

C1 12138 SEQUENCE NO. (MDE USE ONLY)

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

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 13

ST/CO USE ONLY DATE Received MM DD YY 8 13

DATE WELL COMPLETED MM DD YY 5 8 02

Depth of Well 22 375 26 (TO NEAREST FOOT) PERMIT NO. FROM "PERMIT TO DRILL WELL" No. 94-3044

OWNER IKO last name FOX MEADOW LANE first name TOWN WEST FRIENDSHIP MD. SUBDIVISION FOX CREEK SECTION LOT 2

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 TO check if water bearing. BROWN SHAKE 0 16 BLUE SLATE 16 200 BLUE SLATE 200 375. THIS WELL WAS DEEPEIVED FROM 200' TO 375' AFTER IT WAS TEST PUMPED

GROUTING RECORD yes no WELLS HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (Circle one) CEMENT (CM) BENTONITE CLAY (BC) NO. OF BAGS 11 NO. OF POUNDS 1034 GALLONS OF WATER 60 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 25 ft.

CASING RECORD casing types insert appropriate code below. MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 26

OTHER CASING (if used) diameter inch depth (feet) from to

SCREEN RECORD screen type or open hole insert appropriate code below. ST BR HO PL OT

DEPTH (nearest ft.) 1 2 40 25 375. SLOT SIZE 1 2 3. DIAMETER OF SCREEN (NEAREST INCH) 56 60

NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED (Y) (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. 1 MWD 139 Robert Elme DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 MWD 536 Robert Elme

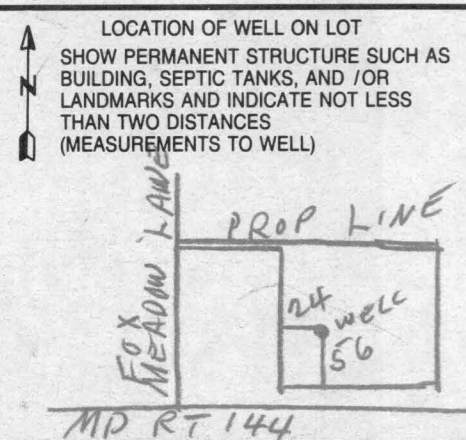
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

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

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

PUMPING TEST 1 HOURS PUMPED (nearest hour) 8 9 PUMPING RATE (gal. per min.) 3 11 15 METHOD USED TO MEASURE PUMPING RATE TIME WATER LEVEL (distance from land surface) BEFORE PUMPING 32 17 20 ft. WHEN PUMPING 375 22 25 ft. TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other J jet S submersible

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. 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 LAND SURFACE (-) below (nearest foot)



C1 0884

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLUMNS 3-6 ON ALL CARDS)

COUNTY NUMBER 13

DATE RECEIVED MM DD YY 8 13

DATE WELL COMPLETED MM DD YY 11 21 01

DEPTH OF WELL 22 200 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-94-3044

OWNER last name first name TOWN SUBDIVISION SECTION LOT

WELL LOG Not required for driven wells

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes handwritten entries: BROWN SHALE 0-16, BLUE SLATE 16-200.

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES NO

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

DRILLERS LIC. NO. MWD 139 Robert Cline

LIC. NO. MWD 536 Robert Cline Jr.

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (Cement, Bentonite Clay) NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL

CASING RECORD

MAIN CASING TYPE (ST, PL, CO, OT) Nominal diameter top (main) casing, Total depth of main casing

OTHER CASING (if used) diameter inch, depth (feet) from to

SCREEN RECORD

screen type or open hole (ST, BR, HO, PL, OT) DEPTH (nearest ft.)

DEPTH (nearest ft.) 1-25, 2-25, 3-200

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

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

TELESCOPE CASING LOG INDICATOR OTHER DATA

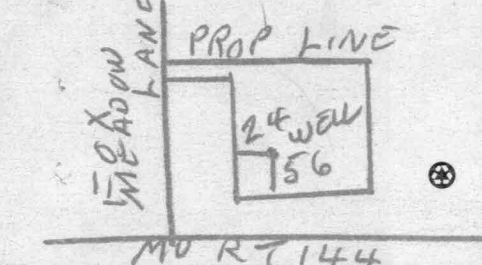
PUMPING TEST

HOURS PUMPED (nearest hour) 6/8.9 PUMPING RATE (gal. per min.) 2.15 METHOD USED TO MEASURE PUMPING RATE TIME WATER LEVEL (distance from land surface) BEFORE PUMPING 32/17-20 ft. WHEN PUMPING 97/22-25 ft. TYPE OF PUMP USED (for test) S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP YES NO (CIRCLE) 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. 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) 49 above LAND SURFACE below 1 (nearest foot)

LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



B-1 0620

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND PERMIT TO DRILL WELL please print or type

STATE PERMIT NUMBER

10-94-3044 fill in this form completely

Date Received (APA) 02/21/01

OWNER INFORMATION

IKO-Tennant Development Owner First Name 34
3403 Olandwood Ct., Suite 101 Street or RFD 55
Olney, MD 20832 Town 70 State 72 Zip 76

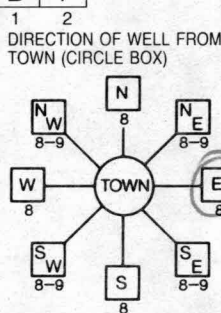
B 3 LOCATION OF WELL

Howard COUNTY 21
Fox Creek SUBDIVISION 42
SECTION 44 46 LOT 2 48 50
West Friendship NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) 1 M I 73 76 77 78

DRILLER INFORMATION

Robert L. Cline M W D 139 Driller's Name 76 License No. 81
Cline & Duvall, Inc. Firm Name
8093 Hillmark Ct., Frederick, MD 21704 Address
Robert L. Cline 2-20-01 Signature Date

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Fox Meadow Lane NEAR WHAT ROAD 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH 32 EAST WEST SOUTH
34 225 37 DISTANCE FROM ROAD ft. ENTER FT OR MI 38 39
TAX MAP: 15 BLK: PARCEL 18

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 300 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- [D] DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
[F] FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
[I] INDUSTRIAL, COMMERCIAL, DEWATERING
[P] PUBLIC WATER SUPPLY WELL
[T] TEST, OBSERVATION, MONITORING
[G] GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME 13 COUNTY NO.
STATE SIGNATURE INSERT S
DATE ISSUED 02/23/01 CO SIGNATURE EXP. DATE 03/22/02
NORTH GRID 535 000 EAST GRID 0817 000
50 55 57 63

APPROXIMATE DEPTH OF WELL 250 FEET 24 28

APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-PERcussion ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTary Drive-POINT
other

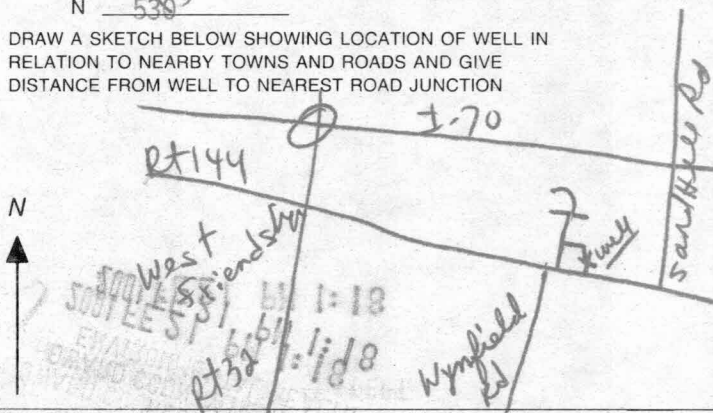
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

- SOURCES OF DRILLING WATER
1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 818 7
N 535

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



REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- [N] THIS WELL WILL NOT REPLACE AN EXISTING WELL
[Y] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
[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 DEEPEM AN EXISTING WELL

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

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

APPROP. PERMIT NUMBER 402001G00

PERMIT No. 10-94-3044

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 94-3044
 Location of property (road) Fox Meadow Lane
 Subdivision Fox Creek Lot 2 Block Plat Sec.
 Well Driller Clive & Duval Owner IKO

Depth of well 200
 Distance of measuring point (M.P.) above ground 1
 Static water level (S.W.L.) below M.P. 32

I. High rate pumping -- reservoir drawdown

Time pump started 8:30 Pumping rate 12
 Total time 30 MIN to reach pumping water level 95 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)
8:30	32	25 SECONDS		12
8:45	60	25 "		12
8:59	94	25 "		12
9:00	95	2 MIN 30 SEC		2
9:15	95	2 MIN 30 SEC		2
9:30	95	2 MIN 30 SEC		2
9:45	95	2 MIN 30 SEC		2
10:00	95	2 MIN 30 SEC		2
10:15	95	2 MIN 30 SEC		2
10:30	95	2 MIN 30 SEC		2
10:45	95	2 MIN 30 SEC		2
11:00	95	2 MIN 30 SEC		2
11:15	95	2 MIN 30 SEC		2
11:30	95	2 MIN 30 SEC		2
11:45	95	2 MIN 30 SEC		2
12:00	95	2 MIN 30 SEC		2
12:15	95	2 MIN 30 SEC		2
12:30	95	2 MIN 30 SEC		2
12:45	95	2 MIN 30 SEC		2
1:00	95	2 MIN 30 SEC		2
1:15	95	2 MIN 30 SEC		2
1:30	95	2 MIN 30 SEC		2
1:45	95	2 MIN 30 SEC		2
2:00	96	2 MIN 30 SEC		2

**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: Van Sant Plbg & Htg Telephone #: 301-829-0444
Address: 310 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): Larry Van Sant License# 109316

*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: NV Homes Telephone #: 410-319-5956
Subdivision: fox creek Lot #: 2 Well Tag #: HO 44-3044
Site Address: 12308 Fox Meadow Lane Ellicott City, MD 21042

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Goulds</u>	Make: <u>Campbell</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: <u>5G50422</u>	Model #: <u>150V</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity _____ GPM	Depth: <u>42</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/>
Well Yield: _____ GPM	NSF approved: <input type="checkbox"/>	Conduit min 18" B.G.: <input checked="" type="checkbox"/>
Depth of well encountered at time of pump installation: <u>300</u> (feet)		Conduit secured to well cap: <input checked="" type="checkbox"/>
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4		
Torque arrestors or Cable guards are required - Must circle one		
Safety rope, if used, attached to inside of well casing with eye bolt <u>NO</u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>PVC ethylene</u>	PVC sleeved to undisturbed soil at wall penetration: <u>15</u>
PSI: <u>200</u> (60psi min)	Approximate length of sleeve: <u>15</u>
Depth of supply line: <u>36</u> (36" min)	Sleeve caulked and sealed properly: <u>yes</u>

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.

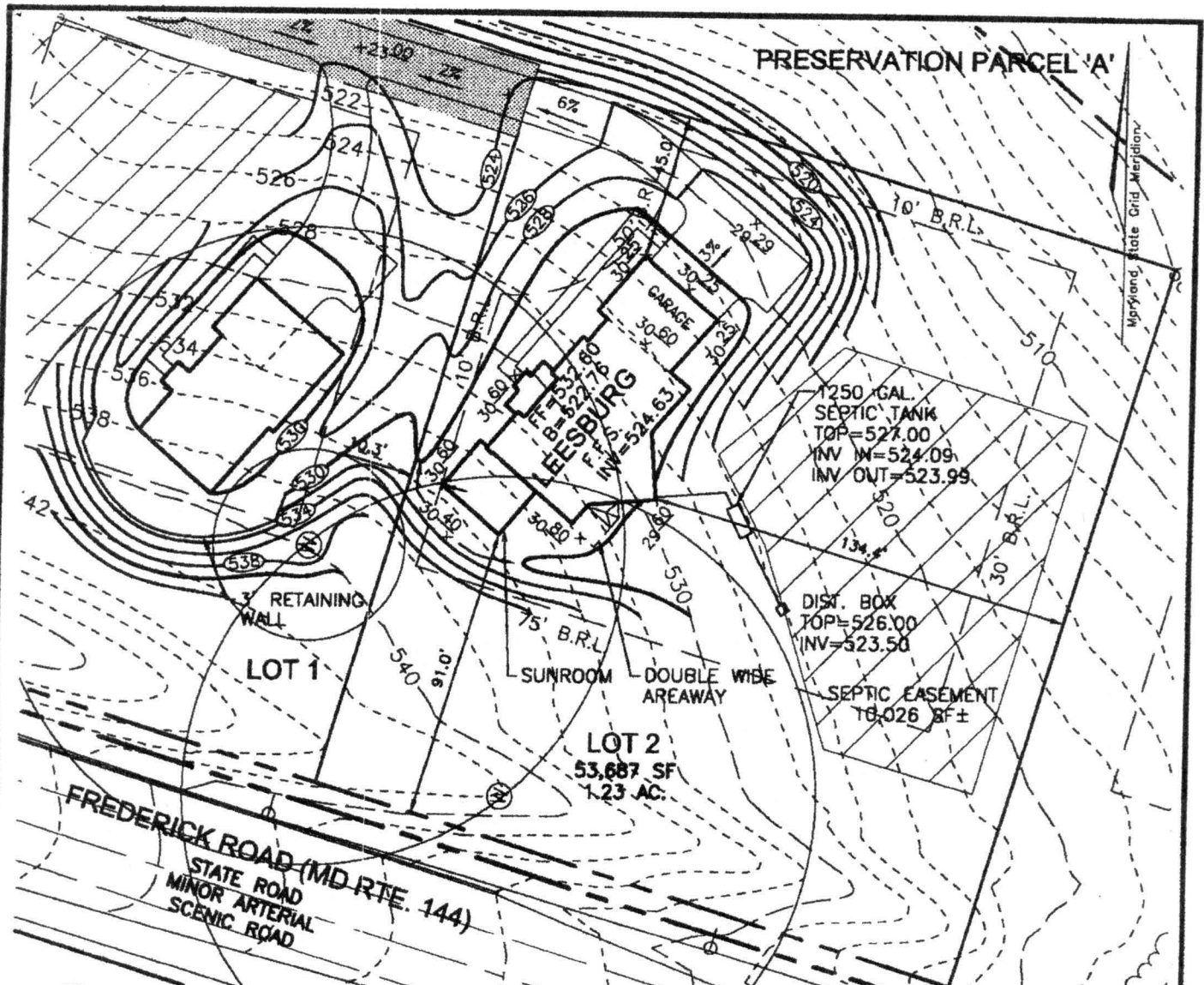
Signature of company representative responsible for installation: [Signature] date: 11.13.03

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

Date Insp. Requested: 10/16/03 12:30pm Date Insp. Approved: 11/4/03

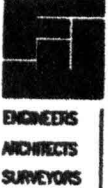
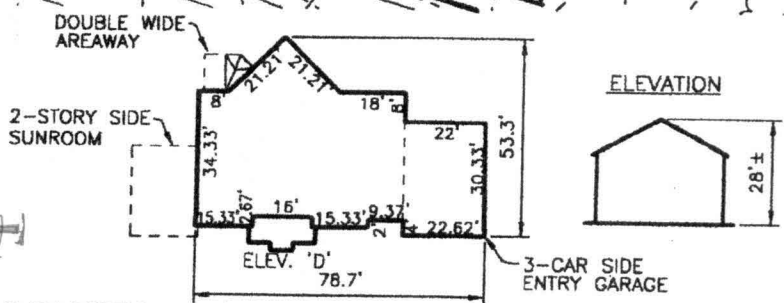
Inspection Data: Pitless adapter and water supply line at least 36" below grade (80)

Two piece cap installed and attached to casing securely	<input checked="" type="checkbox"/>
Elec. conduit extends at least 18" below grade/attached to cap properly	<input checked="" type="checkbox"/>
Safety rope installed inside of well casing	<input checked="" type="checkbox"/>
Correct well tag attached properly and casing 8" above finished grade	<input checked="" type="checkbox"/>
Water supply line sleeved adequately at house connection	<input checked="" type="checkbox"/>
Adequate grout observed below pitless adapter	<input checked="" type="checkbox"/>



FREDERICK ROAD (MD. RTE. 144)
 STATE ROAD
 MINOR ARTERIAL
 SCENIC ROAD

CEW 7/10/03 B00139278
 REVISED
 Date: 7-30-03
 Comments: Addition added



FREDERICK WARD ASSOCIATES, INC.

7125 Riverwood Drive Columbia, Maryland 21046-2354
 Phone: 410-290-9550 Fax: 410-720-6226
 Bel Air, Maryland Columbia, Maryland Warronton, Virginia

PLAN VIEW
LEESBURG
 ELEV. 'D'
 1"=50'

SCALE 1"=50'
 DRAWN BY CMH
 CHECKED BY JCO
 DATE JULY 2003
 W. O. # 2024059.0
 SHEET # 1 OF 1

NVHomes 8/3/03
FOX CREEK SUBDIVISION
LOT 2

TAX MAP 15 BLOCKS 12 & 18
 TAX MAP BLOCKS 7 & 13
 3RD ELECTION DISTRICT

PARCEL '183'
 HOWARD COUNTY, MARYLAND