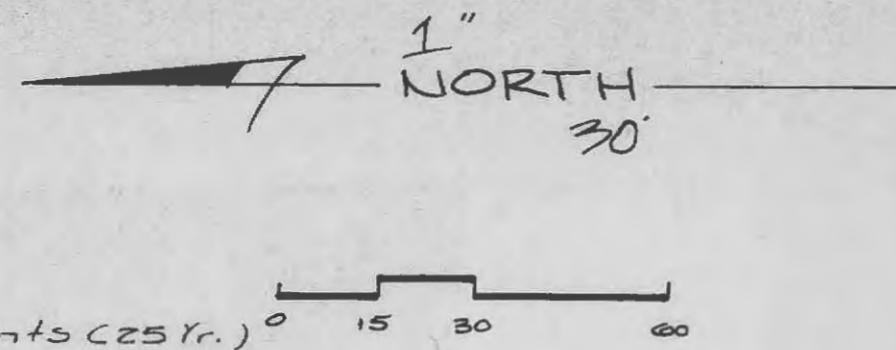


# DEER RUN PLAZA

PART OF THE S.W. 1/4 OF FRAC.  
SEC. 16; TWP. 47 N., R. 3 E.,  
ST. CHARLES COUNTY, MISSOURI



Detention Basin Requirements (25 Yr.)

Differential Runoff:  
Area to be developed = 3.1 ac.  
Developed Runoff Factor = 4.75 c.f.s./ac.  
Undeveloped Runoff Factor = 2.31 c.f.s./ac.  
Differential Runoff Factor = 2.44 c.f.s./ac.

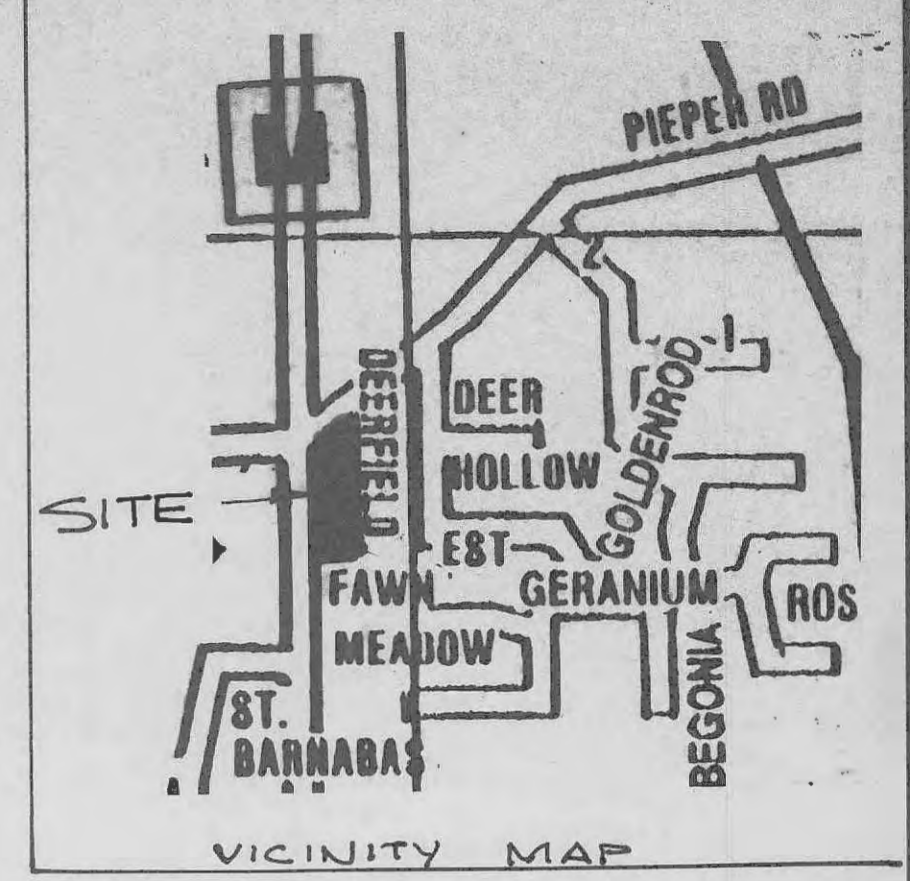
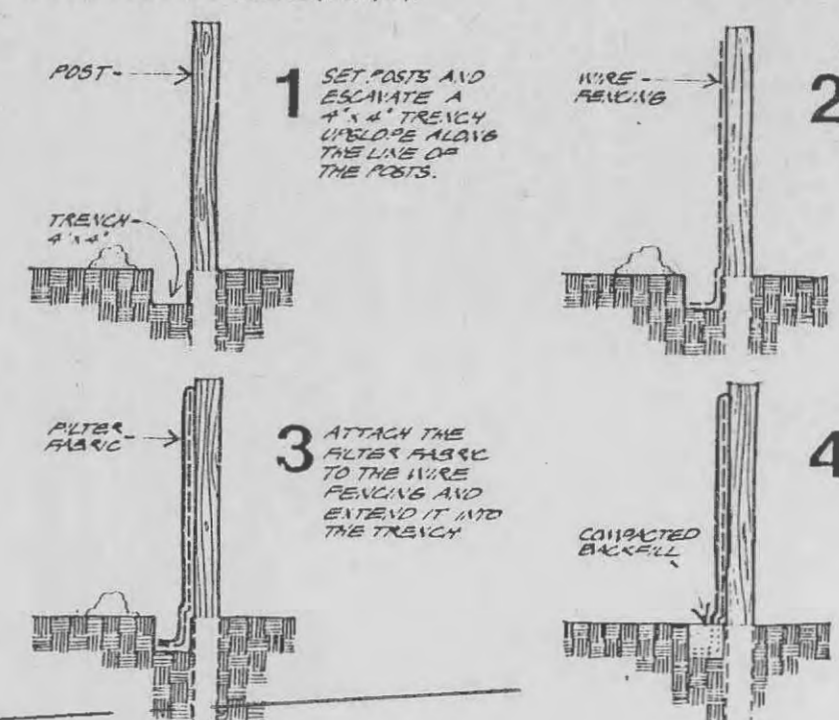
Storage Requirements:

3.1 ac. x 2.44 c.f.s./ac. x 1200 Sec. = 9077 c.f.

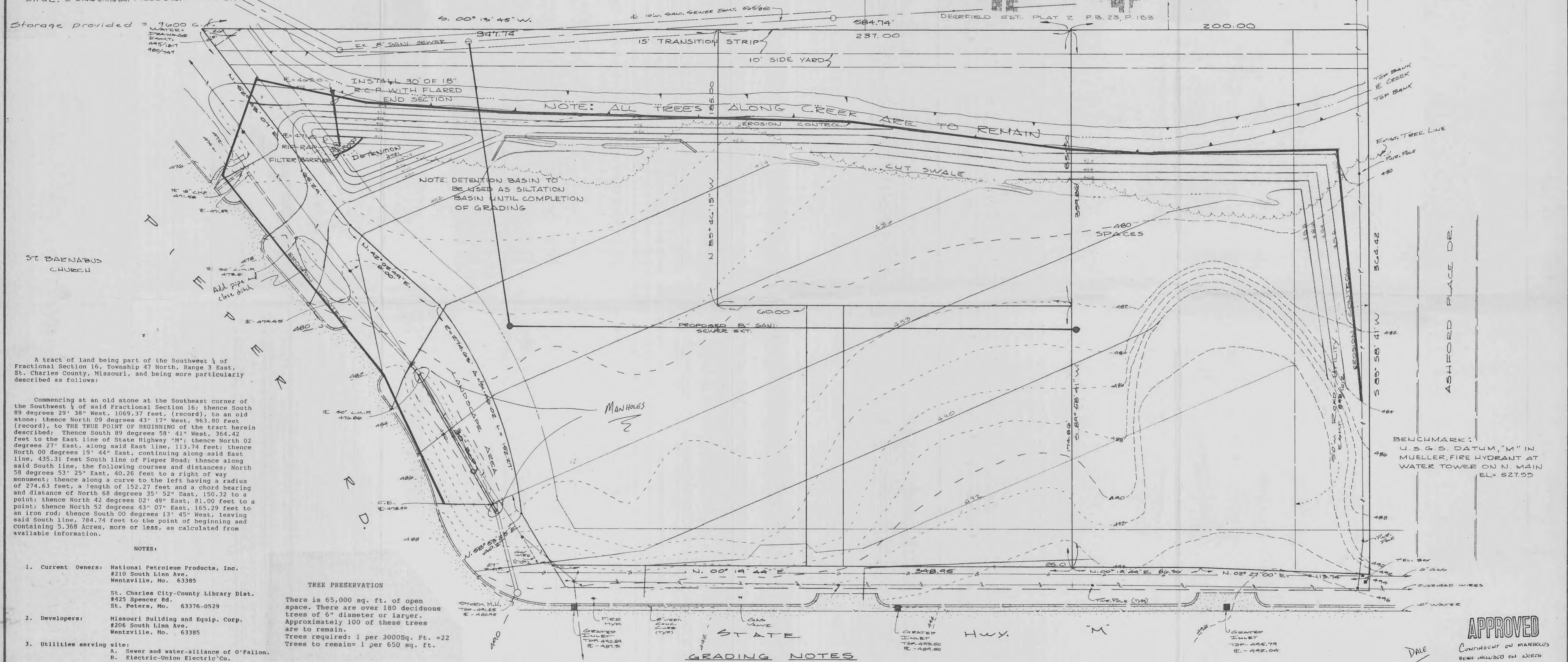
Storage provided = 9600 c.f.

### Maintenance

- Filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
- Should the fabric decompose or become ineffective prior to the end of the expected useful life and the barrier still be necessary, the fabric shall be replaced promptly.
- Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately half the height of the barrier.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.



DEERFIELD EST. PLAT ONE AMENDED PLAT BK. 23  
ZONED R-3 P.U.D. P. 182



A tract of land being part of the Southwest 1/4 of Fractional Section 16, Township 47 North, Range 3 East, St. Charles County, Missouri, and being more particularly described as follows:

Commencing at an old stone at the Southeast corner of the Southwest 1/4 of said Fractional Section 16; thence South 89 degrees 29' 38" West, 1069.37 feet, (record), to an old stone; thence North 09 degrees 43' 17" West, 963.80 feet (record), to the TRUE POINT OF BEGINNING of the tract herein described; thence South 89 degrees 58' 41" West, 364.42 feet to the East line of State Highway "M"; thence North 02 degrees 27' East, along said East line, 113.74 feet; thence North 00 degrees 19' 46" East, continuing along said East line, 435.31 feet South line of Pieper Road; thence along said South line, the following courses and distances; North 58 degrees 53' 25" East, 40.26 feet to a right of way monument; thence along a curve to the left having a radius of 274.63 feet, a length of 152.27 feet and a chord bearing and distance of North 68 degrees 35' 52" East, 150.32 to a point; thence North 42 degrees 02' 49" East, 81.00 feet to a point; thence North 52 degrees 43' 07" East, 165.29 feet to an iron rod; thence South 00 degrees 13' 45" West, leaving said South line, 784.74 feet to the point of beginning and containing 5.368 Acres, more or less, as calculated from available information.

- NOTES:
- Current Owners: National Petroleum Products, Inc. #210 South Linn Ave. Wentzville, Mo. 63385  
St. Charles City-County Library Dist. #425 Spencer Rd. St. Peters, Mo. 63376-0529
  - Developers: Missouri Building and Equip. Corp. #206 South Linn Ave. Wentzville, Mo. 63385
  - Utilities serving site:  
A. Sewer and water-alliance of O'Fallon.  
B. Electric-Union Electric Co.  
C. Gas-Laclede Gas Co.  
D. Telephone-G.T.E.
  - All proposed gas, electric and telephone services will be underground to each site.
  - Total road frontage=788 feet.  
Total trees needed=788-40=20.  
Total trees provided along streets=20.
  - Per FIRM 21983C-0120D, there is no flood plain in this area.
  - Typical pavement cross section will be 6" of rock with 2" Type "C" asphalt.
  - Existing zoning: C-2 General Commercial
  - Total acreage: 5.37
  - Parking:  
A. Carwash-required-24 provided-24.  
B. C-store required-13 provided-13.

TREE PRESERVATION  
There is 65,000 sq. ft. of open space. There are over 180 deciduous trees of 6" diameter or larger. Approximately 100 of these trees are to remain.  
Trees required: 1 per 3000sq. Ft. =22  
Trees to remain= 1 per 650 sq. ft.

### GRADING NOTES

All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to 90% of maximum density as determined by the "modified A.A.S.H.O. T-180 Compaction Test" (ASTM D-1557) unless otherwise specified by the local governing authority specifications. All tests will be verified by a Soils Engineer.

All earthen filled places within State, County, or City roads (Highways) shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test A.A.S.H.O. T-22" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a Soils Engineer.

All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.

All grade shall be within 0.2 feet (more or less) of those shown on the grading plan.

No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.

A Geotechnical Engineer shall be employed by the owner and be on site during grading operations.

The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.

All areas will be allowed to drain. All low points should be provided with temporary ditches.

A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented before grading begins. No graded area is to be allowed to remain bare without being seeded and mulched. Care should be exercised to prevent soil from damaging adjacent property and siltting up existing downstream storm drainage system, whether on or off site.

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 disced prior to the placement of any fill. The Soils Engineer shall approve the dicing operations.

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.

The sequence of operation in the fill areas will be fill, compact, verify acceptable soil density, and repetition of the sequence.

The acceptable moisture contents during the filling operation in the remaining areas are from 2 to 8 percent above the optimum moisture control.

The surface of the fill shall be finished so that it will not impound water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.

BENCHMARK:  
U.S.G.S. DATUM, "M" IN  
MUELLER, FIRE HYDRANT AT  
WATER TOWER ON N. MAIN  
EL: 527.95

APPROVED

DATE  
CONSENT ON MANHOLES  
BEING INCLUDED ON NORTH  
PROP. LINES. ALSO, INSTALL  
PIPE IN OPEN DITCH.  
REV: 10-17-94  
REV: 10-24-94 - Address  
Engr. Dept. comments

Landmark Surveying & Engineering, Inc.  
802 E. Main, Wentzville, MO 63385  
327-5853 • 928-7803  
Troy, 528-5452

### GRADING PLAN

Drawn	DATE
Ckd.	Date
Rev.	Date