BITUMINOUS COATING.
3. ONLY ECCENTRIC MANHOLE CONES WILL BE ALLOWED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
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 APPROVED MANHOLE GASKET MODELS.

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

STANDARD PRECAST MANHOLE – SANITARY SEWER

Date: 02/13
Drawn By: JN
Checked By: GB
FILE: SAN–5
Rev:
Rev:

NOT AS BUILT



UNDERGROUND PIPE INSTALLATION FOR SANITARY SEWER
N.T.S.

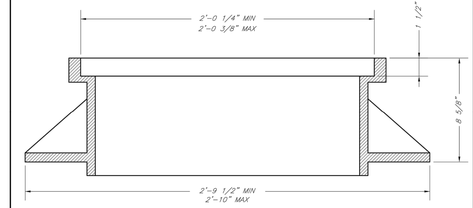
NOTES:
1. A MINIMUM OF 36 INCHES OF COVER SHALL BE OVER THE TOP OF THE PIPE. THIS MINIMUM OF COVER SHALL BE FROM THE TOP OF PIPE TO THE FINISHED GRADE.
2. BEDDING AGGREGATE SHALL BE PLACED FROM A LEVEL 6 INCHES BELOW THE BOTTOM OF THE PIPE TO A LEVEL 6 INCHES ABOVE THE TOP OF THE PIPE.
3. TRENCH BACKFILL IN PAVED AREAS WITHIN STREET OR ALLEY RIGHT OF WAYS
   a. NARROW TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES 24 INCHES OR LESS IN WIDTH AND SHALL BE TYPE A FLOWABLE FILL.
   b. STANDARD TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES BETWEEN 24 TO 48 INCHES WIDE SHALL BE EITHER TYPE A FLOWABLE FILL OR DENSE, WELL GRADED AGGREGATE BASE MATERIAL. AGGREGATE BASE MATERIAL SHALL MEET THE REQUIREMENTS FOR KDOT AB–3; MODOT TYPES 1 OR 5; OR APWA 2202.2.
   c. WIDE TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES GREATER THAN 48 INCHES WIDE SHALL BE SUITABLE MATERIAL AS SPECIFIED FOR EARTH EMBANKMENT IN APWA STANDARD SPECIFICATIONS, SECTION 2102.2.C.
4. SUITABLE BACKFILL MATERIAL OUTSIDE OF PAVED AREAS WITHIN RIGHT OF WAY, AND ALL AREAS OUTSIDE RIGHT OF WAY, MAY BE SUITABLE MATERIAL AS SPECIFIED FOR EARTH EMBANKMENT IN APWA STANDARD SPECIFICATIONS, SECTION 2102.2.C. SUITABLE BACKFILL MATERIAL MAY ALSO BE OTHER TRENCH BACKFILL MATERIAL (FLOWABLE FILL OR AGGREGATE BASE) DEPENDING ON SITE CONDITIONS, TRENCH WIDTHS OR AT THE DIRECTION OF THE CITY'S ON SITE INSPECTOR.

STANDARD 24" MANHOLE COVER
LEE'S SUMMIT PART NO: LS101B
MINIMUM WEIGHT = 160 LB
MATCHING FRAME: LS101A
NOTE: PICK HOLES NOT SHOWN

CITY OF LEE'S SUMMIT, MO
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

STANDARD 24" MANHOLE COVER

Date: 09/16/04
Drawn By: JN
Checked By:
FILE: SANITARY SEWER–2
Rev: 04/05/07
Rev: 12/12



STANDARD 24" MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS101A
MINIMUM WEIGHT = 250 LB
MATCHING COVER: LS101B

CITY OF LEE'S SUMMIT, MO
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

STANDARD 24" MANHOLE FRAME

Date: 09/16/04
Drawn By: JN
Checked By:
FILE: SANITARY SEWER–1
Rev: 01/04/07
Rev: 1/12

OLSSON ASSOCIATES
Olsson Associates - Civil Engineering
Missouri Certificate of Authority # 2002022824
1301 Burlington, Suite 100 TEL: 816.587.4320
North Kansas City, MO 64116 FAX: 816.587.1393
www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DeGONIA
NUMBER PE–2011000892
3-5-18
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
	01.17.2017	Prepared for city Submittal	JES
1	02.23.2017	Trench detail revised	
	11.14.2017	As-builts Submittal	

REVISIONS

SANITARY DETAIL SHEET

EAGLE CREEK
15TH PLAT

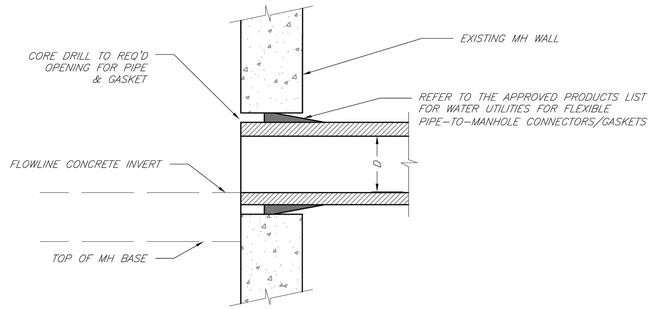
LEE'S SUMMIT, MISSOURI

2016

drawn by: D.A.H.O
design by: P.M.D
approved by: M.G.D
QA/QC by: M.G.D
project no.: 016-3432
date: 2016/12/05

SHEET
C206

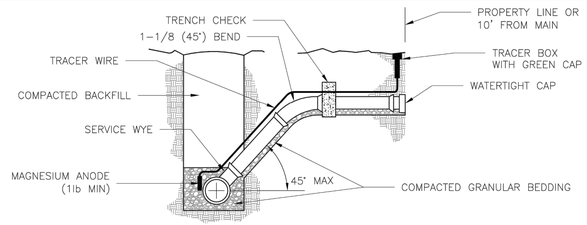
DWG: F:\2016\3001-3500\016-3432\Lutjen\Plans\Construction Documents\Sanitary 34x22\DT1-016-3432.dwg USER: dhernandez
DATE: Feb 23, 2017 6:16pm



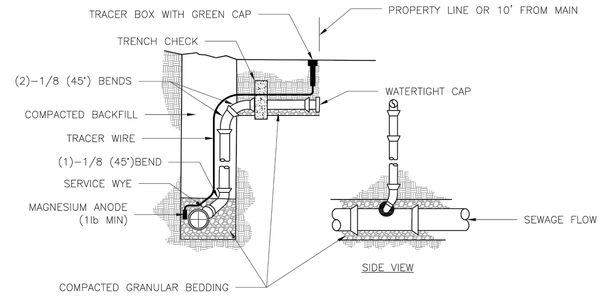
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

EXISTING WALL CONNECTION

Date: 02/13
Drawn By: JN
Checked By: GB
FILE: SAN-9
Rev:
Rev:



STANDARD INSTALLATION
NOT TO SCALE



VERTICAL RISER
NOT TO SCALE

NOTES:
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. 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

BUILDING SEWER STUB AND RISER

Date: 12/13
Drawn By: SC
Checked By: DL
FILE: SAN-1
Rev: 10/15
Rev: 12/15

NOT AS BUILT

OLSSON ASSOCIATES
Olsson Associates - Civil Engineering
Missouri Certificate of Authority # 2007022824
1301 Burlington, Suite 100 TEL 816.587.4320
North Kansas City, MO 64116 FAX 816.587.1393
www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DeGONIA
NUMBER PE-2011000892
PROFESSIONAL ENGINEER
3-5-18

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
	01.17.2017	Prepared for city Submittal	
	11.14.2017	As-builts Submittal	

SANITARY DETAIL SHEET

EAGLE CREEK
15TH PLAT

LEE'S SUMMIT, MISSOURI

2016

drawn by: D.A.H.O
design by: P.M.D
approved by: M.G.D
QA/QC by: M.G.D
project no.: 016-3432
date: 2016/12/05

SHEET
C207

DWG: F:\2016\3001-3500\016-3432\Lut;en\Plans\Construction Documents\Sanitary 34x22\DT2-016-3432.dwg USER: dhernandez
DATE: Feb 23, 2017 6:17pm

Sanitary Sewer Laterals

Lot Number	Lateral Station	Lateral Length (ft)	Riser (ft)	Flowline at End of Lateral (ft)	Minimum Servicable Floor Elevation (ft)
661	27+03.28	10.00	4.0	972.5	975.33
662	26+25.11	10.00	4.0	967.7	970.54
663	25+42.51	12.39	4.0	962.7	965.52
664	24+54.54	10.00	2.0	955.5	958.34
665	23+72.66	10.00	1.0	950.9	953.68
666	22+90.30	18.01	1.0	947.3	950.14
667	21+97.96	10.00	2.0	946.5	949.27
668	21+16.28	10.00	2.0	945.8	948.61
669	20+36.05	10.00	1.0	944.2	946.99
670	19+48.36	10.17	1.0	943.1	945.89
671	18+74.11	10.00	1.0	942.5	945.30
672	18+02.41	10.00	1.0	941.9	944.73
673	17+31.54	10.00	1.0	941.4	944.16
674	16+67.70	13.35	1.0	940.5	943.31
675	15+98.71	10.00	0.0	938.8	941.57
676	14+47.14	10.00	2.0	933.5	936.27
677	13+78.27	10.00	1.0	931.1	933.91
678	13+08.26	10.00	0.0	928.7	931.52
679	12+38.26	10.00	0.0	927.3	930.12
680	11+75.27	10.00	0.0	926.1	928.85
681	10+84.50	10.00	1.0	925.9	928.70
682	10+07.50	63.34	3.0	928.4	931.19
683	10+64.50	75.87	0.0	926.1	928.90
684	11+30.87	76.73	0.0	926.5	929.29
685	11+66.67	68.54	0.0	927.0	929.85
686	12+33.56	68.40	0.0	928.4	931.19
687	13+03.59	68.27	0.0	929.8	932.59
688	13+73.90	68.14	0.0	931.2	934.00
689	14+51.22	68.13	1.0	933.7	936.54
690	15+12.16	67.88	2.0	935.9	938.73
691	16+53.61	66.24	0.0	940.4	943.24
692	17+62.04	73.98	0.0	941.9	944.70
693	18+32.28	76.00	0.0	942.5	945.30
694	19+02.35	78.02	0.0	943.1	945.90
695	19+71.24	77.51	0.0	943.6	946.44
696	20+29.65	73.64	0.0	944.0	946.83
697	20+81.63	79.15	0.0	945.0	947.76
698	21+50.10	79.45	0.0	945.5	948.31
699	22+17.08	72.44	1.0	946.9	949.69
700	22+75.46	59.12	2.0	947.7	950.47
701	23+24.29	69.68	0.0	948.9	951.72
702	23+93.19	76.12	0.0	952.1	954.95
703	24+65.62	74.79	0.0	955.4	958.18
704	25+28.81	66.94	2.0	960.3	963.07
705	25+69.72	72.51	3.0	964.6	967.41
706	26+37.99	76.72	3.0	968.9	971.68
707	27+06.88	74.60	3.0	973.1	975.87

Sanitary Sewer Design Information

Upstream Manhole	Downstream Pipe Slope (%)	Downstream Pipe Diameter (in)	Proposed Cumulative Area (Ac.)	Future Cumulative Area (Ac.)	Peak Base Flow (gpd)	Peak Infiltration (gpd)	Peak Inflow (cfs)	Total Peak Flow (cfs)	Downstream Pipe Mannings N	Downstream Pipe Capacity (cfs)	Downstream Pipe Full Flow Velocity (fps)
Ex. MH 1-0	0.85%	8	13.42	2.55	23955.00	7985.00	0.44	0.49	0.013	1.11	3.19
MH 1-1	0.70%	8	12.22	2.55	22155.00	7385.00	0.41	0.45	0.013	1.01	2.89
MH 1-2	2.01%	8	9.54	2.55	18135.00	6045.00	0.34	0.38	0.013	1.71	4.91
MH 1-3	1.00%	8	8.59	2.55	16710.00	5570.00	0.32	0.35	0.013	1.21	3.47
MH 1-4	0.80%	8	6.25	2.55	13200.00	4400.00	0.26	0.28	0.013	1.08	3.09
MH 1-5	0.80%	8	3.96	2.55	9765.00	3255.00	0.20	0.22	0.013	1.08	3.10
MH 1-6	4.50%	8	1.66	2.55	6315.00	2105.00	0.14	0.15	0.013	2.56	7.34
MH 1-7	6.14%	8	0.00	2.55	3825.00	1275.00	0.09	0.10	0.013	2.99	8.57

NOT AS BUILT

NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X4" PVC WYE, 4"PVC 45° BEND, OR AN 8"X4" TEE, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.

MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.

SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.

TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARD LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C206) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

OLSSON ASSOCIATES
Olsson Associates - Civil Engineering
Missouri Certificate of Authority # 2002824
1301 Burlington, Suite 100 TEL 816.587.4320
North Kansas City, MO 64116 FAX 816.587.1393
www.olssonassociates.com

STATE OF MISSOURI
MELISSA G. DEGONIA
NUMBER PE-2011000892
PROFESSIONAL ENGINEER
3-5-18

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
	01.17.2017	Prepared for city Submittal	JES
1	02.23.2017	Sanitary notes added, Tables revised per plan changes	
	11.14.2017	As-builts Submittal	

SANITARY TABLES

EAGLE CREEK
15TH PLAT

LEE'S SUMMIT, MISSOURI

2016

drawn by: D.A.H.O
design by: P.M.D
approved by: M.G.D
QA/QC by: M.G.D
project no.: 016-3432
date: 2016/12/05

SHEET
C208

DWG: F:\2016\3001-3500\016-3432\Lutjen\Plans\Construction Documents\Sanitary 34x22\DR2-016-3432.dwg USER: dhernandez
DATE: Feb 23, 2017 6:17pm