

LAYOUT 5/6/02 11a.m. INSP 4 5/9/02 PM
 INSP 2 5/7/02 1:30 INSP 5 5/10/02 10:00
 INSP 3 5/8/02 2:00 INSP 6 _____

ISSUE DATE: 4/22/2002

APPROVAL DATE: 5/10/02

**PERMIT
INDEXED**

P- 516942

A 510571-N

337235

**ON-SITE SEWAGE DISPOSAL SYSTEM
 HOWARD COUNTY HEALTH DEPARTMENT
 BUREAU OF ENVIRONMENTAL HEALTH**

South Carroll Backhoe IS PERMITTED TO INSTALL ALTER

ADDRESS: 4410 Salem Bottom Road, 21157 PHONE NUMBER: 410-875-4197

SUBDIVISION: Brantwood 3/1 LOT NUMBER: 13

ADDRESS: 3040 Seneca Chief Trail PROPERTY OWNER: NVR, Inc.

SEPTIC TANK CAPACITY (GALLONS): 1250 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): N/A COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 4

SQUARE FEET PER BEDROOM: 180

LINEAR FEET OF TRENCH REQUIRED: 240

TRENCHES:	Trench to be 3.0 feet wide. Inlet 2.0 feet below original grade. Bottom maximum depth 4.0 feet below original grade. Effective area begins at 3.0 feet below original grade. 2.0 feet of stone below distribution pipe.
LOCATION:	Place the distribution box 185 feet from the front lot line and 10 feet from the right 392.24' lot line. Run trenches per plan if contour allows.
NOTES:	Basement service by gravity is proposed (KG)

PLANS APPROVED: Brian Baker / KG 2-08-02 DATE: 2/06/2002

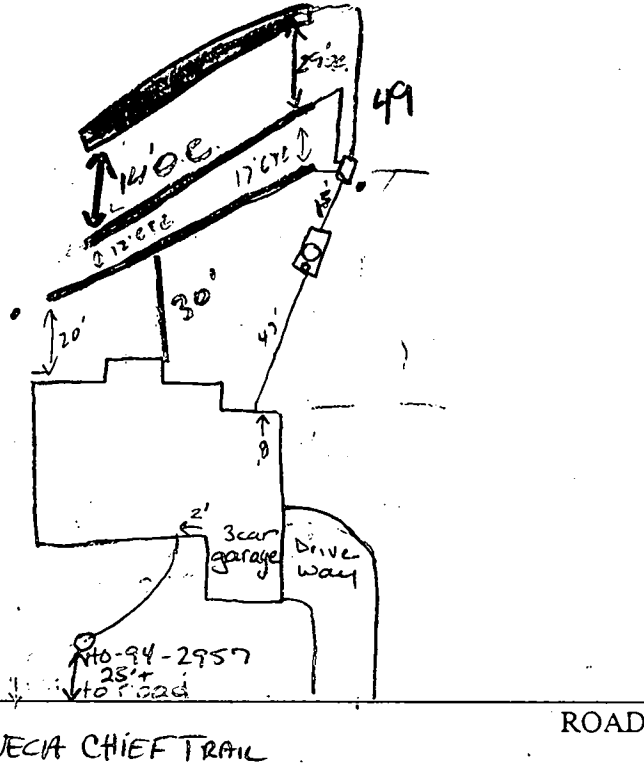
- NOTE: PERMIT VOID AFTER 2 YEARS
- NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS
 RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM
 PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT
 ALL 410-313-2640 FOR INSPECTION OF SEPTIC SYSTEM**

A510571-N

NOT TO SCALE

INDEXED



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3	2	4
NUMBER OF TRENCHES		3
TOTAL LENGTH		240
ABSORPTION AREA		720
DISTRIBUTION BOX LEVEL		<input checked="" type="checkbox"/>
DISTRIBUTION BOX BAFFLE		<input checked="" type="checkbox"/>
DISTRIBUTION BOX PORT		<input type="checkbox"/>

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	<input checked="" type="checkbox"/>
CAPACITY	1500 GAL
SEAM LOC	Top
TANK LID DEPTH	1.5'
BAFFLES	yes
BAFFLE FILTER	—
MANHOLE LOC	Crater
6" PORT LOC	Front
WATERTIGHT TEST	—
SEPTIC TANK 2 LEVEL	
CAPACITY	_____ GAL
SEAM LOC	_____
TANK LID DEPTH	_____
BAFFLES	N/A
BAFFLE FILTER	_____
MANHOLE LOC	_____
6" PORT LOC	_____
WATERTIGHT TEST	_____

PRE-CONSTRUCTION 5/6/02 Lot staked, Log per BP w/ (3) 80's (50)

INSTALLATION 5/7/02 Tank set, OK to cover (50) 5/8/02 First two trenches installed SD/JS 5/10/02 insp 3rd trench o.k. to backfill JS/MR

FINAL INSPECTOR John M

DATE OF APPROVAL 5/10/02

NOTES:

- Approved Sentic System Plan
Howard County Health Department
1. Existing Zoning: RC
 2. Property address: 5040 Seneca Chief Trail
 3. The Limit of Disturbance was approved under GPO2-34
 4. The proposed driveway for this lot shall be a minimum of 10' wide, 6" crusher run with 2-1/2" macadam surface.
 5. The topography shown assumes proposed contours from the FOI-67 plan are existing.
 6. Driveway Entrance per Howard County Volume IX Standard Detail R-6-04

Brian Baker 2/6/02
Signature Date

Total linear feet of trench required 240 feet

Width of trench(es) 3 feet

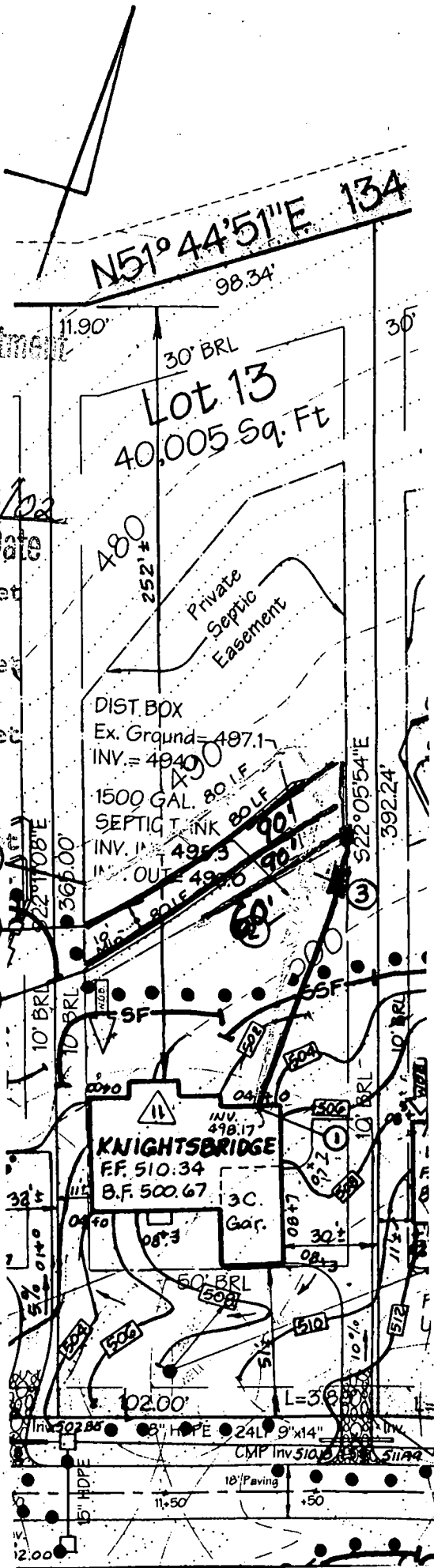
Depth of trench(es) 4 feet

SEPTIC SYSTEM DESIGN DATA
Depth of stone required below distribution pipe 2

- ① Invert at Foundation Wall: 498.17
 - ② 1500 Gallon Septic Tank (4 BR-Provide manhole to grade)
Existing Ground over Tank: 498.00
Proposed Grade over Tank: 498.00
Invert In: 495.3
Invert Out: 495.0
 - ③ Distribution Box: (4 Outlets Minimum)
Existing Ground Over Box: 497.1
Proposed Grade Over Box: 497.1
Invert In: 494.1
4. Trench Design:
(Per Health Department Sentic Specifications)
= 180 SF per Bedroom x 4 Bedrooms = 720 SF
= 720 SF ÷ 3 ft Trench Width
= 240 LF of Trench REQ.

	(A)	(B)	(C)
Ex. Ground over Trench:	496.00	494.00	492.00
Invert Trench:	493.00	491.00	489.00
Bottom Trench:	491.00	489.00	487.00
Length of Trench:	80 LF	80 LF	80 LF
Width of Trench:	3'	3'	3'

NOTE: Trench Design may be revised at time of installation based on site conditions.



SENECA CHIEF TRAIL
(Ex. 50' R/W)

LDE, Inc.

0250 Rumsey Road, Suite 100
Columbia, Maryland
(410)715-1070 - (301)598-3124 - Fax(410)715-9540

Title: REVISION Δ TO GPO2-34
BRANTWOOD SECTION 3 AREA 1
LOT 13

Date: 1/08/02	Drawn: LDE	
Scale: 1" = 50'	LDE Job No.: 01-043	Sheet: 1 OF 1

C1 8002 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER A510571N

DATE RECEIVED MM DD YY

DATE WELL COMPLETED 03-21-01

DEPTH OF WELL 300' (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-94-2957

OWNER BRANTWOOD LLC STREET OR RFD Seneca Chief Trail TOWN Elkton City SUBDIVISION BRANTWOOD SECTION LOT 13

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Brown silt soil, Braunish orange silt soil, etc.

GROUTING RECORD: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM), NO. OF BAGS 18, NO. OF POUNDS 1692

CASING RECORD: MAIN CASING TYPE PL, Nominal diameter 6", Total depth of main casing 63'

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

SCREEN RECORD: screen type or open hole (H.O.), insert appropriate code below

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (Y) (N)

CIRCLE APPROPRIATE LETTER: A, E, P

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04

DRILLERS LIC. NO. 1 MWD 355, DRILLER'S SIGNATURE

LIC. NO. 1 MWD 546, SITE SUPERVISOR (sign. of driller or journeyman)

DEPTH (nearest ft.) HO 63' 300', SLOT SIZE 1 2 3, DIAMETER OF SCREEN (NEAREST INCH) 56 60

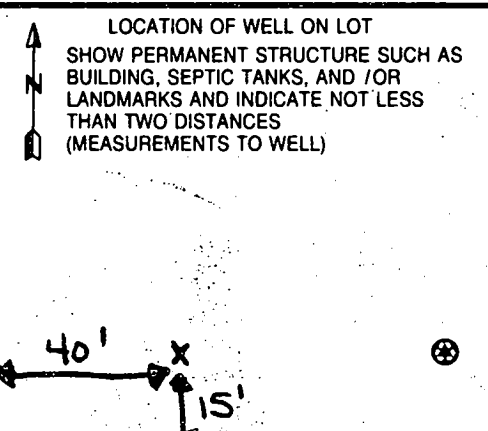
GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

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) 3, PUMPING RATE (gal. per min.) 4.6, METHOD USED TO MEASURE PUMPING RATE Watch & Bucket

PUMP INSTALLED: DRILLER INSTALLED PUMP YES (NO), 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

CASING HEIGHT (circle appropriate box and enter casing height) (+) above, LAND SURFACE (circle appropriate box and enter casing height) (-) below 2' (nearest foot)



410-730-0810

EMERGENCY/TEMP. NO. IF ANY

B 1 03019

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-94-2957

% Nick Liparini OWNER INFORMATION

Date Received (APA) 1/16/01 GRANT WOOD LLC 8835-P Columbia 100 Parkway Columbia MD 21045

LOCATION OF WELL Howard BRANT WOOD SECTION 3 LOT 13 Mayfield

DRILLER INFORMATION Michael Barlow M W 355 Michael Barlow Well Drilling 522 Underwood Lane Bel Air Md 21014

NEAREST TOWN MILES FROM TOWN 2 Seneca Chief Trail Butterfruit Way

WELL INFORMATION APPROX. PUMPING RATE 5 AVERAGE DAILY QUANTITY NEEDED 500

DIRECTION OF WELL FROM TOWN (CIRCLE BOX) ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) DISTANCE FROM ROAD 30

USE FOR WATER (CIRCLE APPROPRIATE BOX) DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard CO A510571N

APPROXIMATE DEPTH OF WELL 300 FEET

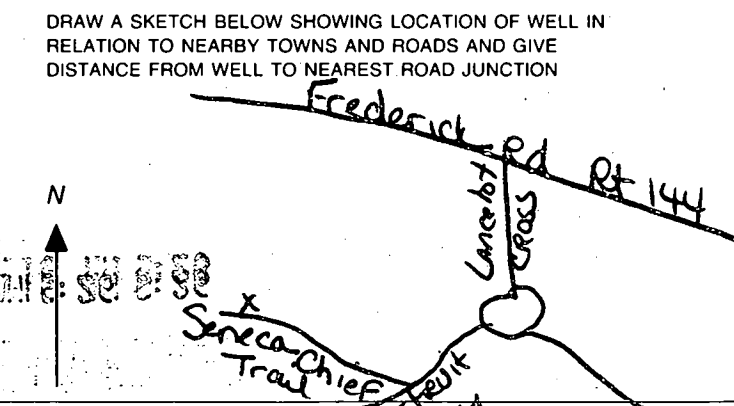
APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one) JETTED AIR-ROtary AIR-PERCUSSION

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) THIS WELL WILL NOT REPLACE AN EXISTING WELL

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROX. PERMIT NUMBER 4098 PERMIT No. HO-94-2957

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 3/20/01 GROUT 2' CASING A.G. 1' GROUT 18 BAGS OK, NOT OBS'D. 63' CASING OK, NOT OBS'D. 40' + OPEN LOC SEEMS OK MR 3/20/07



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

APPLICATION

PERCOLATION TESTING

A 510571 D

P _____

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

DISTRICT _____

DATE 7/17/98

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 George A. Garbutt

ADDRESS 11363 Frederick Rd., Ellicott City, MD 21042 PHONE _____

AGENT OR PROSPECTIVE BUYER Heritage Land Development

ADDRESS 3243 Bethany Lane, Ellicott City, MD 21042 PHONE 410-313-8808

PROPERTY LOCATION:

SUBDIVISION Brantwood II LOT NO. 24/25

ROAD AND DESCRIPTION 11363 Frederick Road, Ellicott City, MD 21042

TAX MAP 16 PARCEL # 172

SIZE OF LOT 1 acre TYPE BLDG. SFD
(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]
(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING Possible wet season testing needed

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

5:10571 D

COUNTY #

SOIL PROFILE

113

orange
clay lm
rock
fregs 10%

brown
silty
clay
loam
mica
flegs

114

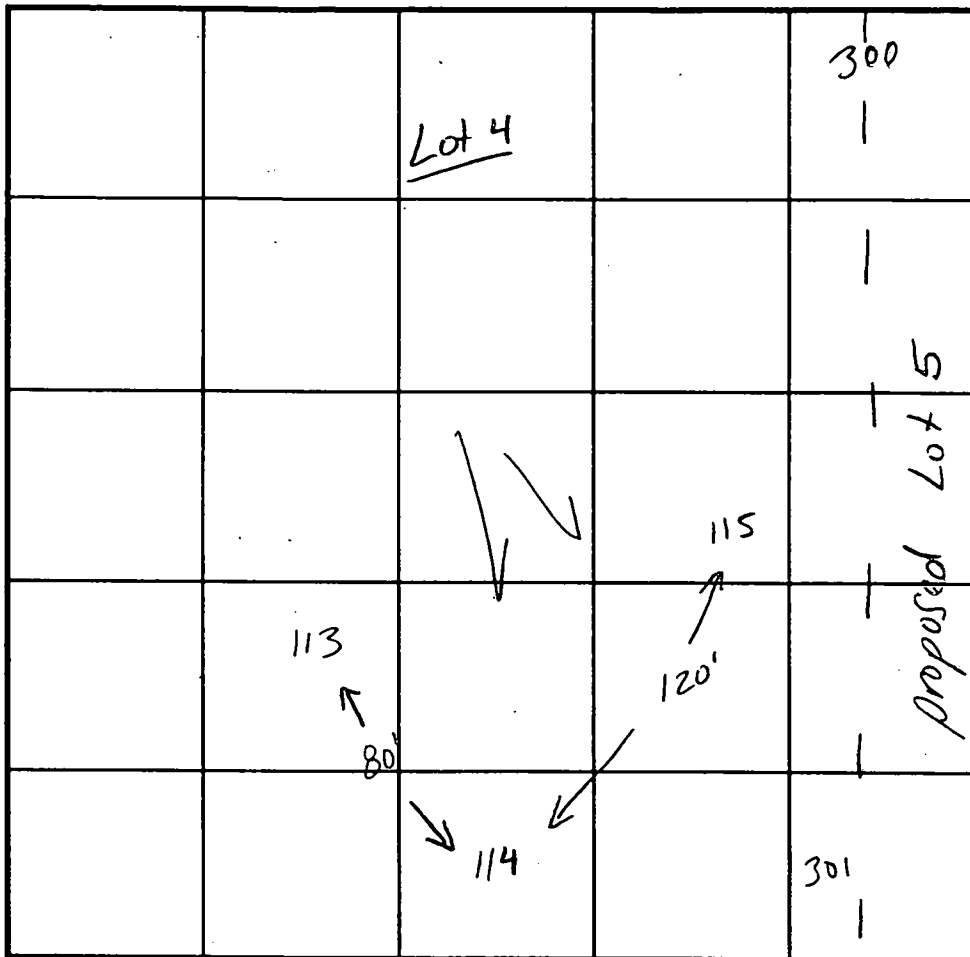
orange
clay lm

orange
brown
silty
clay lm
15% rx
fregs at
7.0'
damp/pale
grey dirt
at bottom
possible air

115

orange
brown
clay lm

brown/
tan
siltm
mica
flegs
10%
Saprolite



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE. Route 144

SOIL PROFILE

300

or/br
cl lm

tan/
beige
siltm
mica

10%
Shale

301

orange
cl lm

tan/
beige
siltm
mica
10% shale

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
8-19-98	113	3.5'S	10:24	10:26	10:26	10:29	330
		12.0'D	Visual	ok	see profile		
	114	3.5'S	10:25	10:27	10:27	10:30	3min
		12.0'D	Visual	ok	see profile		
	115	12.5'D	Visual	only	ok see profile		
	301	3.5'S	11:46	11:48	11:48	11:51	3
		13.0'D	Visual	ok	see profile		
	300	3.0'S	11:57	11:58	11:58	12:00	2
		12.0'D	Visual	ok	see profile		

REMARKS test holes staked by surveyor

TYPE OF SOIL

TESTED BY Kim Maiste

ALSO PRESENT Tim Feaga

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME 2-3 minutes TRENCH WIDTH 3'

INLET DEPTH 3' MAXIMUM BOTTOM DEPTH 5' SQ. FT./BEDROOM 180

510571 F

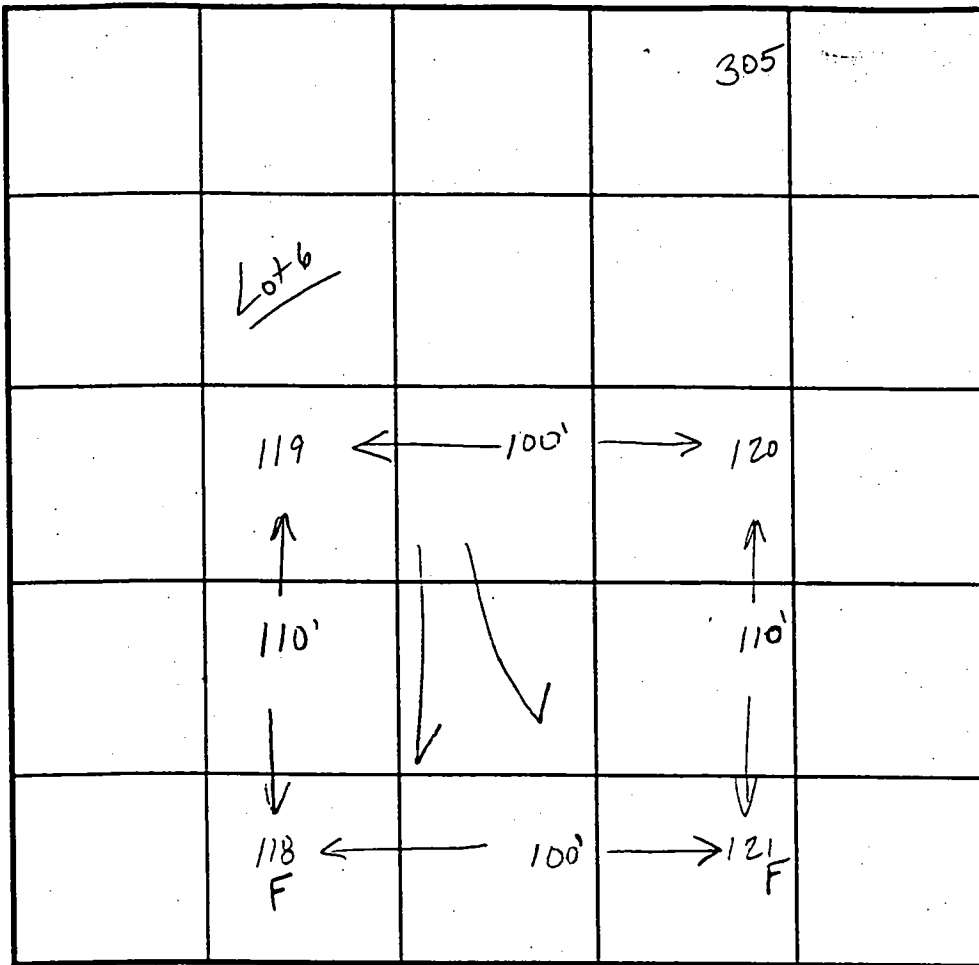
COUNTY #

SOIL PROFILE

0' 121
 orange
 brown
 clay
 loam
 mica
 flecs
 15% rx
 frags
 5'
 7' WATER

120
 brown/
 orange
 clay
 loam
 3'
 brown
 siltm
 quartz
 frags
 10%
 shale
 frags

118
 orange
 brown
 clay
 loam



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE. Rt 144

305

SOIL PROFILE

0' 119
 orange
 cl m
 2.5'
 brown
 siltm
 mica
 flecs
 15%
 shale
 frags
 12'

305
 or/bn
 cl m
 3'
 or/tan
 siltm
 mica
 10% rx
 9'

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
9-19-93	121	9.0'D	FAILED DUE TO WATER				F
	120	3.0'S	11:31 ₀	11:41 ₀	11:41 ₀	11:46 ₀	2min
		10.0'D	Visual ok - see profile				
	118	FAILED DUE TO WATER				F	
	119	2.5'S	10:55	10:55 ₅₀	10:55 ₅₀	10:57	1 10
		12.0'D	Visual ok - see profile				
	305	3.0'S	11:48 ₂₀	11:49 ₃₀	11:49 ₃₀	11:52 ₁₀	220
		9.0'D	Visual ok - see profile				

REMARKS test holes staked by surveyor

TYPE OF SOIL _____

TESTED BY Kim Maiste ALSO PRESENT Tim Feaga

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____

INLET DEPTH _____ MAXIMUM BOTTOM DEPTH _____ SQ. FT/BEDROOM _____