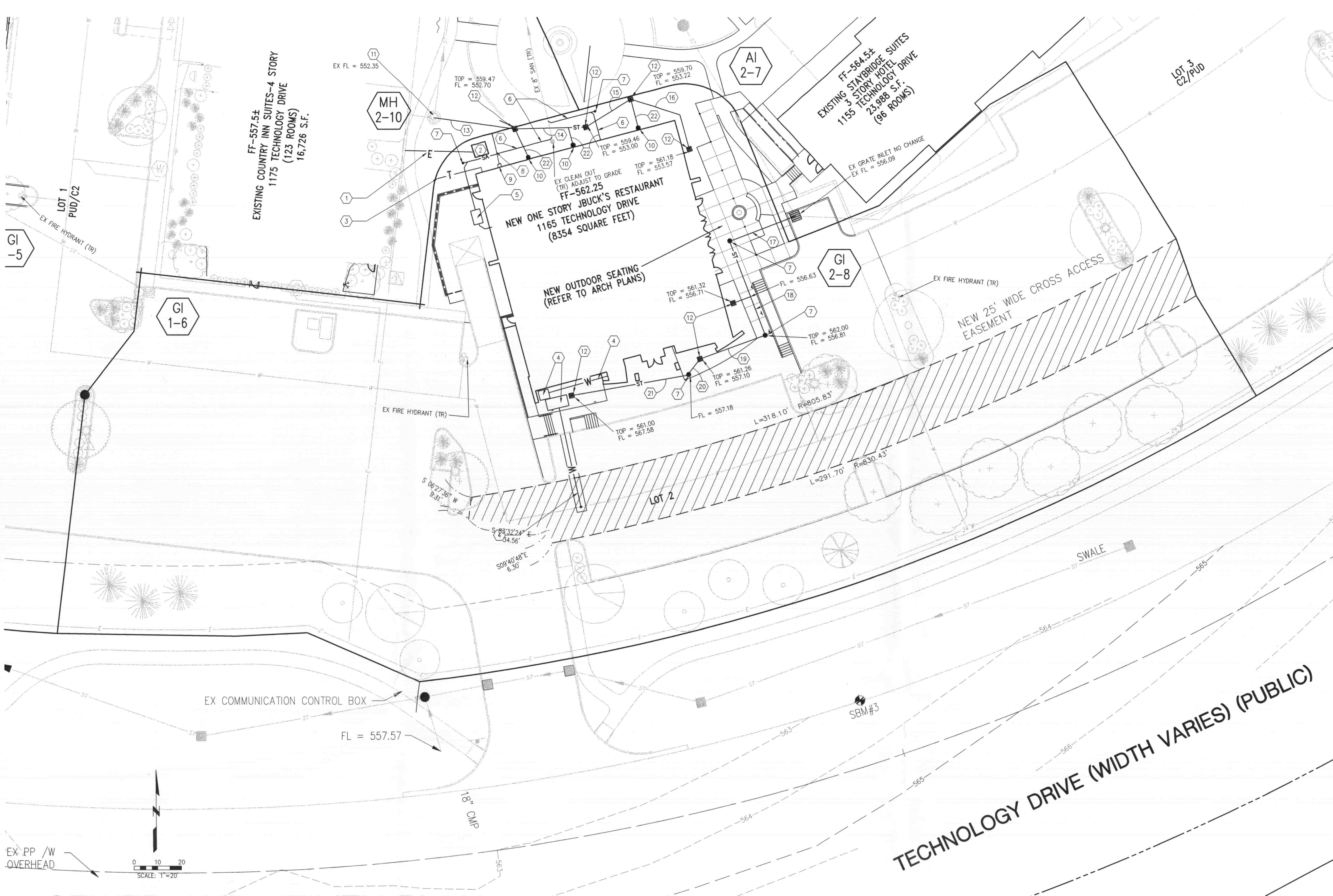

SEWER AND UTILITY PLAN

General Notes

1. REFER TO SHEET C-1 FOR DIMENSIONS AND IDENTIFICATION OF PROPOSED IMPROVEMENTS.
2. REFER TO SHEET C-2 FOR GRADING, DRAINAGE, AND EROSION CONTROL.
3. REFER TO SHEET C-6 FOR LANDSCAPE MATERIALS.
4. ALL UTILITIES WILL BE LOCATED UNDERGROUND.
5. ALL EXISTING UNDERGROUND IMPROVEMENTS SHALL REMAIN UNLESS NOTED OTHERWISE.
6. THE EXISTING UTILITIES SHOWN HEREON ARE FROM SURVEY AND INFORMATION PROVIDED BY UTILITY COMPANIES AND MUST BE CONSIDERED AS APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATIONS PRIOR TO COMMENCING WORK.
7. BACKFILL ALL UTILITY TRENCHES UNDER PAVEMENT WITH GRANULAR MATERIAL. REFER TO DETAIL ON SHEET C-5.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING TOPS AND FLOWLINES OF ALL EXISTING SEWERS PRIOR TO COMMENCING WORK.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND/OR ABANDONMENT OF ALL EXISTING UTILITY SERVICES (INCLUDING UTILITY COMPANY FEES)
10. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF EXIT PORCHES, RAMPS, PATIOS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
11. THE CONTRACTOR SHALL SAWCUT ALL EDGES OF EXISTING PAVEMENT THAT IS TO BE REMOVED. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO CREATE A SMOOTH WORKING EDGE AND TO PLACE BACKFILL AND PAVEMENT SUCH THAT SETTLEMENT DOES NOT OCCUR.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL CONNECTION FEES, INSTALLING AND CONNECTING ALL UTILITIES (INCLUDING, BUT NOT LIMITED TO POWER, CABLE TV, TELEPHONE, WATER, SEWER, GAS, ETC.) FROM LOCAL UTILITY COMPANY SOURCE TO BUILDING.
13. ALL MATERIALS AND WORKMANSHIP ASSOCIATED WITH THE STORM SEWER CONSTRUCTION SHALL CONFORM TO THE LATEST STANDARDS AND SPECIFICATIONS OF THE CITY OF O'FALLON AND MISSOURI DEPT. OF TRANSPORTATION.
14. ALL MATERIALS AND WORKMANSHIP ASSOCIATED WITH THE ELECTRIC CONSTRUCTION SHALL COMPLY WITH THE LATEST STANDARDS AND SPECIFICATIONS OF AMEREN UE.
15. ALL MATERIALS AND WORKMANSHIP ASSOCIATED WITH THE TELEPHONE SERVICE CONSTRUCTION SHALL COMPLY WITH THE LATEST STANDARDS AND SPECIFICATIONS OF SBC.
16. ALL MATERIALS AND WORKMANSHIP ASSOCIATED WITH THE NATURAL GAS SERVICE CONSTRUCTION SHALL COMPLY WITH THE LATEST STANDARDS AND SPECIFICATIONS OF LACLEDE GAS. CONTRACTOR TO COORDINATE LAYOUT AND RUN WITH GAS COMPANY.
17. ALL MATERIALS AND WORKMANSHIP ASSOCIATED WITH THE SANITARY SEWER CONSTRUCTION SHALL COMPLY WITH THE LATEST STANDARDS AND SPECIFICATIONS OF DUCKETT CREEK SEWER DISTRICT.
18. ALL MATERIALS AND WORKMANSHIP ASSOCIATED WITH THE WATER SERVICE CONSTRUCTION SHALL COMPLY WITH THE LATEST STANDARDS AND SPECIFICATIONS OF PUBLIC WATER SUPPLY DISTRICT #2.
19. BRICK SHALL NOT BE USED IN THE CONSTRUCTION OF STORM OR SANITARY SEWER STRUCTURES.
20. ALL SANITARY JOINTS SHALL BE GASKETED O-RING TYPE.
21. ALL SANITARY SEWER LINES & WATERMAINS SHALL HAVE A MINIMUM OF 42" OF COVER.
22. ALL DROP STRUCTURES SHALL BE BACKFILLED WITH COMPACTED ROCK BACKFILL IN THE DISTURBED GROUND AROUND THE STRUCTURE.
23. SANITARY LATERALS AND MAINS CROSSING UNDER ROADWAYS MUST HAVE THE PROPER ROCK BACKFILL AND THE REQUIRED COMPACTION.
24. ROOF DRAINS TO DISCHARGE ONTO GRADE.
25. ALL STORM SEWERS SHALL HAVE A MINIMUM OF 36" OF COVER.
26. PROVIDE 0.2' DROP THROUGH ALL STORM SEWER STRUCTURES.
27. ALL STORM SEWER JOINTS SHALL BE GASKETED O-RING TYPE.
28. THE CITY OF O'FALLON SHALL ALSO BE CONTACTED FOR UTILITY LOCATES UNDER ITS MAINTENANCE RESPONSIBILITY.
29. ANY NEW HDPE PIPE IS TO BE N-12WT AND TO MEET ASTM F1417 WATER TIGHT FIELD TEST.

Keyed Notes (1)

1. NEW PRIMARY UNDERGROUND ELECTRIC SERVICE. CONTRACTOR TO PROVIDE AND INSTALL 2-4" PVC CONDUIT. AMEREN UE TO PROVIDE AND PULL CONDUCTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONNECTION.
2. NEW TRANSFORMER. AMEREN UE TO PROVIDE AND INSTALL THE TRANSFORMER AND CONCRETE PAD (VERIFY SIZE). CONTRACTOR TO PROVIDE A BASE OF GRANULAR MATERIAL OVER COMPACTED BACKFILL.
3. NEW (1) 4" PVC CONDUIT FOR TELEPHONE SERVICE CONNECT TO CLOSEST AVAILABLE SOURCE. CONTRACTOR TO BE RESPONSIBLE FOR ALL MATERIAL AND INSTALLATION OF PVC CONDUIT AND PULL STRING.
4. (1) NEW 2" WATER SERVICE LINE WITH METER TO BE INSTALLED PER PWSD #2 STANDARDS AND SPECIFICATIONS. CONTRACTOR TO FURNISH AND INSTALL A DETECTOR CHECK VALVE ASSEMBLY AND BOX PER PWSD #2 REQUIREMENTS.
5. NEW GREASE AND OIL INTERCEPTORS. ALL MATERIAL AND INSTALLATION BY CONTRACTOR.
6. NEW 6" PVC SANITARY LATERAL AT 2% MINIMUM SLOPE AND 3' MINIMUM COVER. ALL MATERIAL AND INSTALLATION BY CONTRACTOR.
7. SEWER CLEANOUT WITH CAST IRON FRAME AND SOLID TOP. REFER TO DETAIL ON SHEET C-5.
8. NEW UNDERGROUND NATURAL GAS SERVICE, SIZED BY UTILITY CO. CONNECT TO NEAREST AVAILABLE SOURCE.
9. NEW GAS METER.
10. NEW ROOF DOWNSPOUT BOOT TO ACCEPT DOWNSPOUTS AND OUTLET PIPE PAINT BOOT TO MATCH BUILDING. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND DETAILS.
11. REMOVE EXISTING SOLID TOP MANHOLE COVER AND REPLACE WITH SLOTTED OR GRATE TOP.
12. NEW YARD DRAIN. MATCH ON SITE YARD DRAINS.
13. NEW 35'-8" PVC AT 1.00%
14. NEW 30'-8" PVC AT 1.00%
15. NEW 22'-8" PVC AT 1.00%
16. NEW 37'-8" PVC AT 1.00%
17. NEW 29'-8" PVC AT 1.00%
18. NEW 42'-8" PVC AT 1.00%
19. NEW 29'-8" PVC AT 1.00%
20. NEW 8'-8" PVC AT 1.00%
21. NEW 50'-8" PVC AT 1.00%
22. NEW 6" PVC AT 2.00%

Abbreviations and Legend

EXISTING AREA LIGHT
EXISTING ELECTRIC PEDESTAL
EXISTING STORM SEWER STRUCTURE
EXISTING FIRE HYDRANT
EXISTING STORM MANHOLE
EXISTING SANITARY MANHOLE
EXISTING SIGN
EXISTING TRANSFORMER
EXISTING LANDSCAPING
EXISTING POWER POLE
EXISTING CLEAN OUT
EXISTING WATER VALVE
EXISTING GAS VALVE
EXISTING GAS METER
EXISTING HANDICAP PARKING MARKER
EXISTING FIRE DEPARTMENT CONNECTION
NUMBER OF PARKING STALLS
KEYED NOTE DESIGNATOR

N	NORTH
S	SOUTH
E	EAST
W	WEST/WIDE
FL	FLOW LINE
STM/ST	STORM
SAN/SA	SANITARY
MH	MANHOLE
PB	PLAT BOOK
DB	DEED BOOK
PG	PAGE
ESMT	EASEMENT
R/W	RIGHT OF WAY LINE
IP	IRON PIPE
EX	EXISTING

562 FINISH CONTOUR AS BUILT
EX FIBER OPTIC LINE
EX OVERHEAD ELECTRIC
EX SANITARY SEWER WITH SIZE
EX STORM SEWER WITH SIZE
EX WATER LINE WITH SIZE

Utility Contacts

STORM SEWER
CITY OF O'FALLON
100 NORTH MAIN STREET
O'FALLON, MO 63366
(636) 240-5555
CONTACT: FRANK GODWIN

WATER SERVICE
PUBLIC WATER SUPPLY DISTRICT #2
OF ST. CHARLES COUNTY
100 WATER DRIVE
O'FALLON, MO 63366
(636) 561-3737 X-120
CONTACT: BILL SHIRLEY

GAS SERVICE
LACLEDE GAS COMPANY
1999 TRADE CENTER DRIVE EAST
ST. PETERS, MO 63376
(636) 978-2663 X-103
CONTACT: AL HERL

SANITARY SEWER
DUCKETT CREEK SANITARY DISTRICT
3550 HIGHWAY K
ST. CHARLES, MO 63304
(636) 441-1244
CONTACT: CHRISTINE M. BEASLEY

ELECTRIC SERVICE
AMEREN UE
200 CALLAHAN ROAD
WENTZVILLE, MO 63385
(636) 639-8316
(636) 639-8256 FAX
CONTACT: DAVID GRAVITT

SBC
402 N. 3RD ST.
GROUND FLOOR
ST. CHARLES, MO 63301
(636) 949-1312
CONTACT: KATHY SMITH

MoDOT
*FIBER OPTICS MAY BE PRESENT
1590 WOODLAKE DRIVE
CHESTERFIELD, MO 63017-5712
(314) 340-4100
CONTACT: SCOTTY D. WARD

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MISSOURI ONE CALL SYSTEM, INC.

Duckett Creek Sanitary District Construction Notes

1. Underground utilities have been plotted from available information and therefore location shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to any grading or construction of improvements.

2. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary and storm sewers, including house laterals.

3. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match preconstruction conditions.

4. All fill including places under proposed storm and sanitary sewer lines and paved areas including trench backfills within and off the road right-of-way shall be compacted to 90 percent of maximum density as determined by the "Modified AASHTO T-180 Compaction Test (ASTM D1557)". All tests shall be verified by a Soils Engineer concurrent with grading and backfilling operations. The compacted fill shall be free of rutting and shall be free of rutting and shall be non-yielding and non-pumping during proofrolling and compaction.

5. The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.

6. All sanitary sewer flowlines and tops built without elevations furnished by the engineer will be the responsibility of the sewer contractor.

7. Easements shall be provided for all sanitary sewers, storm sewers and all utilities on the record plat.

8. All sanitary sewer construction and materials shall conform to the current construction standards of the Duckett Creek Sanitary District.

9. The Duckett Creek Sanitary District shall be notified at least 48 hours prior to construction for coordination inspection.

10. All sanitary sewer building connections shall be designed so that the minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding building connection shall not be less than the diameter of the pipe plus the vertical distance of 2-1/2 feet.

11. All sanitary sewer manholes shall be waterproofed on the exterior in accordance with Missouri Dept. of Natural Resources specification 10 CSR-8.120(7)(E).

12. All PVC sanitary sewer pipe shall conform to the requirements of ASTM D-3034 Standard Specification for PSM Polyvinyl Chloride Sewer Pipe, SDR-35 or equal, with "clean" 1/2 inch to 1 inch granular stone bedding uniformly graded. This bedding shall extend from 4 inches below the pipe to springline of pipe. Immediate backfill over pipe shall consist of some size "clean" or "minus" stone from springline of pipe to 6 inches above the top of pipe.

13. All sanitary and storm sewer trench be water jetted. Granular backfill will be used under pavement areas.

14. All pipes shall have positive drainage through manholes. Flat invert structures not allowed.

15. All creek crossings shall be grouted rip-rap as directed by District inspectors. (All grout shall be high slump ready-mix concrete.)

16. Brick shall not be used on sanitary sewer manholes.

17. Existing sanitary sewer service shall not be interrupted.

18. Maintain access to existing residential driveways and streets.

19. Pre-manufactured adapters shall be used at all PVC to DIP connections. Rubber boot/mission-type couplings will not be allowed.

20. Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the developer.

21. "Type N" Lock-Type Cover and Locking Device (Lock-Lug) shall be used where lock-type covers are required.

ENGINEERS
ARCHITECTS
SURVEYORS
SCIENTISTS

Farnsworth
GROUP

20 ALLEN AVENUE, SUITE 200
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1	7-14-05	GENERAL
2	8/30/05	CROSS ACCESS ESMT

STATE OF MISSOURI
JAMES T. BURDE
NUMBER
E-13347
REGISTERED PROFESSIONAL ENGINEER

PROJECT:
JBUCK'S
RESTAURANT

**LOT 2
PERSIMMON
POINTE**

1165 TECHNOLOGY DR
O'FALLON, MO

Date:	06/28/05
Design/Drawn:	JPB
Approved:	JTB
Book No.:	-

SHEET TITLE:
SEWER AND UTILITY PLAN

SHEET NUMBER:
C-3

SHEET 4 OF 9

Project No.: 299163.20

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