C 1 | 4184 (1 2 3 6) | SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED AFTER WELL IS COMPLETED.

COUNTY NUMBER: A 37534

ST/CO USE ONLY
DATE Received: MM 9 DD 3 YY 98 (8 13)

DATE WELL COMPLETED: MM 08 DD 28 YY 98 (15 20)

Depth of Well: 300 (TO NEAREST FOOT) (22 26)

PERMIT NO. FROM "PERMIT TO DRILL WELL": HO-94-1685 (28 29 30 31 32 33 34 35 36 37)

OWNER: Rosenberg (last name) Simon (first name)
STREET OR RFD: Shady Lane TOWN: Glenwood
SUBDIVISION: The Knolls SECTION: LOT: 8

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Top Soil	0	2	
Clay	2	7	
Sand Stone	7	25	
mica	25	28	
Sand Stone	28	34	
mica	34	65	
Sand Stone	65	66	✓
mica	66	90	
Sand Stone	90	91	
mica	91	170	
Sand Fibre	170	171	✓
mica	171	205	
Quartz	205	206	✓
Mica	206	300	

NUMBER OF UNSUCCESSFUL WELLS: —

WELL HYDROFRACTURED: yes [Y] no [N]

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MWD 040
George T. Easterday
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: MWD 501
Charles P. Fellers
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes [Y] no [N] (44)
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT [CM] BENTONITE CLAY [BC] (45 46)
NO. OF BAGS 11 NO. OF POUNDS 1100
GALLONS OF WATER 55
DEPTH OF GROUT SEAL (to nearest foot)
from 0 (48) TOP (52) ft. to 34 (54) BOTTOM (58) ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
[ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
ST (60 61)	6 (63 64)	38 (66 70)

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	depth (feet) to

SCREEN RECORD
screen type or open hole — insert appropriate code below
[ST] STEEL [BR] BRASS BRONZE [HO] OPEN HOLE [PL] PLASTIC [OT] OTHER

C 2 — DEPTH (nearest ft.)

EACH SCREEN			
1	40 (8 9)	36 (11 15)	300 (17 21)
2	(23 24)	(26 30)	(32 36)
3	(38 39)	(41 45)	(47 51)

SLOT SIZE 1 ____ 2 ____ 3 ____
DIAMETER OF SCREEN ____ (56 60) (NEAREST INCH)
from ____ to ____

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 ____ (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (70) (E.R.O.S.) (72) W Q (74 75 76)
TELESCOPE CASING | LOG INDICATOR | OTHER DATA

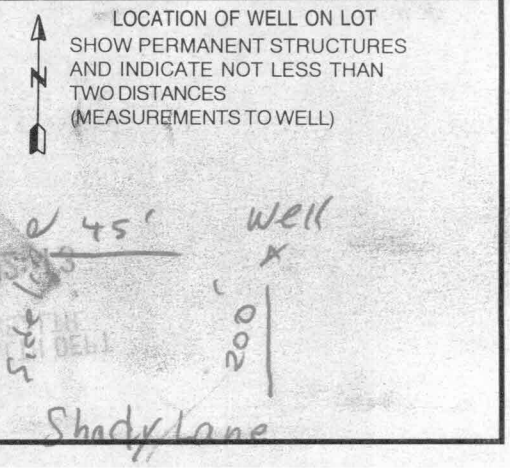
C 3

PUMPING TEST
HOURS PUMPED (nearest hour): 3 (8 9)
PUMPING RATE (gal. per min.): 8.4 (11 15)
METHOD USED TO MEASURE PUMPING RATE: Bucket
WATER LEVEL (distance from land surface)
BEFORE PUMPING: 33 (17 20) ft.
WHEN PUMPING: 161 (22 25) ft.

TYPE OF PUMP USED (for test)
[A] air (27) [P] piston (27) [T] turbine (27)
[C] centrifugal (27) [R] rotary (27) [O] other (describe below) (27)
[J] jet (27) [S] submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES NO
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)
CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)
PUMP HORSE POWER (37 41)
PUMP COLUMN LENGTH (nearest ft.) (43 47)
CASING HEIGHT (circle appropriate box and enter casing height)
[+] above (49) LAND SURFACE [—] below (49)
2 (nearest foot) (50 51)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURES AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



EMERGENCY/TEMP NO. IF ANY WS10381 7/23/98

B 1 2460 SEQUENCE NO. (MDE USE ONLY)
1 2 3 6
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND PERMIT TO DRILL WELL

please print or type

STATE PERMIT NUMBER
70 HO - 94 - 1685 79
fill in this form completely

Date Received (APA) 07/23/98
8 MM DD YY 13

OWNER INFORMATION RN 7513

Rosenberg Simon
15 Last Name Owner First Name 34
12116 Arbie Road
36 Street or RFD 55
Silver Spring, Md. 20904
57 Town 70 State 72 Zip 76

DRILLER INFORMATION

George F. Easterday M WD 040
Driller's Name 76 License No. 81
L. Franklin Easterday, Inc.
Firm Name
9265 Brown Church Rd., MT. Airy, Md. 21771
Address
George F. Easterday 7/21/1998
Signature Date

B 2 WELL INFORMATION
1 2
APPROX. PUMPING RATE (GAL. PER MIN.) 5
8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500
14 20

LOCATION OF WELL

B 3 Howard CC#
8 COUNTY 21
The Knolls
23 SUBDIVISION 42
SECTION 44 46 LOT 8 48 50
~~West Friendship~~ Glenwood
52 NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) 3 MI
73 76 77 78

B 4
1 2
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
N 8; NE 8–9; E 8; SE 8–9 (circled); S 8; SW 8–9; W 8; NW 8–9; TOWN

Shady Lane
11 NEAR WHAT ROAD 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH N; WEST W; 32; E EAST (circled); S SOUTH
34 200 37
DISTANCE FROM ROAD
ENTER FT OR MI Ft 38 39
TAX MAP: _____ BLK: _____ PARCEL _____

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- D (circled) HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION
- 22 I INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
- P PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE APPROVAL
- T TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

HOWARD A 37534
COUNTY NAME COUNTY NO.
STATE SIGNATURE _____ INSERT S → ___ 41
DATE ISSUED
08/18/98 [signature] 08/17/99
43 MM DD YY 48 CO SIGNATURE EXP. DATE
NORTH GRID 526 000 50 55
EAST GRID 0796 000 57 63

APPROXIMATE DEPTH OF WELL 300 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
30 AIR-ROTary (circled) AIR-PERcussion ROTARY (Hydraulic Rotary)
37 CABLE REVerse-ROTary DRive-POINT
other _____

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X →

8-28-98
Grout 10am
NO IDSP
Au

SOURCES OF DRILLING WATER
1.
2. wells
3.

WRITE THE BOX NUMBER FROM THE MAP HERE
E 790 6
N 520 6 ←
000
000

REPLACEMENT OR DEEPENED WELLS

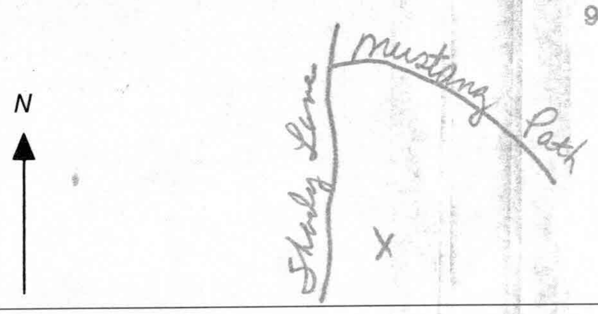
(CIRCLE APPROPRIATE BOX)

- N (circled) THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- 39 S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
- D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) 41 _____ 52

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

MAP 9 D8



Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER G A P
54 63
FORCE DS WRITE INITIALS IN BOX PERMIT No. HO-94-1685
67 68 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS
NOTE = APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED =

Page ____ of ____ Review ____

Date 8.31.98

Pump (3hr) 8:15

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 94-1685

Location of property (road) Shady lane

Subdivision The Knolls Lot 8 Block ____ Plat ____ Sec. ____

Well Driller G. Easterday Owner Rosenberg

Depth of well ____

Distance of measuring point (M.P.) above ground ____

Static water level (S.W.L.) below M.P. ____

I. High rate pumping -- reservoir drawdown

Time pump started ____ Pumping rate ____

Total time ____ to reach pumping water level ____ ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

TIME (in 15 minute intervals	WATER LEVEL below M.P.	PUMPING RATE time to fill 5 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
	8/31/98	mixed pump test location - OK specs - corrected (DKS)		

HD-224

Page ___ of ___ 8:15 8/31/98 Review OK LM 9/3/98

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 94-1685
Location of property (road) Shady Lane
Subdivision The Knolls Lot 8 Block ___ Plat ___ Sec. ___
Well Driller G. Easterday Owner Rosenberg

Depth of well 300 8gpm
Distance of measuring point (M.P.) above ground 2 foot
Static water level (S.W.L.) below M.P. 33 foot

I. High rate pumping -- reservoir drawdown

Time pump started 5:40 AM Pumping rate 15 gpm
Total time 20 min to reach pumping water level 137 foot ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes Pump Set + 280'

TIME (in 15 minute intervals	WATER LEVEL below M.P.	PUMPING RATE time to fill 5/1 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
6:00	137 foot	5 Seconds		12 gpm
6:15	146 foot	7 Seconds		8.4 gpm
6:30	146 foot	7 Seconds		8.4 gpm
6:45	149 foot	7 Seconds		8.4 gpm
7:00	150 foot	7 Seconds		8.4 gpm
7:15	152 foot	7 Seconds		8.4 gpm
7:30	154 foot	7 Seconds		8.4 gpm
7:45	155 foot	7 Seconds		8.4 gpm
8:00	157 foot	7 Seconds		8.4 gpm
8:15	160 foot	7 Seconds		8.4 gpm
8:30	160 foot	7 Seconds		8.4 gpm
8:45	161 foot	7 Seconds		8.4 gpm
9:00	161 foot	7 Seconds		8.4 gpm

HD-224 SONNY

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: VanSant Plbg & Htg Telephone #: 301-829-0444
Address: 3 N. Main St
Mt. Airy, MD 21771

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Hanford A. VanSant License# 14467
***A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.**

Name of Property Owner: Leroy Lewis Telephone #: 410-489-7494
Subdivision: The Knolls Lot #: 8 Well Tag # : HO 94-1685
Site Address: 3515 E Shady Lane
Glenwood, MD 21738

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
Make: Gould	Make: Campbell	Two piece watertight cap: ✓
Model #: 7GS10423	Model#: 910X	Screened, vented well cap: ✓
Pump Capacity _____ GPM	Depth: 5 (36" min)	Cap secured to casing: ✓
Well Yield: 8-9 GPM	NSF approved: Yes	Conduit min 18" B.G.: ✓
Depth of well encountered at time of pump installation: ____ (feet)		Conduit secured to well cap: ✓

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
~~Torque arrestor~~ or Cable guards are required – Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt NO

Piping to house	House Connection
Type: 200 PSI	PVC sleeved to undisturbed soil at wall penetration: Ok
PSI: ____ (160 psi min)	Approximate length of sleeve: 15 ft
Depth of supply line: 42 (36" min)	Sleeve caulked and sealed properly: Yes

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Hanford A VanSant 5.23.01
Signature of company representative responsible for installation date

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For Health Department Use Only – Not to be completed by Installer

Date Insp. Requested: 3/12/01 Date Insp. Approved: 3/12/01 (MR) SRM

Inspection Data:

Pitless adapter and water supply line at least 36" below grade	✓
Two piece cap installed and attached to casing securely	✓
Elec. conduit extends at least 18" below grade/attached to cap properly	✓
Safety rope installed inside of well casing	✓
Correct well tag attached properly and casing 8" above finished grade	✓
Water supply line sleeved adequately at house connection	✓
Adequate grout observed below pitless adapter	✓

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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER _____ DATE _____

DEVELOPER'S CERTIFICATE

"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 FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF DEVELOPER _____ DATE _____

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE _____ DATE _____

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:

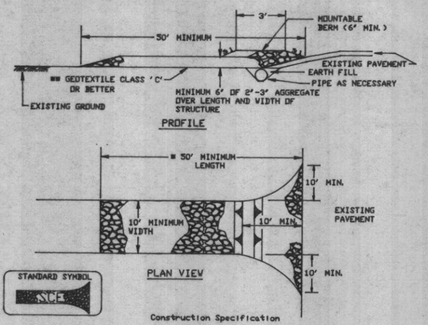
HOWARD SOIL CONSERVATION DISTRICT _____ DATE _____

SEDIMENT CONTROL NOTES

1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES 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 AS 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 THEIR 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. 51), SOD (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	6.00 ACRES
AREA DISTURBED	0.50 ACRES
AREA TO BE ROOFED OR PAVED	0.20 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.30 ACRES
TOTAL CUT	300 CU.YDS.
TOTAL FILL	300 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	— CU.YDS.

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 LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.



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 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.

STABILIZED CONSTRUCTION ENTRANCE - 2

NOT TO SCALE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

F.C.C.*

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. INSTALL SEDIMENT CONTROLS AS SHOWN ON PLAN. (1 day)
3. PERFORM NECESSARY GRADING AND STABILIZE THE SITE. (2 days)
4. CONSTRUCT DWELLING ON SITE. (90 days)
5. AFTER THE SITE IS STABILIZED AND PERMISSION IS GRANTED FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROLS AND STABILIZE ANY REMAINING DISTURBED AREAS.

TEMPORARY SEEDING NOTES:
APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION:
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING 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 PRERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 1 1/2 BUSHEL PER ANNUAL RYE (3.2 LBS./1,000 SQ.FT.)FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS/ACRE OF WEEPING LOVEGRASS (.07 LBS/1000SQ.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./1,000 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./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL./1,000 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:

SEEDBED PREPARATION:
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

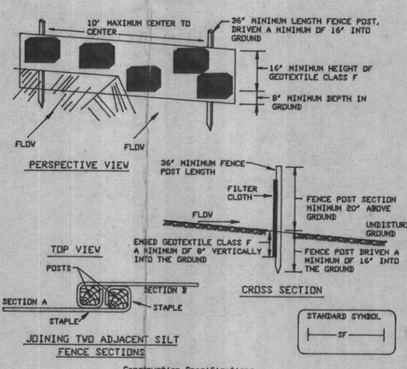
SOIL AMENDMENTS:
APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/ 1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC. INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 38-0-0 UREAFORM FERTILIZER (9 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./ 1,000 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./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS/ACRE (1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROJECT SITE BY: OPTION (1) - TWO 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 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES. ON SLOPES 8 FEET OR HIGHER USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR ANCHORING.

MAINTENANCE:
INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

* FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVETCH 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.



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 fasteed 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 sediment 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.

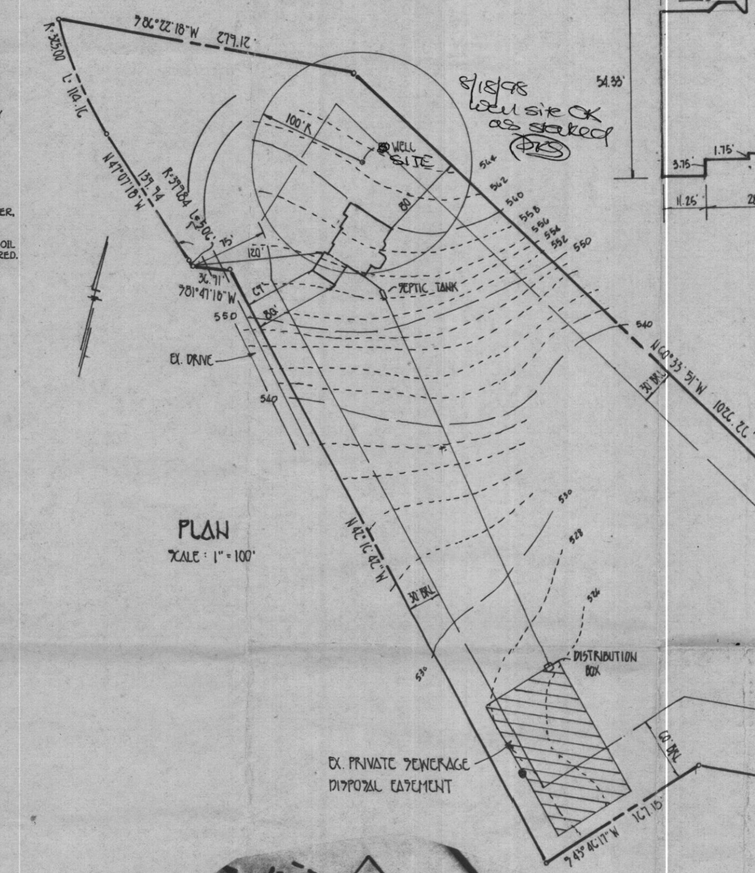
SILT FENCE

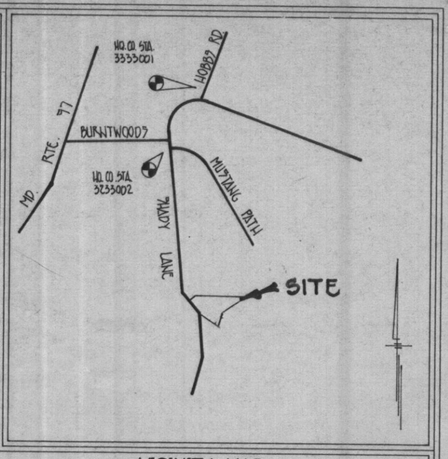
NOT TO SCALE

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, 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 SUBSOILS 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 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.



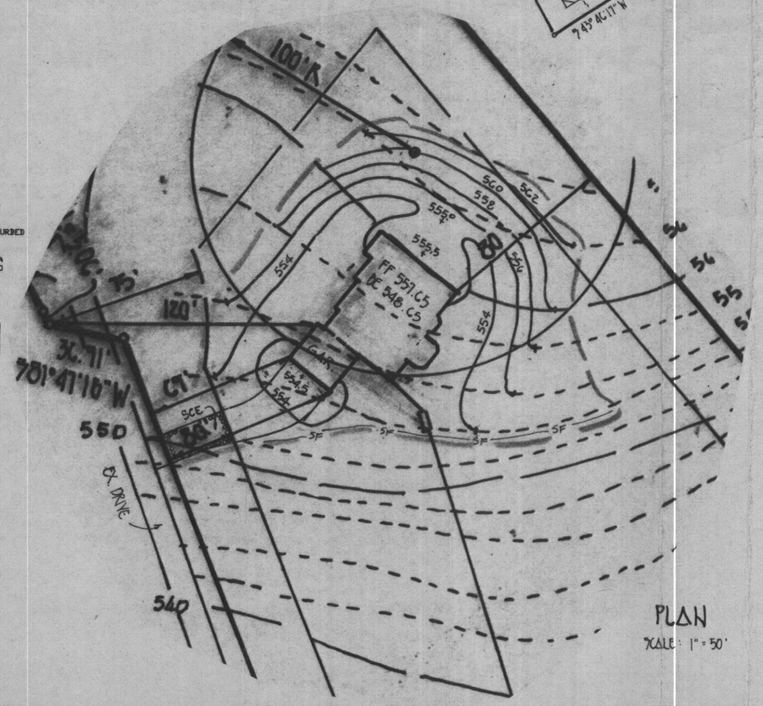


VICINITY MAP

SCALE: 1"=2000'

GENERAL NOTES

1. SEPTIC EASEMENT SUBJECT TO HOWARD COUNTY@HEALTH DEPARTMENT No.
2. PROPOSED 1500 GALLON SEPTIC TANK.
3. A. FIRST FLOOR ELEVATION: 557.65
   B. BASEMENT ELEVATION: 546.65
   C. INVERT OF SEPTIC SYSTEM AT HOUSE: 546.15
   D. INVERT IN AT SEPTIC TANK: 545.75
   E. INVERT OUT AT SEPTIC TANK: 545.35
   F. PROPOSED GRADE OVER SEPTIC TANK: 554.5
   G. INVERT AT DISTRIBUTION BOX: 523.5
   H. EXISTING GROUND OVER DISTRIBUTION BOX: 526.5
4. LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
5. CONTRACTOR / BUILDER TO VERIFY ELEVATIONS IN FIELD BEFORE BEGINNING ANY CONSTRUCTION.



RECEIVED
JUL 23 1998
HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH

PLAN TO ACCOMPANY APPLICATION
FOR ~~BUILDING~~ WELL PERMIT

THE KNOLLS

LOT 8

TAX MAP 21 — PLAT # 7756 — PARCEL 95
4TH ELECTION DIST — HOWARD COUNTY, MARYLAND
SCALE AS SHOWN — DATE: JULY 14, 1998