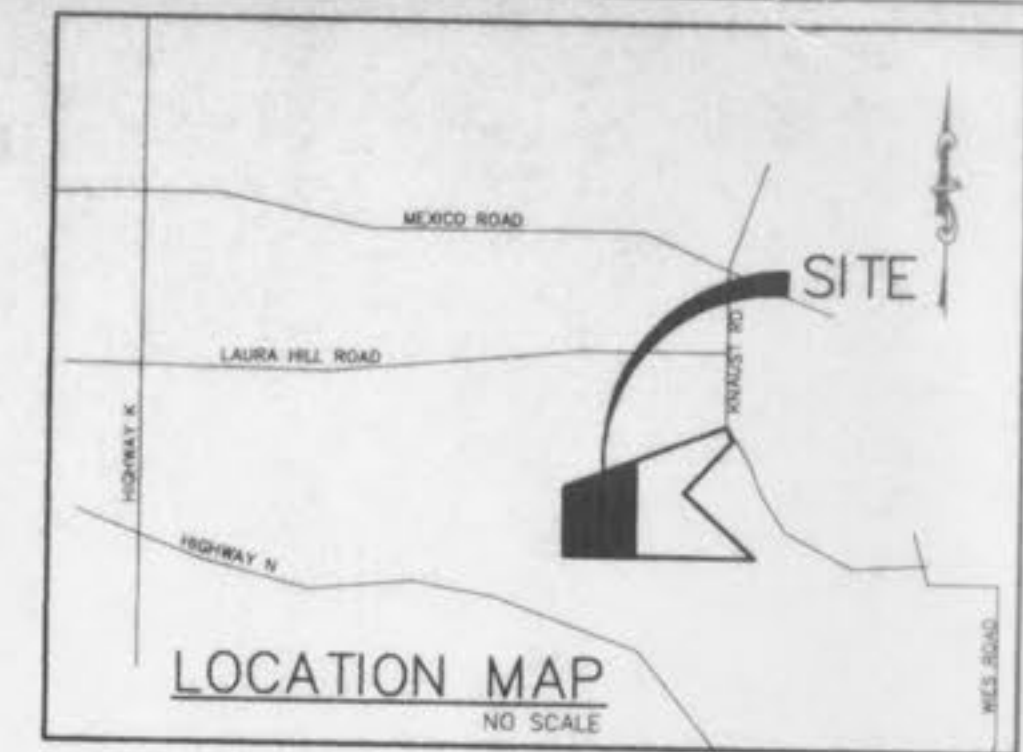


Archive
A-1-1

CONSTRUCTION PLANS FOR AVONDALE HEIGHTS PHASE TWO

A TRACT OF LAND BEING LOTS 45 THRU 54 AND 60 THRU 67 OF DARDENNE FARMS PLAT 2
AND A TRACT OF LAND IN SECTION 10, TOWNSHIP 46 NORTH, RANGE 3 EAST,
CITY OF O'FALLON,
ST. CHARLES COUNTY, MISSOURI
PLAT BOOK 33 PAGES 327-328

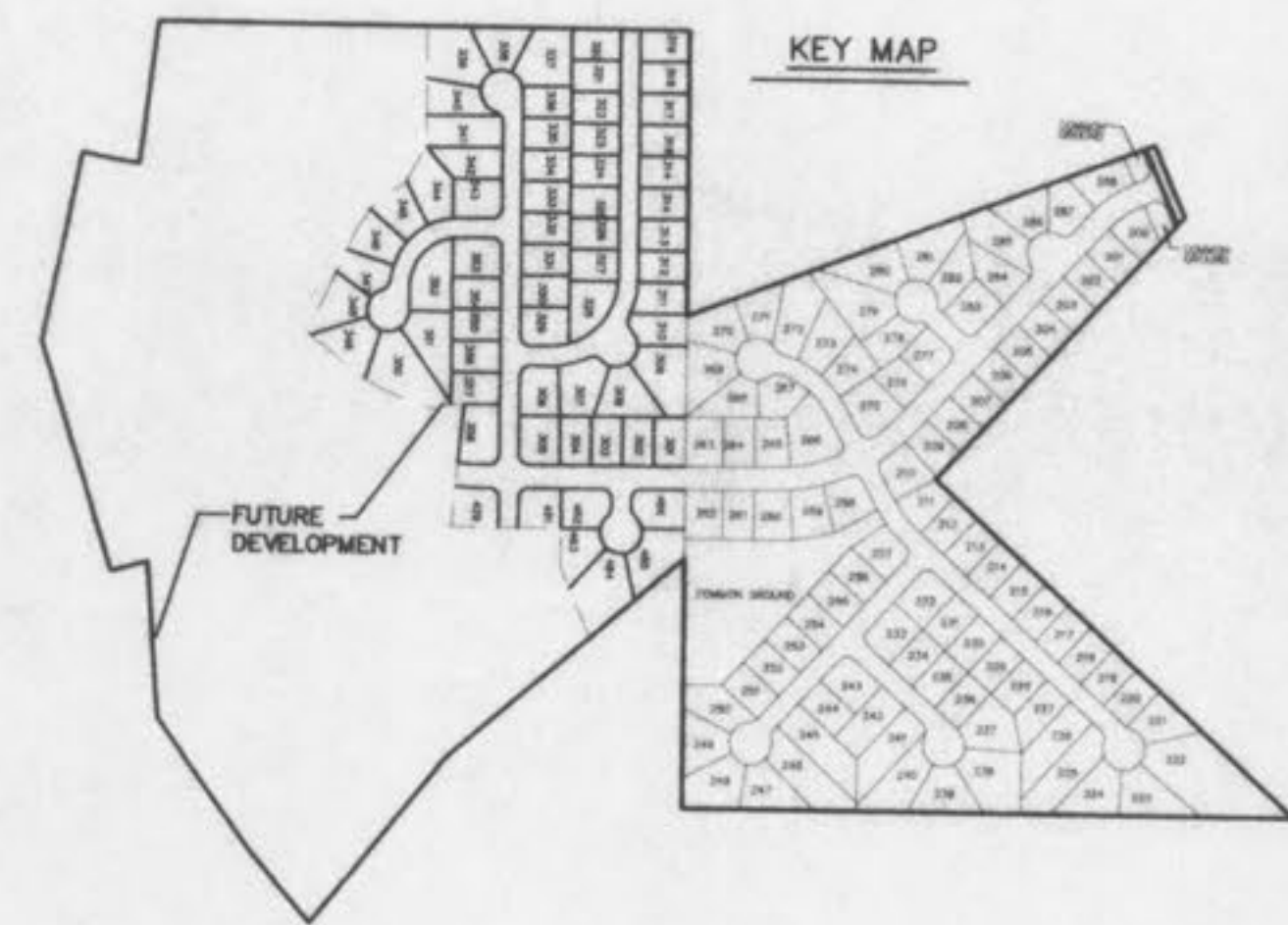


GRADING NOTES

- A Geotechnical Engineer shall be employed by the owner and be on site during grading operations. All soils tests shall be verified by the Geotechnical Engineer concurrent with the grading and backfilling operations.
- The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied there from, all in accordance with the plans and notes as interpreted by the Geotechnical Engineer.
- The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
- All areas shall be allowed to drain. All low points shall be provided with temporary ditches.
- A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare over the winter without being seeded and mulched. Care should be exercised to prevent soil from damaging adjacent property and silting up existing downstream storm drainage system.
- Soft soil in the bottom and banks of any existing or former pond sites or tributaries should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.
- Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds; the grubbing and removal of roots and other surface obstructions from the site; and the demolition and removal of any man-made structures. The unsuitable material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly diced prior to the placement of any fill. The Soils Engineer shall approve the dicing operation.
- Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory roller, or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
- The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Interim reports showing fill quality will be made to the Owner at regular intervals.
- The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.
- All areas to receive fill shall be scarified to a depth not less than 6 inches and then compacted in accordance with the specifications given below. Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have lateral benches, cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.
- The sequence of operation in the fill areas will be compact, verify acceptable soil density, and repair of the sequence. The acceptable moisture contents of the filling operation are those at which satisfactory dry densities can be obtained. The acceptable moisture contents of the filling operation in the remaining areas are from 2 percent above the optimum moisture control.
- All grades shall be within 0.2 feet of those shown on grading plan.
- No slope shall be steeper than 3:1 or as called for in the soils report for the project. All slopes shall be sodded and mulched.
- The surface of the fill shall be finished so it will not impound water. If at the end of a day's grading, the surface shall be finished smooth. If the job has been finished smooth for any reason, it shall be finished before proceeding with the placement of successive lifts. Fill shall not be placed on frozen ground, nor shall grading operations continue when the temperature is such as to permit the layer under placement to freeze.

GENERAL NOTES

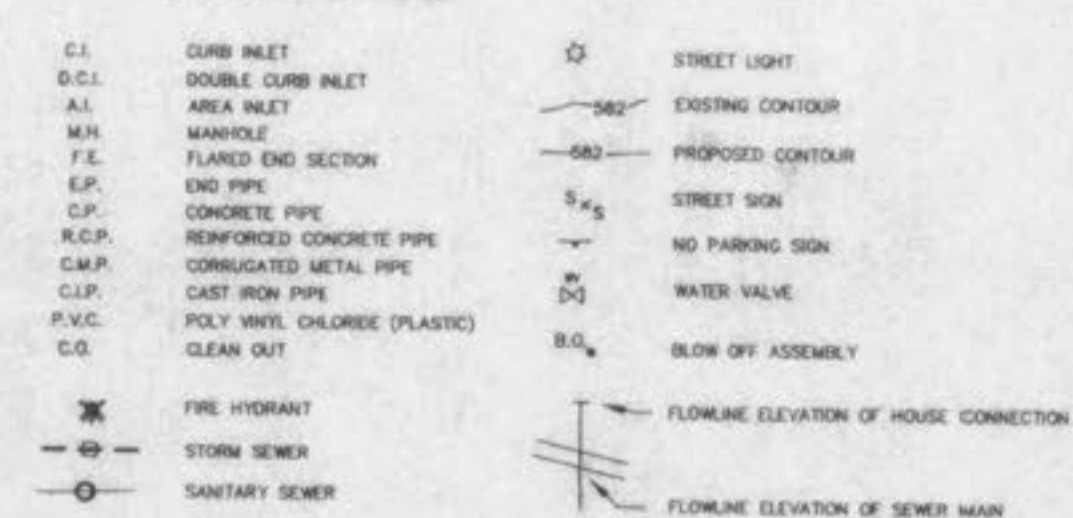
- Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.
- All manhole tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor.
- 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 waterstop as approved by the sewer district shall be installed between P.V.C. pipe and masonry structures.
- All filled places, including trench backfills, 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).
- All trench backfills under paved areas shall be granular backfill, 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 backfills may be earth material (free of large clods or stones). All trench backfills shall be water jetted.
- 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.
- No area shall be cleared without the permission of the Project Engineer.
- All P.V.C. sanitary sewer shall have 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 backfill over pipe shall consist of same size "clean" or minus stone from springline of pipe to 12" above the top of pipe.
- All soils test shall be verified by a Soils Engineer concurrent with the grading and backfilling operations.
- Easements shall be provided for sanitary sewers, and all utilities on the Record Plat. See Record Plat for location and size of easements.
- Maintenance and upkeep of the common ground area shall be the responsibility of the developer and/or successors.
- A 25' building line shall be established along all Public Right-Of-Way.
- 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.
- All PVC water pipe 6" and larger in size shall be Class C-900 per Missouri American Water Company Specifications. All other mains shall have a minimum pressure rating of PR-200 or SDR-21. NOTE: Ultra-Blue PVC (MO) Pressure Pipe with a minimum pressure rating of 200 p.s.i. shall also be considered acceptable.
- Water lines, valves, sleeves, meters, and fittings shall meet all specifications and installation requirements of Missouri American Water Company.
- 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 CC-110. All rubber gasket joints for water ductile iron pressure pipe and fittings shall conform to A.W.W.A. Specification C-111.
- All sanitary manholes shall be waterproofed on the exterior in accordance with Missouri Department of Natural Resources specifications 10 CSR-8.120 (7)E.
- Brick will not be used in the construction of sanitary sewer manholes.
- All pipes shall have positive drainage through manholes. No flat base structures are allowed.
- All sanitary sewer manholes to be 42 inch minimum inside diameter in accordance with Missouri Department of Natural Resources specification 10 CSR 20-8.
- The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
- 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.
- All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match preconstruction conditions.
- The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.
- All construction and materials shall conform to the current construction standards of the City of O'Fallon Sewer.
- All creek crossings shall be grouted rip rap as directed by district inspector.
- No flushing hydrants or water meters shall be located in driveways and/or walkways.
- Tree preservation during development:
Area of existing trees 5.72 acres
Area of trees to be removed 4.83 acres
Total area of trees to be saved 0.89 acres
Trees required:
5.72 acres x 80% = 4.58 acres
5.72 acres - 4.58 acres = 1.14 acres
1.14 acres - 0.89 acres = 0.25 acres
15 trees/acre x 0.25 acres = 3.75 trees required
Landscape requirement
6642' street frontage = 132.84 + 3.75 = 136.59 or 137 trees
Developer shall provide 2 trees per lot plus 1/2 Placement of these trees to be coordinated with City of O'Fallon.
- Tree preservation during Phase Three development:
Area of existing trees 14.52 acres
Area of trees to be removed 12.08 acres
Total area of trees to be saved 2.44 acres
Trees required:
14.52 acres x 80% = 11.62 acres
14.52 acres - 11.62 acres = 2.90 acres
2.90 acres - 2.44 acres = 0.46 acres
15 trees/acre x 0.46 acres = 6.96 trees required
- All swales shall be established with permanent vegetation by use of commercial erosion control blankets or sod.



DEVELOPMENT NOTES

- Area of Tract: 22.73 Acres
- Existing Zoning: R-1
- Proposed Use: R-1
- Number of Lots Proposed: 65 Lots
- Area in Common Ground: 0 Acres
- Area in Right-of-Way: 4.44 Acres
- Area in Lot: 18.29 Acres
- Minimum Lot Area Allowed Per Zoning: 10,000 Square Feet
- Average Lot Area (not including common ground): 12,690 Square Feet
- Average Lot Area including Common Ground: 12,690 Square Feet
- The proposed height and lot setbacks are as follows:
Minimum Front Yard: 25 feet
Minimum Side Yard: 6 feet
Minimum Rear Yard: 25 feet
Maximum Height of Building: 2 1/2 stories or 35 feet
- Current Owners of Property: Tom Johnson Construction
631 Avondale Dr.
St. Peters, MO 63376
- Site is served by:
Duckett Creek Sewer District
Union Electric Company
St. Charles Gas Company
Missouri American Water Company
GTE Telephone Company
Fort Zumwalt School District
O'Fallon Fire Protection District
- No Flood Plain exists on this tract per F.I.R.M. #29183C240 E dated August 2, 1996.
- Topographic information is per flown survey by Walker & Assoc.
- Boundary information is per deed and record information as compiled by Box Engineering Co., during August, 1995.

LEGEND



SHEET INDEX

- 1 OF 23 - COVER SHEET
- 2 OF 23 - FLAT PLAN
- 2A OF 23 - FLAT PLAN
- 3 OF 23 - GRADING PLAN
- 4 OF 23 - OFFSITE IMPROVEMENT PLAN
- 5-7 OF 23 - STREET PROFILES
- 8 OF 23 - WARPING DETAILS
- 9-10 OF 23 - SANITARY SEWER PROFILES
- 11-13 OF 23 - STORM SEWER PROFILES
- 14-16 OF 23 - DRAINAGE AREA MAP
- 17 OF 23 - WATER PLAN
- 18-23 OF 23 - CONSTRUCTION DETAILS

APPROVED

Contingent upon planting of 7 additional trees along Avondale Drive.
8/21/97 Colleen Young

NOTE: Det. notes shall be re-reviewed when Phase 3 plans are submitted.

PREPARED FOR:
TOM JOHNSON CONSTRUCTION
413 KATY LANE
ST. CHARLES, MO 63303
PHONE: (314) 928-6420



REVISIONS

| | |
|---------|------------------|
| 8-18-97 | CITY OF O'FALLON |
| 8-26-97 | CITY OF O'FALLON |

BAE
ENGINEERING
PLANNING
SURVEYING
1052 South Cloverleaf Drive
St. Peters, MO. 63376-6445
314-928-5552
FAX 928-1718

| | |
|-------------|----------------|
| 7-21-97 | DATE |
| 95-7230 | PROJECT NUMBER |
| 1 OF 23 | SHEET OF |
| 7230COV.DWG | FILE NAME |
| PJS | DRAWN |
| CHECKED | |