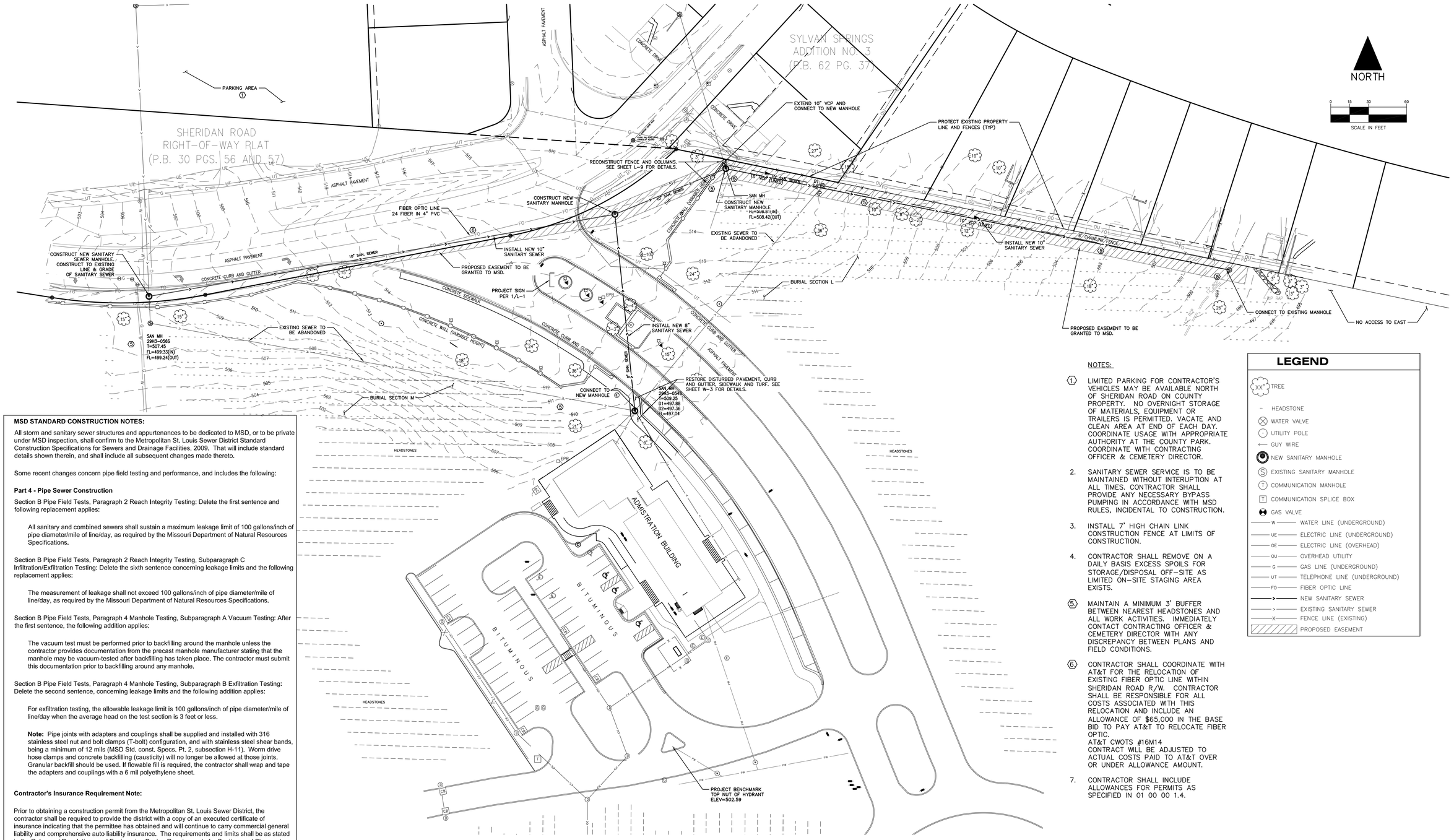

MSD STANDARD CONSTRUCTION NOTES:

All storm and sanitary sewer structures and appurtenances to be dedicated to MSD, or to be private under MSD inspection, shall confirm to the Metropolitan St. Louis Sewer District Standard Construction Specifications for Sewers and Drainage Facilities, 2009. That will include standard details shown therein, and shall include all subsequent changes made thereto.

Some recent changes concern pipe field testing and performance, and includes the following:

Part 4 - Pipe Sewer Construction

Section B Pipe Field Tests, Paragraph 2 Reach Integrity Testing: Delete the first sentence and following replacement applies:

All sanitary and combined sewers shall sustain a maximum leakage limit of 100 gallons/inch of pipe diameter/mile of line/day, as required by the Missouri Department of Natural Resources Specifications.

Section B Pipe Field Tests, Paragraph 2 Reach Integrity Testing, Subparagraph C Infiltration/Exfiltration Testing: Delete the sixth sentence concerning leakage limits and the following replacement applies:

The measurement of leakage shall not exceed 100 gallons/inch of pipe diameter/mile of line/day, as required by the Missouri Department of Natural Resources Specifications.

Section B Pipe Field Tests, Paragraph 4 Manhole Testing, Subparagraph A Vacuum Testing: After the first sentence, the following addition applies:

The vacuum test must be performed prior to backfilling around the manhole unless the contractor provides documentation from the precast manhole manufacturer stating that the manhole may be vacuum-tested after backfilling has taken place. The contractor must submit this documentation prior to backfilling around any manhole.

Section B Pipe Field Tests, Paragraph 4 Manhole Testing, Subparagraph B Exfiltration Testing: Delete the second sentence, concerning leakage limits and the following addition applies:

For exfiltration testing, the allowable leakage limit is 100 gallons/inch of pipe diameter/mile of line/day when the average head on the test section is 3 feet or less.

Note: Pipe joints with adapters and couplings shall be supplied and installed with 316 stainless steel nut and bolt clamps (T-bolt) configuration, and with stainless steel shear bands, being a minimum of 12 mils (MSD Std. const. Specs. Pt. 2, subsection H-11). Worm drive hose clamps and concrete backfilling (causticity) will no longer be allowed at those joints. Granular backfill should be used. If flowable fill is required, the contractor shall wrap and tape the adapters and couplings with a 6 mil polyethylene sheet.

Contractor's Insurance Requirement Note:

Prior to obtaining a construction permit from the Metropolitan St. Louis Sewer District, the contractor shall be required to provide the district with a copy of an executed certificate of insurance indicating that the permittee has obtained and will continue to carry commercial general liability and comprehensive auto liability insurance. The requirements and limits shall be as stated in the Rules and Regulations and Engineering Design Requirements for Sanitary and Stormwater Drainage Facilities, February 2006, Section 10.090 (Addendum).

Note: for sewer pipe (storm, sanitary and combined) with a design grade less than 1 percent, verification of the pipe grade will be required for each installed reach of sewer, **prior to any surface restoration or installation of any surface improvements**. The contractor's field supervisor will be required to provide daily documentation verifying that the as-built pipe grade meetings the design grade through the submittal of signed cut sheets to the district inspector upon request.

NOTES:

1. LIMITED PARKING FOR CONTRACTOR'S VEHICLES MAY BE AVAILABLE NORTH OF SHERIDAN ROAD ON COUNTY PROPERTY. NO OVERNIGHT STORAGE OF MATERIALS, EQUIPMENT OR TRAILERS IS PERMITTED. VACATE AND CLEAN AREA AT END OF EACH DAY. COORDINATE USAGE WITH APPROPRIATE AUTHORITY AT THE COUNTY PARK. COORDINATE WITH CONTRACTING OFFICER & CEMETERY DIRECTOR.

2. SANITARY SEWER SERVICE IS TO BE MAINTAINED WITHOUT INTERUPTION AT ALL TIMES. CONTRACTOR SHALL PROVIDE ANY NECESSARY BYPASS PUMPING IN ACCORDANCE WITH MSD RULES, INCIDENTAL TO CONSTRUCTION.

3. INSTALL 7' HIGH CHAIN LINK CONSTRUCTION FENCE AT LIMITS OF CONSTRUCTION.

4. CONTRACTOR SHALL REMOVE ON A DAILY BASIS EXCESS SPOILS FOR STORAGE/DISPOSAL OFF-SITE AS LIMITED ON-SITE STAGING AREA EXISTS.

5. MAINTAIN A MINIMUM 3' BUFFER BETWEEN NEAREST HEADSTONES AND ALL WORK ACTIVITIES. IMMEDIATELY CONTACT CONTRACTING OFFICER & CEMETERY DIRECTOR WITH ANY DISCREPANCY BETWEEN PLANS AND FIELD CONDITIONS.

6. CONTRACTOR SHALL COORDINATE WITH AT&T FOR THE RELOCATION OF EXISTING FIBER OPTIC LINE WITHIN SHERIDAN ROAD R/W. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THIS RELOCATION AND INCLUDE AN ALLOWANCE OF $65,000 IN THE BASE BID TO PAY AT&T TO RELOCATE FIBER OPTIC.
AT&T CWOTS #16M14
CONTRACT WILL BE ADJUSTED TO ACTUAL COSTS PAID TO AT&T OVER OR UNDER ALLOWANCE AMOUNT.

7. CONTRACTOR SHALL INCLUDE ALLOWANCES FOR PERMITS AS SPECIFIED IN 01 00 00 1.4.

LEGEND

- XX" TREE
- HEADSTONE
- WATER VALVE
- UTILITY POLE
- GUY WIRE
- NEW SANITARY MANHOLE
- EXISTING SANITARY MANHOLE
- COMMUNICATION MANHOLE
- COMMUNICATION SPLICE BOX
- GAS VALVE
- W — WATER LINE (UNDERGROUND)
- UE — ELECTRIC LINE (UNDERGROUND)
- OE — ELECTRIC LINE (OVERHEAD)
- OU — OVERHEAD UTILITY
- G — GAS LINE (UNDERGROUND)
- UT — TELEPHONE LINE (UNDERGROUND)
- FO — FIBER OPTIC LINE
- NEW SANITARY SEWER
- EXISTING SANITARY SEWER
- X — FENCE LINE (EXISTING)
- PROPOSED EASEMENT

CALL 48 HOURS BEFORE DIGGING
Utilities Underground Location Center
DIAL 811
811
Know what's below, Call before you dig.

P-0029720-00
BASE MAP 29H3

BID DOCUMENTS

Revisions:	Date

CONSULTANTS:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MISSOURI.
PRINT NAME: GARY R. JOHNSON, P.E.
SIGNATURE:
DATE March 28, 2016 P.E. 2012005390

ARCHITECT/ENGINEERS:

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Drawing Title: SITE PLAN	Project Title: SEWER RELOCATION		Project Number: 852CM3037
Approved Project Director	Location: ST. LOUIS, MO		Drawing Reference Number
	Date: 3-28-16	Checked: AMT	Drawn: PSH
	Drawing Number: L-1	Dwg. 4 OF 17	

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231