AA 24-99 Schwarz, John
VAR 99-0003

MSA_S1829-6

Letter Rec
1-25-99

N/F

RECEIVED

FEB 17 1999

CHESAPEAKE BAY
CRITICAL AREA COMMISSION

IN THE OFFICE OF ADMINISTRATIVE HEARINGS

CASE NUMBER 1999-0003-V

IN RE: **JOHN SCHWARZ**

SECOND ASSESSMENT DISTRICT

DATE HEARD: FEBRUARY 8, 1999

ORDERED BY: **STEPHEN M. LeGENDRE**, ADMINISTRATIVE HEARING OFFICER

ZONING ANALYST: **LAWRENCE BURKINS**

DATE FILED: **FEBRUARY** 12, **1999**

PLEADINGS

John Schwarz, the applicant, seeks a variance (1999-0003-V) to permit disturbance of steep slopes in the Critical Area on property located along the north side of Ogleton Road, west of Carrollton Road, Annapolis.

PUBLIC NOTIFICATION

The case was advertised in accordance with the provisions of the County Code. Mr. Schwarz testified that the property was posted for 14 days prior to the hearing.

FINDINGS AND CONCLUSIONS

This case concerns unimproved property with a street address of 2607 Ogleton Road, in the subdivision of Annapolis Roads, Annapolis. The property comprises 40,946 square feet and is zoned R-2 residential with a Chesapeake Bay Critical Area designation as Limited Development Area (LDA). This is not a waterfront lot. The applicant seeks to construct a single-family dwelling with its driveway access on steep slopes.

The Anne Arundel County Code, Article 28, Section 1A-105(c) prohibits development on steep slopes within the LDA. Accordingly, the proposal necessitates a variance to disturb steep slopes.

Lawrence Burkins, Administrator of Current Planning, testified that the site is severely impacted by steep slopes. The proposed dwelling will be sited to the

northeast side of the property on a small ridge. The witness originally contemplated recommending for the denial of this request but for the approval of a modified plan relocating the dwelling in a westerly direction and closer to Ogleton Road. However, the environmental division has been recently advised that the alternate plan would destroy a significant stand of American Holly. The witness also advised that the applicant has revised the plan to reduce the limits of disturbance and to include a retaining wall to protect the slope. In the circumstances, he supported the request based on the revised site plan.

Michael Drum, the applicant's engineer, testified that less than 20 percent of the existing forest would be cleared. Mr. Schwarz indicated that the proposal will have the least impact on the drainage patterns.

Upon review of the facts and circumstances, I find and conclude that the applicant is entitled to relief from the code. For this Critical Area property, due to the extent of the steep slopes, a strict implementation of the County's Critical Area Program would result in an unwarranted hardship to the applicant. To literally interpret the program would deprive that applicant of the right commonly enjoyed by other properties in similar areas within the Critical Area of the County to be developed with a single-family residence. Conversely, the granting of the variance will not confer on the applicant any special privilege which the program denies to other lands within the County's Critical Area. There was nothing to suggest that the request is based on conditions resultant of actions by the applicant; nor does it arise from any condition relating to land use on neighboring

property. The granting of a conditional variance will not adversely affect water quality or adversely impact fish, wildlife or plant habitat within the Critical Area; and will be in harmony with the general spirit and intent of the program. I further find that the variance is the minimum necessary to afford relief. The applicant has revised the site plan to reduce the degree of disturbance to the steep slope and to include a protective retaining wall. There was nothing to suggest that the granting of the variance will alter the essential character of the neighborhood, substantially impair the appropriate use or development of adjacent property or be detrimental to the public welfare. The approval shall be subject to the conditions in the Order.

ORDER

PURSUANT to the application of John Schwarz, petitioning for a variance to allow development on steep slopes within the Critical Area; and

PURSUANT to the advertising, posting of the property, and public hearing and in accordance with the provisions of law, it is this 12th day of February, 1999,

ORDERED, by the Administrative Hearing Officer of Anne Arundel County, that the applicant's request for a variance to disturb steep slopes in accordance with the revised site plan submitted in these proceedings is hereby **granted**.

The foregoing variance is subject to the following conditions:

1. All site disturbance shall be mitigated/reforested at a rate of 3:1.

2. The remaining forest shall be placed in a conservation easement.

Stephen M. LeGendre
Administrative Hearing Officer

NOTICE TO APPLICANT

Within thirty (30) days from the date of this Decision, any person, firm, corporation, or governmental agency having an interest therein and aggrieved thereby may file a Notice of Appeal with the County Board of Appeals.

Further, Section 11-102.2 of the Anne Arundel County Code states:

A variance granted under the provisions of this Article shall become void unless a building permit conforming to the plans for which the variance was granted is obtained within one year of the grant and construction is completed within two years of the grant.

If this case is not appealed, exhibits must be claimed within 60 days of the date of this order, otherwise they will be discarded.

Judge John C. North, II
Chairman

Ren Serey
Executive Director

STATE OF MARYLAND
CHESAPEAKE BAY CRITICAL AREA COMMISSION
45 Calvert Street, 2nd Floor, Annapolis, Maryland 21401
(410) 260-7516 Fax: (410) 974-5338

January 25, 1999

Mr. Kevin Dooley
Anne Arundel County Dept. of Planning and Code Enforcement
2664 Riva Rd., MS 6301
Annapolis, Maryland 21401

RE: Variance 1999-0003-V, John J. Schwarz

Dear Mr. Dooley:

Thank you for providing information on the above referenced variance application. The applicant is requesting a variance to permit a dwelling on steep slopes. The property is designated LDA and is currently undeveloped.

Provided this lot is properly grandfathered, this office does not oppose the siting of a single family dwelling on it. However, impacts to steep slopes should be minimized to the greatest extent possible. The currently proposed location for the dwelling does not appear to minimize the impact to the steep slopes on site. The driveway in particular will have a large impact to the slopes. Extensive clearing of large trees is also proposed on steep slopes. The Critical Area report states that the location of specimen trees is provided on the site plan, however the locations are not indicated. This office recommends that the applicant consider moving the house location to the level area towards the front center part of the property or directly forward towards the street. Although some impact to steep slopes and some clearing would be necessary, it would be much less than currently proposed.

If the house location remains as currently proposed, Commission staff recommends that alternative locations and perhaps a more direct route for the driveway be explored to reduce impacts to the steep slopes. Further, the large 25 foot by 25 foot parking area could be reduced since there is a garage. The well should also be moved to a level portion of the property to eliminate the impact of drilling equipment on the steep slopes. Mitigation for the currently proposed forest clearing should occur at a 1.5 to 1 ratio.

Thank you for the opportunity to comment. Please include this letter in your file and submit it as part of the record for this variance. Also, please notify the Commission of the decision made in this case.

Sincerely,

LeeAnne Chandler
Natural Resources Planner

cc: AA24-99

DATE: 01/12/1999 ANNE ARUNDEL COUNTY, MARYLAND PROGRAM ID: PNZ020C
TIME: 11:24:24 PACE ZONING APPLICATION SYSTEM SCREEN ID: PNZMS20
UPDATE APPLICATION REQUEST

AA 24-99

APPLICATION TYPE VARIANCE

CASE NUMBER	TAX ACCT NBR	MAP	BLK	PARCEL	LOT	SQFT	TYPE
1999-0003-V	2001-1196-3046	57	03	0184	11	40946.0	R

APPLICANT NAME SCHWARZ, JOHN J. APPLICATION DATE 01/07/1999
CLASS RESACS STANDARD OTHER TYPE APPLICATION FEE 125.00
ANALYST RMG STATUS OPEN DECISION PENDING COURT ADMINIST APPEAL N

OWNER NAME/ADDRESS/PHONE
GRAEFE, GEORGE E 3RD
2678 CARROLLTON RD

ANNAPOLIS MD 21403 TELEPHONE 410-268-1213

PROPERTY DESCRIPTION
LT 11 SC W
2607 OGLETON RD
ANNAPOLIS ROADS

PROPERTY LOCATION 245 FEET OF FRONTAGE ON N SIDE OF OGLETON ROAD
200 FEET W OF CARROLLTON ROAD IN ANNAPOLIS ROADS

TAX DIST 2 COUNCIL DIST 6 ZONING R2
WATERFRONT N CORNER LOT N CRITICAL AREA: IDA N LDA Y RCA N
MAPS: 200 Y27 ALEX 26C2 DEED: LIBER 4811 FOLIO 733

DATE: 01/12/1999 ANNE ARUNDEL COUNTY, MARYLAND PROGRAM ID: PNZ021C
TIME: 11:25:12 PACE ZONING APPLICATION SYSTEM SCREEN ID: PNZMS21
UPDATE DESCRIPTION AND RECOMMENDATION DATA

CASE NUMBER 1999-0003-V APPLICATION TYPE VARIANCE
DESCRIPTION
VARIANCE TO PERMIT A DWELLING ON STEEP SLOPES.

RECOMMENDATIONS

RECEIVED
JAN 14 1999
CHESAPEAKE BAY
CRITICAL AREA COMMISSION

SCHWARZ PROPERTY
CRITICAL AREA REPORT

PREPARED FOR:

DRUM, SNELL, AND ASSO., LC

ONE STATE CIRCLE
ANNPOLIS, MD 21401

PREPARED BY:

CATTAIL CONSULTING
POST OFFICE BOX 1599
SEVERNA PARK, MD 21146

410-544-0133

JULY 1998

RECEIVED
JAN 14 1999
CHESAPEAKE BAY
CRITICAL AREA COMMISSION

CHESAPEAKE BAY CRITICAL AREA REPORT
CHECK LIST
Anne Arundel County, Maryland

ANNE ARUNDEL COUNTY MARYLAND

TO: Property Owners in the Chesapeake Bay Critical Area DATE: 7.1.98

FROM: Department of Planning and Code Enforcement

SUBJECT: Information Required for Submission of Critical Area Report - Zoning Applications

---

Zoning Case Number _____ Applicant's Name JOHN J. SCHARZ

Critical Area Classification: (LDA)/RCA/IDA; Tax Map 57 Block 3 Parcel 184

Your property is located within the Chesapeake Bay Critical Area. In reviewing your application, Planning and Code Enforcement must determine the impact your proposal will have on stormwater management and plant and animal habitat in conformance to Critical Area criteria. Your plan must meet the criteria for your classification and satisfy COMAR 14.15.11 regarding variances. You are responsible for supplying five copies of the VICINITY MAP, NARRATIVE STATEMENT AND PLAN to the Zoning Administration Division of the Department of Planning and Code Enforcement with your zoning application. Applications within the Critical Area will not be accepted without a complete Critical Area Report.

1. A brief explanation of why you need a variance or special exception. If you have applied for a building or grading permit, please list the permit number(s). _____ _____

2. A **VICINITY MAP** showing clear directions to your property and the address.

3. A short, 1 or 2 sentence per item, **NARRATIVE STATEMENT** which provides the following information (if checked):

   ___Type of predominant trees and shrubs (maple, oak, evergreen, etc.) on the entire parcel. (At least 15% of the lot must have trees and shrubs or additional plantings will be required. Trees and shrubs must cover the area 25' from the water on waterfront lots except for access area.)

   ___Method of control of rainwater from existing and proposed structures, driveways and parking. (Where does it go now? Where will additional runoff go? Any special techniques?)

   ___Methods to minimize impacts on water quality and habitat from proposed construction (e.g. stormwater management, sediment control, replanting, avoiding slopes).

   ___Square footage of site that is currently wooded or has trees and shrubs; square footage to be disturbed by proposed work; acreage of lot; total impervious coverage before and after work (Any lot in LDA or RCA that is 21,780 square feet or less cannot have more than 25% impervious surface covered unless further restricted by plat. Lots over 1/2 acre cannot exceed 15% coverage.)

   ___Habitat protection areas: Buffers, expanded buffers, wet ands, rare and endangered species, anadromous fish propagation waters, colonial water bird nesting sites, historic waterfowl staging and concentration areas, riparian forests 300' or more in width, forested blocks 100 acres or more, natural heritage areas, plant and wildlife habitats of local significance.

4. A **PLAN** of your property, drawn to scale (a plot plan, grading plan or building location survey can be used) showing (if checked):

   ___Steep slopes (15% or greater - show any slope if you aren't sure of percentage of slope)

   ___Existing tree line, individual trees and all proposed clearing, grading or any disturbance

   ___Wetlands (tidal and nontidal) ___ Floodplain (tidal and nontidal)

   ___Any proposed planting or landscaping on property

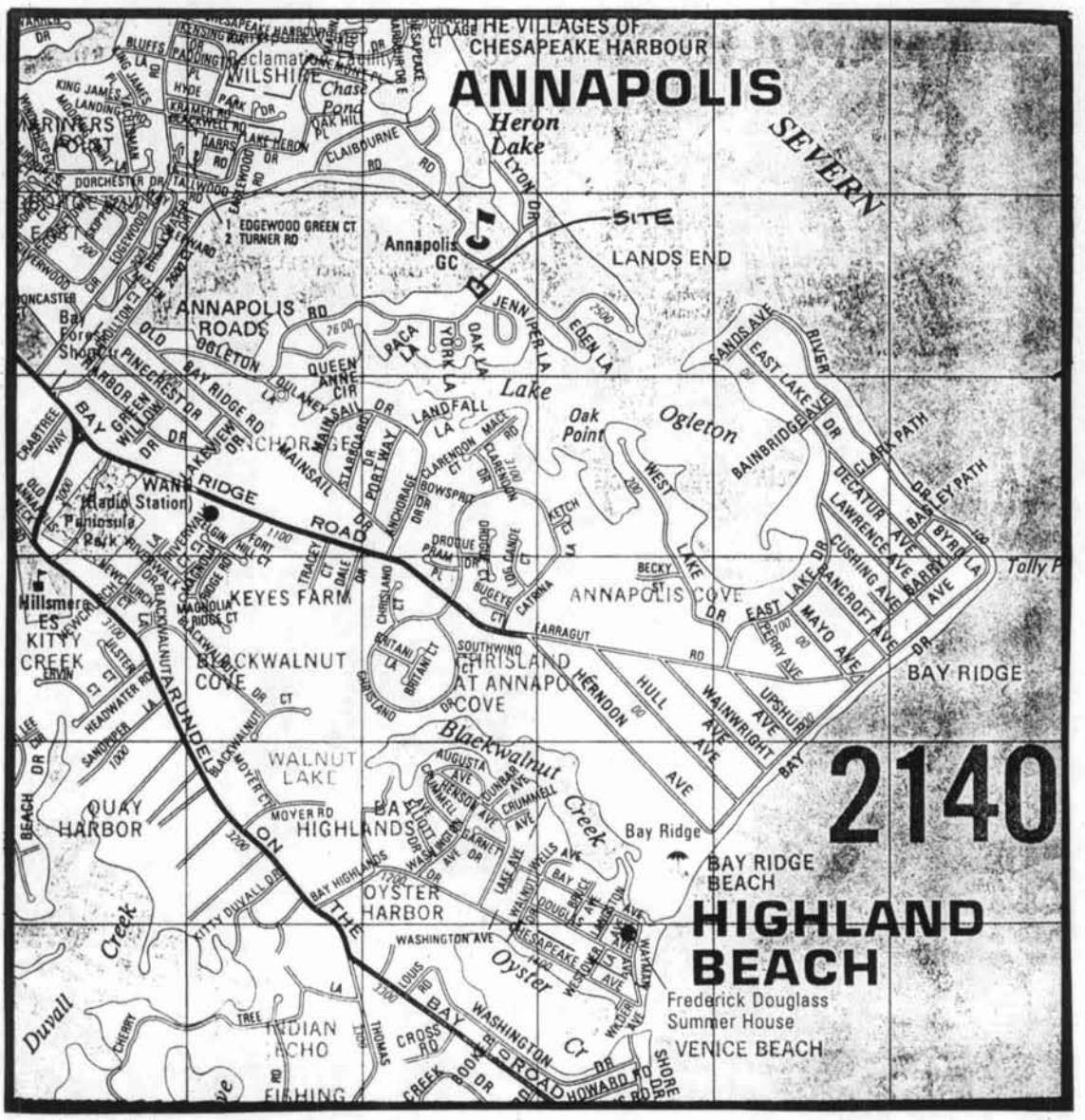
   ___Other (water depths, buffers as shown on record plat, habitat protection areas as identified in 3e, and plat notes)

5. **ONE** copy of a Notification of Project Application supplied with this check list.

Residential lots in IDA will be required to meet the criteria for LDA. Special circumstances where LDA criteria cannot be met will be reviewed in conjunction with the Critical Area Commission. Commercial, institutional or industrial uses in IDA must meet the 10% Pollutant Reduction Rule. If you have any questions or need assistance, please contact Lori Allen at (410) 222-7459.

VICINITY MAP

1" = 2000'



SCHWARZ PROPERTY
CRITICAL AREA REPORT

I. INTRODUCTION

The project known as the Schwarz Property is located on Parcel 184 Ogleton Road in Annapolis Roads. The site is 0.94 acres in size and is completely wooded. The site is within the Limited Development Area of the Critical Area and is proposed to have one single family residence constructed on it. Due to the steep slopes onsite, it is not possible to develop the lot without some impact to the slope and/or the buffer to the slopes. The purpose of this variance request is to gain relief from the restriction of not disturbing the steep slope and buffer.

II. VICINITY MAP

A vicinity map is included in this report, as are a soil survey, nontidal wetland map, Critical Area map and Upland Natural Areas map. Attached to this report is a plan showing the existing and proposed conditions of the site.

III. NARRATIVE

A. EXISTING CONDITIONS

The woodland onsite is dominated by sweetgum and yellow poplar in the 12-20" size class, with some larger specimen trees. The specimen trees have been flagged in the field and their surveyed locations shown on the plan. The understory is sweetgum, holly, black cherry, spicebush, and dogwood. There are many vine species on the property, including poison ivy, trumpet creeper, English ivy, and Japanese honeysuckle, and most of the site has greenbriar and red raspberry on it. Due to the thickness of the shrub layer, the herbaceous layer is almost absent, with mayapples and Christmas fern being the dominant species found.

where?

There is a large swale/depression found onsite. Despite there being a culvert under Ogleton Road in this area, the area does not meet the criteria for a nontidal wetland. The list of vegetation found here is generally the same as on the rest of the site and is attached to this report. The species are mainly facultative to facultative-upland, with the exception of spicebush and jack-in-the-pulpit (facultative-wetland). The soils in this area were very dry and had no gleying, nor mottles, and the colors were 2.5Y 4/4 and 10YR 3/4 and 3/6. In order for a soil to be considered hydric, the matrix chroma (number after the slash) shold be 1 or 2 and the soil should be gleyed (gray) or have mottles.

In addition to the large swale/depression on the property, the is a smaller area near the road that appears to be only a roadside ditch that holds water periodically because of the steep topography around it. There are six elderberry stems and about as many jack-in-the-pulpits, so the vegetation is somewhat wetland in nature. However, there is an equal or greater amount of nonwetland vegetation also. The soils have become hydric because they do hold water after storm events.

There were no rare, threatened or endangered species found onsite, nor any critical habitats. No historic or archaeological features were seen. The soil type found onsite is Monmouth-Urban land complex, which is nonhydric and has a k-factor of 0.43. As stated, there are six specimen trees onsite which have been field located.

B. STORMWATER MANAGEMENT

The lot is unimproved at this time so there is no stormwater management. At the time of construction of the house and associated structures, stormwater management will be addressed to the extent required by the regulations.

C. IMPACT MINIMIZATION

The development of the site is proposed to impact less than 20% of the woodland onsite. The steep slopes and buffer will remain intact with the exception of construction of the driveway. Because the flat area of the site is essentially upslope from the front of the lot, impacts to the slope and buffer cannot be completely avoided and that is the purpose of this variance request. In addition to keeping disturbance to a minimum, the lot will have stormwater management subsequent to construction of the house, etc.

D. HABITAT PROTECTION AREAS

The Habitat Protection Areas onsite include steep slopes and the buffer. As previously stated, impacts to these areas will be kept to the minimum needed to construct the house and driveway. The proposed "future pool" will be outside the HPAs.

E. PROPOSED CONDITIONS

The proposed conditions of the site are the construction of the house and driveway, and possibly a pool in the future.

Total lot size	0.94 acres
Existing woodland	0.94 acres
Proposed clearing	0.22 acres
Existing impervious coverage	-0-
Proposed impervious coverage	0.09 acres

Because the lot is entirely wooded at this time, it is not

possible for reforestation to occur onsite, therefore, a request to pay a fee-in-lieu of reforestation will be submitted with the grading permit application.

IV. PLAN

A plan is attached which shows the existing conditions: steep slopes, buffer, treeline, topography, etc. Also shown are the proposed conditions, including the house and driveway location.

V. ADDITIONAL INFORMATION

A Notification of Project Application for the Critical Area Commission is included in this report.

The field work was done on 6/26/98.

APPENDIX 1

VEGETATION FOUND ONSITE

SWALE/DEPRESSION AREA

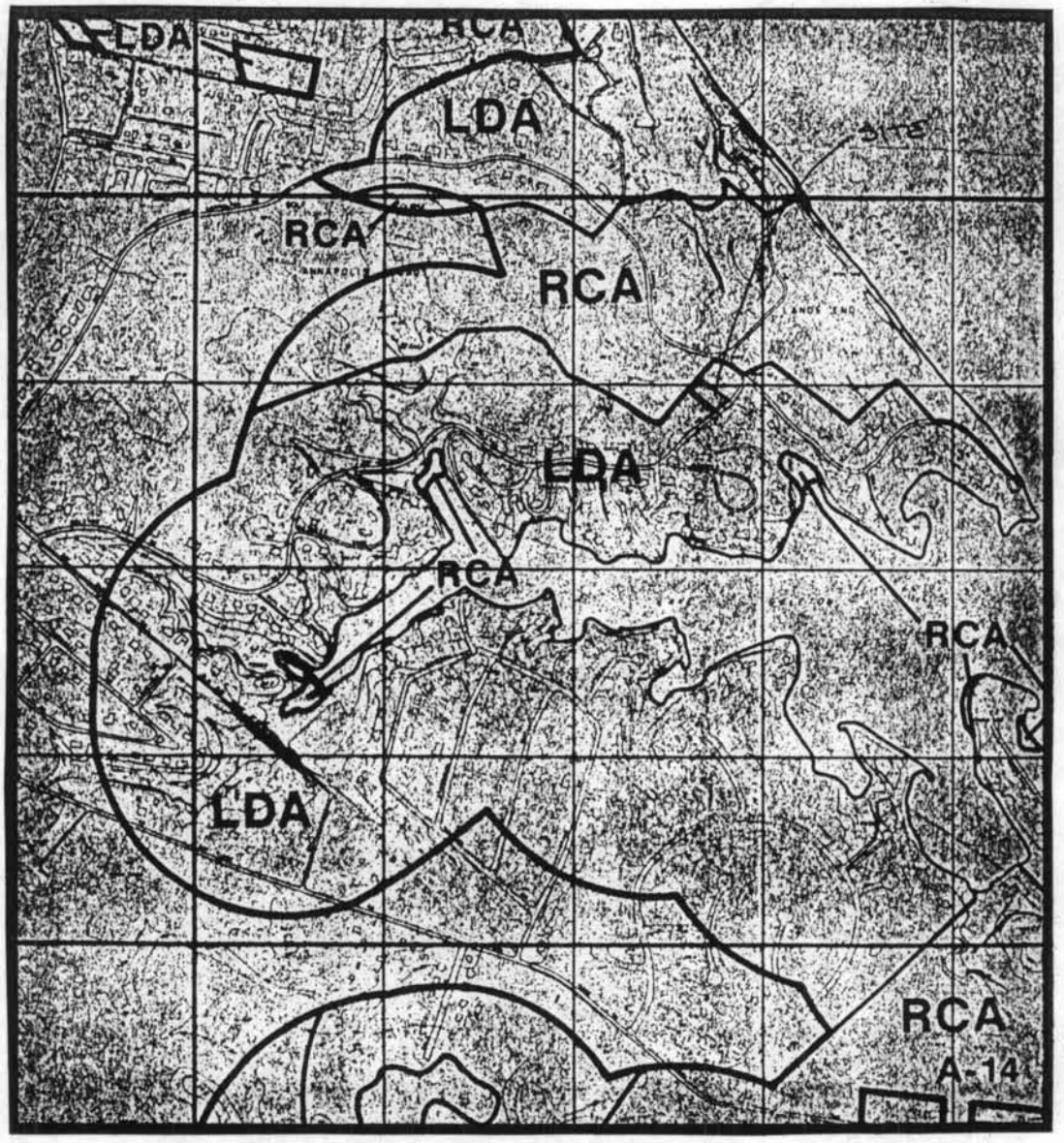
sycamore (1)	FACW-
sweetgum	FAC
spicebush	FACW-
trumpet creeper	FAC
Virginia creeper	FACU
mayapple	FACU
red raspberry	FAC-
poison ivy	FAC
common greenbriar	FAC
English ivy	(no listing)
Japanese honeysuckle	FAC-
jack-in-the-pulpit	FACW-

UPSLOPE AREA

sweetgum	fac
yellow poplar	facu
holly	facu-
black cherry	facu
flowering dogwood	facu-
poison ivy	fac
red raspberry	fac-
spicebush	facw-
jack-in-the-pulpit	facw-
English ivy	---

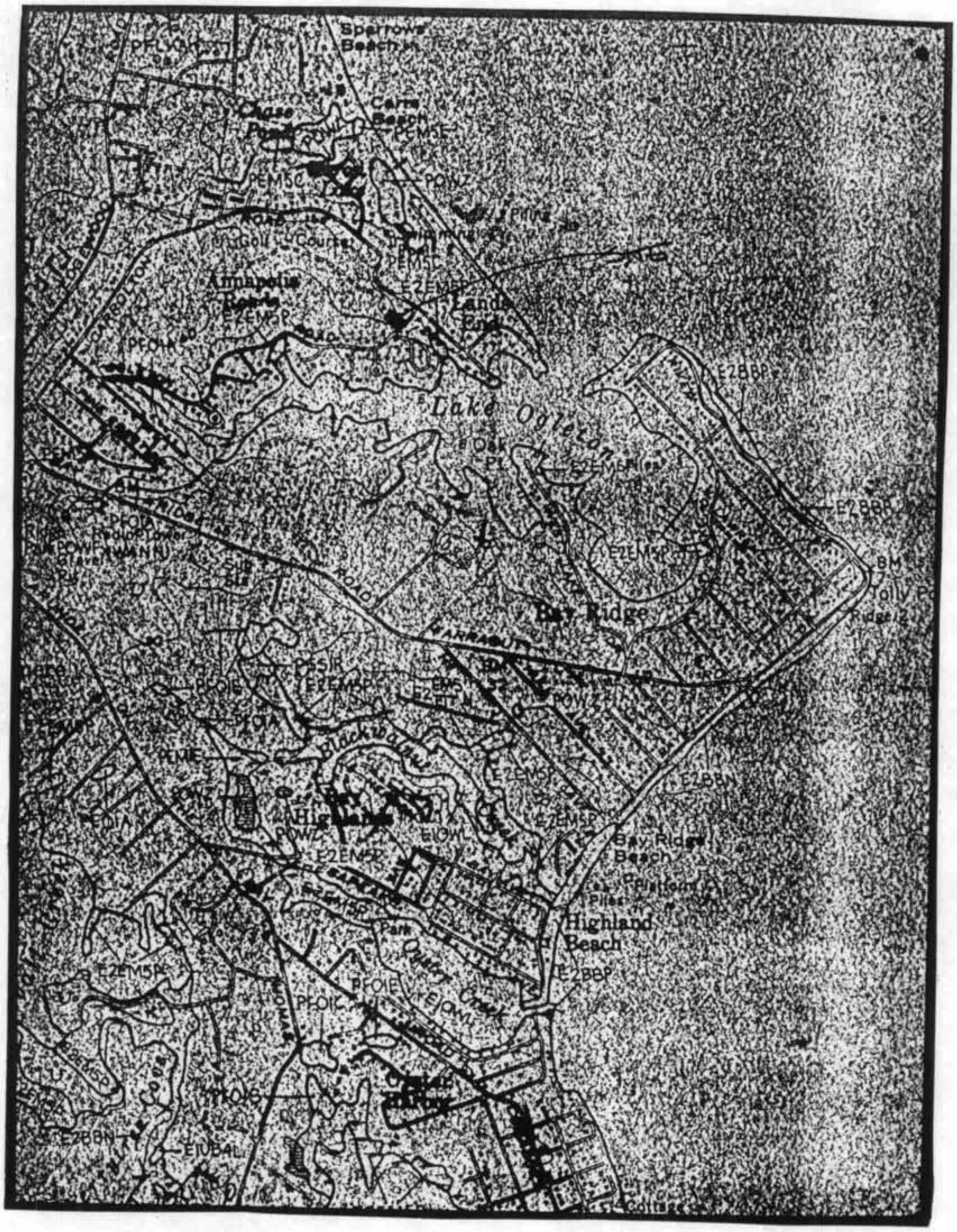
CRITICAL AREA MAP

1" = 1000'



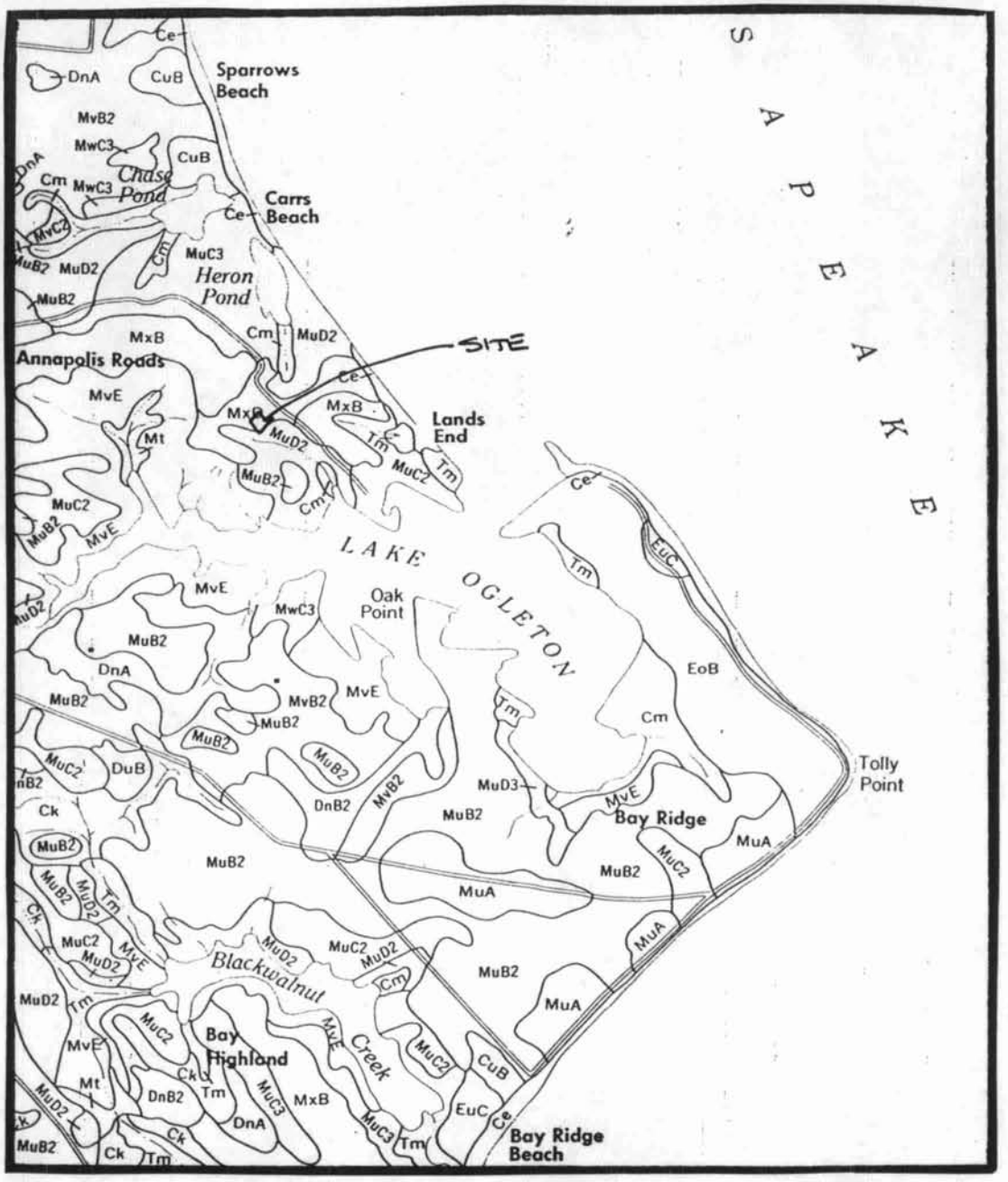
NONTIDAL WETLANDS MAP

1" = 2000'



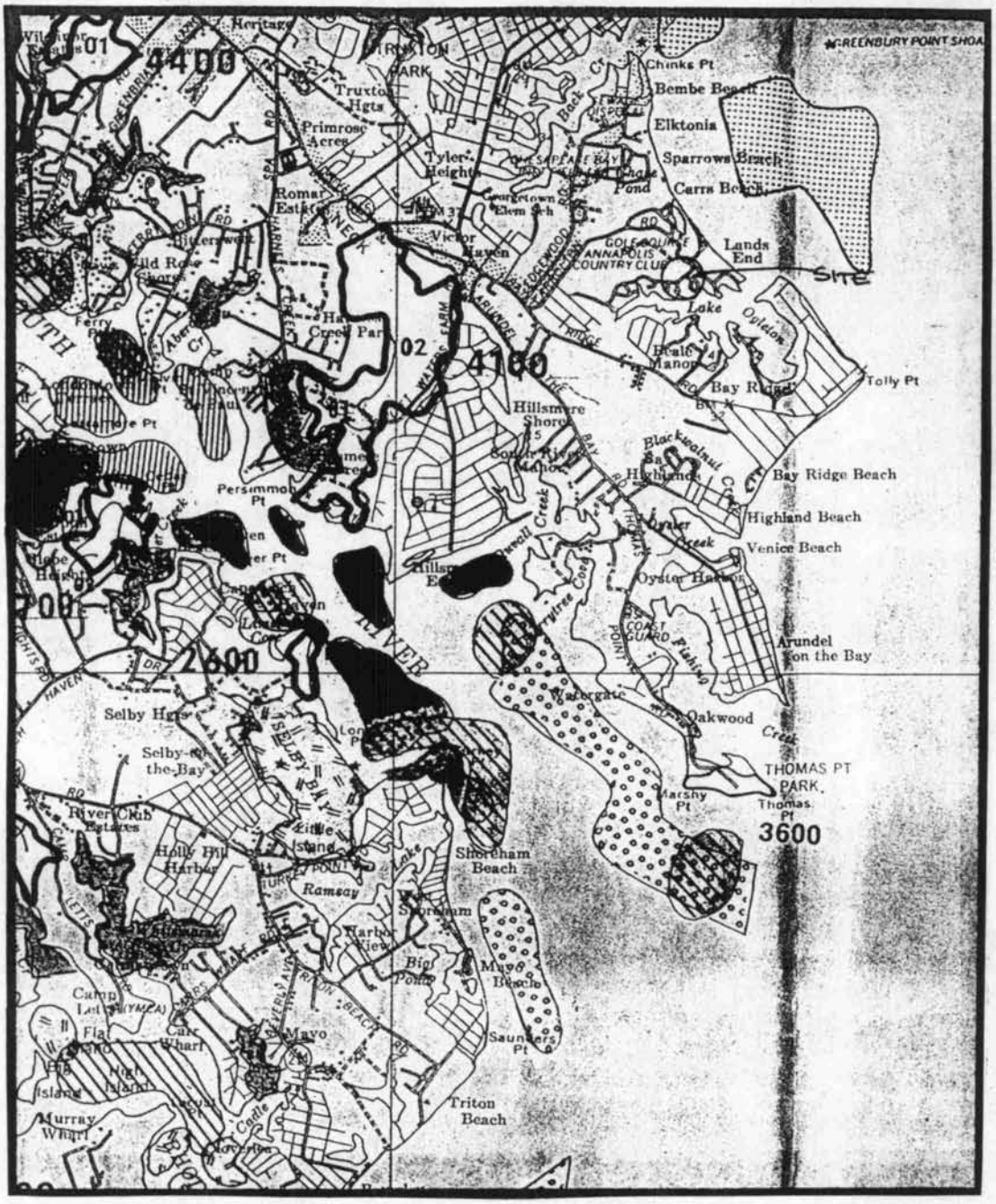
SOIL SURVEY

1" = 1666'



UPLAND NATURAL AREAS AND
AQUATIC SENSITIVE FEATURES MAP

1" = 1 MILE



CHESAPEAKE BAY CRITICAL AREA COMMISSION
45 CALVERT STREET, 2ND FLOOR
ANNAPOLIS, MD 21401

NOTIFICATION OF PROJECT APPLICATION

Jurisdiction: ANNE ARUNDEL Date: 7-1-98

Name of Project (site name, subdivision name, or other): GRAEFE PROPERTY

Local case number: _____

Project location/Address: LOT 184 OGLETON ROAD, ANNAPOLIS ROADS

Tax map# 57 Block# 3 Lot# _____ Parcel# 184

Type of application: (Select all applicable)

- ☐ SUBDIVISION
- ☐ SITE PLAN
- ☒ VARIANCE:
  Buffer X Slope X
  Imp.Surf.__ Other__
- ☐ SPECIAL EXCEPTION
- ☐ CONDITIONAL USE
- ☐ REZONING
- ☐ GRADING PERMIT
- ☐ BLDG PERMIT
- ☐ INTRAFAMILY
- ☐ GROWTH ALLOCATION
- ☐ OTHERS _____

Type of Project: (Select all applicable)

- ☒ RESIDENTIAL
- ☐ COMMERCIAL
- ☐ WATER DEPENDENT FACILITY/PIER/MARINA
- ☐ INDUSTRIAL
- ☐ MIXED USE
- ☐ REDEVELOPMENT
- ☐ SHORE EROSION PROTEC.
- ☐ AGRICULTURE
- ☐ OTHERS _____
  e.g. PUD

Current Use: (Select all applicable)

- ☐ COMMERCIAL
- ☐ RESIDENTIAL
- ☐ AGRICULTURE
- ☒ FOREST/BUFFER/WOODLAND
- ☐ INDUSTRIAL
- ☐ INSTITUTIONAL
- ☐ OPEN SPACE/RECRE.
- ☐ SURFACE MINING
- ☐ VACANT
- ☐ WATER DEPENDENT FACILITY/PIER/MARINA
- ☐ OTHERS _____

Describe Proposed use of project site: THE PURPOSE OF THIS VARIANCE REQUEST IS TO ALLOW CONSTRUCTION OF A SINGLE FAMILY HOUSE WITH MINIMAL DISTURBANCE TO THE STEEP SLOPE BUFFER.

SITE INVENTORY OF AREA ONLY IN THE CRITICAL AREA

TOTAL ACRES IN CRITICAL AREA: 0.94

IDA ACRES	_____	AREA DISTURBED:	0.22 Ac
LDA ACRES	0.94	# LOTS CREATED:	_____
RCA ACRES	_____	# DWELLING UNITS:	1
AGRICULTURAL LAND:	_____		

EXISTING FOREST/WOODLAND/TREES: 0.93 Ac FOREST/WOODLAND/TREES REMOVED: 0.22 Ac

FOREST/WOODLAND/TREES CREATED: 0.00

EXISTING IMPERVIOUS SURFACE: 0.00 PROPOSED IMPERVIOUS SURFACE: 0.09 Ac

TOTAL IMPERVIOUS SURFACE: 0.09 Ac

GROWTH ALLOCATION DEDUCTED: _____

RCA to LDA: _____ RCA to IDA: _____ LDA to IDA: _____

Local Jurisdiction Contact person: _____
Telephone number: _____
Response from Commission required by: _____ Hearing Date: _____

ANNE ARUNDEL SOIL CONSERVATION DISTRICT

DETAILS AND SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT

Following initial soil disturbances or redisturbance, permanent or temporary stabilization shall be completed within seven calendar days for the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and fourteen days for all other disturbed or graded areas on the project site.

1. Permanent Seeding:

   A. Soil Tests: Lime and fertilizer will be applied per soil tests results for sites greater than 5 acres. Soil tests will be done at completion of rough grading. Rates and analyses will be provided to the grading inspector as well as the contractor.

      1. Occurrence of acid sulfate soils (grayish black color) will require covering with a minimum of 12 inches of clean soil with six inches minimum capping of top soil. No stockpiling of material is allowed. If needed, soil tests should be done before and after a 6 week incubation period to allow oxidation of sulfates.

   B. Seedbed Preparation: Area to be seeded shall be loose and friable to a depth of at least 3 inches. The top layer shall be loosened by raking, disking or other acceptable means before seeding occurs. For sites less than 5 acres, apply 100 pounds of dolomitic limestone and 21 pounds of 10-20-20 fertilizer per 1,000 square feet. Harrow or disk lime and fertilizer into the soil to a depth of at least 3 inches on slopes flatter than 3:1.

   C. Seeding: Apply 5-6 pounds per 1,000 square feet of tall fescue between February 1 and April 30 or between August 15 and October 31. Apply seed uniformly on a moist firm seedbed with a cyclone seeded drill, cultipacker seeder or hydroseeder (slurry includes seeds and fertilizer, recommended on steep slopes only). Maximum seed depth should be 1/4 inch in clayey soils and 1/2 inch in sandy soils when using other than the hydroseeder method. Irrigate if soil moisture is deficient to support adequate growth until vegetation is firmly established. If other seed mixes are to be used, select from Table 25, entitled "Permanent Seeding For Low Maintenance Areas" from the 1994 Standards and Specifications for Soil Erosion and Sediment Control. Mixes suitable for this area are 1, 3 and 5-7. Mixes 5-7 are suitable in non-mowable situations.

   D. Mulching: Mulch shall be applied to all seeded areas immediately After seeding. During the time periods when seeding is not permitted, mulch shall be applied immediately after grading.

      Mulch shall be unrotted, unchopped, small grain straw applied at a rate of 2 tons per acre or 90 pounds per 1,000 square feet (2 bales). If a mulch anchoring tool is used, apply 2.5 tons per acre. Mulch materials shall be relatively free of all kinds of weeds and shall be completely free of prohibited noxious weeds. Spread mulch uniformly, mechanically or by hand, to a depth of 1-2 inches.

   E. Securing Straw Mulch: Straw mulch shall be secured immediately following mulch application to minimize movement by wind or water. The following methods are permitted:

      (i) Use a mulch anchoring tool which is designed to punch and anchor mulch into the soil surface to a minimum depth of 2 inches. This is the most effective method for securing mulch, however, it is limited to relatively flat areas where equipment can operate safely.

      (ii) Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. If mixed with water, use 50 pounds of wood cellulose fiber per 100 gallons of water.

      (iii) Liquid binders may be used and applied heavier at the edges where wind catches mulch, such as in valleys and on crests of slopes. The remainder of the area should appear uniform after binder application. Binders listed in the 1994 Standards and Specifications for Soil Erosion and Sediment Control or approved equal shall be applied at rates recommended by the manufacturers.

      (iv) Lightweight plastic netting may be used to secure mulch. The netting will be stapled to the ground according to manufacturers recommendations.

2. Temporary Seeding:

   Lime: 100 pounds of dolomitic limestone per 1,000 square feet.

   Fertilizer: 15 pounds of 10-10-10 per 1,000 square feet.

   Seed: Perennial rye - 0.92 pounds per 1,000 square feet (February 1 through April 30 or August 15 through November 1).

   Millet - 0.92 pounds per 1,000 square feet (May 1 through August 15).

   Mulch: Same as 1 D and E above.

3. No fills may be placed on frozen ground. All fill to be placed in approximately horizontal layers, each layer having a loose thickness of not more than 8 inches. All fill in roadways and parking areas is to be classified Type 2 as per Anne Arundel County Code - Article 21, Section 2-308, and compacted to 90% density; compaction to be determined by ASTM D-1557-66T (Modified Proctor). Any fill within the building area is to be compacted to a minimum of 95% as determined by methods previously mentioned. Fills for pond embankments shall be compacted as per MD-378 Construction Specifications. All other fills shall be compacted sufficiently so as to be stable and prevent erosion and slippage.

4. Permanent Sod:

   Installation of sod should follow permanent seeding dates. Permanent sod is to be tall fescue, state approved sod; lime and fertilizer per permanent seeding specifications and lightly irrigate soil prior to laying sod. Sod is to be laid on the contour with all ends tightly abutting. Joints are to be staggered between rows. Water and roll or tamp sod to insure positive root contact with the soil. All slopes steeper than 3:1, as shown, are to be permanently sodded or protected with an approved erosion control netting. Additional watering for establishment may be required. Sod is not to be applied on frozen ground. Sod shall not be harvested or transplanted when moisture content (dry or wet) and/or extreme temperature may adversely affect its survival. In the absence of adequate rainfall, irrigation should be performed to insure established sod.

5. Mining Operations:

   Sediment control plans for mining operations must include the following seeding dates and mixtures:

   For seeding dates of:

   February 1 through April 30 and August 15 through October 31, use seed mixture of tall fescue at the rate of 2 pounds per 1,000 square feet and serices lespedeza at the rate of 0.5 pounds per 1,000 square feet.

   For seeding dates of May 1 through August 14, use seed mixture of tall fescue at the rate of 2 pounds per 1,000 square feet and weeping lovegrass at the rate of 0.1 pound per 1,000 square feet.

   NOTE: Use of this information does not preclude meeting all of the requirements of the "1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control".

Standard Responsibility Notes

I (We) certify that:

1. a. All development and construction will be done in accordance with this sediment and erosion control plan, and further, authorize the right of entry for periodic on-site evaluation by the Anne Arundel Soil Conservation Board of Supervisors or their authorized agents.

   b. Any responsible personnel involved in the construction project will have a certificate of attendance from the Maryland Department of the Environment's approved training program for the control of sediment and erosion before beginning the project.

   Responsible personnel on site: _____

   _____

   c. The appropriate enclosure will be constructed and maintained on sediment basin(s) included in this plan. Such structure(s) will be in compliance with Article 21, Section 2-304 of the Anne Arundel County Code.

2. The developer is responsible for the acquisition of all easements, rights, and/or rights-of-way that may be required for the sediment and erosion control practices, stormwater management practices and the discharge of stormwater onto or across adjacent or downstream properties included in this plan. He is also responsible for the acquisition of all easements, rights and/or rights-of-way that may be required for grading and/or work on adjacent properties included on this plan.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within seven calendar days for the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and fourteen days for all other disturbed or graded areas on the project site.

4. The sediment control approvals on this plan extent only to areas and practices identified as proposed work.

5. The approval of this plan for sediment and erosion control does not relieve the developer/consultant from complying with any Federal/State/County requirements opertaining to environmental issues.

6. The developer must request that the Department of Inspections and Permits approve work completed in accordance with the approved erosion and sediment control plan, the grading or building permit, and the Ordinance.

7. On all sites with disturbed areas in excess of 2 acres, approval of the Department of Inspections and Permits shall be required on 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 the initial approval by the Department of Inspections and Permits is given.

8. Approval shall be requested on final stabilization of all sites with disturbed areas in excess of 2 acres before removal of controls.

Signature(s) of Developer/Owner _____ Date 10-19-98

Print: Name JAY SCHWARZ Title: DEVELOPER

Address _____

Telephone:(____) _____

Consultant's Certification

"The Developer's plan to control silt and erosion is adequate to contain the silt and erosion on the property covered by the plan. I certify that this plan of erosion and sediment control represents a practical and workable plan based on my personal knowledge of this site and was prepared in accordance with the requirements of the Anne Arundel Soil Conservation District Plan Submittal Guidelines and the current Maryland Standards and Specifications for Sediment and Erosion Control. I have reviewed this erosion and sediment control pain with the Owner/developer."

Signature _____ MD P.E. License # 19521 Date 10-15-98

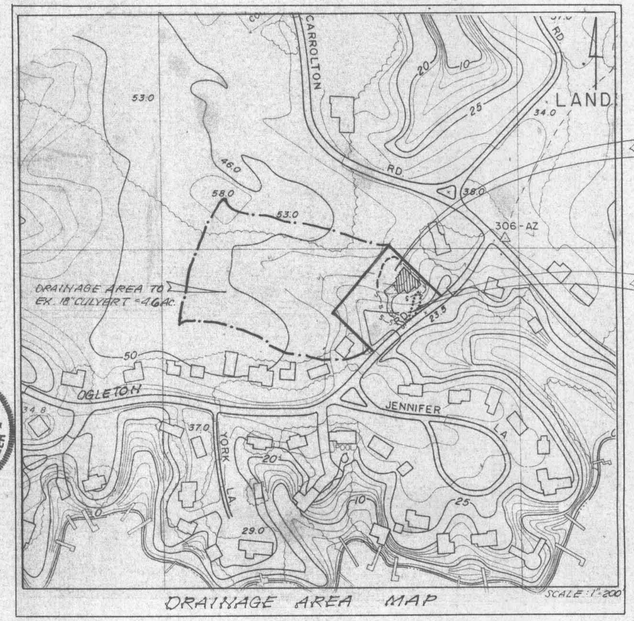
MD Land Surveyor License # _____ Date _____

Name (Print) MICHAEL M. DRUM, P.E. Firm Name Drum, Snell & Associates, LC

Address: 209 West Street, Suite 203

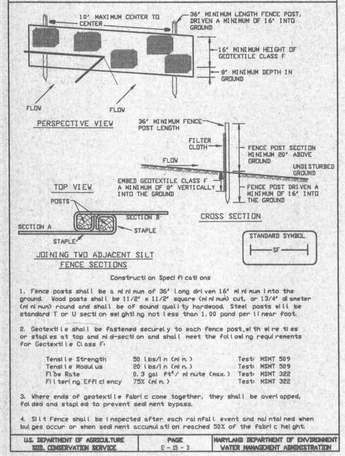
Annapolis, Maryland 21401

STATE OF MARYLAND · MICHAEL M. DRUM · 19521 · PROFESSIONAL ENGINEER



DRAINAGE AREA MAP SCALE: 1" = 200'

DETAIL 22 - SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond 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:

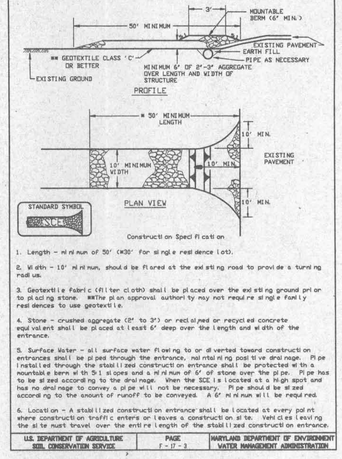
Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile Fabric come together, they shall be overlapped, folded and stapled to prevent seed bypass.

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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE E-15-3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specifications

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 recycled or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

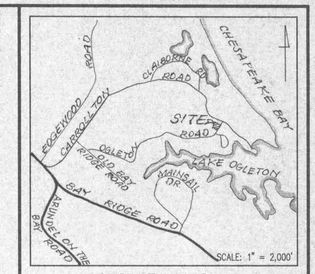
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE F-17-3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SITE TABULATIONS

SITE AREA	40,431 SF OR	0.93 AC
TOTAL DISTURBED AREA	9800 SF OR	0.22 AC
DISTURBED AREA TO BE VEGETATIVELY STABILIZED	5977 SF OR	0.14 AC
DISTURBED AREA TO BE STRUCTURALLY STABILIZED	3,823 SF OR	0.09 AC
PREDOMINANT SOIL TYPE	Monmouth Loamy Sand	
EARTHWORK		
CUT =	514 CY	
FILL =	395 CY	
EXPORT =	119 CY	
EXISTING FOREST ON SITE	40,431 SF	0.93 AC
TOTAL FOREST TO BE CLEARED	9800 SF ≈ 24.2%	0.22 AC
EXISTING IMPERVIOUS COVERAGE	0 SF	0.00 AC
PROPOSED IMPERVIOUS COVERAGE	3,823 SF	0.09 AC



VICINITY MAP

SEQUENCE OF CONSTRUCTION

1.	Obtain all necessary permits. Contractor to notify Anne Arundel County Department of Environmental Programs, (410) 222-7780, 48 hours prior to the start of construction.	1 day
2.	Install stabilized construction entrance, silt fence and obtain 1st Phase Sediment Control Inspection. No clearing or grading to be done except where necessary for the installation of Sediment Control Devices.	1 day
3.	Clear, grub, rough grade site.	1 week
4.	Begin House construction, install driveway and SWM Infiltration system. Sediment to be prevented from entering infiltration systems during construction (inflow pipes to be connected only after contributing areas are stabilized.) Stockpile area for temporary use only. All excess cut to be hauled offsite upon excavation.	6 months
5.	Drill well and install Grinder Pump and Sewer House Connection. (When installing utilities only disturb those areas which can be backfilled & stabilized in one working day.)	1 week
6.	Final grade and stabilize all disturbed areas.	1 week
7.	With Grading Inspector's approval remove all sediment control devices. Stabilize remaining disturbed areas with seed and mulch.	1 day
8.	Maintenance	On going

Grinder Pump Schedule

Lot No.	Unit type	Basement Elevation	Invert Elev. at Unit	Top Elev. of Grinder Pump	Depth of Grinder Pump
11	Simplex	32.5	18.5	23.5	5

General Notes (Grinder Pump)

1. All construction shall be in accordance with the Anne Arundel County "Standard Details and Specifications for Construction" (September 1988) and all revisions thereto.
2. The existing utilities and obstructions shown are from the best available records and shall be verified by the Contractor to his satisfaction prior to construction. Necessary precautions shall be taken by the Contractor to protect existing services and mains and any damage to them shall be repaired immediately at his own expense.
3. It shall be distinctly understood that failure to mention specifically any work which would normally be required to complete the project shall not relieve the Contractor of his responsibility to perform such work.
4. The Contractor shall notify Miss Utility (800) 257-7777 five (5) working days before starting work on these drawings.
5. The Contractor shall notify the Anne Arundel County Department of Public Works (410) 222-7347 five (5) working days before starting work shown on these drawings.
6. Sanitary sewer pipe elevations shown on these drawings refer to inverts unless otherwise noted.
7. Complete system must be tested prior to acceptance by the Department of Public Works. The general contractor and the applicable sub-contractor must guarantee their workmanship for one year after acceptance by the Department of Public Works.
8. Trench backfill must be compacted to at least 95 percent of the minimum dry density determined by AASHTO Method T-180.
9. Disturbance within Ogleton Road must be stabilized immediately using cold patch bituminous material. Permanent pavement patching in these areas with hot mix bituminous material must be completed within 14-30 days to match existing pavement section of road.
10. This plan does not contain the necessary components to satisfy the O.S.H.A. requirements for excavation/trenching safety. The Contractor is responsible for the safety aspects of this project.

Construction Sequence (Grinder Pump)

1. Contact the Inspection Division (222-7347) 48 hours prior to the start of work to arrange a pre-construction meeting.
2. Excavate for Grinder Pump to undisturbed earth. Install Grinder Pump per standard notes and details.
3. Excavate trenches for the 4" PVC inlet pipe and 1½" PVC discharge pipe. Install pipes, make connections and backfill per Department of Public Works standards.
4. Pressure test the Grinder Pump and piping after installation.
5. Conduct complete system test and obtain Department of Public Works approval.

CHESAPEAKE BAY CRITICAL AREA COMMISSION

JAN 14 1999

RECEIVED

Approved for Use in the Utility Agreement for the Sanitary Sewer System Shown Hereon:

By _____ Date _____

GENERAL NOTES

1. CONTRACTOR SHALL GIVE 48 HOURS NOTICE PRIOR TO START OF CONSTRUCTION TO ANNE ARUNDEL COUNTY DEPARTMENT OF ENVIRONMENTAL PROGRAMS, 410- 222-7780.
2. SEDIMENT CONTROL MEASURES MUST BE INSPECTED AND MAINTAINED REGULARLY TO INSURE THAT THE INTENDED PURPOSES ARE ACCOMPLISHED.
3. ALL DISTURBED AREA NOT INTENDED FOR PAVING SHALL BE SEEDED AS PER SPECIFICATIONS ON THIS SHEET.
4. ALL DOWNSPOUTS ARE TO BE CARRIED TO THE TOE OF FILL SLOPES. SPLASH BLOCKS ARE TO BE PROVIDED AT ALL DOWNSPOUTS NOT DISCHARGING ON A PAVED SURFACE.
5. REFER TO USDA-SOIL CONSERVATION SERVICE "1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
6. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENT CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE ANNE ARUNDEL SOIL CONSERVATION DISTRICT.
7. AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
8. ANY DISTURBED EARTH LEFT IDLE FOR PERIODS EXCEEDING 14 DAYS SHALL BE STABILIZED ACCORDING TO TEMPORARY STABILIZATION SPECIFICATIONS.
9. ANY CHANGE TO THE GRADING PROPOSED ON THE PLAN REQUIRES RESUBMISSION TO ANNE ARUNDEL COUNTY INSPECTIONS AND PERMITS - GRADING AND SEDIMENT CONTROL FOR APPROVAL.
10. DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO USDA-SOIL CONSERVATION SERVICE "1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," H-30-1 FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
11. ANY VARIATIONS FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE ANNE ARUNDEL SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
12. SLOPES WHERE SOD IS REQUIRED MAY BE TEMPORARILY STABILIZED WITH MULCHING IN ACCORDANCE WITH "1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," G-20-4 IF WEATHER CONDITIONS PROHIBIT PLACING OF SOD. PERMANENT SODDING TO BE ACCOMPLISHED AS WEATHER PERMITS.
13. ANY MATERIAL REMOVED FROM THE SITE SHALL BE TAKEN TO AN APPROVED ANNE ARUNDEL COUNTY DISPOSAL SITE.
14. CONTRACTOR TO PLACE CUT MATERIAL ON HIGH SIDE OF TRENCH WHEN CONNECTING SANITARY LINE.
15. CONTRACTOR SHALL CLEAR ONLY AREAS SHOWN ON THIS PLAN.
16. CONTRACTOR TO CONTACT MISS UTILITY 1-800-257-7777 FIVE WORKING DAYS PRIOR TO THE START OF WORK SHOWN ON THESE PLANS.
17. TOPOGRAPHICAL SURVEY BY STEVEN H. UHRITZ, REG SURVEYOR
18. WELL CONSTRUCTION TO BE IN ACCORDANCE WITH CURRENT ANNE ARUNDEL COUNTY STANDARDS & MARYLAND STATE STANDARDS. CONTRACTOR RESPONSIBLE FOR NECESSARY WELL PERMITS.

LEGEND

EXISTING CONTOUR 16
PROPOSED CONTOUR 16
SILT FENCE S S S S
LIMIT OF DISTURBANCE
ZONING - R-2
SETBACKS: FRONT- 30', SIDE: 7' MIN, 20' COMB REAR: 25'

Anne Arundel Soil Conservation District
Sediment and Erosion Control Approval

District Official _____ Date _____

AASCD # _____ Small Pond (s) # _____

Reviewed for technical adequacy by USDA, Natural Resource Conservation Service

VARIANCE PLAN

REVISIONS		
DATE	BY	DESCRIPTION

DESIGNED BY: MME & MMD DATE Sept '98
DRAWN BY: SHW DATE Sept '98
CHECKED BY: MMD DATE Sept '98
APPROVED BY: MMD DATE Sept '98

DRUM, SNELL & ASSOCIATES, LC
CIVIL ENGINEERS
209 WEST STREET, SUITE 203
ANNAPOLIS, MARYLAND 21401
410-280-3122

STATE OF MARYLAND · MICHAEL M. DRUM · 19521 · PROFESSIONAL ENGINEER

11/2/98

CONTRACTOR/DEVELOPER

MR. AND MRS. JOHN J SCHWARTZ
2607 OGELTON ROAD
ANNAPOLIS, MD 21403

GRADING AND SEDIMENT CONTROL PLAN
ANNAPOLIS ROADS, PARCEL 184
TAX ACCT. NO. 2-001-11963046
TAX MAP 57 GRID 3 PARCEL 184 DISTRICT 2ND
ANNE ARUNDEL COUNTY, MARYLAND

SCALE: 1" = 20'	DATE: Dec, 1998	FILE NO.	SHEET 1 OF 2

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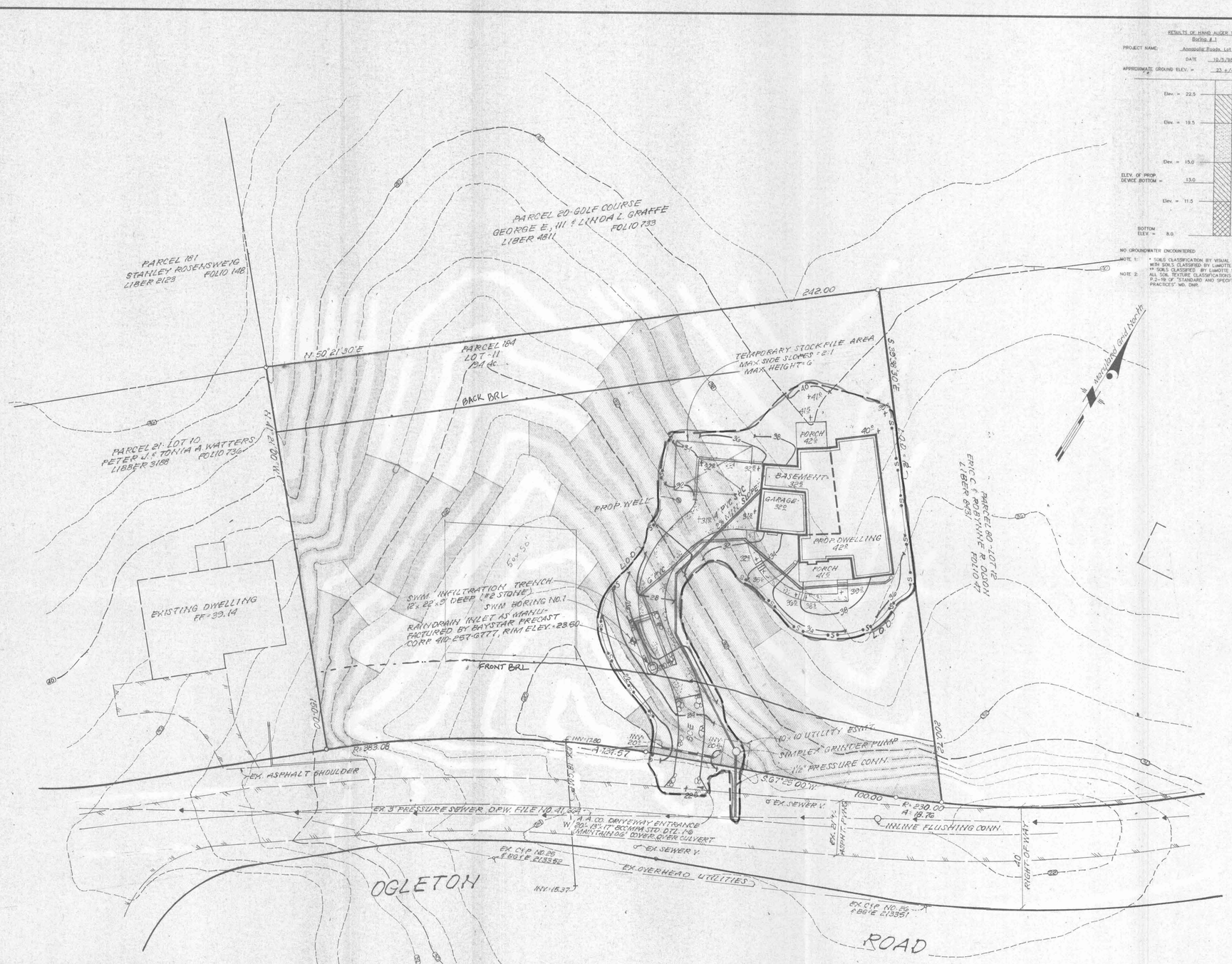


RESULTS OF HAND AUGER TEST
Boring # 1

PROJECT NAME: Annapolis Roads Lot 11
DATE 10/5/98
APPROXIMATE GROUND ELEV. = 23 +/-

Elev. = 22.5	0 - 0.5' Topsoil
	0.5' - 3.5' Silt Loam** (f = 0.27 in/hr)
Elev. = 19.5	
	3.5' - 8' Sand** (f = 8.27 in/hr)
Elev. = 15.0	
ELEV. OF PROP. DEVICE BOTTOM = 13.0	8' - 11.5' Sandy Loam** (f = 1.02 in/hr)
Elev. = 11.5	
	11.5' - 15.0' Sandy Clay Loam** (f = 0.17 in/hr)
BOTTOM ELEV. = 8.0	

NO GROUNDWATER ENCOUNTERED

NOTE 1: * SOILS CLASSIFICATION BY VISUAL & PHYSICAL COMPARISON WITH SOILS CLASSIFIED BY LaMOTTE SOIL TEXTURE ANALYSIS.
** SOILS CLASSIFIED BY LaMOTTE SOIL TEXTURE ANALYSIS.

NOTE 2: ALL SOIL TEXTURE CLASSIFICATIONS PER FIG. 3-13, P.3-29 AND P.2-19 OF "STANDARD AND SPECIFICATIONS FOR INFILTRATION PRACTICES", MD. DNR.

Drum, Snell & Associates, LC

Infiltration Trench Design Computations

Property Address: Annapolis Roads, Lot 11, Ogleton Road
Designer: M.W. Evans
Date: 10/9/98

Given: Existing Site 10-year Runoff Depth = 2.18 in (see attached RCN comp.)
Developed Site 10-year Runoff Depth = 2.44 in (see attached RCN comp.)
Difference in Runoff Depth = 0.26 in
Site Area = 40,431 sf

Required: Manage difference in runoff depth over site area. Use infiltration technique to capture runoff from contributing area.

Solution: Required volume of runoff to manage = (0.26/12)*(40,431 sf) = 876 cu ft

Use design procedure as outlined in Section 4.2 of "Maryland Standards and Specifications For Stormwater Management Infiltration Practices", Maryland Department of Natural Resources, Water Resources Administration, Feb. 1984.

From hand auger results, attached, use infiltration f = 1.02 in/hr

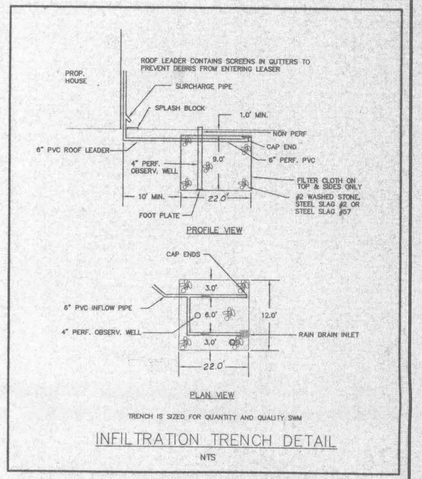
From Equation (4-15), dmax = (fTs/Vr), where

Material	f (in/hr)	Ts (hr)	Vr	dmax (ft)	Use d (ft)
Steel Slag #2 (Steel)	1.02	72	0.52	12	9
Steel Slag #57 (Foam)	1.02	72	0.453	14	9
#2 Stone	1.02	72	0.40	15	9

From Equation (4-20), At = (delta Qu)(Au) / (Vr*(d)-P+(f*T)) where

(delta Qu) = 0.26 inch
Au = 40,431 sf
d = 9 ft
P = 5.2 inch
f = 1.02 in/hr
T = 2 hr

Material	Vr	Width	Length	Provided (sf)	Required (sf)
Steel Slag #2 (Steel)	0.52	12	17	204.0	198.3
Steel Slag #57 (Foam)	0.453	12	26	240.0	229.7
#2 Stone	0.4	12	22	264.0	262.6



INFILTRATION TRENCH DETAIL
NTS

Worksheet 2: Runoff curve number and runoff

Project: Annapolis Roads, Lot 11
Location: Ogleton Road
By: M.W.Evans
Date: 9/24/98

Development condition: **Existing**

1. Runoff curve number (CN)

Soil Name and Hydrologic Group	Cover description	CN (Table 2-2)	Area (sf)	Product (CN * Area)
C	Woods (Good)	70	40,431	2,830,170.00
C	Open Space (Lawn, Good)	74	0	0.00
C	Impervious	98	0	0.00
	Total		40,431	2,830,170.00

CN (weighted) = (total product)/(total area) = (2,830,170)/(40,431) = 70.00

Use CN = 70

2. Runoff

S = (1000/CN) - 10 = (1000/70) - 10 = 4.29

		Storm # 1	Storm # 2	Storm # 3
Frequency	yr	2	10	
Rainfall, P (24-hour)	in	3.3	5.2	
Runoff, Q	in	0.89	2.18	

Development condition: **Developed**

1. Runoff curve number (CN)

Soil Name and Hydrologic Group	Cover description	CN (Table 2-2)	Area (sf)	Product (CN * Area)
C	Woods (Good)	70	30,686	2,148,020.00
C	Open Space (Lawn, Good)	74	5,922	438,228.00
C	Impervious	98	3,823	374,654.00
	Total		40,431	2,960,902.00

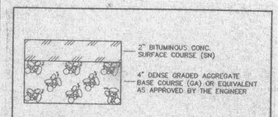
CN (weighted) = (total product)/(total area) = (2,960,902)/(40,431) = 73.23

Use CN = 73

2. Runoff

S = (1000/CN) - 10 = (1000/73) - 10 = 3.70

		Storm # 1	Storm # 2	Storm # 3
Frequency	yr	2	10	
Rainfall, P (24-hour)	in	3.3	5.2	
Runoff, Q	in	1.05	2.44	



DRIVEWAY PAVING SECTION
N.T.S.

80' front setback
25' back

VARIANCE PLAN

DESIGNED BY: MWE & MMD	DATE: Sept 98	
DRAWN BY: BAW	DATE: Sept 98	
CHECKED BY: MMD	DATE: Sept 98	
APPROVED BY: MMD	DATE: Sept 98	

REVISIONS

DATE	BY	DESCRIPTION

DRUM, SNELL & ASSOCIATES, LC
CIVIL ENGINEERS
209 WEST STREET, SUITE 203
ANNAPOLIS, MARYLAND 21401
410-280-3122

STATE OF MARYLAND · MICHAEL W. BRUM · 13521 · PROFESSIONAL ENGINEER

11/2/98

CONTRACTOR/DEVELOPER

MR. AND MRS. JOHN J. SCHWARTZ
2607 OGELTON ROAD
ANNAPOLIS, MD 21403

GRADING AND SEDIMENT CONTROL PLAN
ANNAPOLIS ROADS, PARCEL-184
TAX ACCT. NO. 2-001-11963046
TAX MAP 57 GRID 3 PARCEL 184 DISTRICT 2ND
ANNE ARUNDEL COUNTY

SCALE: 1" = 20'	DATE: Dec, 1998	FILE NO.	SHEET 2 OF 2