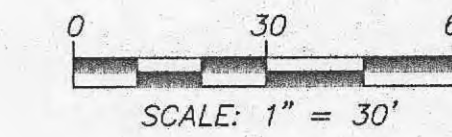


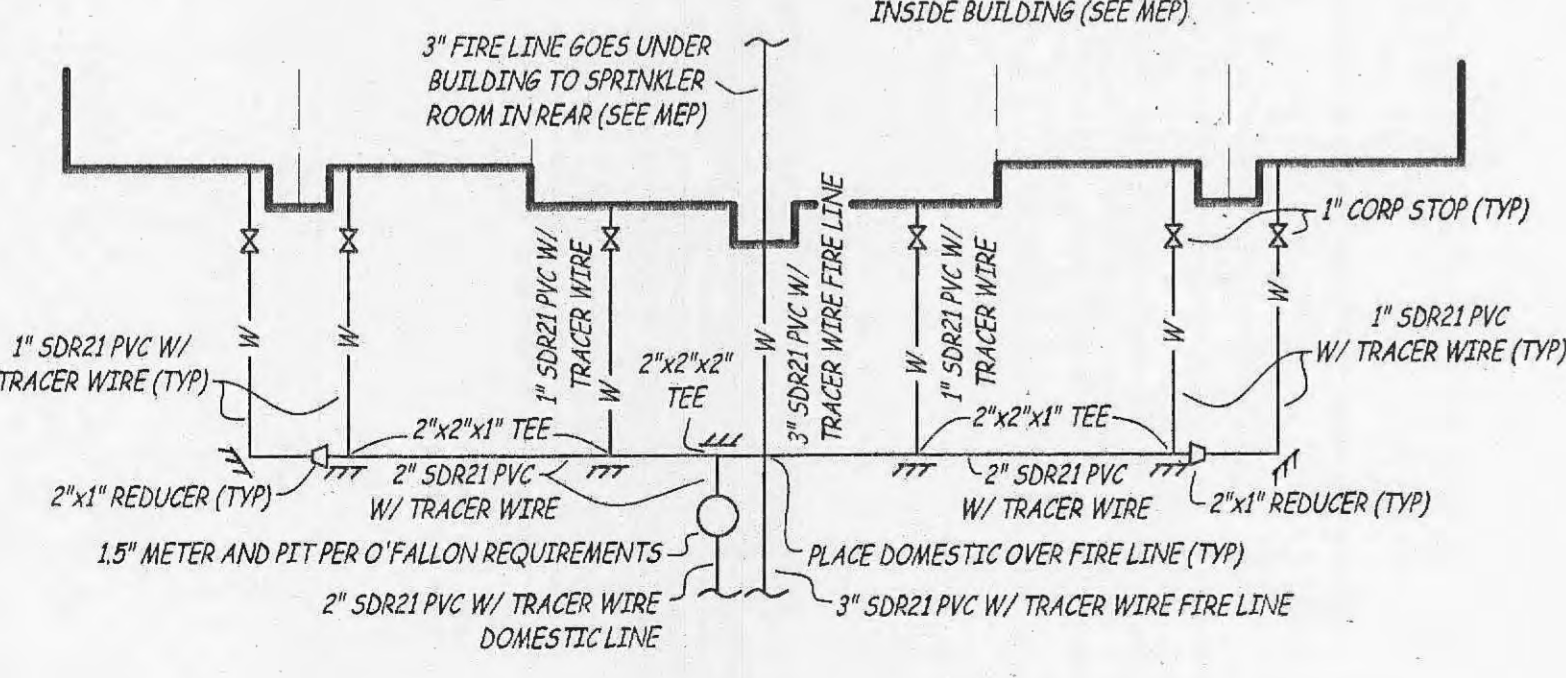
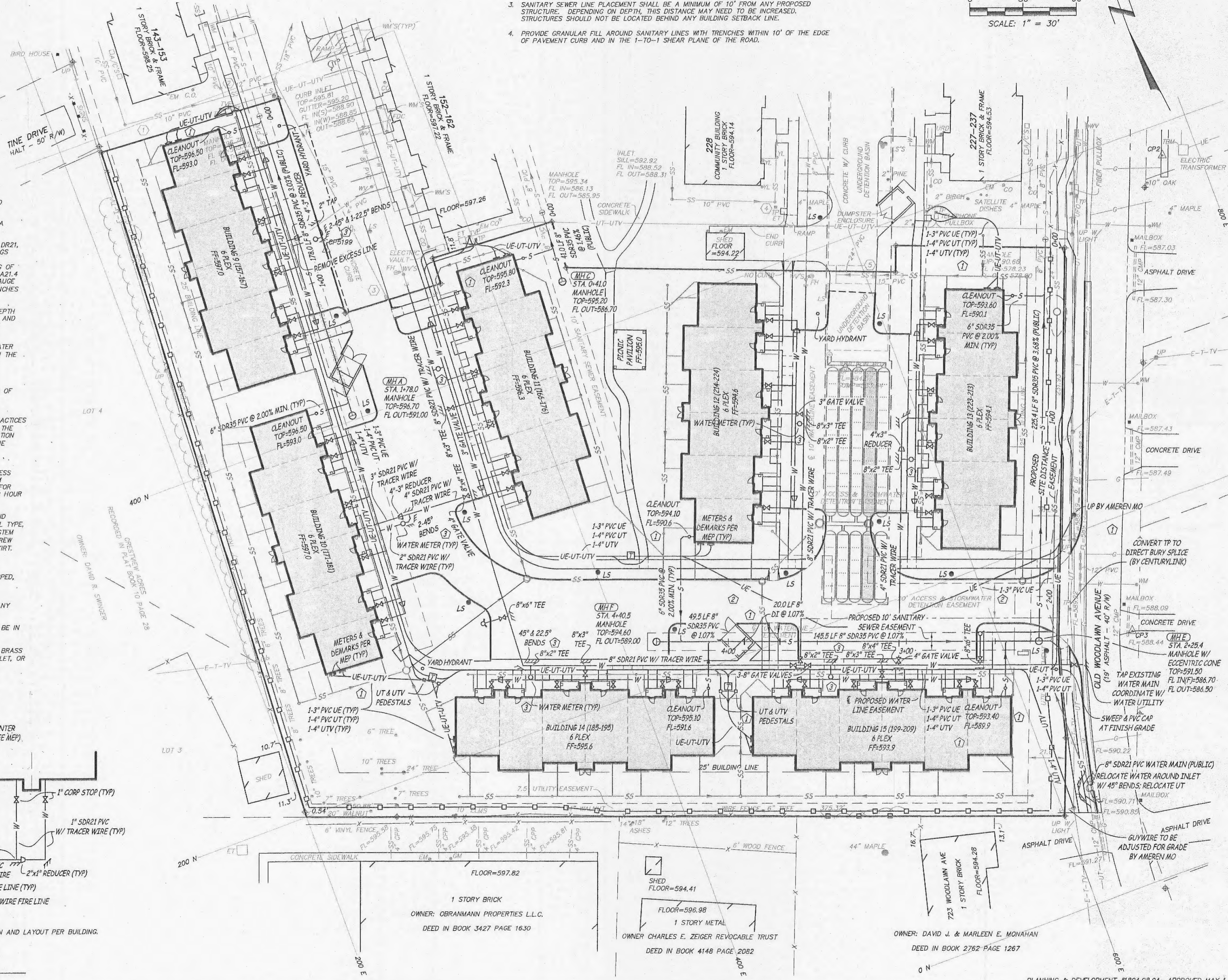
**SANITARY SEWER NOTES**

1. A MINIMUM 6" DIAMETER PIPE FOR SANITARY LATERALS.
2. SEWER GREASE TRAPS AND CLEANOUTS REQUIRED FOR THE SANITARY LATERALS ARE SHOWN.
3. SANITARY SEWER LINE PLACEMENT SHALL BE A MINIMUM OF 10' FROM ANY PROPOSED STRUCTURE. DEPENDING ON DEPTH, THIS DISTANCE MAY NEED TO BE INCREASED. STRUCTURES SHOULD NOT BE LOCATED BEHIND ANY BUILDING SETBACK LINE.
4. PROVIDE GRANULAR FILL AROUND SANITARY LINES WITH TRENCHES WITHIN 10' OF THE EDGE OF PAVEMENT CURB AND IN THE 1-TO-1 SHEAR PLANE OF THE ROAD.



**WATER LINE NOTES**

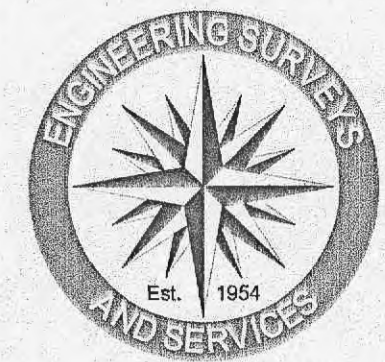
1. CONTACT THE CITY OF O'FALLON FOR WATER METER LOCATION.
2. CONTACT THE CITY OF O'FALLON FOR WATER METER VAULT SPECIFICATIONS.
3. ADHERE TO CITY SPECIFICATIONS FOR ALL WATER MAIN EXTENSIONS.
4. EXISTING LINES SHALL REMAIN IN SERVICE DURING CONSTRUCTION OF NEW LINES.
5. SERVICE INTERRUPTION SHALL BE MINIMIZED AND SHALL BE DONE ONLY TO MAKE FIELD CONNECTIONS BETWEEN EXISTING AND NEW WATER LINES.
6. THE CONTRACTOR SHALL NOTIFY ALL PARTIES AFFECTED BY A SERVICE INTERRUPTION A MINIMUM OF 48 HOURS PRIOR TO THE INTERRUPTION.
7. ALL PVC PIPES (3" TO 12") SHALL CONFORM TO THE REQUIREMENTS OF ASTM D2241, DR21, 200 PSI PRESSURE RATING. PIPE JOINTS SHALL BE ELASTOMERIC JOINT ONLY. FITTINGS SHALL BE MECHANICAL-JOINT DUCTILE-IRON COMPACT FITTINGS IN ACCORDANCE WITH AMERICAN STANDARDS ASSOCIATION (A.S.A.) STANDARD A21.10 WITH PRESSURE RATING OF 350 PSI. FITTINGS SHALL BE CEMENT LINED AND SEAL COATED PER A.S.A. STANDARD A21.4 AND THE EXTERIOR SHALL BE COATED PER A.S.A. STANDARD 21.10. INSTALL A 14-GAUGE SOLID COPPER TRACER WIRE PRIOR TO BACKFILLING TRENCH, LAID WITHIN THREE (3) INCHES ABOVE THE PVC PIPE.
8. ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 42" ABOVE TOP OF PIPE. THE DEPTH OF COVER SHALL BE MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED GRADE AND DUE CONSIDERATION SHOULD ALWAYS BE GIVEN TO FUTURE OR FINAL GRADE AND THE NATURE OF THE SOIL.
9. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND THE SEWER LINE IS TEN FEET (10'). THE MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS EIGHTEEN INCHES (18").
10. THRUST BLOCK SHALL BE PROVIDED AT ALL BENDS, TEES AND FIRE HYDRANTS.
11. ALL FIRE HYDRANTS SHALL BE PROVIDED WITH AN APPROVED GATE VALVE A MAXIMUM OF 5'-0" FROM HYDRANT.
12. BEFORE WATER MAINS SHALL BE ACCEPTED AND PUT INTO SERVICE, THEY SHALL BE PROPERLY STERILIZED, FLUSHED, AND PRESSURE TESTED ACCORDING TO STANDARD PRACTICES BY THE LANDOWNER, DEVELOPER OR HIS/HER AGENTS, AND TO THE SATISFACTION OF THE CITY. DISINFECTION OF MAINS SHALL CONFORM WITH AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARD C851-86. TWO (2) BACTERIOLOGICAL TESTS SHALL BE MADE BY THE LANDOWNER, DEVELOPER, OR HIS/HER AGENTS, AND MUST MEET STATE OF MISSOURI STANDARDS, AND SHALL BE EVIDENCED BY TEST RESULTS FURNISHED TO THE CITY.
13. ALL NEW PRIVATE FIRE SERVICE MAINS SHALL BE TESTED HYDROSTATICALLY AT NOT LESS THAN 200 PSI PRESSURE FOR TWO HOURS, OR AT 50 PSI IN EXCESS OF THE MAXIMUM STATIC PRESSURE WHEN THE MAXIMUM STATIC PRESSURE IS IN EXCESS OF 150 PSI. FOR NEW PIPE, THE AMOUNT OF LEAKAGE, AT JOINTS SHALL NOT EXCEED TWO QUARTS PER HOUR PER 100 GASKETS OR JOINTS IRRESPECTIVE OF THE PIPE DIAMETER.
14. VALVES SHALL BE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARD LEFT HAND THREAD, TWO HUNDRED (200) POUND WORKING PRESSURE, BRONZE MOUNTED PARALLEL TYPE, DOUBLE DISC, OR COMPRESSION RESILIENT SEAT, 70" RING STEM SEALS, NON-RISING STEM WITH TWO (2) INCH SQUARE NUT. VALVE BOXES SHALL BE CAST IRON ADJUSTABLE SCREW TYPE FIVE AND ONE-QUARTER (5 1/4) INCH SHAFT WITH BASE, WATER COVER AND SKIRT.
15. SEE GRADING NOTES FOR BACKFILLING AND COMPACTION REQUIREMENTS.
16. ALL OPENINGS SHALL BE CLOSED WITH WATERTIGHT PLUGS WHEN PIPE LAYING IS STOPPED, INCLUDING REST BREAKS, MEALS AND THE END OF THE WORK DAY.
17. DISINFECTION SHALL BE BY PIGGING AND INJECTION OF LIQUID CHLORINE SOLUTION. CONTRACTOR WILL PROVIDE THE EXCAVATION AND BACKFILL REQUIRED TO ESTABLISH ANY SOURCE WATER TAPS AND FLUSHOUTS.
18. 3" BACKFLOW PREVENTERS WITHIN THE BUILDING, 3/4" BACKFLOW PREVENTERS SHALL BE IN METER BOX (SEE MEP PLANS).
19. YARD HYDRANTS SHALL BE WOODFORD MODEL Y95 WITH 1" BRASS PIPE CASING, 3/8" BRASS PIPE OPERATING ROD, 3" BURY DEPTH, 3/4" HOSE PIPE THREADED OUTLET, 1-1/2" INLET, OR APPROVED EQUAL. YARD HYDRANTS SHALL BE SERVED BY THE IRRIGATION SYSTEM. COORDINATE WITH IRRIGATION PLANS.



1. THIS DETAIL IS FOR GENERAL LAYOUT ONLY. SEE PLANS FOR SPECIFIC METER LOCATION AND LAYOUT PER BUILDING.

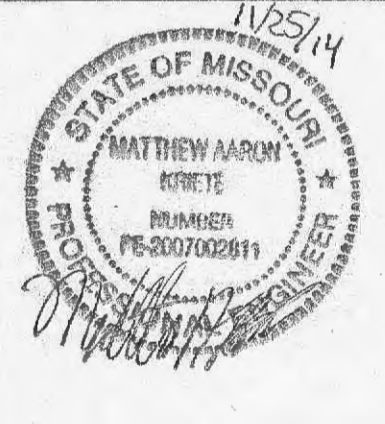
**WATER LINE SERVICE CONNECTION DETAIL**

NOT TO SCALE



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**WOODBURY PLACE II**  
 721 WOODLAWN AVENUE  
 O'FALLON, ST. CHARLES COUNTY, MISSOURI



MATTHEW A. KRIETE  
 PROFESSIONAL ENGINEER  
 PE-2007002811

Date

**MAY 23, 2014**

Revised

1	JULY 18, 2014
2	AUGUST 13, 2014
3	NOVEMBER 25, 2014

Design: TOC Drawn: BR

**UTILITY PLAN**

Sheet

**C6.01**