#### Real Property Data Search ( w4)

#### Search Result for HOWARD COUNTY

Tax Exempt:		Special T	ax Recaptur	·e:		
Exempt Class:		NONE	·			
Account Identifier:	District - 04 A	ccount Num	i <b>ber -</b> 328353	3		
		Owner In	iformation			
Owner Name:	TWO DOGS LI C/O HERBERT III		Use: PER Princ	ipal Residence	RESIDEN NO	TIAL
Mailing Address:	901 DULANEY STE 502 TOWSON MD				/15543/ 00	0001
			cture Informa	tion		
Premises Address:	622 WATERS\ MT AIRY 2177		Lega	I Description:	10.231 AC 622 WATE .7 MI N O	ERSVILLE RD
Map: Grid: Parcel	: Sub Sub District:	odivision:	Section:	Block: Lot:	Assessmen Year: 2017	t Plat No: Plat
						Ref:
Special Tax Areas:		A	own: d Valorem: ax Class:		NONE 100	Ē
Primary Structure Built	Above Grade Livin Area	g Fini Are	ished Basem a	Area	-	County Use
				10.2	300 AC	
Stories Basement	Type Exter	ior Full	/Half Bath	Garage	Last Major R	enovation
		Value Int	formation			
	Base Value	Va	lue	Phase-in	Assessments	
			of /01/2017	As of 07/01/201	As 07/	of 01/2019
Land:	296,600		6,900	07701720	10 077	01/2019
Improvements	0		0,000			
	ū	0			306	5,900
Total:	296.600	30	306,900			,
Total: Preferential Land:	296,600 0	30	6,900	303,467	0	
			nformation	303,467		
	0 DPHER	Transfer II	nformation	303,467		392
Preferential Land: Seller: TOLER CHRISTO	OPHER GTH OTHER	Transfer III  Date: 04/1  Deed1: /1  Date: 12/1	nformation 15/2014 5543/ 00001		0 <b>Price:</b> \$14,8	392
Preferential Land:  Seller: TOLER CHRISTO Type: NON-ARMS LENG Seller: LWIN MIN	OPHER BTH OTHER BTH OTHER	Transfer III  Date: 04/1  Deed1: /1  Date: 12/1	nformation 15/2014 5543/ 00001 14/2004 8847/ 00536		Price: \$14,8 Deed2: Price: \$0	
Seller: TOLER CHRISTO Type: NON-ARMS LENG Seller: LWIN MIN Type: NON-ARMS LENG	OPHER GTH OTHER GTH OTHER S M	Transfer li Date: 04/1 Deed1: /1 Date: 12/1 Deed1: /0 Date: 04/2	nformation 15/2014 5543/ 00001 14/2004 8847/ 00536		Price: \$14,8 Deed2: Price: \$0 Deed2:	
Seller: TOLER CHRISTO Type: NON-ARMS LENG Seller: LWIN MIN Type: NON-ARMS LENG Seller: O NEILL THOMA Type: ARMS LENGTH V	OPHER ETH OTHER ETH OTHER S M CACANT	Transfer la Date: 04/1 Deed1: /1 Date: 12/1 Deed1: /0 Date: 04/2 Deed1: /0	nformation 15/2014 5543/ 00001 14/2004 8847/ 00536 27/1994 3232/ 00589 Information		Price: \$14,8 Deed2: Price: \$0 Deed2: Price: \$90,0 Deed2:	000
Preferential Land:  Seller: TOLER CHRISTO Type: NON-ARMS LENG Seller: LWIN MIN Type: NON-ARMS LENG Seller: O NEILL THOMA Type: ARMS LENGTH V	OPHER GTH OTHER GTH OTHER S M	Transfer la Date: 04/1 Deed1: /1 Date: 12/1 Deed1: /0 Date: 04/2 Deed1: /0	nformation 15/2014 5543/ 00001 14/2004 8847/ 00536 27/1994 3232/ 00589 Information		Price: \$14,8 Deed2: Price: \$0 Deed2: Price: \$90,0	000
Preferential Land:  Seller: TOLER CHRISTO Type: NON-ARMS LENG Seller: LWIN MIN Type: NON-ARMS LENG Seller: O NEILL THOMA Type: ARMS LENGTH V  Partial Exempt Assessments: County:	OPHER ETH OTHER ETH OTHER S M CACANT	Transfer la Date: 04/1 Deed1: /1 Date: 12/1 Deed1: /0 Date: 04/2 Deed1: /0	nformation 15/2014 5543/ 00001 14/2004 8847/ 00536 27/1994 3232/ 00589 Information		Price: \$14,8 Deed2: Price: \$0 Deed2: Price: \$90,0 Deed2:	000
Preferential Land:  Seller: TOLER CHRISTO Type: NON-ARMS LENG Seller: LWIN MIN Type: NON-ARMS LENG Seller: O NEILL THOMA Type: ARMS LENGTH V  Partial Exempt Assessments: County: State:	OPHER ETH OTHER S M ACANT Class 000 000	Transfer la Date: 04/1 Deed1: /1 Date: 12/1 Deed1: /0 Date: 04/2 Deed1: /0	nformation 15/2014 5543/ 00001 14/2004 8847/ 00536 27/1994 3232/ 00589 Information 07/01 0.00 0.00	/2018	Price: \$14,8 Deed2: Price: \$0 Deed2: Price: \$90,0 Deed2:	000
Seller: TOLER CHRISTO Type: NON-ARMS LENG Seller: LWIN MIN Type: NON-ARMS LENG Seller: O NEILL THOMA	OPHER ETH OTHER S M ACANT Class 000	Transfer la Date: 04/1 Deed1: /1 Date: 12/1 Deed1: /0 Date: 04/2 Deed1: /0	nformation 15/2014 5543/ 00001 14/2004 8847/ 00536 27/1994 3232/ 00589 Information 07/01	/2018	Price: \$14,8 Deed2: Price: \$0 Deed2: Price: \$90,0 Deed2:	000

Tolly Short

# APPLICATION

PERCOLATION TESTING

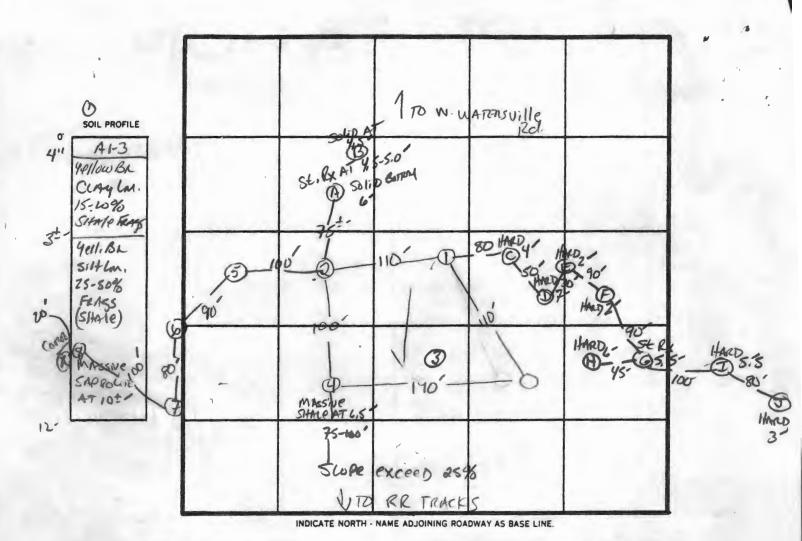
Δ	42038	
.,		

HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH P.O. BOX 476 ELLICOTT CITY, MARYLAND 21043 TELEPHONE. 461-9933 DATE 6-22-88

TO: THE COUNTY HEALTH OFFICER ELLICOTT CITY, MARYLAND			
I, HEREBY, APPLY FOR THE NECESSARY TEST IN ORDER	TO CONSTRUCT (OR RECONSTRUCT) A SEWA	AGE DISPOSAL SYSTEM.	
Basi D. Sollers	. ot al		
PROFERITORIES			
ADDRESS 934 E. IAKE ave		PHONE	
PROSPECTIVE BUYER THOWAS M ON	veill (contact)		
PROSPECTIVE GOTE.	r Elkridge Mo 1122	7 347-3310	שוני אוני אוני
ADDRESS 5115 0000	1 telloring I min visit	PHONE ON IT DE	0 /410/0
PROPERTY LOCATION:			
SUBDIVISION		LOT NO. P.7	
ROAD AND DESCRIPTION AFF Old waters	sulla pal. Attaly	effer Dead David	nomenter
	Allow the Short to	CLARCE PARTI (CSRC)	propert
at end.	1		
2			
TAX MAP		Marine well	land
SIZE OF LOT 10.2 GCres		YPE BLOG UNIMPLY (SINGLE FAMILY DWELLI)	NG OR COMMERCIAL)
THE SYSTEM INSTALLED UNDER THIS APPLICATION IS A	CCEPTABLE ONLY UNTIL PUBLIC FACIL	LITIES BECOME AVAILABLE I FULLY	Y UNDERSTAND THE
FEE CONNECTED WITH THE FILING OF THIS PERC TEST	APPLICATION IS NON-REFUNDABLE UP	NDER ANY CIRCUMSTANCES. I ALSO	AGREE TO COMPLY
WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS	Mamas M	Dhall	
THE ALCOHOL REGULATION IN TESTING THE	\	NATURE OF APPLICANT)	
APPROVED BY	FOR	DATE	
- 1			
REJECTED BY	FOR	DATE	
HOLD PENDING FURTHER TESTS		DATE	
REASONS FOR REJECTION OR HOLDING 8-15-87-	UNSATISFACTOR SOIL	- Shallow bed Re	CP. SAL
2-24-89 - UNSATIS FACTOM - S	TRIION DEPIN IO BED	NOCK, RECOMMEND	+ 7
TESTING for APPROVAL			

HD-216

THIS IS NOT A PERMIT



			PRE-WET TEST - 1" DROP			
TEST NO.	DEPTH	START	STOP	START	STOP	TIME
15 M	7,5	1/	11:11:50			
1	12-	see Pan	file			
25	3,5	11;21	11:42	11:42 = 41/240 i	N Coss in	AN ZOS
21	7,5					
34	8.5-	STRUCTU	APD SH	18 ATN	7.00 00	A4 10
4m	7,5	11:41	^			
5v	9'	STRUCTU	COAT 8	clay to de		
6v	8'	STRUCTU	LED AT G			
7 V	6	STRUCTUR	TENATS	-		
	1V 25 2V 3V 4M 5V	1 7.5 1 12' 2 5 3.5' 7.0 2 1 7.5 3 1 8.5' 4 M 7.5' 5 1 9' 6 1 8'	1 7.5 11:09:18  1 12' See Pro  25 3.5' 11:21  7.0 SGAI OF  2 V 7.5  3 V 8.5' STRUCTU  4 M 7.5' 11:41  5 V 9' STRUCTU  6 V 8' STRUCTU	15 3.5 11:09 11:47 7.5 11:09:15 11:11:50  1V 12' See Profile.  25 3.5' 11:21 11:42 7.0 SGAL OF HED TA  2V 7.5  3V 8.5' STRUCTURED SHM  4M 7.5' 11:41  5V 9' STRUCTURED AT 6'	15 3.5 11:09 11:47 11:47 = 7.5 11:09:15 11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:50 11:11:11:11:50 11:11:11:50 11:11:11:11:50 11	15 N 7.5 11:09:15 11:14  12' See Profile  25 25 3.5' 11:21 7.0 SGAL OF H.O IN HIMAED IN COSS IN  21 7.5  34 7.5  37  8.5' STRUCTURED SHALE AT ~ 7.0' CO  4M 7.5' 11:41  50 9' STRUCTURED AT 8' COM FO Y'  60 8' STRUCTURED AT 8' COM FO Y'  60  8' STRUCTURED AT 8' COM FO Y'

REMARKS	
TYPE OF SOIL ME AIRY	and the second s
	ARNOLD BACKITOE
TESTED BY S. Alue	ALSO PRESENT MAL OMEILL.

# APPLICATION

PERCOLATION TESTING

HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH P.O. BOX 476 ELLICOTT CITY, MARYLAND 21043 TELEPHONE 461-9933

TO: THE COUNTY HEALTH OFFICER ELLICOTT CITY, MARYLAND	
I, HEREBY. APPLY FOR THE NECESSARY TEST IN ORDER TO CONSTRUCT (OR	RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.
Basi D. Sollers, et a	.1
ADDRESS 934 E. lake ave	PHONE
PROSPECTIVE BUYER Thomas M. OWELL CO.	
ADDRESS 5993 Setter Dr Elknidge,	MD 21227 PHONE 347-2210 W- 744-812
PROPERTY LOCATION:	
SUBDIVISION	LOT NO.
ROAD AND DESCRIPTION PT 70 -> , RT 94 -	- > telt on old Frederick Rd-
	sulf wite on left Dirt, nood Follow DIFT
TAX MAP 2 PARCEL * 73	Road until the end.
SIZE OF LOT 10.2 acres	TYPE BLDG UNIMPTY LEWER (SINGLE FAMILY DWELLING OR COMMERCIAL)
+ + +	ISINGLE PAMILI DWELLING ON COMMERCIAL)
THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY	Y UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE
FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION	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 BYFOR	DATE
REJECTED BYFOR	DATE
HOLD PENDING FURTHER TESTS	DATE
REASONS FOR REJECTION OR HOLDING	
	The state of the s

## THIS IS NOT A PERMIT

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

	********	PRE	WET	TEST -			
DATE	TEST NO.	DEPTH	START	STOP	START	STOP	TIME
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- 1		1					
- 1							

REMARKS		
TYPE OF SOIL		***************************************
TESTED BY	ALSO PRESENT	

5/15/91

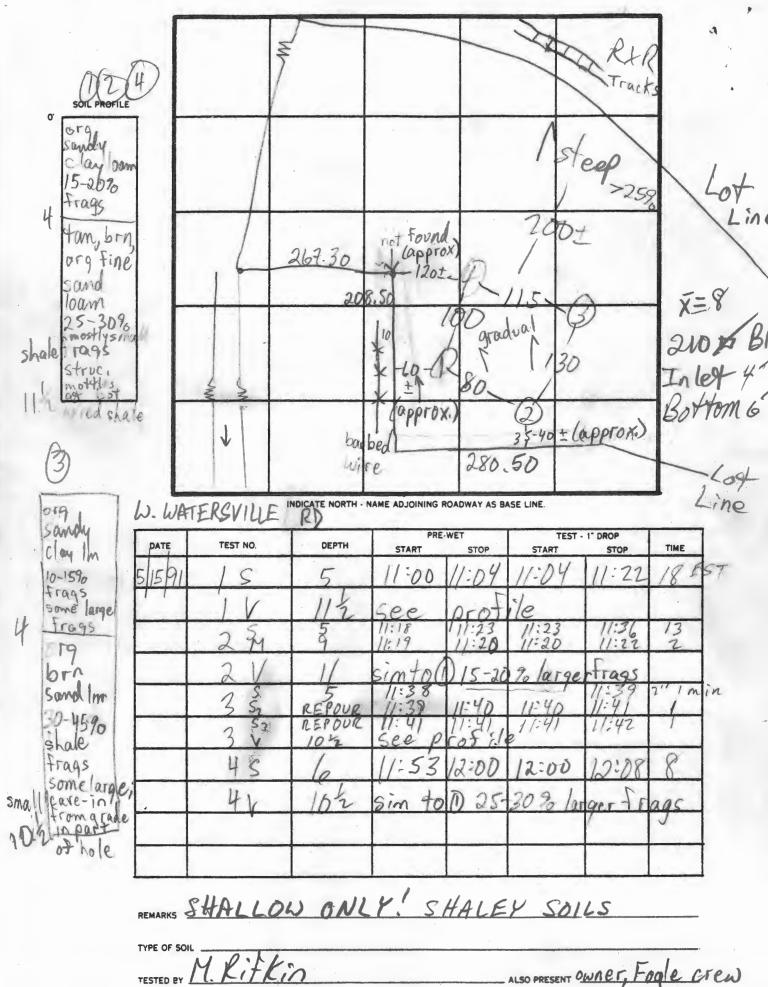
# APPLICATION

PERCOLATION TESTING

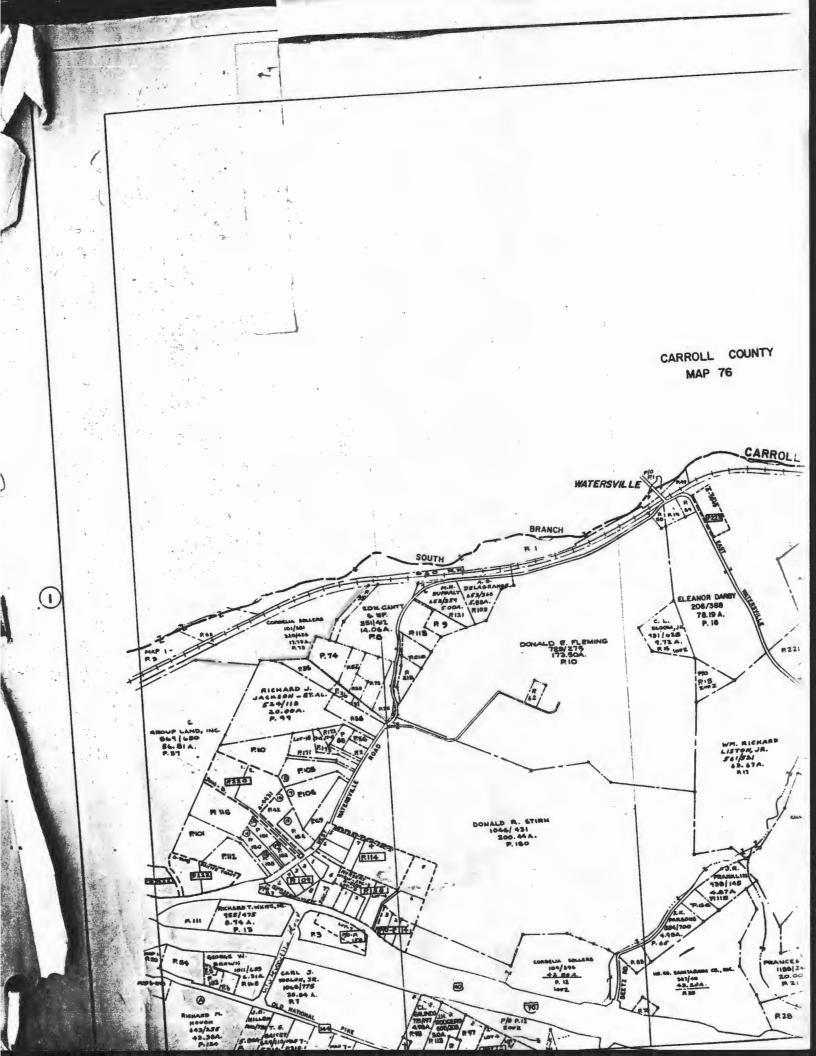
A 42038

				P	)
BI	OWARD COUNTY HEALTH DEPARTMENT UREAU OF ENVIRONMENTAL HEALTH O. BOX 476 ELLICOTT CITY, MARYLAND 21043 ELEPHONE: 461-9933	SVETTA C AND BE	APPROVED.	DATE	
E	HE COUNTY HEALTH OFFICER LLICOTT CITY. MARYLAND HEREBY, APPLY FOR THE NECESSARY TEST IN OR	TEST HOLE LOC	OK TO N	PARCERS FEG - P	NAL APPLICATIONAL NAL APPLICATION
	Thomas N	DINE II			.,,
PROPERT	DDRESS 5993 Sett	er Dr 21227	PHONE	379-	0855
PROSPEC	TIVE BUYER Elkridge, MD				
A	DORESS		PHONE		
PROPERT	Y LOCATION:				
SUBDIVISI	on Head quarter	75	LOT NO	2	
ROAD AND	DESCRIPTION OFF old was	lensville Rd	on left	DIRH	Road
Prop	serty at end.				
TAX MAP	2 PARCEL # 73				
SIZE OF L	ot 10.2 MCMS L	1+2	TYPE BLDG.	Single	
FEE CO	STEM INSTALLED UNDER THIS APPLICATION  NNECTED WITH THE FILING OF THIS PERC TO  LL M.O.S.H.A. REQUIREMENTS IN TESTING	EST APPLICATION IS NON-REFUND	IC FACILITIES BECOME A	VAILABLE. I FULI	,
APPROVE	D BY	FOR		DATE	
REJECTED	987	FOR		DATE	
HOLD PEN	IDING FURTHER TESTS			DATE	
REASONS	FOR REJECTION OR HOLDING HOLD	FOR PLAT-	PERC OK	-SHA	-LOW
SYS	TEM ONLY! M	12 5/15/91			

## THIS IS NOT A PERMIT



ALSO PRESENT OWNER, Fogle crew





#### DEPARTMENT OF THE ENVIRONMENT

2500 Broening Highway, Baltimore, Maryland 21224 Area Code 301 • 631-3652

William Donald Schaefer Governor

Martin W. Walsh, Jr. Secretary

May 26, 1989

Mr. Frank Skinner, Director Environmental Health Howard County Health Department P.O. Box 476 Ellicott City, Maryland 21043

> RE: O'Neill Property Tax Map 2 Parcel 73 lot

Dear Mr. Skinner:

On April 13, 1989 I conducted four percolation tests on the above referenced property. The results of these tests suggest that this site would be suitable for a conventional sand mound sewage disposal system where slopes do not exceed 12% standard percolation tests were used, instead of ring infiltrometer tests because of the channery soils encounters. Copies of my data sheets are enclosed. Since a backhoe was not available at the site, I was unable to test below 3 feet. However, previous tests conducted by Sid Abel (Howard County Health Department), suggest rock fragments exceed 50% by volume at depths of 3 to 5 ft. below ground level everywhere over the area tested.

If you have any questions please call me at (301) 631-3652.

Sincerely,

Ronald Pinkley, R.S.

Innovative/Alternative Section

Division of Residential Sanitation

RP/mj

cc: Mr. Jack Holthaus, R.S.

Tom O'Neill

6/1/09

Craig Lets discuss this

Fal

#### TEST DATA

NAME	O'Weill,	Tom			FILE NO	
LOCATIO	N Tox Map	2 17365	2 dipot	RS // NW/W	tracile LICOUNTY	Howard
			- ///	17 /	DATE	4-13-09
					GRID	E
RECORDE	D BY R. Pin	kly				N
HOLE NO.	TEST NO. 12" liam per	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
	Pi	36"	11:56:50	>7 ½ men 9 hmin	top Mail 2nd Mail 3rd Wail	too book to brive Intillion or get a good seal.
10 ft from	nu puls	elsek ruseritalf hlbd t	1:07:30/	135 mn	4th Mail 3rd Naul	
10 pt from						5% ( long rocks in the hole Thes
	P2 fx/17"	20"	12:10 stout 1"	loop by two	1/2 Notes on on top Notes	presented -
		reset	1:27:45 1:28 1:48	20 min	3 and Noted	
	P3	20"	2:58:00 3',03',72 3',121,00	>55 min	Top Notal	Enil profiles of perkholes officers uniform— Ch Sil-SiCL aboves though whole be at 16-32"
			3:26 -	(10 min ) ich	1-2 Mare	Cless clays above , more sech frags been
	0		46		1146	4
	Py	14 reset	3:30 3:30 3:39 3:38:00	1 stenih 5 mgi	2nd Mil 3rd Nail 4th Nail + 2" 3rd Nail	
			338100 8:48100	10.75	Soul Mark 4st West	

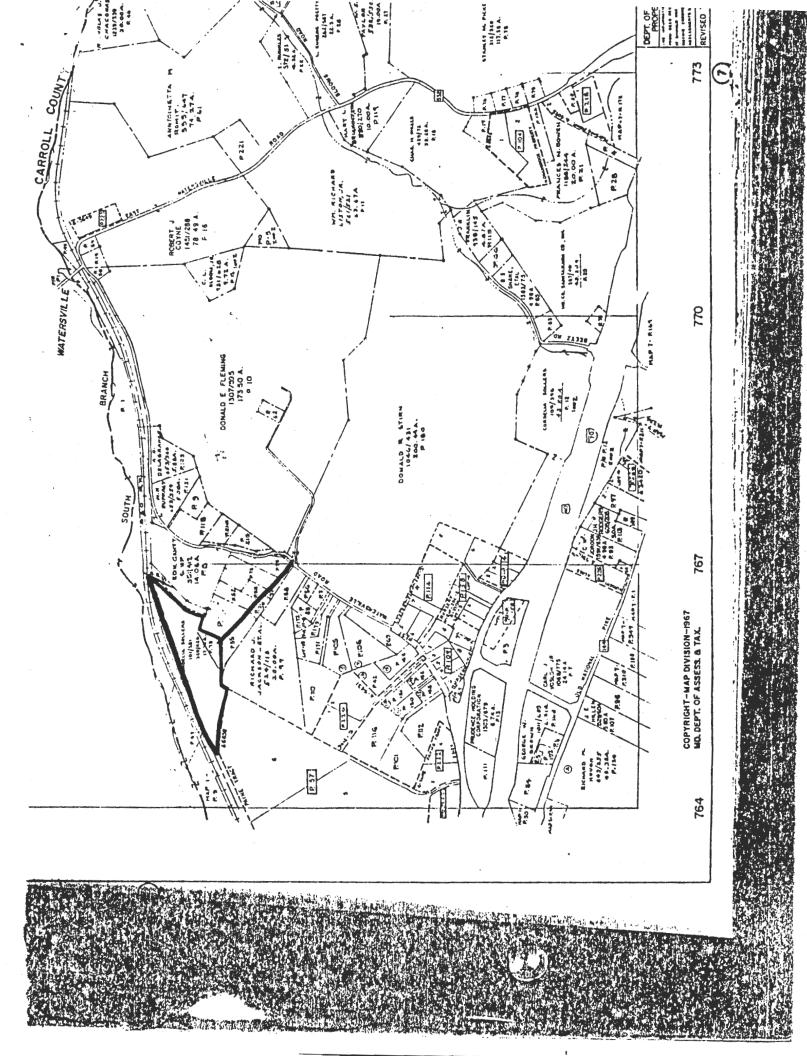
large Tree deasity = 25 ft +5 ft soutable for moved cleaning

#### SOIL DESCRIPTION

NAME O, Neill Tom	792-2305 COUNTY Howard	FILE NO	
SOIL MAP UNIT ME Airy C	Lancer silt LOGAMAP SYMBOL Mt C2, MED2	DATE 4-13-89	
GEOLOGIC MATERIAL Weather	es schist ELEVATION	GRID NO	Е
NO. 7	DESCRIBED BY RPAKIEL		N

Horizon	Depth	Col	or	Texture	Struc	ture	% Rock	Notes
	in.	Matrix	Mottles		Grade	Type	Fragments	(Moisture, Density, Biopores, Seepage)
0	r <u>+</u> 0	10/2/2		fine Mulch				sh.Moist ml
A	0-5	10185/3		chSil	3vF	gran	5%-10%, usmall schit cha	most mufr-Inc infroots
Β,	5-11	10 YR 5/4		th Sil	3rf-f	SLK	5%-10%	Moist MFm mf-moods
B21 t	11-19	10/25/6		chsil- sich	3vF-f	Shk	10-15% vsmell school d	Most Comemouts  enner close to 27% days  Min corosts
Bost	19-24	10'YR 5/2-9/	z –	dsicl	2f-vf	Sbk	15-20%	men corrects in a corrects in an acres sight 27% -30% clays
B23+	24-36	P.548.58	62f 54898	chSICL	2.F	Shk	20% -30% (5%-10 one luga 2-5" log resting UF-Fahenn	ennous chee to 27% classe Noist man co roots  enners Just 27% -30% classe  V. Moist SL 56, ch man  or obout 27% class &f-m roots

			l					1		_
.ANDSCAP	E				.44,		L DRAINAGE	CLASS	LIMITING ZONE	
Posit Sum	ion	Depr	ession	Slop Per	e 20% cent <u>137</u>	Levelspien of	test inte MWD SPD	PDVPD		
	ulder eslope 🗸	Vpla Terr	nd	Sha	pe <u>Lihe</u> orslic		ER TABLE		SOIL CLASSIFICATION	
Foo	tslope	Floo	dplain					<del></del>	i comment	
						******				





#### HOWARD COUNTY HEALTH DEPARTMENT

Joyce M. Boyd, M.D., County Health Officer

April 18, 1991 Reply to:

Mr. Thomas O'Neill 5993 Setter Drive Elkridge, Maryland 21227

RE: Percolation Retesting O'Neill Property Tax Map: 2 Parcel: 73 West Watersville Road

Dear Mr. O'Neill:

A percolation test date has been reserved for 10:00 a.m., Wednesday, May 15, 1991. This retest was scheduled to examine other areas on the property not previously tested.

You will be responsible for having a contractor on-site to excavate test holes in the corners of the proposed percolation areas.

Please call this office between 8:30 a.m. and 4:30 p.m., Monday through Friday, to confirm your acceptance of this percolation test date.

Thank you for your cooperation in this matter.

Very truly yours,

Jane Nadeau, Sanitarian Water and Sewerage Program

JN:jr



#### HOWARD COUNTY HEALTH DEPARTMENT

Joyce M. Boyd, M.D., County Health Officer
June 4, 1991

Reply to:

Mr. Thomas O'Neill 5993 Setter Drive Elkridge, Maryland 21227

RE: Percolation Test Results

Application Number: A42038 Proposed Use: Adjustment to

Sewage Easement

Property ID: Headquarters - Lot 2

Tax Map: 2 Parcel: 73

Dear Mr. O'Neill:

Percolation testing conducted May 15, 1991 on the above referenced property indicated limited satisfactory soil conditions in the vicinity of the area that was originally approved for a sand mound septic system. Copies of the test results are enclosed.

Based on these results, approval will be granted to install a very shallow standard septic system in the platted sewage disposal area. A copy of the septic system specifications is enclosed to assist in preparation of your building permit application.

If you have any questions regarding this matter, please feel free to contact me at the above address or by calling 461-9933.

Very truly yours,

Craig Williams, Director Water and Sewerage Program

CW:jr

Enclosures

cc: Don Lynch Associates, Inc.

File

To! Howard country Health Dept.

ON behalf of my well driller. Westminster rotorary. I request six month extension of well permit 140-88-1498.

4-10-91 Thomas my oraill

EXTENSION GRANTED. 9/1/9)

EXTENSION GRANTED. PATE 9/1/9)

NOW EXPIRATION PATE 9/1/9/

COPY OF THIS CORRESPONDENCE

COPY OF THIS CORRESPONDENCE

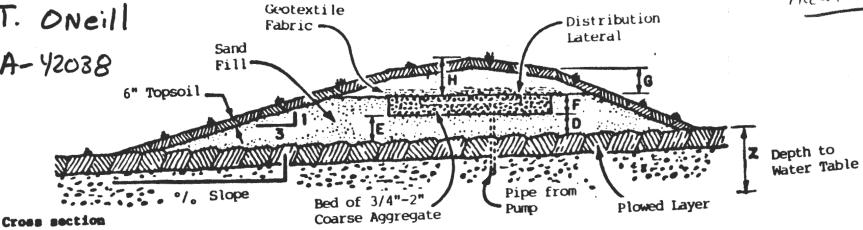
WILL BE SENT TO 4/10/9/

CWILL BE

HOWARD COUNTY HEALTH DEPT 91 APR 10 PMIS: 14 HEAD QUARTERS LOT#2 T. Oneill Sand A-42038 Fill 6" Topsoil.

### SAND MOUND DESIGN

HBK W DISPOSAL Treat AS SBR



#### BACKGROUND DATA

40.6 23,25 Distribution 70 Slope KILL

Slope & (change in elevation over 100ft. distance): 12 & BEDROCK 6 Depth to water table (2): >24 inches Design flow (gal. per day): 750 Design infiltration rate: 1.2 gpd/ft<sup>a</sup>

#### DESIGN CALCULATION

Absorption bed ft<sup>2</sup> (AxB) = Design flow =  $\frac{625}{1.2}$  ft<sup>2</sup> Bed length (B) = 70 ft. (21 ft. to 101 ft. dependent on site) Bed width (A) =  $\frac{\text{Bed } 625}{\text{B}}$   $\frac{\text{ft}^2}{\text{CO}}$  ft. (15 ft. or less) Upslope sand fill depth (D) = 48in. - Zin. = 24 in. (12" min.)

Downslope sand fill depth (E) = [12 A x (slope)] + D in. = 37.0 in.

Cap + topsoil at bed center (H) = 18in. Cap + topsoil at bed edge Total Bed Depth (F)

Sides lope setback (K) = 1(D+E) + 28in.] x 3 = 175.5 in. 14.7

Upslope setback (J) = (22in. + D) x 3 x upslope corr. factor= 10/ in. 8.4

Downslope setback (1) \* (22in. + E) x 3 x downslope corr. factor= 278 in. 23.2 Total Width of Mound (W) = 12A + J + I = 487.0 in. 40.60 Total Length of Mound (L)  $\approx 12B + K + K = 1/91$  in. 99.25

Plan view

7/20/89 Seller

	,			DATE	4-13-09
ED BY R. P	the state of the s			GRID	
ED BI _V. /	7/4-1.9				
NO.	DEPTH Leght foles	CLOCK	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
Pi	36"	11:56:50	7/2 men	top Mil	too book y to drive In C. H.
fills to "	- clock	12:14:10	95min	3rd Wart	to o fock y to drive Infilte or get a good seal.
1	replant to	1:/2:20	13/2 mm	4th Mail 3rd Naul	1.11
1		1,23.50			files to 5 % of whare souches in the hole the
D	20"	12:/0	-	1/2 Motoles -	presented -
filled 7"				Top Notal	
	roset	1:27:45	>16 min	1/2"	
	Buch	1:28	20 min	300 A Notal	
P	204	2:550		Top Notal	soil profiles of parkboles offer chsil-sill shoesthough
P3	201	3:12100	No To	34 "	dall 6 at 16-12"
		3:26	10 mighis	12 Mare.	Ches claye above , were rock fregs to
				,	
Py	14"	3:43	lotuid	2nd Will 3rd Will	· ·
,	reset	3:39 >	5 mgi	Yth Mailth"	•

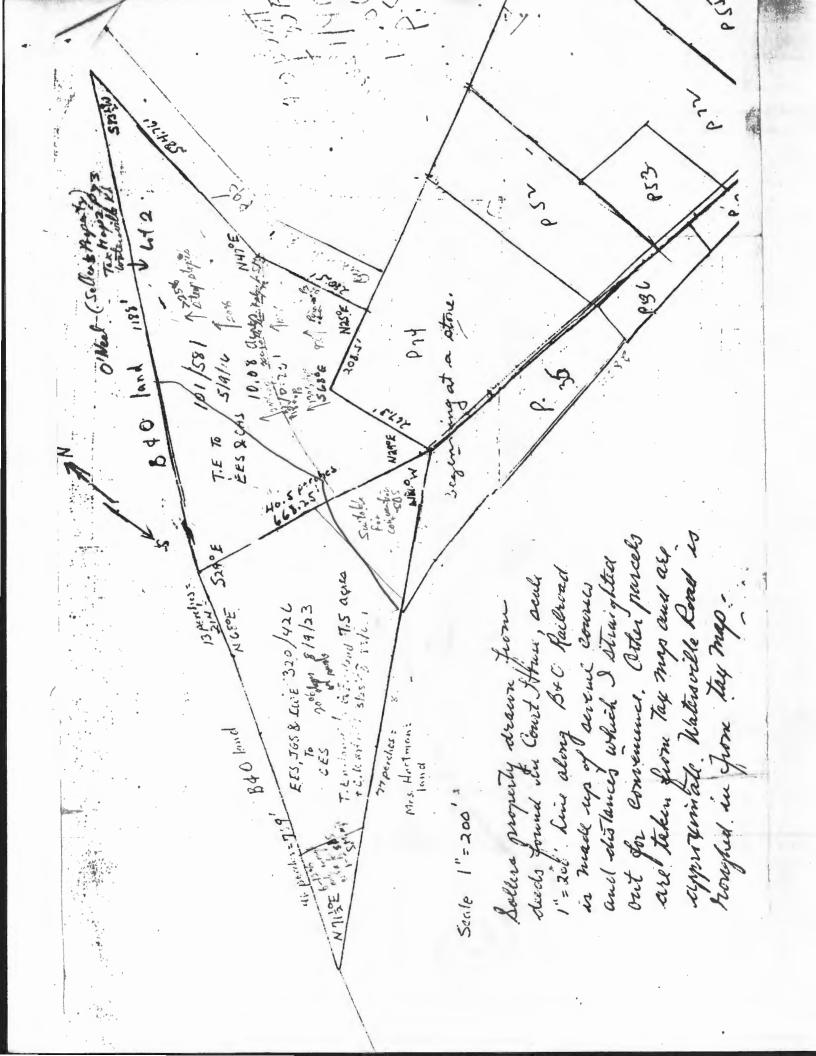
" deasity = 25 ft +5 ft sutile for and cleaning

#### SOIL DESCRIPTION

NAME O, Neill Tom	COUNTY Howard	FILE NO	
SOIL MAP UNIT ME Airy chancey.	rilt LORAMAP SYMBOL Mt C2, 176 D2	DATE 4-13-89	
GEOLOGIC MATERIAL weathered schi	f ELEVATION	GRID NO	E
NO. P DESC	CRIBED BY RPIAKLEY		N

Horizon	Depth	Col	or	Texture	Struc	ture	% Rock	Notes
	in.	Matrix	Mottles	102000	Grade	Туре	Fragments	(Moisture, Density, Biopores, Seepage)
0	rt-o	104842		fine Mulch				shhoist ml
A	0-5	10785/3		chsil	3uf	gran	5% -10%, usmall schot cha	moist mufri-ful infroots
· £,	5-11	10 yr 5/4	_	el sil	34-f	SLK	5%-10%	Moist M. Fareds
But	11-19	10485/6	-	dhsib- sich	3vF-f	Shk	10-15% V s mall schoft d	Most character Mar comments  Most to 27% clays mar corosts
. Bat	19-24	10'YR 5/2-9	¥ —	dsice	2f-if	Sbk	15-20%	Moist men co roots .
Bast	24-36	V.6YK58	c2f 54898	chs;cl	2F	Sbk	20% - 30% (5%-100m layer 2-5"lay next is of fabruar	Point when corosts  Thist was 27% -30% class when corosts  1. Woist SL Stick man  2 obout 2 7% class & & -m roots

Position Slope 20% downslop of Test ate	
Symit Depression Percent 13% proposition Spane	ASSIFICATION



### HEAD QUARTERS LOT 2

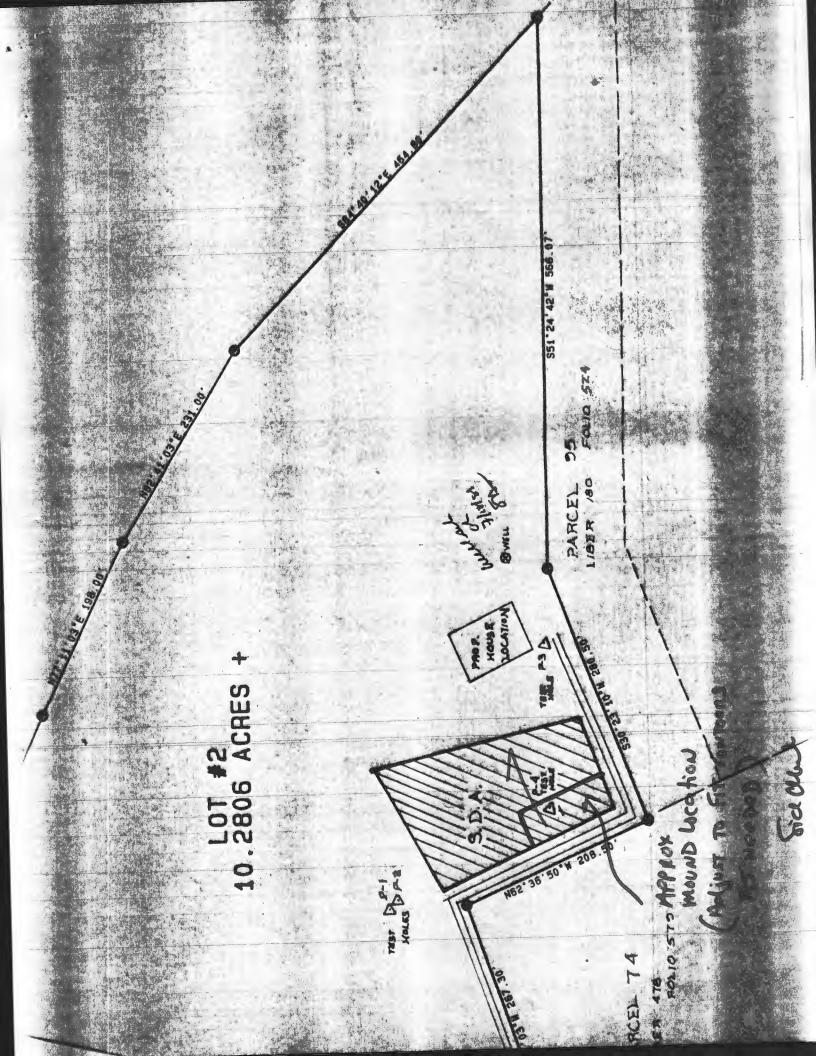
W. WATERSUITE RSAND MOUND PRE-CONSTRUCTION CHECK LIST

```
Total mound width (ft) = 40.6
       Total mound length (ft) = 99.a
       Absorption bed length (ft) =
       Absorption bed width (ft) =
4.
       Side slope setback = 14.7
5.
       Upslope setback = 8.4
Downslope setback = 23.6
6.
7.
       Center feed or end feed manifold = \frac{C}{34.5}
8.
9..
       Number of rows of laterals = 3
10.
       Total length of lateral pipe required for system = 207
11.
       Space between laterals = 3
Lateral diameter = 1444
12.
13.
14.
       Perforation diameter = 5/16 inch
       Perforation spacing = \frac{42^{11}}{100}

Number of perforations per lateral = \frac{100}{100}

Space between first perforation and manifold = \frac{1.75}{1000}
15.
16.
17.
       Total length of manifold = 6
18.
       Reducers - type and number required To be derekmined
19.
       Upslope sand fill depth (in) = 24
20.
       Downslope sand fill depth (in) = 37
21.
       Depth of clay cap and top soil along bed center = 18 in.
Depth of clay cap and top soil along bed edges = 12 in.
22.
23.
24.
       Depth of gravel absorption bed = 10 in.
25.
       Diameter of force main = 3
       Total length of force main =
26.
       Minimum flow or discharge rate for system (g.p.m.) =
27.
28.
       Total dynamic head (TDH) =
29.
       Dose (gal.) = __
```

27-29 Depends on House Location
To be clerex mine by engineer.



# SECTION FIVE CONSTRUCTION PROCEDURES

#### 5.1. **GENERAL**

Proper construction is extremely important if the sand mound is to function as designed. Installation of a sand mound system is prohibited when soils are frozen. Construction of the mound should not occur if the soil is too wet. Compaction and puddling of the soil in the location of the mound and downslope should be avoided. Soil is too wet for construction of the mound if a sample, taken anywhere within the upper eight inches, when rolled between the hands forms a wire. If the sample crumbles, the soil is dry enough for construction to proceed.

#### 5.2. **EQUIPMENT**

The following special equipment is recommended:

- 1. A small track-type tractor with blade for placing and spreading the sand fill.
- 2. A cordless drill for drilling holes in the pipe on-site.
- A moldboard or chisel plow for plowing the soil within the perimeter of the mound. A rototiller may be used on structureless soils with USDA sand textures.
- 4. A rod and level for determining bed elevations, slope on pipes, outlet elevation of septic tank, slope of site, etc.

#### 5.3. MATERIALS

The following specifications are required:

- 1. Sand fill material must be approved by the local Approving Authority prior to hauling to the site. Submit a sample to the local Authority for analyses at least three weeks in advance of construction or select a sand fill from the list of potential sand suppliers. If a sample is submitted for analyses a fee will be charged. Sand fill shall have an effective size between 0.25 mm and 0.5 mm with a uniformity coefficient of 3.5 or less. A copy of the receipt from the sand supplier showing the company name, address, phone number, date and product name will be required.
- 2. Aggregate shall be clean aggregate free of fines and between 3/4 to 2 inches in diameter.
- 3. Geotextile fabric shall be of a type approved by the Approving Authority.
- 4. Cap material shall be soil relatively free of coarse fragments and preferably a clay loam or silt loam texture.

#### 5.4. TANK INSTALLATION AND SITE PREPARATION

- 5.4.1 Locate and rope-off the entire sewage disposal area to prevent damage to the area during other construction activity on the site. Vehicular traffic over the disposal area should be prohibited to avoid soil compaction.
- 5.4.2 Install septic tank(s) and pumping chamber(s) and pump as shown on the drawings. Call for inspection.
- 5.4.3 Stake out the initial and recovery mound perimeters in their proper orientation as shown in the drawings. Reference stakes offset from the mound corner stakes are recommended. Locate the upslope edge of the absorption bed within the mound and determine the ground elevation at the highest location. Reference this elevation to a benchmark for future use. This is necessary to determine the bottom elevation of the absorption bed.
- 5.4.4 Excess vegetation should be cut and removed. Trees should be cut at ground level and stumps left in place.
- 5.4.5 Determine the location where the force main from the pumping chamber will connect to the distribution network manifold within the mound.
- 5.4.6 Install the force main from the pumping chamber to the proper location within the mound. Pipe should be laid with uniform slope back to the chamber so that it drains after dosing. Cut and stub off pipe one foot below existing grade within the proposed perimeter of the initial mound. Backfill trench and compact to prevent seepage along the trench.
- 5.4.7 Plow the soil within the perimeter of the mound to a depth of about eight inches, if the soil is not too wet. Moldboard or chisel plows may be used. Plowing should be done along the contour, throwing soil upslope. Use a two bottom or larger Moldboard plow. In wooded areas with stumps, roughening the surface to a depth of four to six inches with backhoe teeth may be satisfactory. However, all work should be done from the upslope or sides of the mound if at all possible. Rototilling may be used on soils with USDA textures of sand. After plowing, all foot and vehicular traffic shall be kept off the plowed area.

#### 5.5. FILL PLACEMENT

- 5.5.1 Relocate and extend the force main several feet above the ground surface.
- 5.5.2 Place the approved sand fill material on the upslope edge(s) of the plowed area. Keep delivery trucks off the plowed area. Minimize traffic on the downslope side. Fill should be placed and spread immediately after plowing. Move the fill

- material into place using a small track-type tractor with a blade. Work from the end and upslope side. Always keep a minimum of six inches of material beneath the tracks of the tractor to minimize compaction of the natural soil. The fill material should be worked in this manner until the height of the fill reaches the elevation of the top of the absorption bed.
- 5.5.3 With the blade of the tractor, form the absorption bed. Hand level the bottom of the bed and check it for proper elevation. The bed should be level for proper functioning of the mound. Call for inspection.
- 5.5.4 Shape the sides of the sand fill to design slope (ie., 3:1 or flatter).

#### 5.6. **BED AND DISTRIBUTION NETWORK**

- 5.6.1 Carefully place the coarse aggregate in the bed. Do not create ruts in the bottom of the bed. Level the aggregate to a minimum depth of six inches.
- 5.6.2 The distribution network is assembled in place setting the manifold to ensure draining the laterals between doses. The laterals should be laid level with the holes directed downward. Call for inspection. Test the pumping chamber and distribution network with clean water.
- 5.6.3 Place additional aggregate to a depth of at least two inches over the crown of the pipe.
- 5.6.4 Place the approved geotextile fabric over the aggregate bed. The fabric may extend beyond the bed over the sand fill.

#### 5.7. **COVER MATERIAL**

- 5.7.1 Place a finer textured soil material such as sandy clay loam, clay loam, or silt loam on top of the fabric over the bed. The minimum depth of this cap shall be six inches at the outer edges of the bed and 12 inches along the center.
- 5.7.2 Place a minimum of six inches of good quality topsoil over the entire mound surface including the sideslopes. Call for final inspection.

#### 5.8. **VEGETATION**

- 5.8.1 Fertilize, lime, seed and mulch the entire surface of the mound. Grass mixtures adapted to the area should be used.
- 5.8.2 Consult the county extension agent or Soil Conservation Service for recommendations.

COUNTY

EMERGENCY/TEMP NO. IF ANY

COUNTY

SPECIAL CONDITIONS

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& a polienicic

Fage of			Review _					
Page of Date								
		FIELD DATA S	YIELD TEST					
Well Permit No. HO - 88-1498  Location of property (road)  Subdivision Headquarters  Well Driller Kyker Owner D'Wejll								
Well Driller	Hennquar ver	Ker Owne	er D'West	sec.				
Depth of Distance	Depth of well  Distance of measuring point (M.P.) above ground  Static water level (S.W.L.) below M.P.							
I. High rate	pumping reser	voir drawdown						
Time pum Total ti	p startedto	reach pumping water	Pumping rateft.	below M.P.				
II. Recovery	pump test data -	observations to be	recorded every 15 minu	tes				
1	•	PUMPING RATE	FLOW METER READING	CALCULATED FLOW				
minute in- tervals	below M.P.	time to fill 5 gallon bucket	(if used)	(gallons per minute)				
tervars		garion backet		MITTACCY				

A	420	38	

SUBDIVISION: HEAD QUARTERS

LOT NUMBER: 2

#### DRY WELL OR DRY WELL AND TRENCH

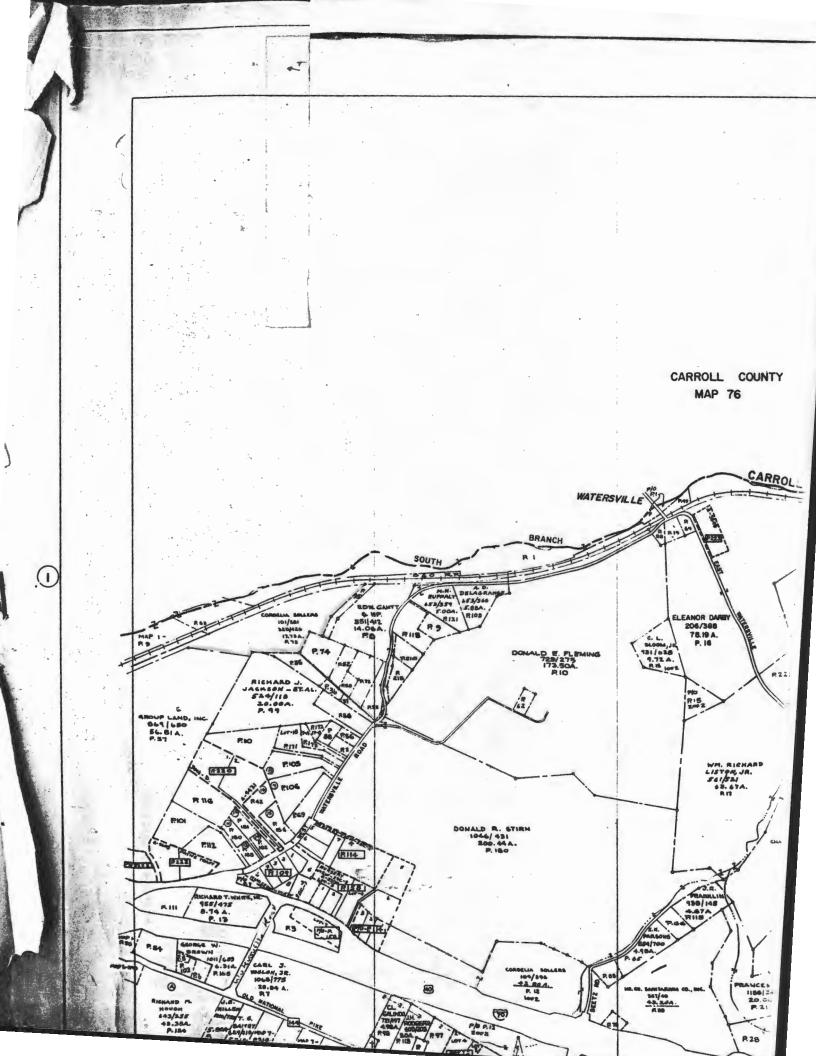
		sq. ft./bedroom
	Septic Tank	Minimum Total Square Feet
3 bedroom	1000 gallon	
4 bedroom	1250 gallon	
5 bedroom	1500 gallon	
Inlet feet	below original grade.	
Bottom maximum depth	feet below or	
Effective area begins	atfeet below	v original grade.
and leave a to exceed l	5-foot earth buffer bet	nt area, run the trench on level ground wees dry well and trench. No trench is with inlet to be same as dry well, with union pip.
Trench to be 6	wide.	sq.ft./bedroom
Inletfeet	below original grade.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Bottom maximum depth	feet below of	ginal grade.
Effective area begins	at feet below	v original grade.
NOTE: (1) No trenc (2) If wore (3) Trenches (4) Call for (5) Provide (ank and (6) If a gal and incr	to be installed on lever inspection of trench be 6" - 8" diameter cleaned drywell.  The properties of the control of the contr	length. distribution box is required. l ground. fore gravel is installed. out and cap to grade or above on septic d, increase septic tank capacity by 50% area by 22%.
LOCATION: LOCATIO	ov: Hace Me	MOUND AT THE HISHOST
ARRA OF The	Approved Sevac	e disposal ANDA, APPROXIMENTE
place the Cen	ER OF THE MOU	ND 80 FE OFF THE SOUTH
30.23'10" W	(280.50°) LOT 4	INC AND SOFE OFF THE
NG2-36-50"W	(208,50) WT LINE.	7-26-89 S. Abol
HD-191		

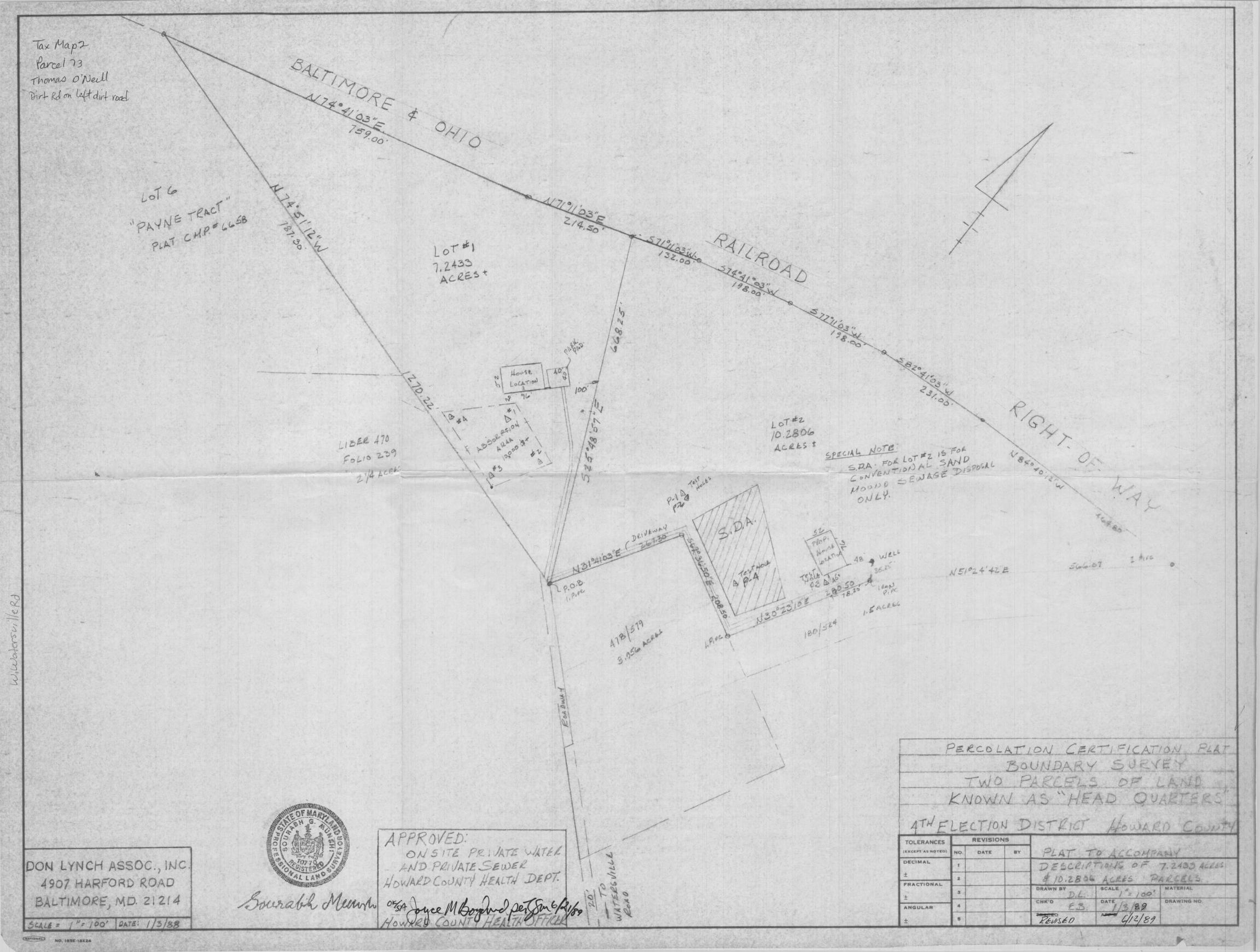
SUBDIVISION: Headquarters
. W. Waters ville ld DRY WELL OF

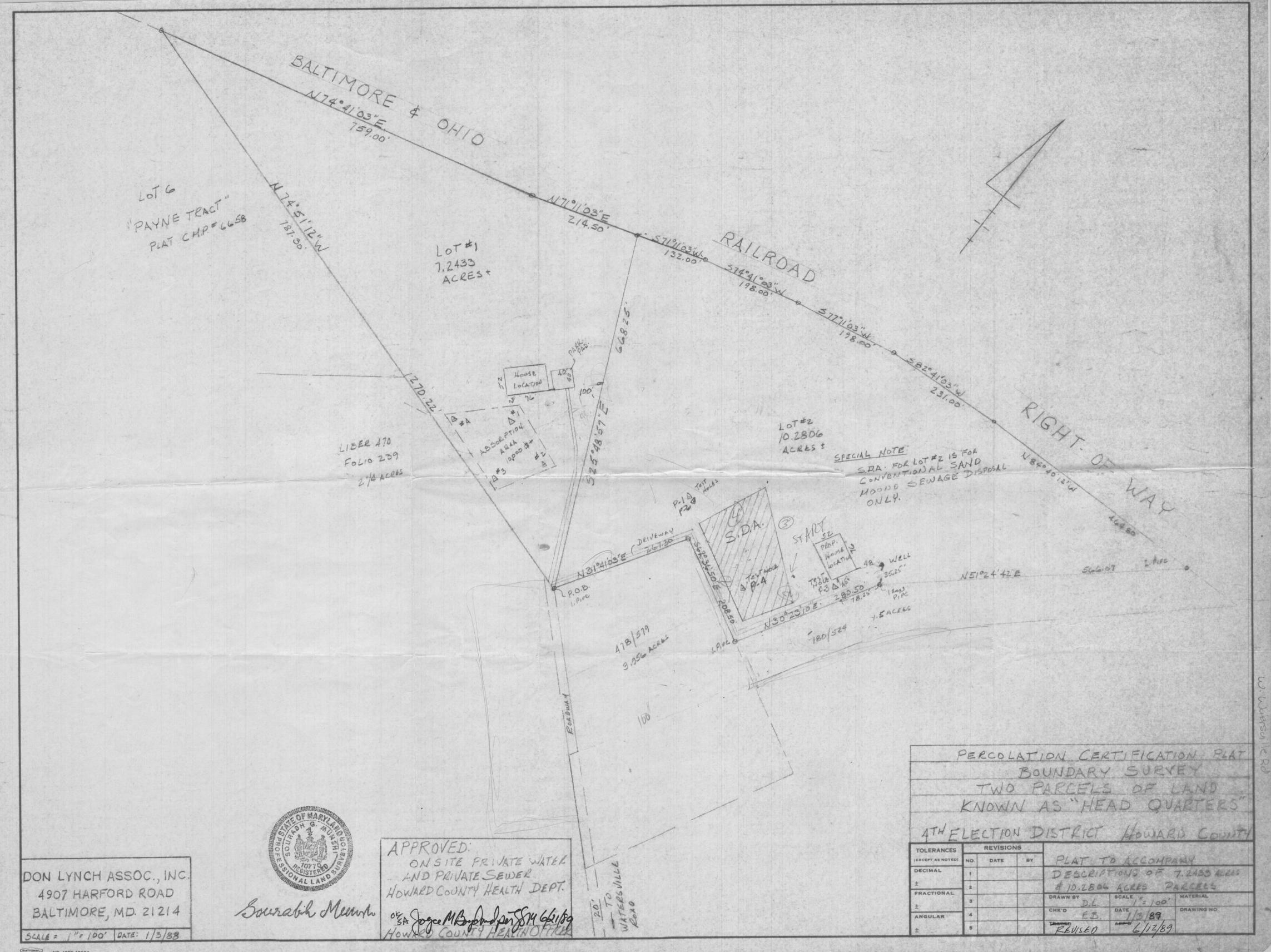
A 42038

LOT NUMBER: 2

· W. Waters v	DRY WELL OR DR	RY WELL AND TRENCH
		sq. ft./bedroom
	Septic Tank	Minimum Total Square Feet
B bedroom	1000 gallon	
bedroom	1250 gallon	· ·
bedroom	1500 gallon	
Inletfeet	below original gr	rade.
Bottom maximum depth		
Effective area begins	at fee	et below original grade.
and leave a to exceed l	5-foot earth buff 00 feet in lengt	absorbent area, run the trench on level groun fer between dry well and trench. No trench ith. Trench inlet to be same as dry well, wit distribution pipe.
	TRE	ENCHES
		300 sq. ft./bedroom
Trench to be 3	wide.	
Inlet 1/2 feet	below original gr	rade.
Bottom maximum depth	3 feet be	elow original grade.
Effective area begins	at /2 fee	et below original grade.
feet of st	one below distribu	ution pipe.
(2) If more (3) Trenches (4) Call for (5) Provide tank and (6) If a ga	to be installed of inspection of tree 6" - 8" diameter drywell.	sed, a distribution box is required.
LOCATION: START	THE FIRST	TRENCH 150 ARG THE
		75. OFF THE 280.500 LOT
		TOWARD THE 208.50 LOT
LINE ON		
	AUV I UV I	
		rida un
In-191		6/3/71 MIL
111-1-1-1		To the second se







NO. 185E-18X24