

LAYOUT 9/16/02 10:30 ^{↓ Later} INSP 4 _____
 INSP 2 9/9/02 10:30 INSP 5 _____
 INSP 3 9/11/02 9AMLS INSP 6 _____

house
constr.

ISSUE DATE: 8/29/2002

APPROVAL DATE: 9/11/02

**INDEXED
PERMIT
INDEXED**

P 517445

A 510571-p

RPS#
OB-337251

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

South Carroll Backhoe, Inc IS PERMITTED TO INSTALL ALTER

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

SUBDIVISION: Brantwood 3/1 LOT NUMBER: 15

ADDRESS: 3032 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 HOUSE SERVED BY PUBLIC WATER

TRENCHES:	Trench to be 3.0 feet wide. Inlet 3.0 feet below original grade. Bottom maximum depth 5.0 feet below original grade. Effective area begins at 3.0 feet below original grade. 2.0 feet of stone below distribution pipe.
LOCATION:	The distribution box is to be placed in the best location to effectively utilize SDA, to be determined during layout inspection.
NOTES:	

PLANS APPROVED: Steven R. Krieg OK 4/23/02 EG DATE: 3/20/2002

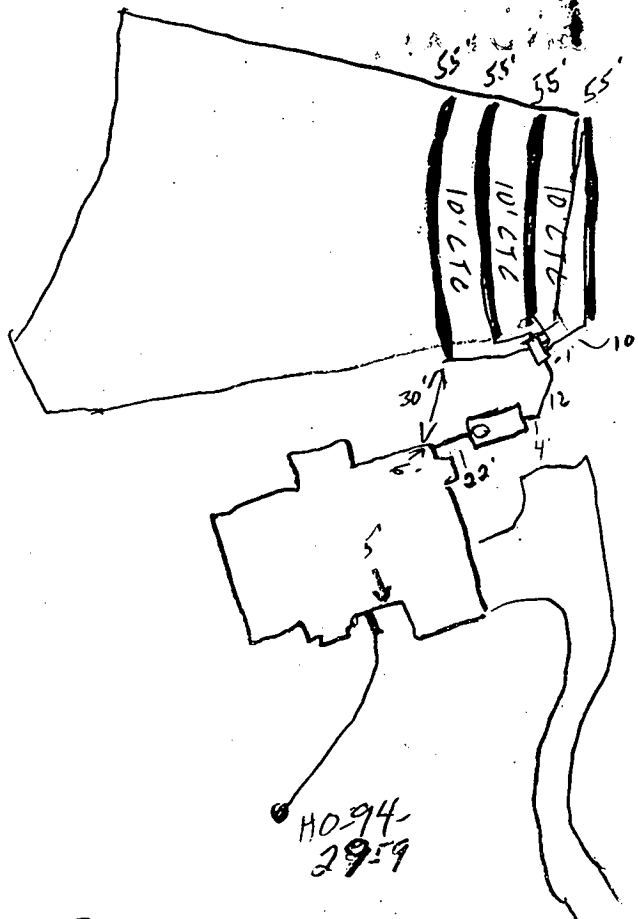
NOTES: PERMIT VOID AFTER 2 YEARS
 CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
 WATERTIGHT SEPTIC TANKS REQUIRED
 ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL UNLESS SPECIFICALLY AUTHORIZED
 MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED
 CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE REGULATIONS, GUIDELINES AND THE TERMS OF THIS PERMIT

**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
 BUILDING PERMIT SIGNED 301-313-2640 FOR INSPECTION OF SEPTIC SYSTEM**

AND RETURNED
 8/3/05 BOU 155334 DEEK

A510571-p

NOT TO SCALE



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3	3'	5'
NUMBER OF TRENCHES		4
TOTAL LENGTH		220'
ABSORPTION AREA		660 sq ft
DISTRIBUTION BOX LEVEL		✓
DISTRIBUTION BOX BAFFLE		—
DISTRIBUTION BOX PORT		—

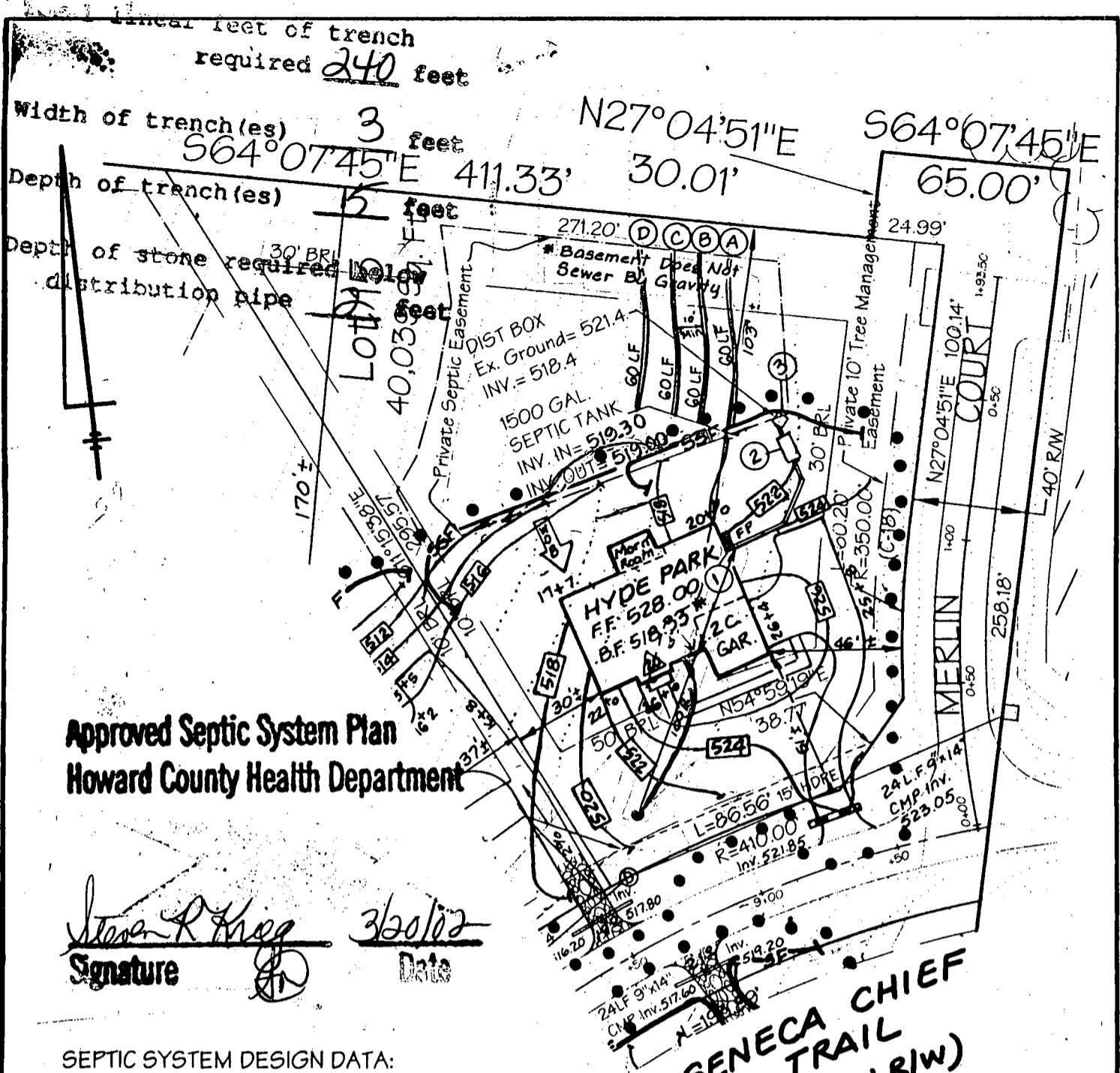
SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	✓
CAPACITY	1250 GAL
SEAM LOC	Top
TANK LID DEPTH	6"
BAFFLES	✓
BAFFLE FILTER	—
MANHOLE LOC	Front
6" PORT LOC	—
WATERTIGHT TEST	—
SEPTIC TANK 2 LEVEL	
CAPACITY	_____ GAL
SEAM LOC	_____
TANK LID DEPTH	N/A
BAFFLES	N/A
BAFFLE FILTER	_____
MANHOLE LOC	_____
6" PORT LOC	_____
WATERTIGHT TEST	_____

Spruce Chief Trail ROAD

PRE-CONSTRUCTION 9/6/02 House move toward SRA. Closest part of house is 14-15' from septic. Place 1st trench 10' above stakes. (4) 66' trenches.

INSTALLATION 10' CTC (SO) 9/6/02 Tank set 1st Two trenches installed (SO) 9/8/02 House, corr not made, OK to cover all other work (SO) 9/11/02 House corr made (SC)

FINAL INSPECTOR [Signature] DATE OF APPROVAL 9/11/02



**Approved Septic System Plan
Howard County Health Department**

Steve R. King
Signature 3/20/02
Date

SEPTIC SYSTEM DESIGN DATA:

- ① Invert at Foundation Wall: 520.30 (Wall Hung)
- ② 1500 Gallon Septic Tank (4 BR-Provide manhole to grade)
Existing Ground over Tank: 522.00
Proposed Grade over Tank: 522.00
Invert In: 519.30
Invert Out: 519.00
- ③ Distribution Box: (4 Outlets Minimum)
Existing Ground Over Box: 521.40
Proposed Grade Over Box: 521.40
Invert In: 518.40

4. Trench Design:
(Per Health Department Septic Specifications)
= 180 SF per Bedroom x 4 Bedrooms = 720 SF
= 720 SF ÷ 3 ft Trench Width
= 240 LF of Trench REQ.

	(A)	(B)	(C)	(D)
Ex. Ground over Trench:	520.00	519.00	518.00	517.00
Invert Trench:	517.00	516.00	515.00	514.00
Bottom Trench:	515.00	514.00	513.00	512.00
Length of Trench:	60 ft.	60 ft.	60 ft.	60 ft.
Width of Trench:	3 ft.	3 ft.	3 ft.	3 ft.

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

NOTES:

- 1. Existing Zoning: RC
- 2. Property address: 3032 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 6.06.

LDE, Inc.
0250 Rumsey Road, Suite 100
Columbia, Maryland
(410)715-1070 - (301)598-3424 - Fax (410)715-9540

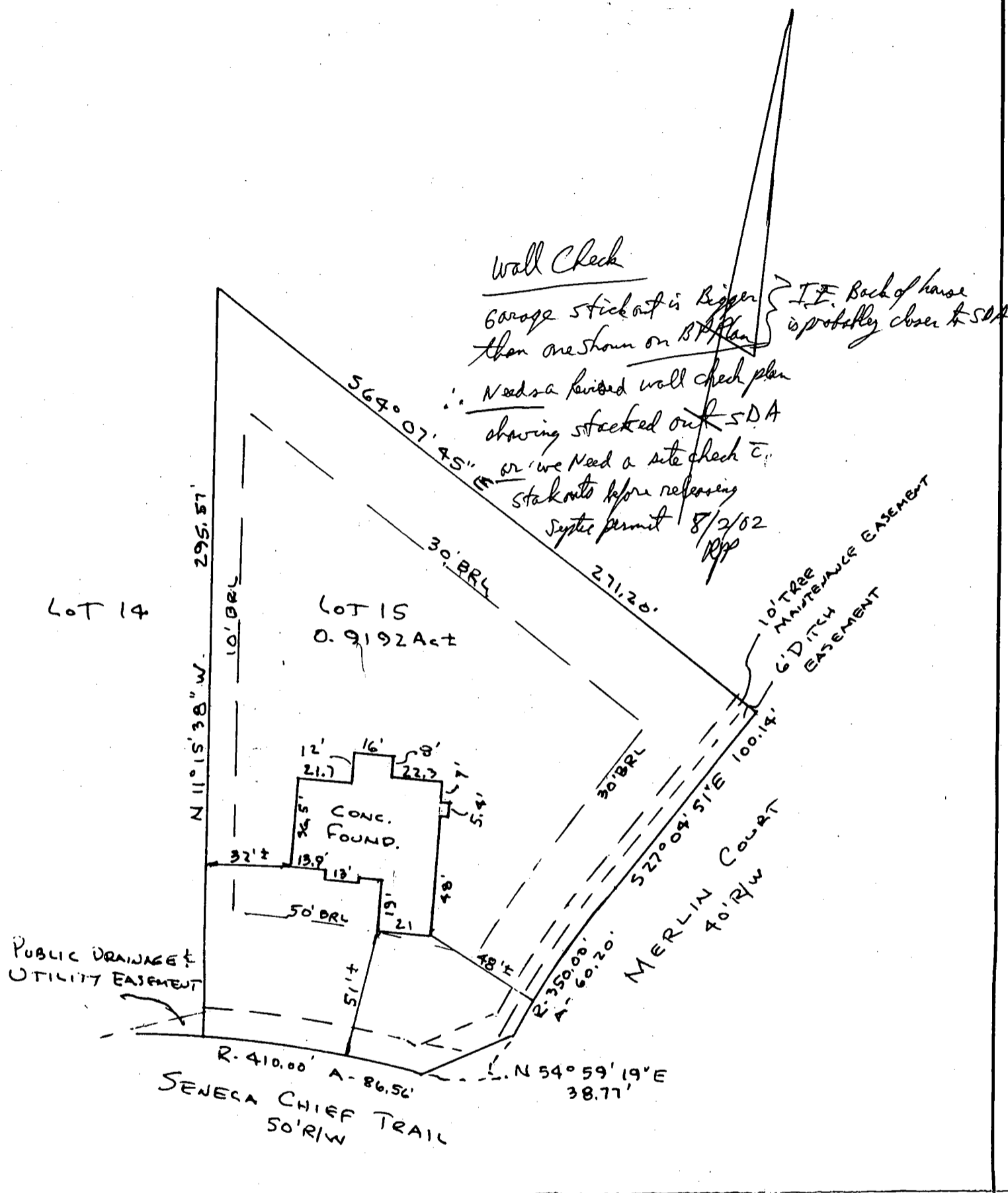
Title: **REVISION A TO GP 02-34
BRANTWOOD SECTION 3 AREA 1
LOT 15**

Date: 3/12/02	Drawn: LDE	
Scale: 1" = 50'	LDE Job No.: 01-043	Sheet: 1 OF 1

PROPERTY KNOWN AS: LOT 15
 SECTION THREE AREA ONE
 BRANTWOOD PLAT 14876
 3RD DISTRICT HOWARD Co., MD.

THIS PLAT CAN NOT BE USED TO ESTABLISH
 PROPERTY LINES OR CORNERS.

RECEIVED JUL 22 2002



LOCATION DRAWING

TOP OF WALL ELEV 527.2'

CERTIFICATION

SEAL

SCALE 1" = 50'

DATE 7/18/02

This is to certify that I have surveyed the property known as: LOT 15
SENECA CHIEF TRAIL - BRANTWOOD

The information shown has been established by current acceptable survey procedures and from available record information. This drawing is to be used for Title Transfer Financing, or Refinancing Only and IS NOT to be used for the Establishment of Property Lines, Locations for Fences, Garages, Buildings, or other Existing or Future Improvements.



LDE Inc.
 9250 Rumsey Road Suite 106
 Columbia, Maryland 21045
 (410) 715-1070 (Balt.)
 (301) 596-3424 (Wash)
 (410) 715-9540 (Fax)

C1 0282 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.

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

COUNTY NUMBER A510571P

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED 03-20-01

Depth of Well 310' (TO NEAREST FOOT)

OKSRK 3/20/02

PERMIT NO. FROM "PERMIT TO DRILL WELL" HD-94-2959

OWNER Brantwood LLC STREET OR RFD Seneca Chief Trail TOWN Ellicott City SUBDIVISION Brantwood SECTION 3/1 LOT 15

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. Red Clay 0 5, Brown mica silt 5 50, Med hard Grey rock 50 310, Water at 275', water at 310.

GROUTING RECORD WELL HAS BEEN GROUDED (Circle Appropriate Box) TYPE OF GROUING MATERIAL (Circle one) CEMENT (CM) BENTONITE CLAY (BC) NO. OF BAGS 17 NO. OF POUNDS 1578 GALLONS OF WATER 102 DEPTH OF GROUT SEAL (to nearest foot) from 0' to 58' ft.

CASING RECORD casing types insert appropriate code below. MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch)! 6" Total depth of main casing (nearest foot) 58'

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

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

NUMBER OF UNSUCCESSFUL WELLS: 0

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. 1 MWD 355 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 MWD 350

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

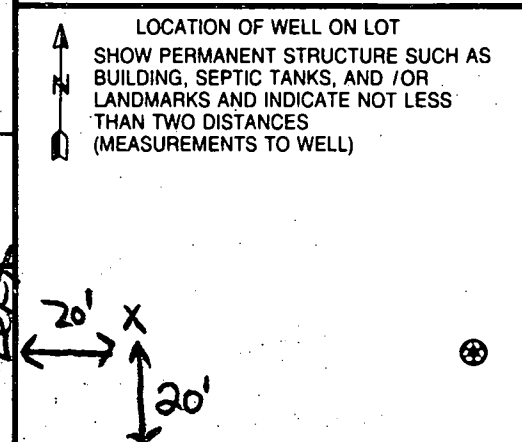
DEPTH (nearest ft.) H O 58' 310'

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

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 20 METHOD USED TO MEASURE PUMPING RATE watch bucket WATER-LEVEL (distance from land surface) BEFORE PUMPING 49' WHEN PUMPING 62' TYPE OF PUMP USED (for test) S submersible

PUMP INSTALLED DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES (NO) IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETE 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 2' (nearest foot)



410-730-0810

EMERGENCY/TEMP NO. IF ANY

B 1 03021

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND PERMIT TO DRILL WELL please print or type

STATE PERMIT NUMBER 110-94-2959 fill in this form completely

Date Received (A) 1/10/01

W 514745 Nick L. PARINI

OWNER INFORMATION BRANTWOOD LLC 8835-P Columbia 100 Parkway Columbia MD 21045

LOCATION OF WELL Howard BRANTWOOD 23 SUBDIVISION 3 SECTION 15 LOT mayfield

DRILLER INFORMATION Michael Barlow MW D.355 Michael Barlow Well Drilling 522 Underwood Lane Bel Air MD 21014

NEAREST TOWN mayfield MILES FROM TOWN 2.11 Seneca Chief Trail Butter Fruit Way

WELL INFORMATION APPROX. PUMPING RATE 5 GAL. PER MIN. AVERAGE DAILY QUANTITY NEEDED 500 GAL. PER DAY

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

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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard CO A510571P

APPROXIMATE DEPTH OF WELL 300 FEET APPROXIMATE DIAMETER OF WELL 6 INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER

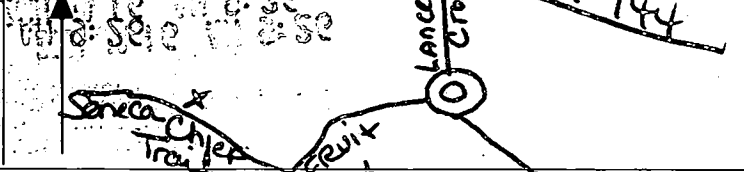
METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) CABLE REVerse-ROTARY Drive-POINT

WRITE THE BOX NUMBER FROM THE MAP HERE E 820 N 520

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

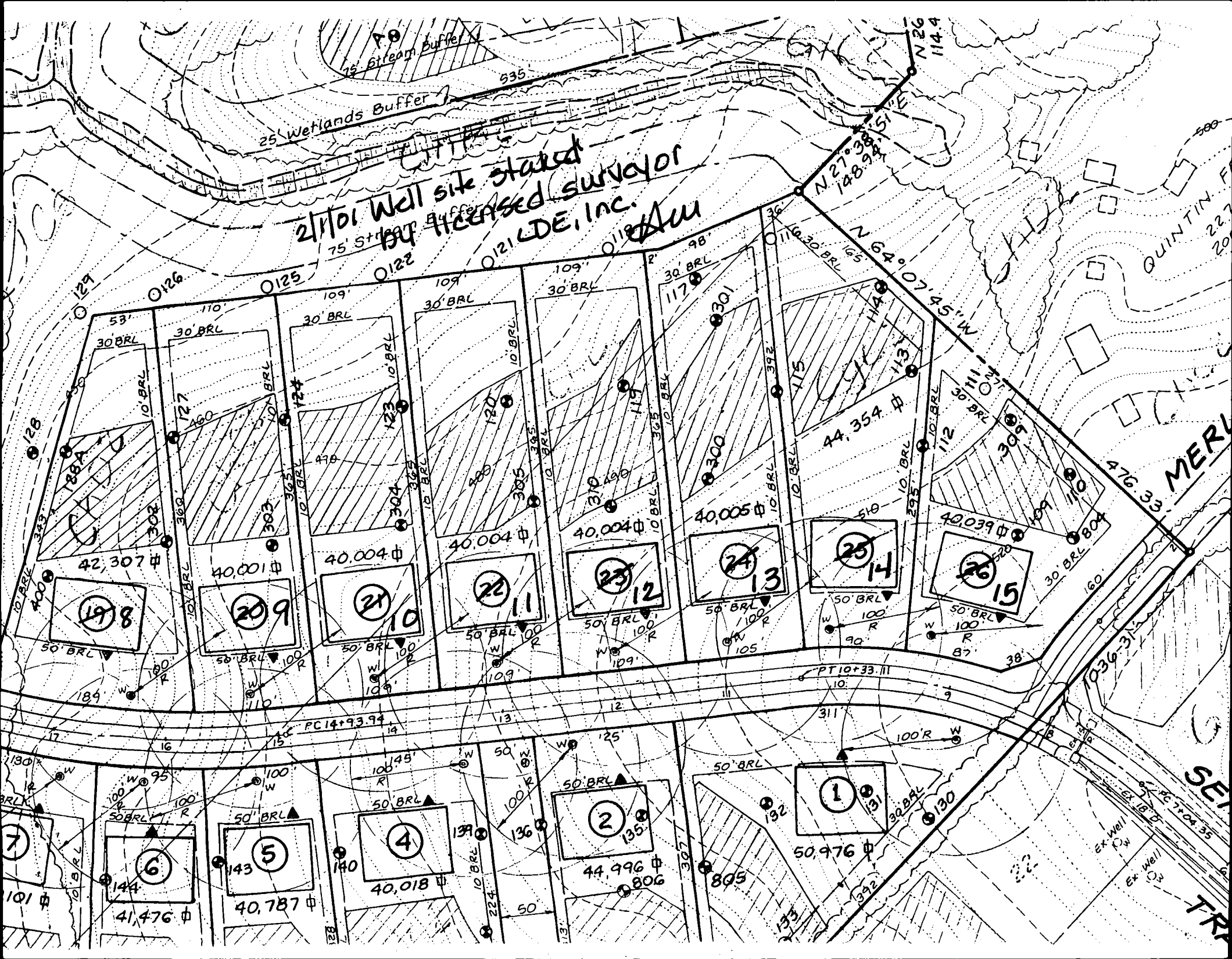
3/20/01 x 11' 00 3' CASING AG. GROUT GROUT OK, NOT OBS'D 17 BAGS 63' CASING 40' + OPEN LOC SEEMS OK MR TAG OK 3/20/07

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER 110-98 G.A.P. 6003(2) PERMIT No. 110-94-2959



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

2/1/01 Well site started
by licensed surveyor
LDE, Inc.



APPLICATION

PERCOLATION TESTING

A 510571 C

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. X 26

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 OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING _____

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

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

THIS IS NOT A PERMIT

510571C

COUNTY #

SOIL PROFILE

109

orange
brown
clay
loam

brown
mica
silt
clay
loam

804
orange
brown
silt
white
decayed
feldspar
10% white
salm

Lot 3

RD

109 ← 110' → 112

↑
70'

↑
70'

804

110 ← 100' → 112

SOIL PROFILE

112

orange
clay
loam

brown
silty
clay
loam
mica flecks
manganese
at bottom
in saprolite

2.5'

11'

309

or / br
clim

2'

beige
silt
mica and
quartz frags

12'

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

Route 144

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
8-19-98	109	11.0' D	visual	only	- see	profile	
11-8-99	804	Visual to 12.0'	- see profile				OK
8-19-99	110	3.5'S	10:3850	10:4150	10:4150	10:4420	230
		11.0' D	visual	ok	- see profile		
	111	8.0' D	HARD BOTTOM				F
		(Greater than 50% rock)					
	112	3.0'S	10:3715	10:38	10:38	10:39	fast
		11.0' D	visual	ok	- see profile		
		(reflow)	10:3920	10:4020	10:4020	10:4140	120
	309	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 1-2 minutes TRENCH WIDTH 3

INLET DEPTH 2.5 MAXIMUM BOTTOM DEPTH 4.5 SQ. FT./BEDROOM 180

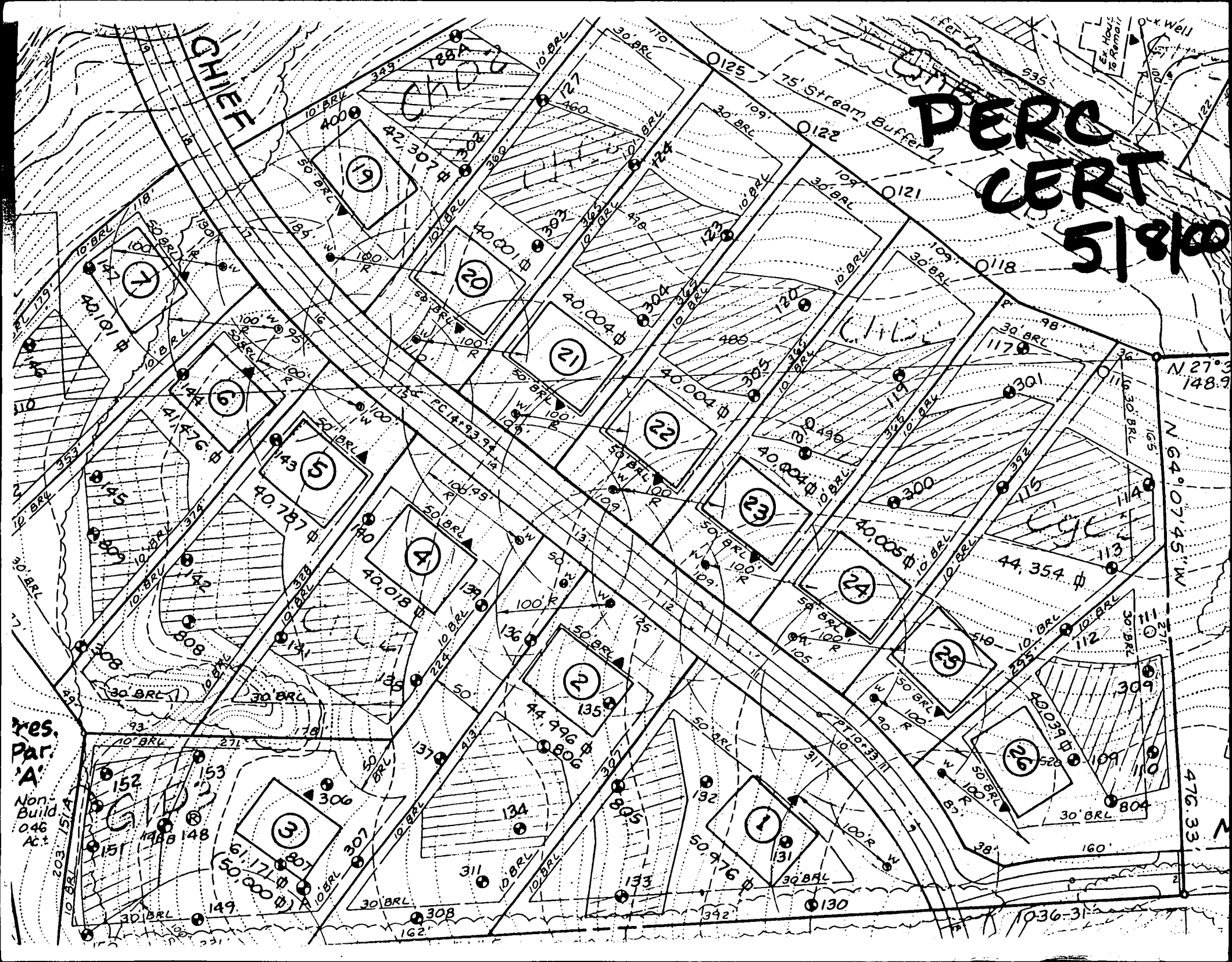
orange
clay
loam

brown
silty
clay
lm
large
quartz
boulders
with
mica
flakes

3'

8'

**PERC
CERT
5/8/00**



CHIEF

CITY

75' Stream Buffer

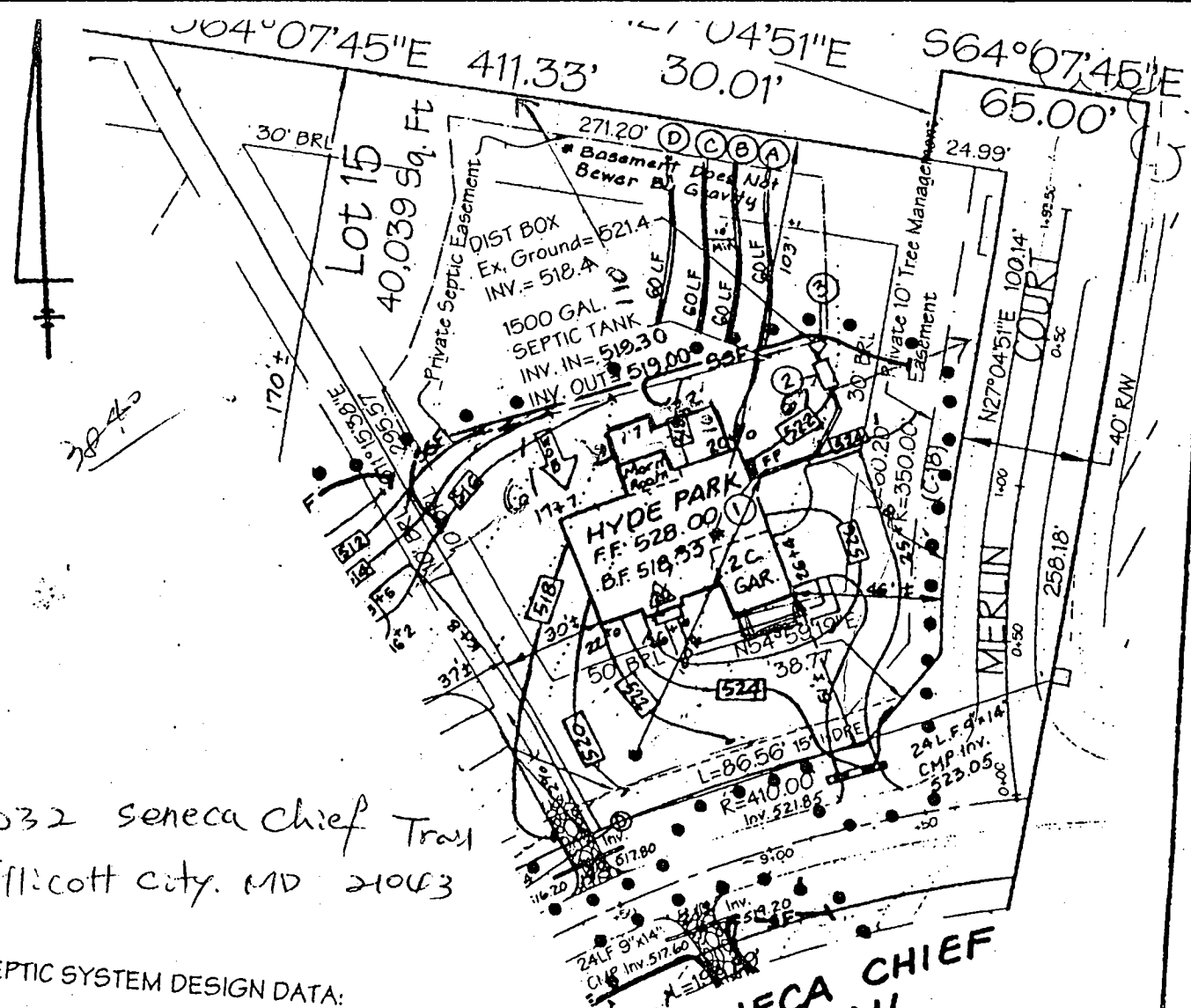
Res. Par. 'A'
Non-Build
046 Act

N 27° 3' 148.7'

N 64° 07' 45" W

476.33

1036-31



3032 Seneca Chief Trail
 Ellicott City, MD 21043

SEPTIC SYSTEM DESIGN DATA:

- ① Invert at Foundation Wall: 520.30 (Wall Hung)
- ② 1500 Gallon Septic Tank (4 BR-Provide manhole to grade)
 Existing Ground over Tank: 522.00
 Proposed Grade over Tank: 522.00
 Invert In: 519.30
 Invert Out: 519.00
- ③ Distribution Box: (4 Outlets Minimum)
 Existing Ground Over Box: 521.40
 Proposed Grade Over Box: 521.40
 Invert In: 518.40
- 4. Trench Design:
 (Per Health Department Septic Specifications)
 = 180 SF per Bedroom x 4 Bedrooms = 720 SF
 = 720 SF ÷ 3 ft Trench Width
 = 240 LF of Trench REQ.

	(A)	(B)	(C)	(D)
Ex. Ground over Trench:	520.00	519.00	518.00	517.00
Invert Trench:	517.00	516.00	515.00	514.00
Bottom Trench:	515.00	514.00	513.00	512.00
Length of Trench:	60 ft.	60 ft.	60 ft.	60 ft.
Width of Trench:	3 ft.	3 ft.	3 ft.	3 ft.

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

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

NOTES:

- 1. Existing Zoning: RC
- 2. Property address: 3032 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 is shown by proposed contours from a Fall 2001 spot arc casting.
- 6. Driveway Entrance off Howard Rd.

APPROVED
WALKTHRU BUILDING PERMIT
 BP# 80059334 A# 510571P
 APP. SAN *Race Jones* DATE: _____
 DESC. OF WORK: *deck*

LDE, Inc.
 9250 Rumsey Road, Suite 100
 Columbia, Maryland
 (410)715-1070 - (301)598-3424 - Fax (410)715-9540

Title: REVISION A TO GP 02-34 BRANTWOOD SECTION 3 AREA 1 LOT 15		
Date: 3/12/02	Drawn: LDE	
Scale: 1" = 50'	LDE Job No.: 01-043	Sheet: 1 OF 1