

APPLICATION

PERCOLATION TESTING

A _____

P _____

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
3525-H ELLICOTT MILLS DRIVE/ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 313-2640

DISTRICT _____

DATE _____

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I HEREBY APPLY FOR THE NECESSARY TEST PRIOR TO APPLICATION FOR PERMIT TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER _____

ADDRESS _____ PHONE _____

AGENT OR PROSPECTIVE BUYER _____

ADDRESS _____ PHONE _____

PROPERTY LOCATION:

SUBDIVISION _____ LOT NO. _____

ROAD AND DESCRIPTION _____

TAX MAP _____ PARCEL # _____

SIZE OF LOT _____ TYPE BLDG. _____
(SINGLE FAMILY DWELLING OR COMMERCIAL)

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT.

(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING _____

PERCOLATION TEST PLAT/PRELIMINARY PLAT - TITLE OR I.D. # _____ DATE _____

SITE DEVELOPMENT PLAN/FINAL PLAT - TITLE OR I.D. # _____ DATE _____

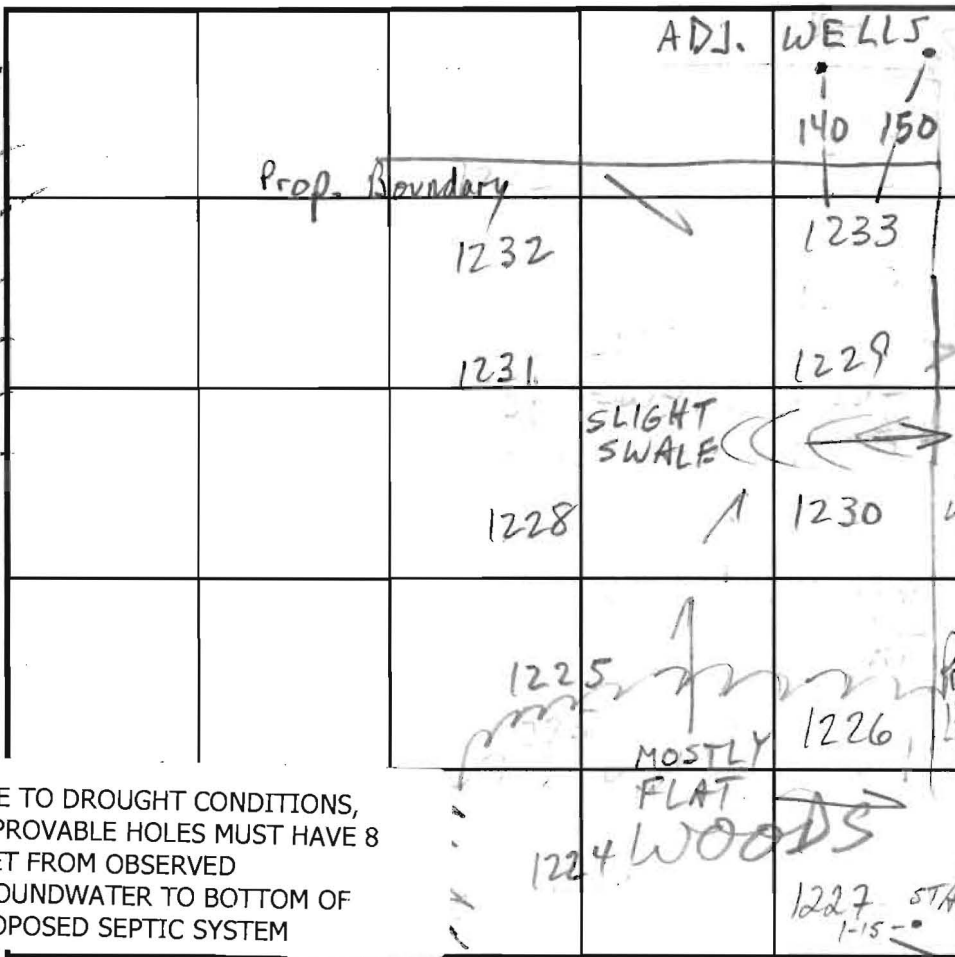
THIS IS NOT A PERMIT

COUNTY #

SOIL PROFILE

0' 1225/28/31
 30
 4 1/2' 30
 29
 5 33
 32
 26
 27
 24
 12 1/2'
 14 1/2'

grge
red brn
sa cll m
tan
pink brn
sa l m
5-15%
frags



SOIL PROFILE

0' NO WELLS OBS'D

No WELLS OBS'D

Prop line

DUE TO DROUGHT CONDITIONS, APPROVABLE HOLES MUST HAVE 8 FEET FROM OBSERVED GROUNDWATER TO BOTTOM OF PROPOSED SEPTIC SYSTEM

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

90 - ADJ WELL

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
5/16/01	1225	4 1/2' / 14	11:48	11:51	11:51	11:58	7
	1228	5 1/2' / 14 1/2'	11:52	11:58	11:58	12:05	7
	1231	5 / 14	12:01	12:07	12:07	12:13	6
	1230	5 / 12 1/2'	1:25	1:29	1:29	1:33	4
	1229	5 / 13	1:29	1:32	1:32	1:35	3
	1233	4 1/2' / 13	1:34	1:37	1:37	1:44	7
	1232	5 1/2' / 14	1:40	1:44	1:44	1:48	4
	1224	4 / 12	2:29	2:31	2:31	2:39	8
	1227	4 / 12 1/2'	2:26	2:29	2:29	2:40	11
	1226	4 1/2' / 12	2:21	2:26	2:26	2:56	EST 30

REMARKS

OK 15-20% frags, better @ 5 1/2'

TYPE OF SOIL

TESTED BY M. Rifkin

ALSO PRESENT M. Johnson

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME

TRENCH WIDTH

INLET DEPTH

MAXIMUM BOTTOM DEPTH

SQ. FT/BEDROOM

(378)

P-02-05 SIGNED 9/4/02

HEATHERWOOD SECTION 1, AREA 1 PLAT No. 4401

10'W.X34'L PROP. RAIN GARDEN

10'W.X62'L PROP. RAIN GARDEN

10'W.X46'L PROP. RAIN GARDEN

10'W.X20'L PROP. RAIN GARDEN

10'W.X22'L PROP. RAIN GARDEN

190' CREDIT EX. BLDG. FOUND.

LOT 15 50,677 sq. ft.

LOT 14 49,399 sq. ft.

LOT 13 44,593 sq. ft.

LOT 12 43,151 sq. ft.

LOT 11 46,726 sq. ft.

LOT 16 48,734 sq. ft.

LOT 18 47,647 sq. ft.

LOT 19 49,026 sq. ft.

LOT 17 51,189 sq. ft.

LOT 20 46,852 sq. ft.

B-4 PROP. MICRO-POOL EXTENDED DETENTION DESIGN AS PER PDE 2001 P-1 HAZARD CLASS 'K' BOTT. = 553.50

DRAINAGE, UTILITY & ACCESS EASEMENT

F.C.E. No. 4 0.72 AC. (TO BE PLANTED)

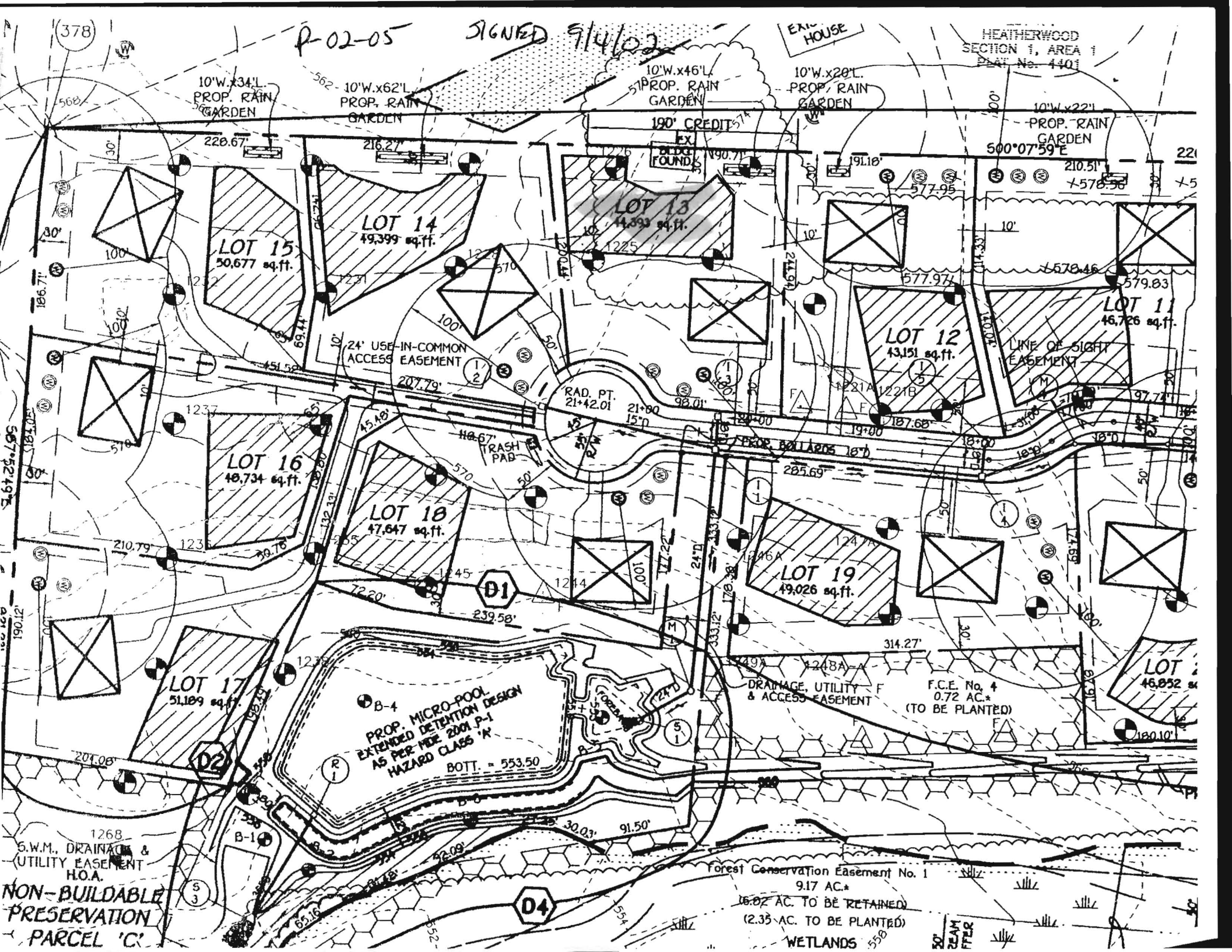
Forest Conservation Easement No. 1 9.17 AC. 16.82 AC. TO BE RETAINED (2.35 AC. TO BE PLANTED)

WETLANDS

1268 S.W.M., DRAINAGE & UTILITY EASEMENT H.O.A.

NON-BUILDABLE PRESERVATION PARCEL 'C'

STAR MAPPER



SEQUENCE OF CONSTRUCTION

- 1. Obtain grading permit. 1 Day
2. Install Sediment and Erosion Control Devices as shown on plan. 1 Day
3. Clear and grub to limits of disturbance and mass grade to sub-base. 1 Day
4. Install temporary seeding. 1 Day
5. Construct Building and Permanent Seeding (Sec. 54). 2 Months
6. Fine grade site and install permanent seeding and landscaping. 1 Day
7. Remove Sediment Control Devices as upland areas are stabilized and permission is granted by Erosion and Sediment Control Inspector. 2 Days

SEDIMENT CONTROL NOTES

- 1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current Maryland Standards and Specifications for soil erosion and sediment control and revisions thereto.
3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes steeper than 3:1, b) 14 days to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around the perimeter in accordance with Vol. 1, Chapter 12, of the Howard County Design Manual, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control for Permanent Seeding (Sec. 54), Temporary Seeding (Sec. 50), and Mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis: Total Area of Site 0.9206 Acres, Area Disturbed 0.8054 Acres, Area to be roofed or paved 0.1095 Acres, Area to be vegetatively stabilized 0.6299 Acres, Total Cut 660 Cu. Yards, Total Fill 660 Cu. Yards, D/F Site Waste/Borrow Area Location N/A
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.

TEMPORARY SEEDING NOTES

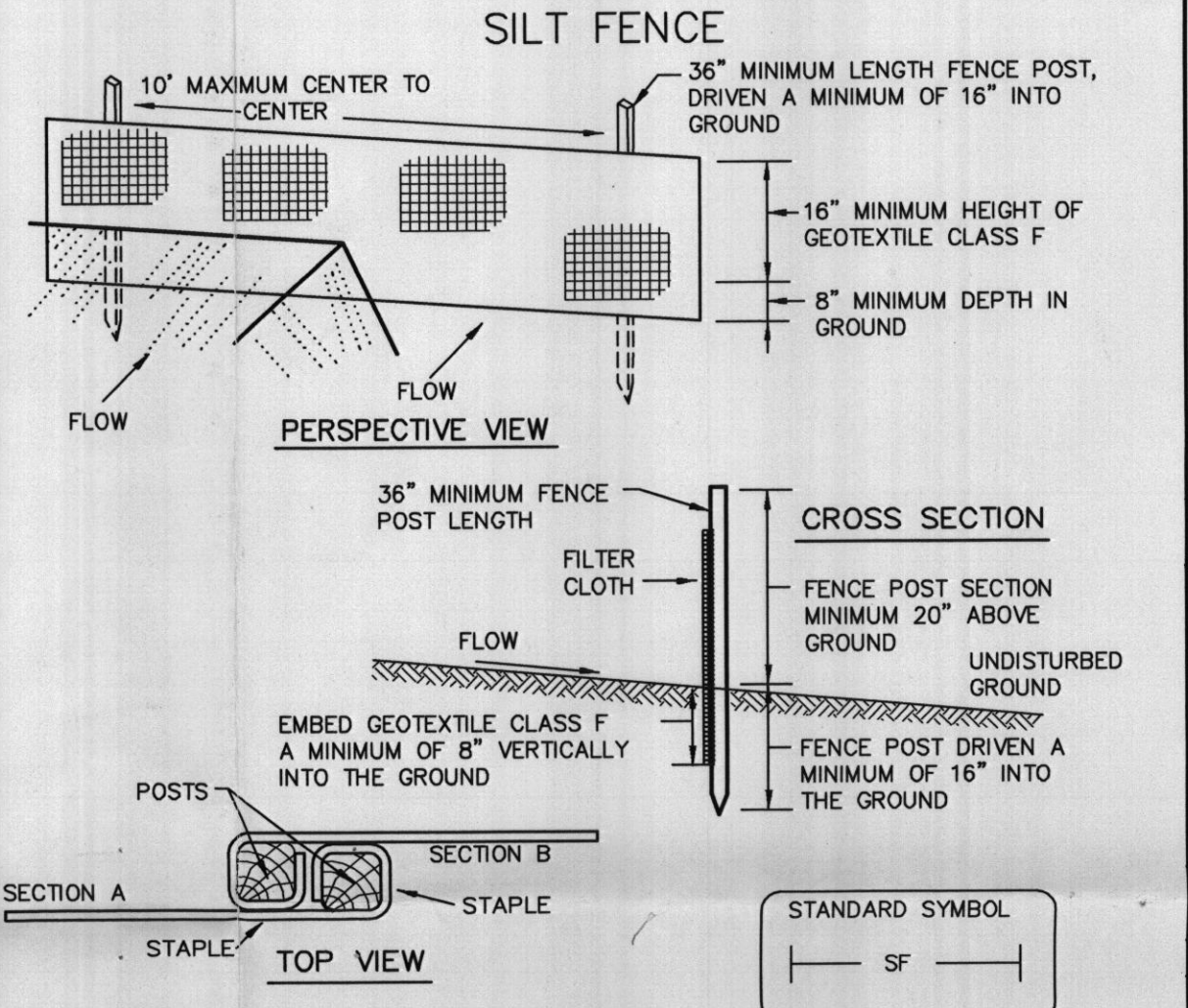
- Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.
Seeding Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.).
Seeding: For the periods March 1 through April 30, and August 15 through November 15, seed with 1 1/2 bushels per acre of annual rye (3.2 lbs./1000 sq. ft.). For the period of May 1 thru August 14, seed with 3 lbs./acre of weeping lovegrass (0.7 lbs./1000 sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.
Refer to the 1988 Maryland Standards and Specification for Soil Erosion and Sediment Control for rate and methods not covered.

PERMANENT SEEDING NOTES

- All disturbed areas shall be stabilized as follows:
Seeding Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
Soil Amendments: Apply two tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 600 lbs. per acre 0-20-20 fertilizer (14 lbs./1000 sq. ft.). Before seeding harrow or disc into upper 3 inches of soil. At time of seeding, apply 400 lbs. per acre 38-0-0 ureaform fertilizer (9 lbs./1000 sq. ft.) and 500 lbs. per acre (11.5 lbs./1000 sq. ft.) of 10-20-20 fertilizer.
Seeding: For the periods March 1 through April 30, and August 1 through October 15, seed with 100 lbs. per acre (2.3 lbs./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period of May 1 thru July 31, seed with 60 lbs./acre (1.4 lbs./1000 sq. ft.) Kentucky 31 Tall Fescue and 2 lbs. per acre (0.05 lbs./1000 sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by:
Option 1) Applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring.
Option 2) Use sod.
Option 3) Seed with 100 lbs./acre Kentucky 31 Tall Fescue and mulch with two tons/acre well anchored straw. All slopes should be hydroseeded.
Mulching: Apply 1 to 2 tons per acre (45 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using 200 gallons per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.
Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.
*For public ponds substitute Chemung Crownwath at 15 lbs./acre and Kentucky 31 Tall Fescue at 40 lbs./acre as the seeding requirement. Optimum seeding date for this mixture is March 1 to April 30.

TOPSOIL SPECIFICATIONS

- Soil to be used as topsoil must meet the following:
Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority.
Regardless, topsoil shall not be a mixture of contrasting texture subsols and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash or other materials larger than 1 1/2" in diameter.
Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle or others as specified.
Where the topsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 lbs./1000 sq. ft.) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations.

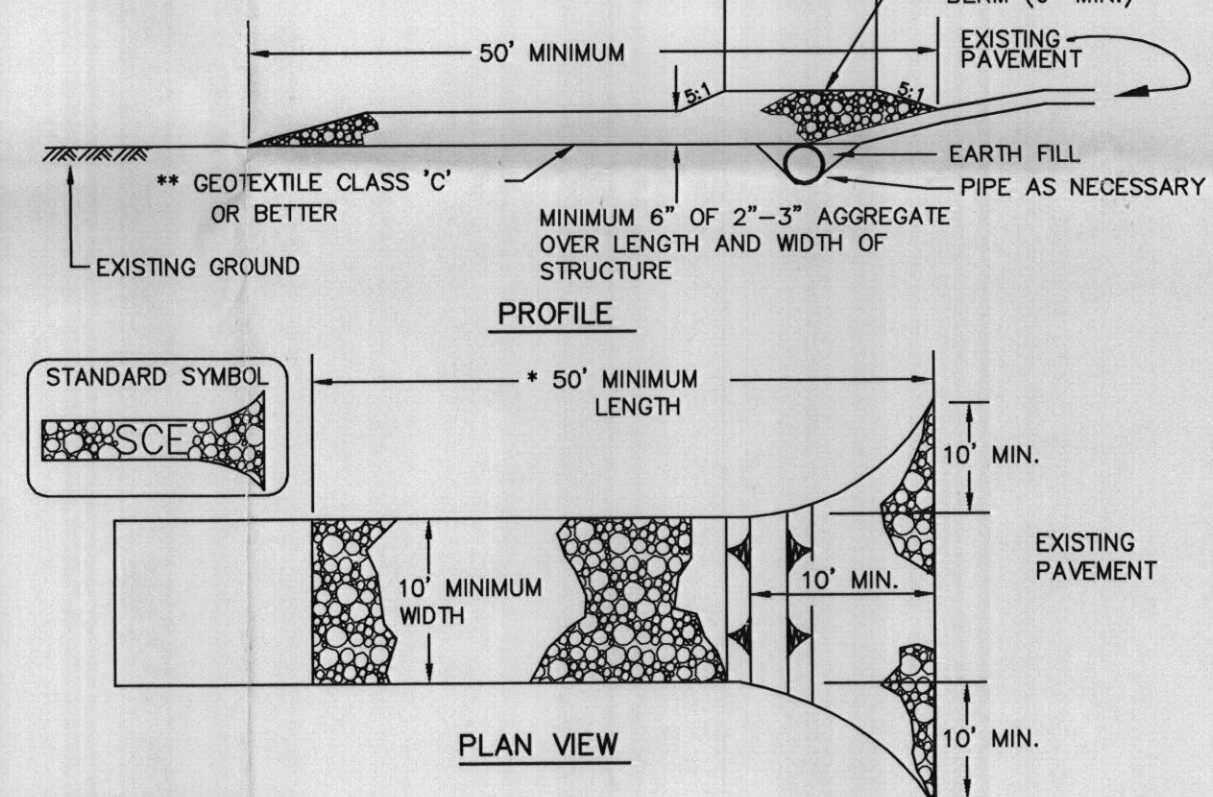


JOINING TWO ADJACENT SILT FENCE SECTIONS

- 1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard I or U section weighing not less than 1.00 pound per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:
Tensile Strength 50 lbs./in. (min.) Test: MSMT 509
Tensile Modulus 20 lbs./in. (min.) Test: MSMT 509
Flow Rate 0.3 gal./ft. /minute (max.) Test: MSMT 322
Filtering Efficiency 75% (min.) Test: MSMT 322
3. Where ends of geotextile fabric come together, they shall be overlapped.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

Approved for Private Water and Sewerage Systems
R. Wilson for Peter Bideman HEALTH OFFICER 8/29/2007 DATE

STABILIZED CONSTRUCTION ENTRANCE



- Construction Specification
1. Length - minimum of 50' (*30' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 5" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

Approved for private water and private sewerage systems in conformance with the master plan of Howard County: R. Wilson for Peter Bideman 8/29/2007

GENERAL NOTES

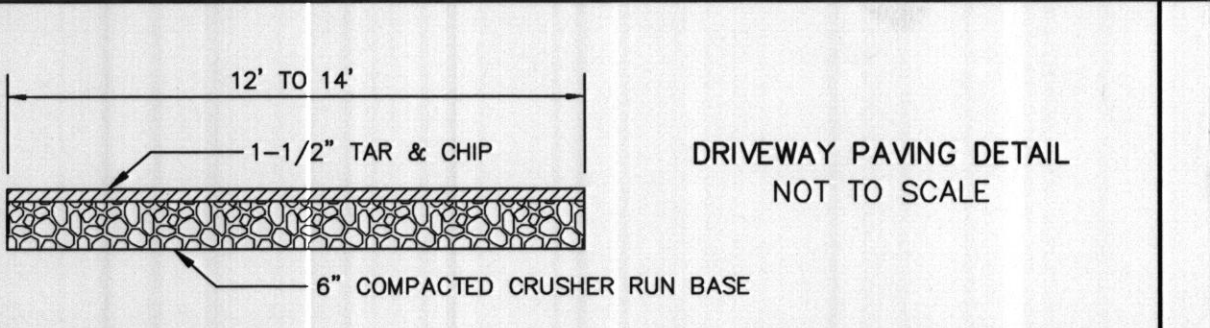
- 1. Subject Property Zoned: RC-DEO.
2. Total area of property 40,102.31 sq. ft.
3. Septic easement subject to Howard County Health Department review.
4. Length of trench to be determined at time of septic permit issuance.
5. Contractor/Builder to verify elevation in the field before beginning any construction. Field run topographic survey run by Fisher, Collins & Carter, Inc in May of 2004.
6. No wetlands currently exist on the property.
7. For driveway entrance detail refer to Howard County Design Manual Volume IV Standard Detail R6.06.
8. This area designates a private sewerage easement at least 10,000 square feet as required by the Maryland State Department of the Environment for individual sewerage disposal. Improvements of any nature in this area are restricted until public sewerage is available. These easements shall become null and void upon connection to a public sewerage system. The County Health Officer shall have the authority to grant adjustments to the private sewerage easement. Recordation of a modified sewerage easement shall not be necessary.
9. The lot shown hereon complies with the minimum ownership width and lot area as required by the Maryland State Department of the Environment.
10. Existing wells and/or sewerage easements within 100 feet of the property have been shown from the best available information.
11. All house sites shown comply with minimum building restriction regulations.
12. All wells shall be drilled prior to final plat recordation. It is the developer's responsibility to schedule the well drilling prior to final plat submission. It will not be considered "government delay" if the well drilling holds-up the Health Department signature of the record plat.
13. *The existing well shown on this plan identified with the attached well tag number HO-94-3749 has been field located by DRS & Associates professional land surveyor and is accurately shown.
14. There is no stockpile area located on site, stockpiling will not be permitted on site.

SEPTIC TEST LEGEND

- PROPOSED PERC
APPROVED DEEP TRENCH PERC
APPROVED MODIFIED TRENCH PERC
APPROVED SAND MOUND PERC
APPROVED TIE FIELD PERC
FAILED PERC
NO TEST
PROPOSED OBSERVATION HOLE
APPROVED DEEP TRENCH OBSERVATION HOLE
APPROVED MODIFIED TRENCH OBSERVATION HOLE
APPROVED SAND MOUND OBSERVATION HOLE
APPROVED TIE FIELD OBSERVATION HOLE
FAILED OBSERVATION HOLE

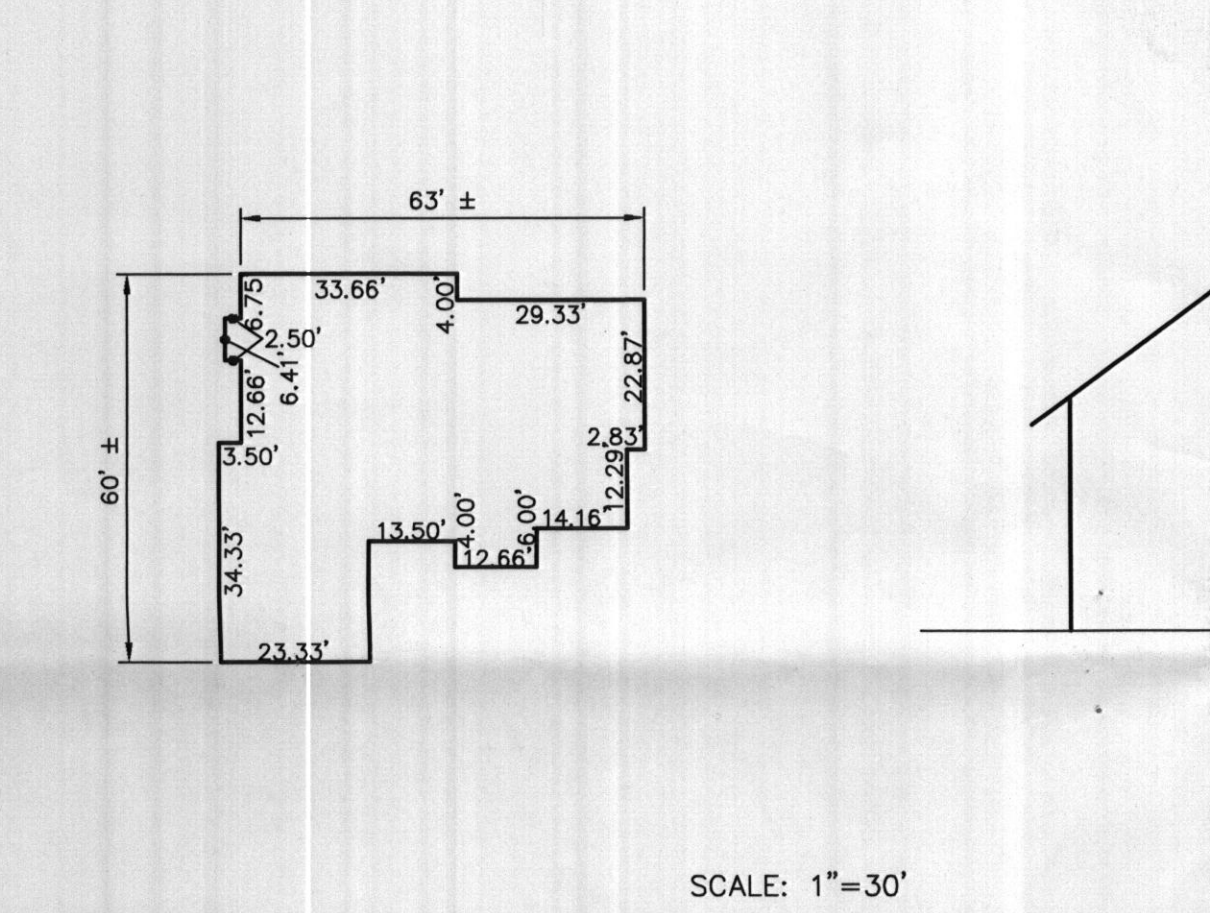
SEPTIC TEST RESULTS

Table with columns: No., TYPE TEST, COMMENTS, DATE. Includes results for 1224, 1225, 1226, and 1227.



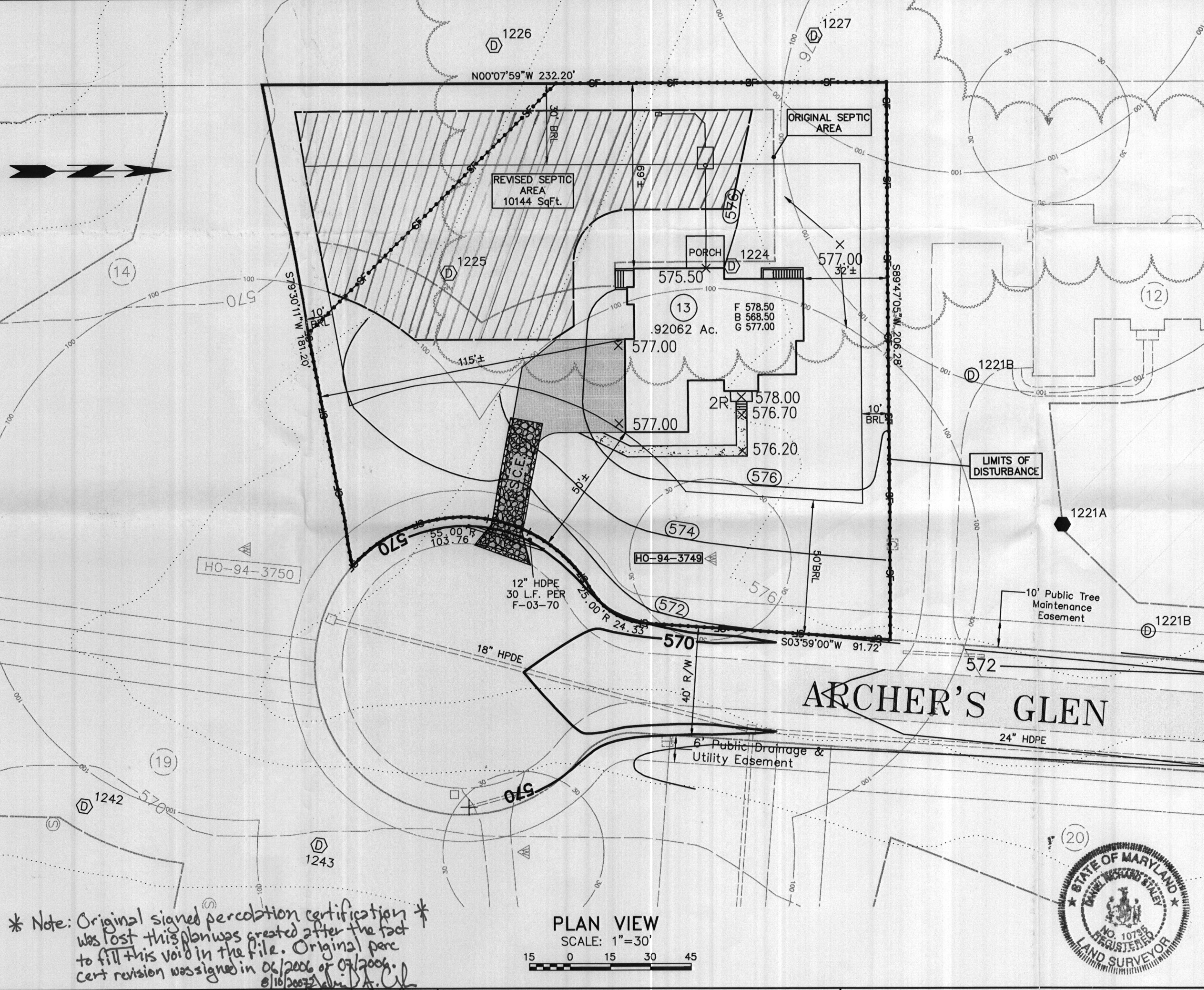
SEPTIC SYSTEM DATA

Table with columns: Structure, Ex. Ground, Finished Ground, Inv. In, Inv. Out, Bottom of Trench, Length, Remarks. Includes Septic Tank and Distribution Box.



Builder/Developer: PATSCO HOMES, INC. 13898 FORSYTHE ROAD SYKESVILLE, MD 21784 410-442-2421. Includes vicinity map and legend.

Legend and Abbreviations section listing symbols for existing and proposed features like Cable Line, Center Line Rd, Easement, Edge of Rd, etc.



Reviewed for Howard County Soil Conservation District and meets technical requirements. U.S.D.A. Natural Resources Conservation Service Date: 8/29/2007

DEVELOPER'S CERTIFICATION: I/we certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a certificate of attendance at a Department of the Environment approved training program...

ENGINEER'S CERTIFICATE: I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Revision table with columns: REV.No., DATE, BY, DESCRIPTION, DATE: 2006-02-09. Includes scale and sheet information.

Vertical text on the left margin: I:\CAD\020809\729\ST01-01.DWG, REV0613, 2006-06-26 12:30:52 PM, mif