WHITETAIL ESTATES
NOTE SHEET
APRIL 15,97 96-235

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 and/or construction of improvements.

2. Erosion control shall not be limited to what is shown on the plans. The contractor shall take whatever means necessary to prevent siltation from entering adjacent roadways, properties, and ditches. Such control might include channeling runoff into sediment basins, channeling runoff into areas where an extra row of straw bales are used. A silt fence might be considered, if necessary.

3. Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and County and State roads will be adequately protected.

4. Soil preparation and re-vegetation shall be performed according to Appendix A of the Model Sediment and Erosion Control Regulations for Urban Development.

5. Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible or during the next seeding period after grading has been completed. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations.

6. When grading operations are completed or suspended for more than thirty (30) days, permanent grass must be established at sufficient density to provide erosion control on the site. Between permanent grass seeding periods, temporary cover shall be provided according to the Designated Official's recommendation. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations. All finished grades (areas not to be disturbed by improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1000 square feet when seeded.

7. All fill including filled 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% of maximum density as determined by the "Modified ASSHTO 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 non-yielding and non-pumping during proofrolling and compaction.

8. Temporary siltation control measures (structural) shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site.

9. If straw bales or silt fences are destroyed by heavy rains, vandalism, etc., they are to be replaced immediately by contractor.

10. All cut and fill slopes should be a maximum of 33% slope (3:1) after grading.

11. Any wells and/or springs which may exist on this property should be located and sealed in a manner acceptable to the CITY of O'FALLON.

12. All existing trash and debris on-site must be removed and disposed of off-site.

13. Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed of off-site.

14. Soft soils 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 public right-of-way locations or on any storm sewer location.

15. No area shall be cleared without permission of the developer.

16. The total yardage of this project is based on a 15% ±shrinkage factor.

17. The shrinkage factor is subject to change, due to soil conditions (types and moisture content), weather conditions, and the percentage of compaction actually achieved at the time of the year grading is performed. As a result, adjustments in final grade may be required. If adjustments need to be made, the contractor shall contact Musler Engineering prior to completion of the grading.

18. Earth quantities were obtained from aerial grid mapping with contours at two foot intervals, with a tolerance of plus or minus one foot or one-half (1/2) contour intervals.

19. The vertical grading tolerance shall be plus or minus 0.2 feet for all rough grading.

20. All construction and materials shall conform to THE CITY OF O'FALLON STANDARDS.

21. The most stringent of the above requirements shall apply.

SPECIFICATIONS

1. 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 discing operation.

2. Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory rollers or high speed impact type drum rollers acceptable to the Soils Engineer. The rollers shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.

3. 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.

4. The Soils Engineer shall notify the Contractor of rejections 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.

5. All Areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted to at least 85 percent of the maximum density as determined by the Modified AASHTO T-1800 Compaction Test (ASTM-D1557). Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal 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.

6. 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 are those at which satisfactory dry densities can be obtained. The acceptable moisture contents during the filling operation in the remaining areas are from 2% to 6% above the optimum moisture content.

7. 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.

8. Fill placed within proposed street R.O.W. shall be compacted to 90% M.O.D. Proctor and be 2% below to 6% above optimum moisture content.

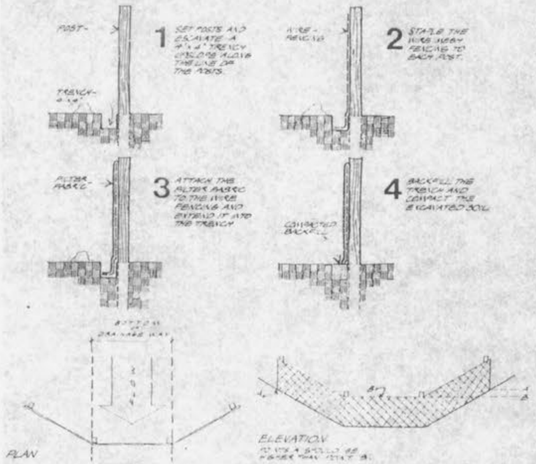
9. Soft soil in the bottom and banks of any existing or former pond site should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.

10. The most stringent of the above requirements shall apply.

SYNTHETIC FILTER BARRIERS
For Urban Development Sites
APPENDIX D

Maintenance

1. Filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.
2. Should the fabric decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.
3. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately half the height of the barrier.
4. 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.



Placement and Construction of a Synthetic Filter Barrier

VEGETATIVE ESTABLISHMENT
FOR URBAN DEVELOPMENT SITES
APPENDIX A

Seeding Rates

Permanent

Tall Fescue - 30 lbs /ac
Smooth Brome - 20 lbs /ac
combined: Fescue @ 15 lbs. /ac. and Brome @ 10 lbs./ac.

Temporary

Wheat or Rye - 150 lbs /ac (3.5 lbs. per 1000 square foot)
Oats 120 lbs./ac (2.75 lbs. per 1000 square foot)

Seeding periods

Fescue or Brome	March 1 to June 1
	August 1 to October 1
Wheat or Rye	March 15 to November 1
Oats	March 15 to September 15

Mulch Rates: 100 lbs. per 1,000 sq. ft. (4,356 lbs. per acre)

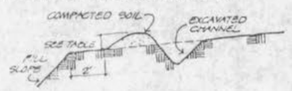
Fertilizer Rates:	Nitrogen	30 lbs /ac.
	Phosphate	30 lbs./ac.
	Potassium	30 lbs./ac.
	Lime	600 lbs./ac. ENM*

*ENM = effective neutralizing material as per State evaluation of quarried rock.

DIVERSIONS
For Urban Development Sites
APPENDIX B

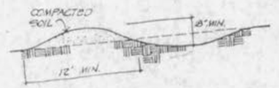
** Outlets for diversions must be stable. Stable outlets consist of grass waterways, earthen channels with capacity adequate to prevent gully erosion, grade stabilization structures or other practices as approved by the Designated Official.

Combination Diversion
Used at the top of a fill slope.



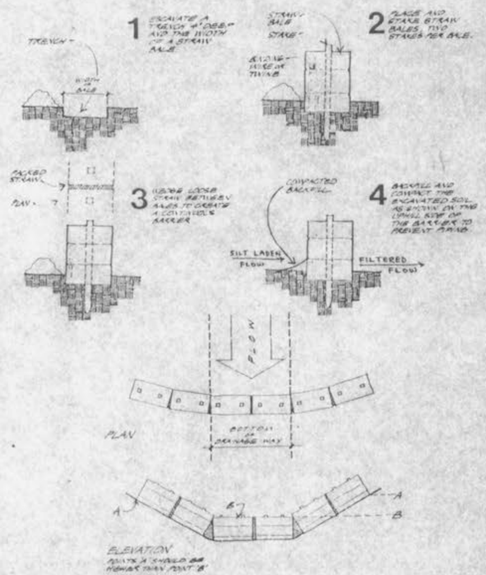
Earth Ridge Diversion
Used around the perimeter of a construction site.

Combination Diversion
General use.



Gravel Ridge Diversion
General use.

STRAW BALE BARRIERS
For Urban Development Sites
APPENDIX C



Placement and Construction of a Straw Bale Barrier