

GENERAL NOTES

- 1. Underground utilities have been plotted from available information and therefore their locations 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 the improvements.
2. No area shall be cleared without the permission of the Project Engineer.
3. Easements shall be provided for sanitary sewers, and all utilities on the Record Plat. See Record Plat for location and size of easements.
4. Maintenance and upkeep of the common ground area shall be the responsibility of the developer and/or successors.
5. A 25' building line shall be established along all Public Rights-Of-Way.
6. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
7. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre-construction conditions.
8. The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.
9. All construction and materials shall conform to the current construction standards of the City of O'Fallon. Where conflicts exist, the contractor shall notify the Engineer for resolution.
10. All mechanical equipment to be screened from public view.
11. Proposed building and site will comply with current Americans with Disabilities Act (ADA) requirements.
12. See architectural drawing for all building dimensions, service connections, details, etc.
13. All dimensions are to back of curb, unless otherwise noted.
14. All construction methods and practices shall conform with current OSHA standards.
15. All new driveways shall match existing driveway finish, except as noted otherwise. Drive aprons shall be concrete with standard broom finish.
16. Topographic survey performed by:
Box Engineering Inc.
17. Fencing, posts and fence hardware system shall be per manufacturer specifications and conform to the current construction standards of the City of O'Fallon. Said shop drawings shall be submitted to the City of O'Fallon and approved prior to construction.

UTILITY NOTES

- 1. Underground utilities have been plotted from available information and therefore their locations 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 the improvements.
2. All filled places, including trench back fills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All filled places within public roadways shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D-698).
3. All trench back fills under paved areas shall be granular back fill, and shall be compacted to 90% of the maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All other trench back fills may be earth material (free of large clods or stones). All trench back fills shall be water jetted.
4. Easements shall be provided for sanitary sewers, and all utilities on the Record Plat. See Record Plat for location and size of easements.
5. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
6. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary or storm sewers, including house laterals.
7. All construction and materials shall conform to the current construction standards of the City of O'Fallon.
8. See architectural drawing for all building dimensions, service connections, details, etc.
9. All utilities shown are existing, unless otherwise noted. All new utilities shall be located underground.
10. All construction methods and practices shall conform with current OSHA standards.

GRADING NOTES

- 1. All soils tests shall be verified by a Soils Engineer concurrent with the grading and back filling operations.
2. All grades shall be within 0.2 feet of those shown on the grading plan.
3. No slope shall be steeper than 3:1. All slopes shall be sodded or seeded and mulched.

DEMOLITION NOTES

- 1. Contractor shall remove and dispose of all asphalt, concrete, rock, building materials, and all other debris at an approved landfill in accordance with all rules and regulations, including Missouri Department of Natural Resources (MDNR), St. Charles County, and the City of O'Fallon.
2. Contractor shall remove all rock base when removing pavements.
3. Sawcuts shall be considered incidental to removals.
4. Contractor shall remove concrete sidewalk at joint nearest the limits of removal.

SANITARY SEWER NOTES

- 1. All manhole tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor.
2. 8" P.V.C. sanitary sewer pipe shall meet the following standards: A.S.T.M.-D-3034 SDR-35, with wall thickness compression joint A.S.T.M.-D-3212. An appropriate rubber seal water stop as approved by the sewer district shall be installed between P.V.C. pipe and masonry structures.
3. All filled places, including trench back fills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All filled places within public roadways shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D-698).
4. All trench back fills under paved areas shall be granular back fill, and shall be compacted to 90% of the maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All other trench back fills may be earth material (free of large clods or stones). All trench back fills shall be mechanically compacted in 6" lifts.
5. All sanitary house connections have been designed so that the minimum vertical distance from the low point of the basement to the flow line of a sanitary sewer at the corresponding house connection is not less than the diameter of the pipe plus the vertical distance of 2 1/2 feet.
6. All P.V.C. sanitary sewer is to be SDR-35 or equal with clean 1/2" to 1" granular stone bedding uniformly graded. This bedding shall extend from 4" below the pipe to the springline of the pipe. Immediate back fill over pipe shall consist of same size "clean" or minus stone from spring line of pipe to 12" above the top of pipe.
7. All sanitary manholes shall be waterproofed on the exterior in accordance with Missouri Department of Natural Resources specifications 10 CSR-8,120 (7)E.
8. Brick shall not be used in the construction of sanitary sewer manholes.
9. All pipes shall have positive drainage through manholes. No flat base structures are allowed. Structures shall have a 0.2' min. difference in invert elevation.
10. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
11. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary or storm sewers, including house laterals.
12. The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.
13. Granular back fill shall be used under pavement areas.
14. All existing areas disturbed during construction of the off-site sanitary sewer line shall be seeded and mulched to prevent erosion.
15. All sanitary sewer laterals shall be a minimum of 4" in diameter per City of O'Fallon.
16. All construction methods and practices shall conform with current OSHA standards.

STORM SEWER NOTES

- 1. All manhole tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor.
2. All filled places, including trench back fills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All filled places within public roadways shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D-698).
3. All trench back fills under paved areas shall be granular back fill, and shall be compacted to 90% of the maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All other trench back fills may be earth material (free of large clods or stones). All trench back fills shall be mechanically compacted in 6" lifts.
4. Brick will not be used in the construction of storm sewer manholes.
5. All pipes shall have positive drainage through manholes. No flat base structures are allowed. Structures shall have a 0.2' min. difference in invert elevation.
6. All construction and materials shall conform to the current construction standards of the City of O'Fallon.
7. Concrete pipe for storm sewers shall be Class III, A.S.T.M. C-76 with a minimum diameter of 12" except in the R.O.W. it shall be 15".
8. Concrete pipe joints shall be MSD type "A" approved compression-type joints and shall conform to the requirements of the specifications for joints for circular concrete sewer and culvert pipe, using flexible, watertight, rubber-type gaskets (A.S.T.M.-C-443). Band-type gaskets depending entirely on cement for adhesion and resistance to displacement during jointing shall not be used.
9. All flared end sections and inlet structures will be concrete.
10. All storm sewer pipe installed in the Public Right-of-Way shall be reinforced concrete Class III pipe.
11. All concrete pipe or ADS N-12 pipe shall be installed with "O-Ring" Rubber type gaskets per M.S.D. standard construction specifications or manufacturer.
12. All construction methods and practices shall conform with current OSHA standards.
13. Top of Grate elevations are to center of grates. Grate inlets shall be set with a 2.0% cross slope. All grate inlets shall be constructed with sidetakes.

WATER NOTES

- 1. All water lines shall be laid at least 10 feet horizontally, from any sanitary sewer, storm sewer, or manhole. 18" vertical clearance from outside of pipe to outside of pipe shall be maintained wherever water lines must cross sanitary sewers, laterals, or storm drains. The water line shall be laid at such an elevation that the bottom of the water line is above the top of the drain or sewer. A full length of water pipe shall be centered over the sewer line to be crossed so that the joints will be equally distant from the sewer and as remote therefrom as possible. This vertical separation shall be maintained for that portion of the water line located within 10 feet horizontally, of any sewer or drain it crosses.
2. All PVC water pipe shall conform to A.S.T.M.-D-2241, SDR 21 Standard Specification for P.V.C. Pressure Pipe, 200 P.S.I. working pressure for water, with approved joint.
3. Water lines, valves, sleeved, meters, and fittings shall meet all specifications and installation requirements of Public Water Supply District No. 2 of St. Charles County.
4. All water hydrants and valves shall be ductile iron and installed in accordance with plans and details. All ductile iron pipe for water mains shall conform to A.W.W.A. Specifications C-106 and/or C-108. The ductile iron fittings shall conform to A.W.W.A. Specification C-110. All rubber gasket joints for water ductile iron pressure pipe and fittings shall conform to A.W.W.A. Specification C-111.
5. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
6. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary or storm sewers, including house laterals.

STRIPING NOTES

- 1. Existing striping shall be removed as shown on plan and as directed by the Engineer.
2. Contractor shall paint all striping. See specification for type of paint.
3. Striping and pavement markings shall be in accordance with the current edition of the "Manual on Uniform Traffic Control Devices" (MUTCD) and current ADA standards.

CITY OF O'FALLON
COMMUNITY DEVELOPMENT
DESIGN DIVISION
O'FALLON, MISSOURI



DISCLAIMER OF RESPONSIBILITY
I HEREBY SPECIFY THAT THE DOCUMENTS INTENDED TO BE AUTHORIZED BY MY SEAL AND SIGNED RESPONSIBILITY FOR ALL OTHER DRAWINGS, DOCUMENTS OR INSTRUMENTS RELATING TO OR PERTAINING TO THIS PROJECT OR PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT OF SUBJECT.

Professional Engineer seal and signature area with date 11-17-03

DESIGNED: ERB
CHECKED: CEM
DATE: 11/17/03
PROJECT NO.: 00-034