

APPLICATION

PERCOLATION TESTING

A 514619

P _____

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

DISTRICT _____

DATE 10/31/00

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 Debra and William Anderson
Brenda Tompkins-McDade

ADDRESS 7320 GEORGE DRIVE PHONE (410) 531-6444
Columbia MD 21044

AGENT OR PROSPECTIVE BUYER TRINITY QUALITY HOMES INC

ADDRESS 7320 GEORGE DRIVE PHONE (410) 531-6444
Columbia MD 21044

PROPERTY LOCATION: * THE PRESERVE AT WAVERLY WOODS
D SUBDIVISION OF SHADOW SHADE LOTS 1+2 + RES. PARCEL

SUBDIVISION AD HICHMONT AT BREEZEWOOD FARMS LOT NO. (23)

ROAD AND DESCRIPTION WOODGATE ROAD AD ROUTE 99 (FREDERICK ROAD)

TAX MAP 10 PARCEL # 36+102

SIZE OF LOT 1 ac 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 _____

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

COUNTY #

SOIL PROFILE

180

topsoil

red org
brn
cl lm

tan
mica
lm

5-10%
rock

174

topsoil

dk red
brn
cl lm

med to
dk
org brn
mica
lm

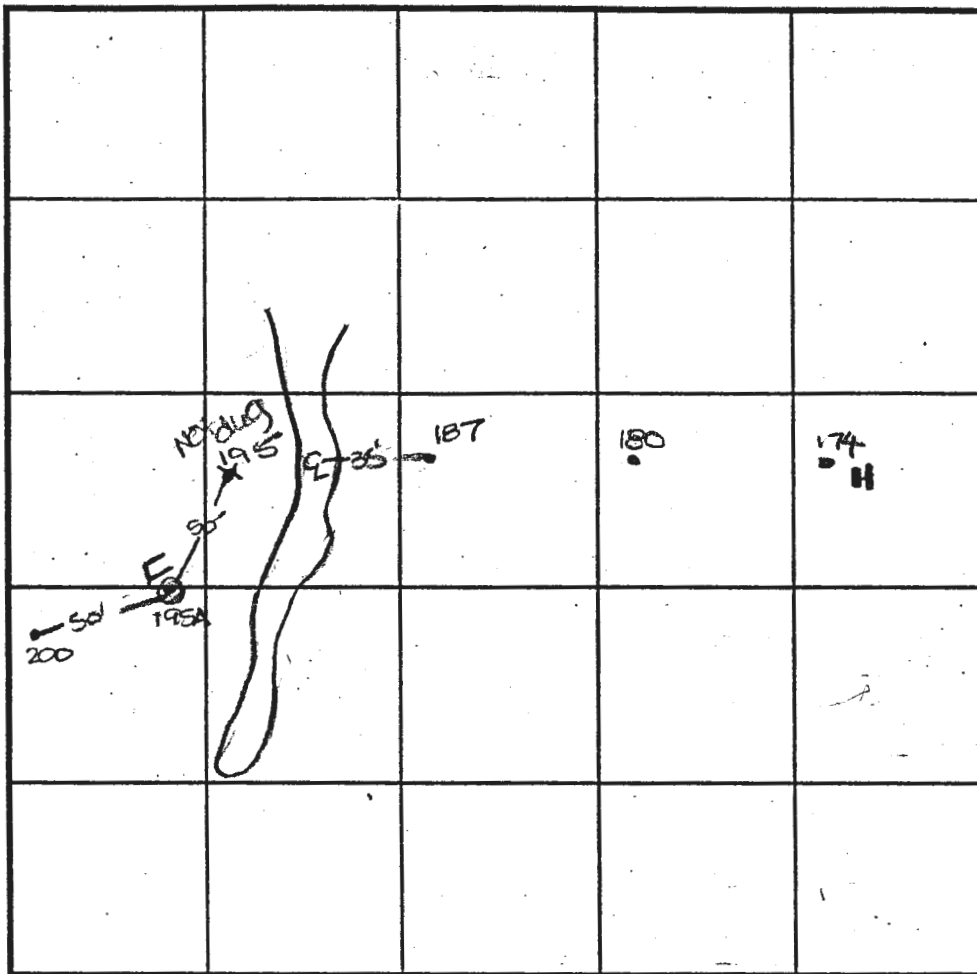
171

topsoil

org brn
cl lm

med
to lt
brn
mica
lm

60% patches
Refused



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

SOIL PROFILE

200

topsoil

org brn
cl lm

lt org
brn
mica
lm

20%
rock

11.5' Refusal

187

like

180

w/

15-20%
rock

11' Refusal

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
1-10-01	180	3.0'S	2:03	2:04	2:04	2:06	2
		13.0'D	view	1-see	profile		OK
	174	3.5'S	2:00	2:123	2:123	2:33e	21
		12'4" D	water	-see	profile		HOLD FOR water test
	171	12.5'D	refusal	-see	profile		OK
	187	2.5'S	2:00	2:30	2:30	2:34	4
		11.0' D	refusal	-see	profile		OK
	195A	6.5'D	Refusal				FAIL
	200	11.5' D	Refusal	-see	profile		OK

REMARKS except 195A, all holes tested as stated

TYPE OF SOIL

TESTED BY DKC ALSO PRESENT T. Feaga, C. Zapp

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME TRENCH WIDTH

INLET DEPTH MAXIMUM BOTTOM DEPTH SQ. FT./BEDROOM

APPLICATION

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3525-H ELLICOTT MILLS DRIVE/ELLICOTT CITY, MARYLAND 21043
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PROPERTY OWNER Debrah and William Anderson
Brenda Tompkins-McDade

ADDRESS C/O TRINITY QUALITY HOMES INC
7320 GEORGE DRIVE PHONE (410) 531-6444
Columbia MD 21044

AGENT OR PROSPECTIVE BUYER TRINITY QUALITY HOMES INC
7320 GEORGE DRIVE

ADDRESS Columbia MD 21044 PHONE (410) 531-6444

PROPERTY LOCATION: * THE PRESERVE AT WAVERLY WOODS
D SUBDIVISION OF SHADOW SHADE LOTS 1+2 + PRES. PARCEL

SUBDIVISION OLD HIGHROAD AT BREEZEWOOD FARMS LOT NO. _____

ROAD AND DESCRIPTION WINDSOR ROAD AND ROUTE 99 (FREDERICK ROAD)

TAX MAP 10 PARCEL # 36-102

SIZE OF LOT 1 AC 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 _____

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

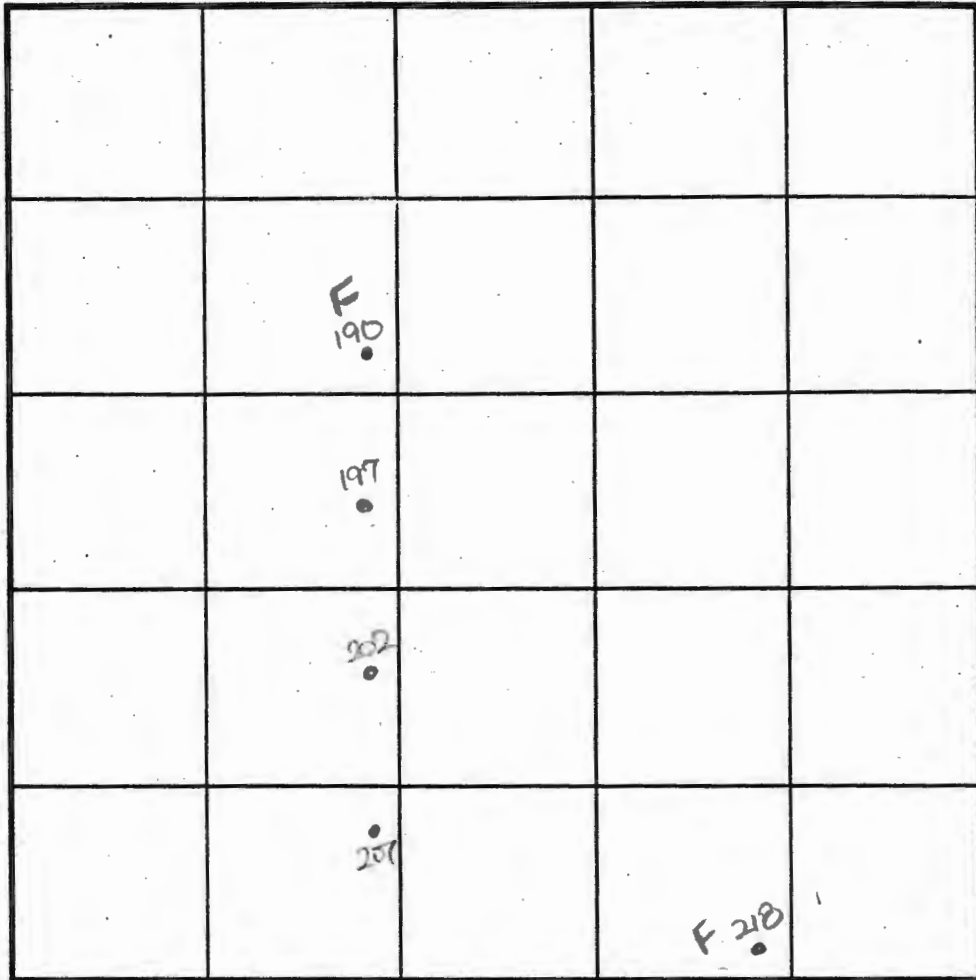
COUNTY #

SOIL PROFILE

0' 190
 6" topsoil
 org brn cl lm
 3' pale org brn sa mica lm
 7' 60% rock
 12' Refusal

0' 207
 6" topsoil
 org brn cl lm
 3' pale brn sa mica lm
 11' 20%+ rock
 Refusal

0' 197/202
 6" topsoil
 org brn cl lm
 3' pale org brn sa mica lm
 10-15% rock
 13'



SOIL PROFILE

0' 218
 6" topsoil
 org brn cl lm
 3' pale org brn sa mica lm
 5' 60% rock frag
 10' Refusal

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
1-5-01	190	12.0'D	Refusal	- see profile			FAIL *
	207	2.5'S	1:26	1:31	1:31	1:43	12
		11.0'D	Refusal	- see profile			OK
	197	3.0'S	1:31	1:39	1:39	1:50	11
		13.0'D	visual	- see profile			OK
	202	13.0'D	visual	- see profile			OK
	218	10.0'D	Refusal	- see profile			FAIL *

REMARKS * holes 190 and 218 fail due to excessive rock content

TESTED BY DKC ALSO PRESENT T. Feaga, C. Zepp

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____

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

* original test sheet recopied - HEAVY ENVD

COUNTY #

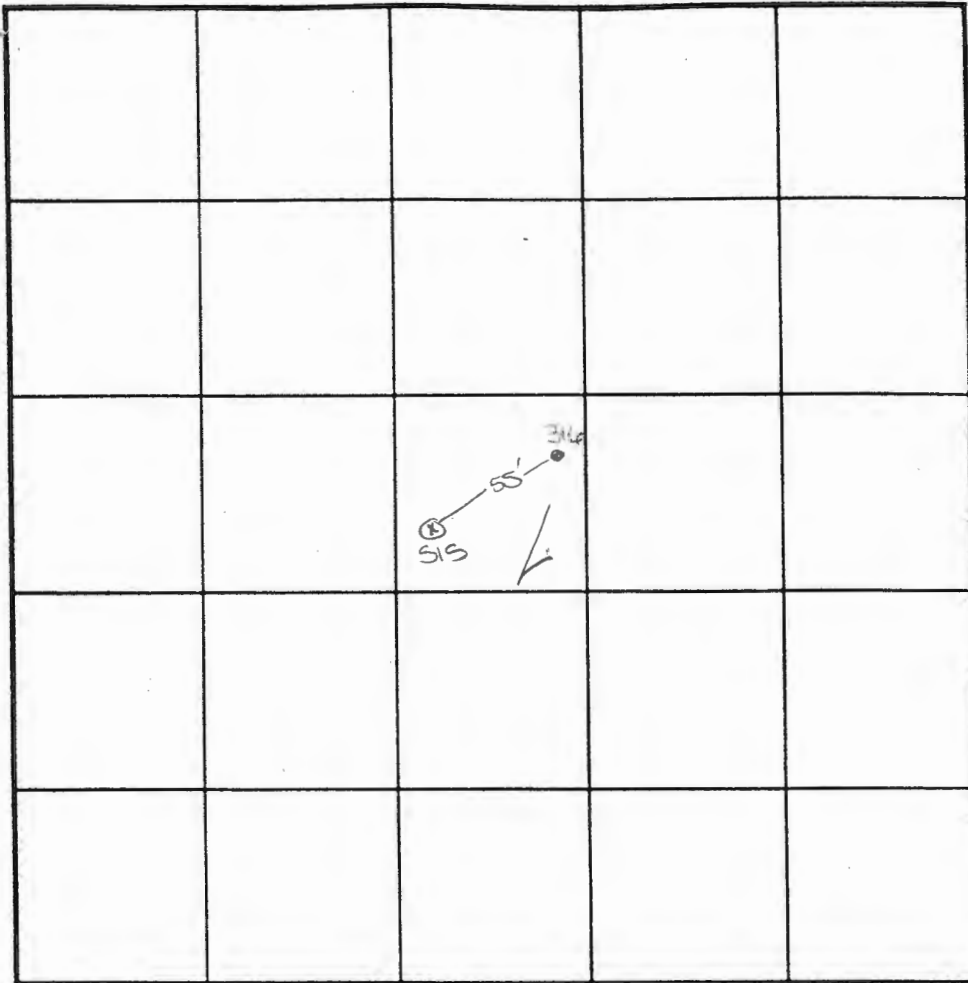
SOIL PROFILE

316

0'
topsoil
org brn
cl lm
2.5'
lt brn
sa mira
lm
10%
rock
13

SOIL PROFILE

0'



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

19ke
316
w/
25%
rock
11.5' Refusal

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
5-16-01	316	2.5' S	1:29	1:30.3	1:30.3	1:32	2
		13.0'D	visual	-see	profile		OK
	515	11.5' D	refusal	-see	profile		OK

REMARKS hole 316 started only

TYPE OF SOIL _____

TESTED BY DKC ALSO PRESENT Clayp, T. Feaga

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____

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

COUNTY #

SOIL PROFILE 211

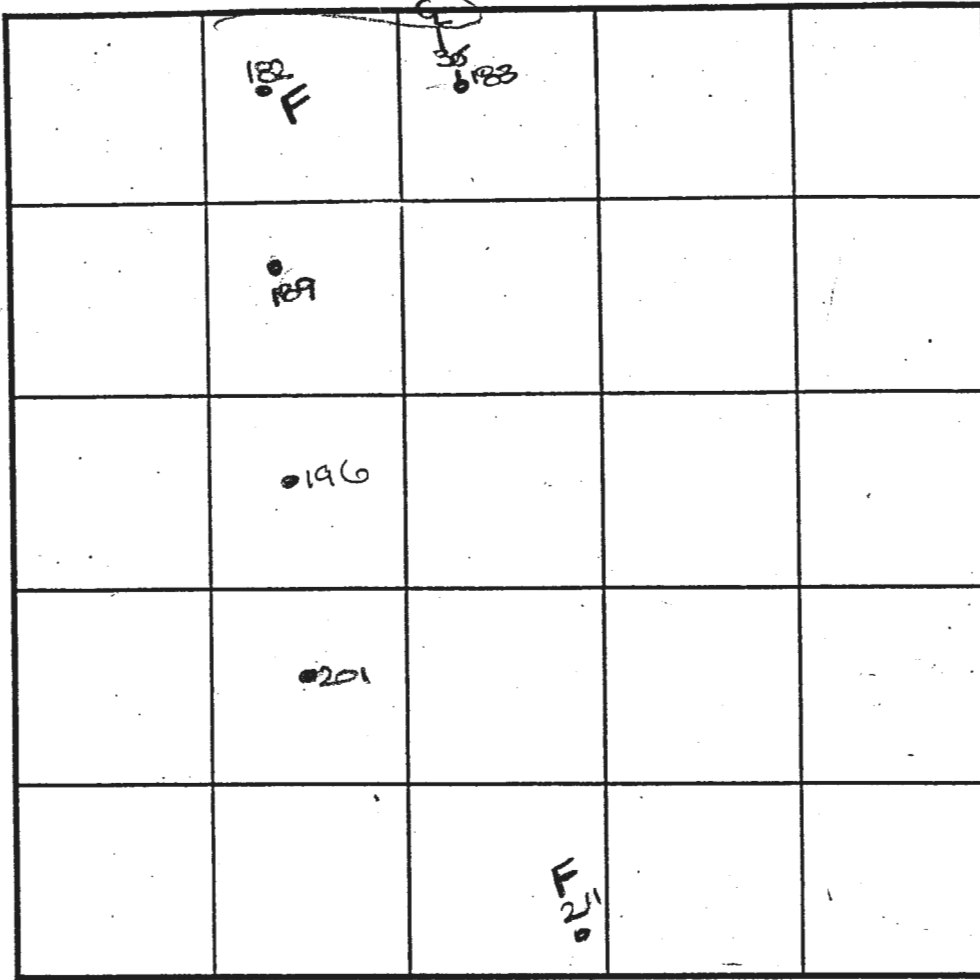
0' topsoil
 6" org lim
 cl lim
 3' 1t lim
 ca mica
 lm
 7'8" Refusal

189/196

0' topsoil
 6" org lim
 cl lim
 25" tan
 to
 base
 mica
 lm
 10-15%
 rock

182

6" topsoil
 org lim
 cl lim
 4' 60%
 rock
 Refusal



SOIL PROFILE 183

0' topsoil
 6" org lim
 cl lim
 2' med
 org lim
 mica
 lm
 15%
 rock

201

like
 189
 w/20%
 mica
 rock

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

Old Frederic Road

13.5'

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
1-10-01	211	7'8" D	Refusal	1 - see profile			FAIL *
	189	2.5' S	10:28	10:30	10:35	10:33	3
		12.5' D	visual	1 - see profile			OK
	182	9.0' D	Refusal	1 - see profile			FAIL *
	183	3.0' S	10:38	10:41	10:41	10:46	5
		13.0' D	visual	1 - see profile			OK
	196	14.0' D	visual	1 - see profile			OK
	201	2.5' S	11:01	11:07	11:07	11:14	7
		13.5' D	visual	1 - see profile			OK

REMARKS * notes 211 and 182 fail due to excessive

TYPE OF SOIL rock content

TESTED BY DRC ALSO PRESENT T. Feaga, C. Zepp

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME TRENCH WIDTH

INLET DEPTH MAXIMUM BOTTOM DEPTH SQ. FT./BEDROOM

APPLICATION

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PROPERTY OWNER Debra and William Anderson
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Columbia MD 21044

AGENT OR PROSPECTIVE BUYER TRINITY QUALITY HOMES INC

ADDRESS 7320 GEORGE DRIVE PHONE (410) 531-6444
Columbia MD 21044

PROPERTY LOCATION: * THE PRESERVE AT WAVERLY WOODS

SUBDIVISION D RESUBDIVISION ON SHADOW SHADE LOTS 1+2+ RES. PARCEL
AND HIGHWAYS AT BREEZEWOOD FOREST LOT NO. (22)

ROAD AND DESCRIPTION WINDSOR TOW AND DATE 99 (FREDERICK TOW)

TAX MAP 10 PARCEL # 36-102

SIZE OF LOT 1.0 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 _____

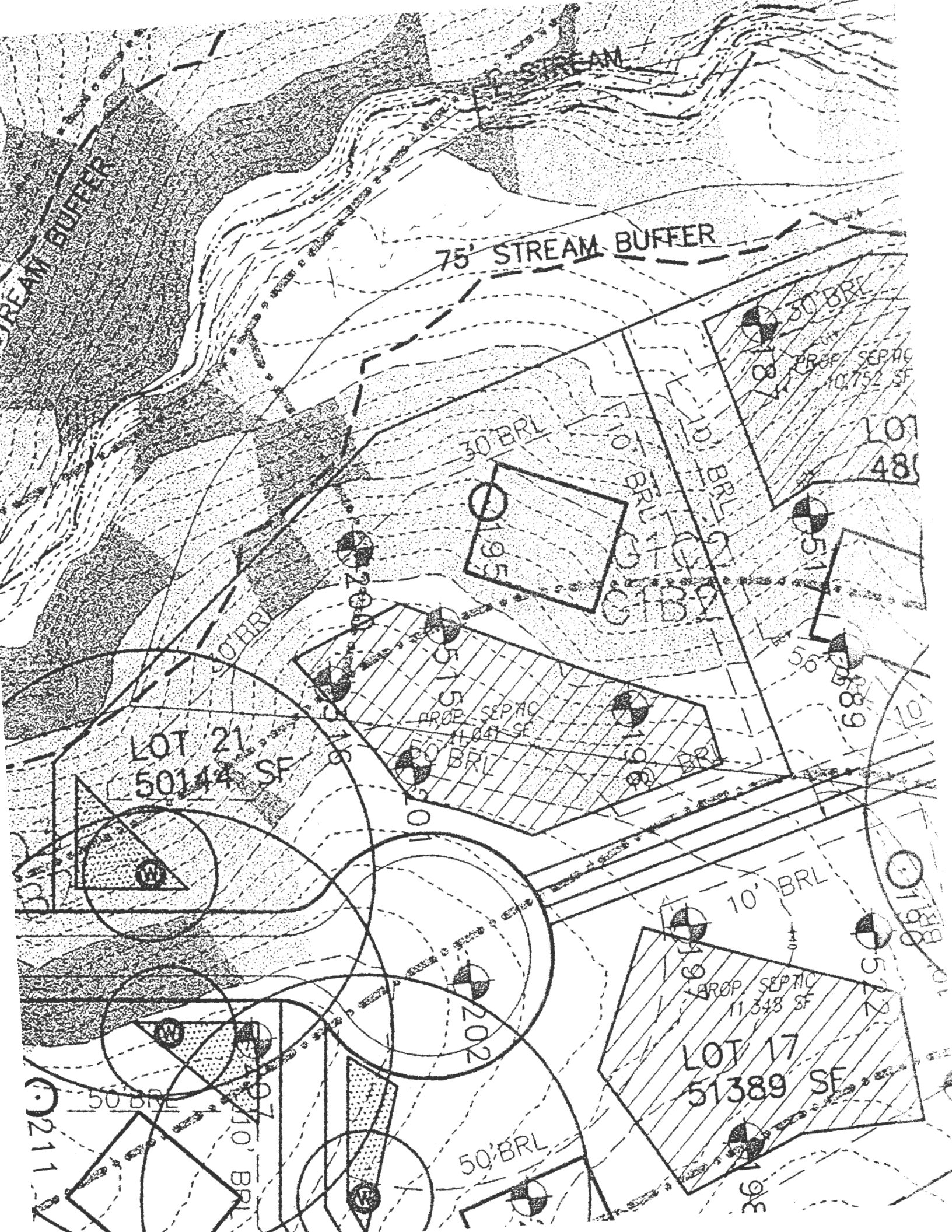
HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING _____

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



75' STREAM BUFFER

LOT 21
50,144 SF

LOT 17
51,389 SF

LOT 48
10,752 SF

PROP SEPTIC
11,041 SF

PROP SEPTIC
11,348 SF

PROP SEPTIC
10,752 SF

30' BRL

30' BRL

50' BRL

10' BRL

50' BRL

50' BRL

10' BRL

10' BRL

211

36

202

589

195

51

51

57

57

57

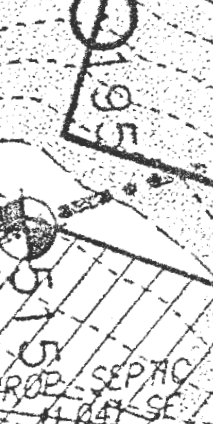
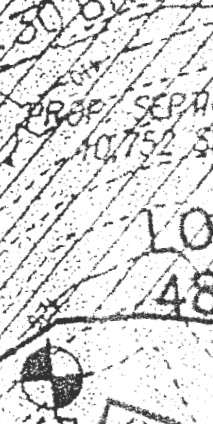
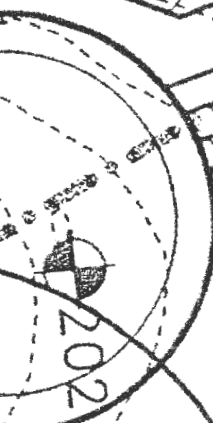
57

57

57

57

57



STREAM BUFFER

STREAM

Oswald, Hank

From: Oswald, Hank
Sent: Tuesday, April 26, 2022 11:41 AM
To: Kathleen.makusky@timmons.com
Cc: Rob Vogel; Jeremiah Reynolds (Jeremiah.Reynolds@timmons.com)
Subject: FW: PC and OSDS Plan_1812 Mount Denali Drive

Hi Ms. Makusky:

Below, you will find the last set of comments regarding the OSDS plan for 1812 Mount Denali Drive. To date, I have not received a revision.

Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well & Septic Program
410.313.1786
hoswald@howardcountymd.gov

From: Rob Vogel <Rob.Vogel@timmons.com>
Sent: Wednesday, March 16, 2022 9:34 AM
To: Oswald, Hank <hoswald@howardcountymd.gov>
Cc: tkeane@trinityhomes.com
Subject: RE: PC and OSDS Plan_1812 Mount Denali Drive

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Hank
I had a conversation with Jeff. Unfortunately the computer generated a steep slope symbol where it should not be. The topo has never changed in this area.

Jeremiah.
Please send Hank the corrected plan without the shading

Robert H. Vogel P.E., M.ASCE

Principal

VOGEL ENGINEERING + TIMMONS GROUP | www.timmons.com
3300 N. Ridge Road, Suite 110 | Ellicott City, MD 21043
Office: 410.461.7666 | Fax: 410.461.8961
<https://www.linkedin.com/company/timmons-group>
Your Vision Achieved Through Ours

To send me files greater than 20MB [click here](#)

From: Oswald, Hank <hoswald@howardcountymd.gov>
Sent: Wednesday, March 16, 2022 9:27 AM
To: Rob Vogel <Rob.Vogel@timmons.com>
Cc: tkeane@trinityhomes.com
Subject: FW: PC and OSDS Plan_1812 Mount Denali Drive

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Rob:

The revised OSDS plan for 1812 Mount Denali Drive was reviewed with the following comments:

- 1.) Arrange systems around highlighted area per last comment dated 2.17.22 (please see attachment for highlighted area).
- 2.) The topo changed within the SDA on the revised OSDS Plan. Please correct.

Should you have any questions, please don't hesitate to ask.

Thanks,

Hank

From: Oswald, Hank
Sent: Thursday, February 17, 2022 2:20 PM
To: Rob Vogel <Rob.Vogel@timmons.com>
Cc: Jeremiah Reynolds <Jeremiah.Reynolds@timmons.com>
Subject: PC and OSDS Plan_1812 Mount Denali Drive

Hi Rob:

The PC and OSDS Plan have been reviewed with the following comments:

Perc Cert Plan:

- 1.) Add field location note to PC Plan

OSDS Plan:

- 1.) Arrange systems around highlighted area on plan (See attachment).

Should you have any questions, please don't hesitate to ask.

Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well & Septic Program
410.313.1786

hoswald@howardcountymd.gov

COUNTY #

SOIL PROFILE 211

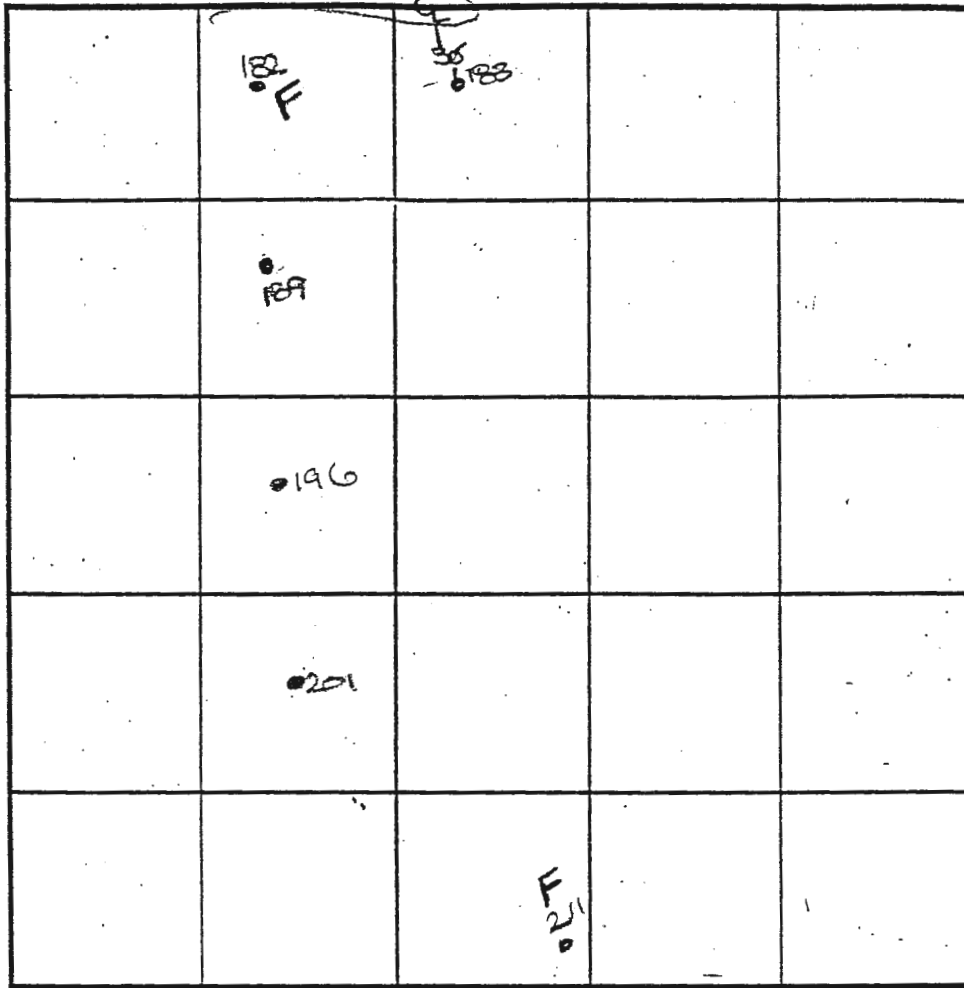
6" topsoil
 3' org lim
 cl lim
 1+ lim
 sa mica
 Lm
 7'8" Refused

189/196

6" topsoil
 org lim
 cl lim
 2.5' tan
 to
 be
 sa mica
 Lm
 10-15%
 rock

182

6" topsoil
 org lim
 cl lim
 4' Refused
 60%
 rock



SOIL PROFILE 183

6" topsoil
 3' org lim
 cl lim
 med
 org lim
 sa mica
 Lm
 15%
 rock

201

like
 189
 w/20%
 90%
 rock

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

Old Frederice Road

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
1-10-01	211	7'8" D	Refused	1 - see profile			FAIL *
	189	2.5' S	10:28	10:30	10:30	10:33	3
		12.5' D	visual	1 - see profile			OK
	182	4.0' D	Refused	1 - see profile			FAIL *
	183	3.0' S	10:38	10:43	10:43	10:46	5
		13.0' D	visual	1 - see profile			OK
	196	14.0' D	visual	1 - see profile			OK
	201	2.5' S	11:01	11:07	11:07	11:14	7
		13.5' D	visual	1 - see profile			OK

REMARKS * holes 211 and 182 fail due to excessive

TYPE OF SOIL rock content

TESTED BY DJE ALSO PRESENT T. Feaga C. Zepp

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME TRENCH WIDTH

INLET DEPTH MAXIMUM BOTTOM DEPTH SQ FT/BEDROOM

Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, October 6, 2021 9:27 AM
To: Rob Vogel
Subject: OSDS Plan Review_1812 Mount Denali Drive

Hi Rob:

Good morning. The OSDS Plan for 1812 Mount Denali Drive has been reviewed with the following comments:

- 1.) The side wall reduction credit (5 feet) for the first replacement system should be 0.36 (not .31). 169 linear feet of trench would be required.
- 2.) The swale along the driveway should be 50 feet from the well box. There is also a concern for road salt from the cul-de-sac. Therefore, this office recommends a sodium, chloride and TDS sample from the well now to plan for treatment (if needed). If not now, then definitely at I.C.O.P. A note will be added to the file.

Should you have any questions, please don't hesitate to ask.

Respectfully,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well & Septic Program
410.313.1786
hoswald@howardcountymd.gov

COUNTY #

SOIL PROFILE

316

topsoil

org brn

cl lm

2.5

14 brn

sa mir

lm

10%
rock

13

19ke

316

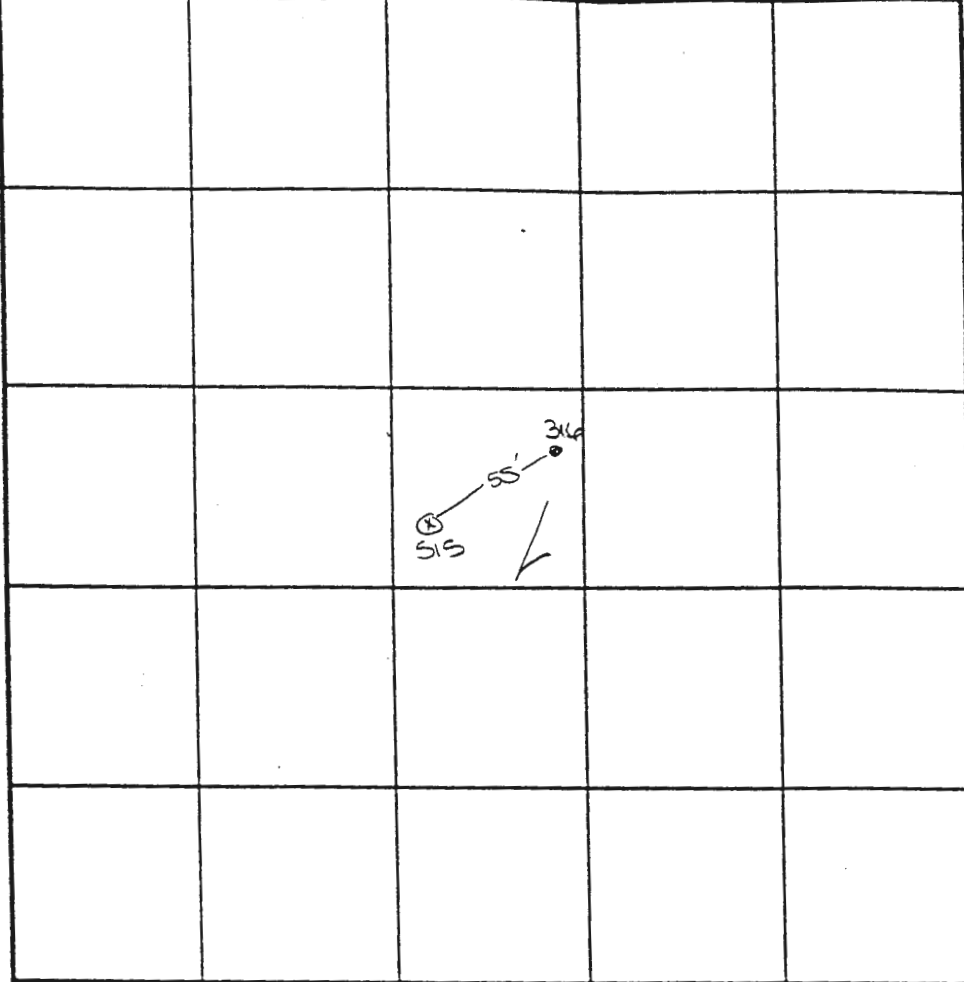
w/

25%
rock

11.5 Refusal

SOIL PROFILE

0'



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
5-16-01	316	2.5' S	11:29	11:30	11:30	11:32	2
		13.0' D	Visual	-spec	profile		OK
	S15	11.5' D	Refusal	-spec	profile		OK

REMARKS hole 316 staked only

TYPE OF SOIL _____

TESTED BY DKC ALSO PRESENT Cripp, T. Feag

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____

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

LOT 6
58559 SF

WACI (BAST MEW)
AS IS DOWN OR TOWARD
LOCALITY HEALTH
DEPARTMENT

PROP. SEPTIC
10,103 SF

75' STREAM BUFFER

75' STREAM BUFFER

LOT 19
48095 SF

LOT 20
48045 SF

LOT 21
50144 SF

LOT 18
58122 SF

LOT 17
51389 SF

LOT 16
58286 SF

NON-BUILDABLE
PRESERVATION
PARCEL 'E'
190,443 SF

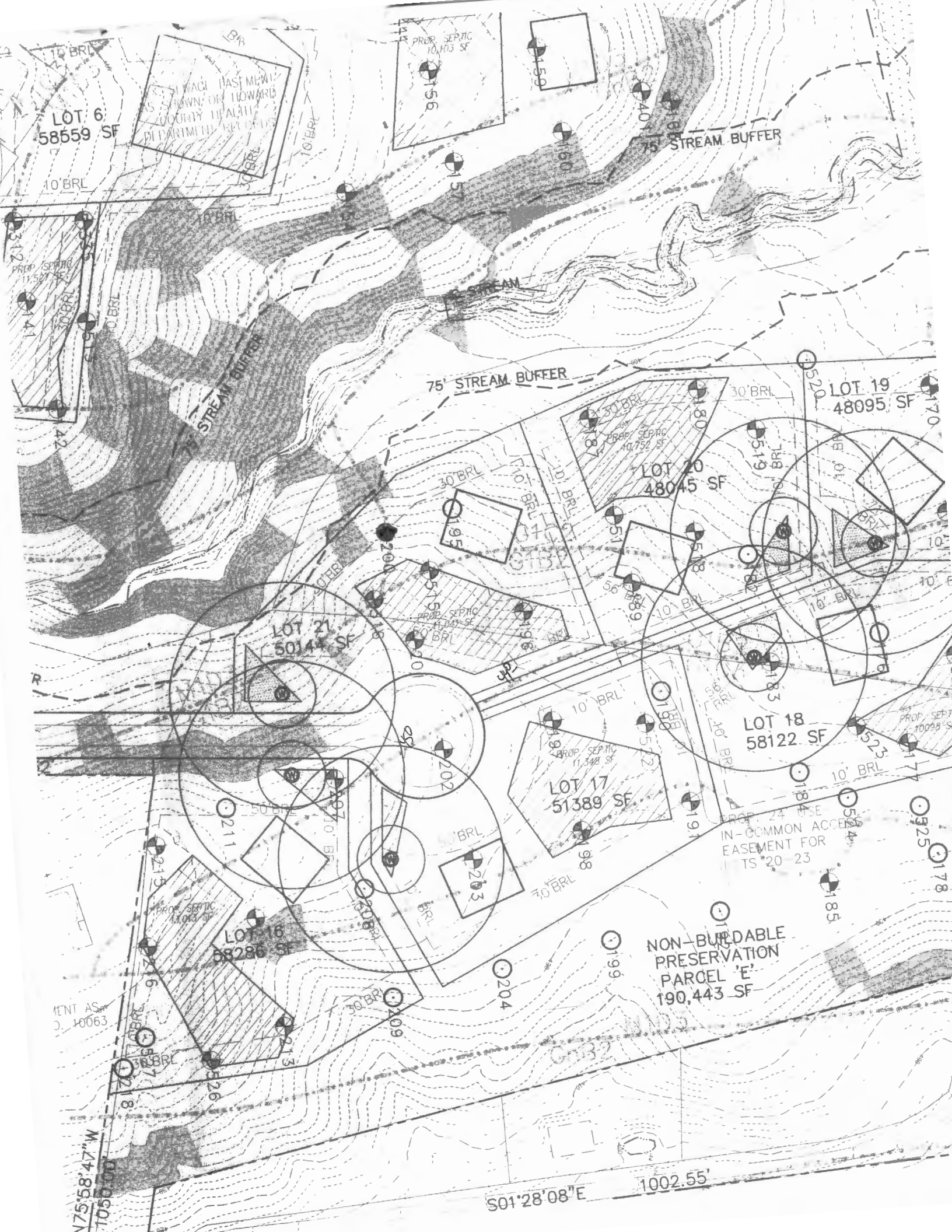
MENT AS
J. 10063

PROP. 24 USE
IN-COMMON ACCESS
EASEMENT FOR
TS 20-23

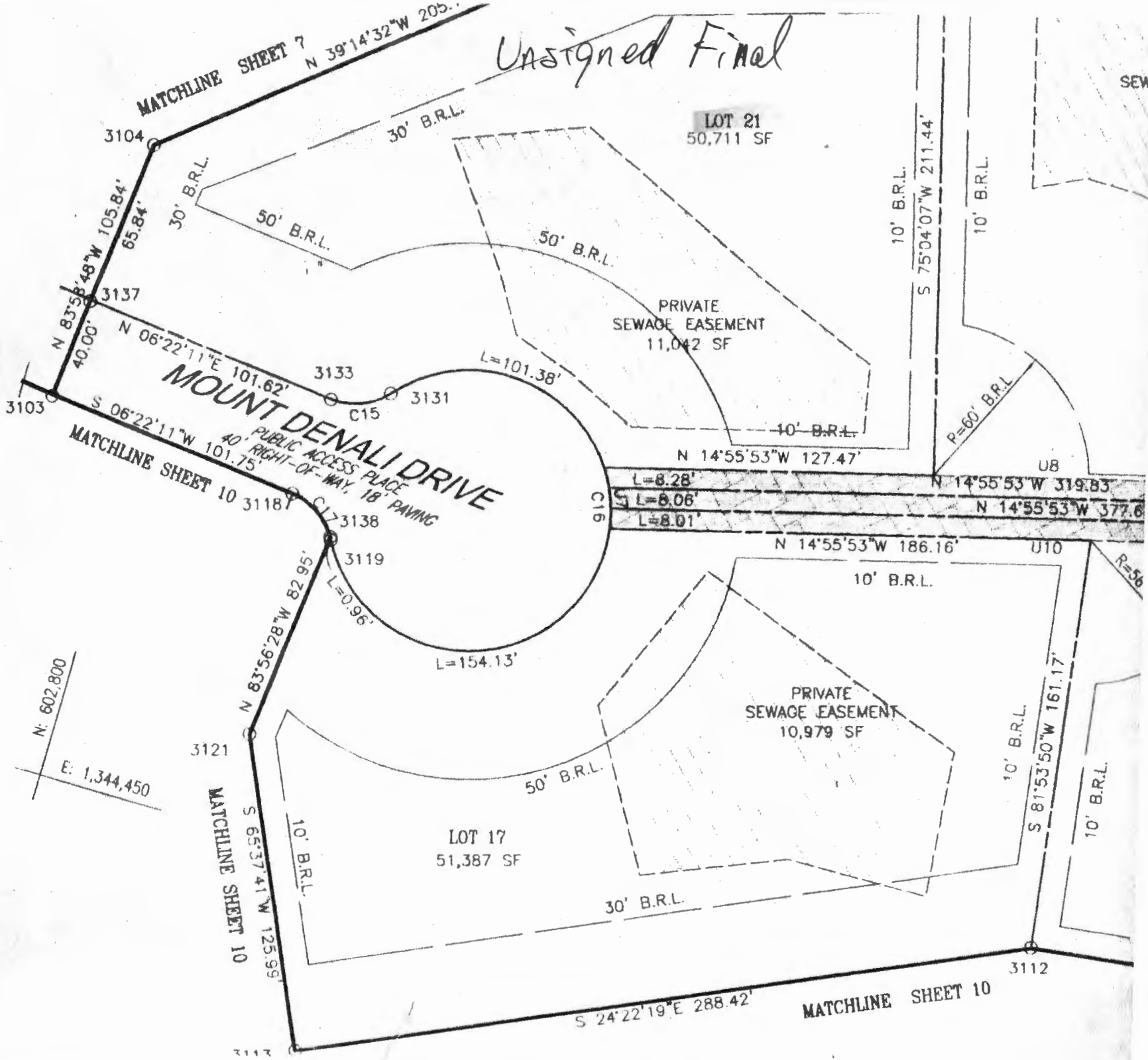
75°58'47" W
1009.50'

S01°28'08" E

1002.55'



Unsigned Final



MATCHLINE SHEET 7

LOT 21
50,711 SF

MOUNT DENALI DRIVE

MATCHLINE SHEET 10

LOT 17
51,387 SF

MATCHLINE SHEET 10

N: 602,800
E: 1,344,450

Oswald, Hank

From: Oswald, Hank
Sent: Thursday, February 17, 2022 2:20 PM
To: Rob Vogel
Cc: Jeremiah Reynolds
Subject: PC and OSDS Plan_1812 Mount Denali Drive
Attachments: [Untitled].pdf

Hi Rob:

The PC and OSDS Plan have been reviewed with the following comments:

Per Cert Plan:

- 1.) Add field location note to PC Plan

OSDS Plan:

- 1.) Arrange systems around highlighted area on plan (See attachment).

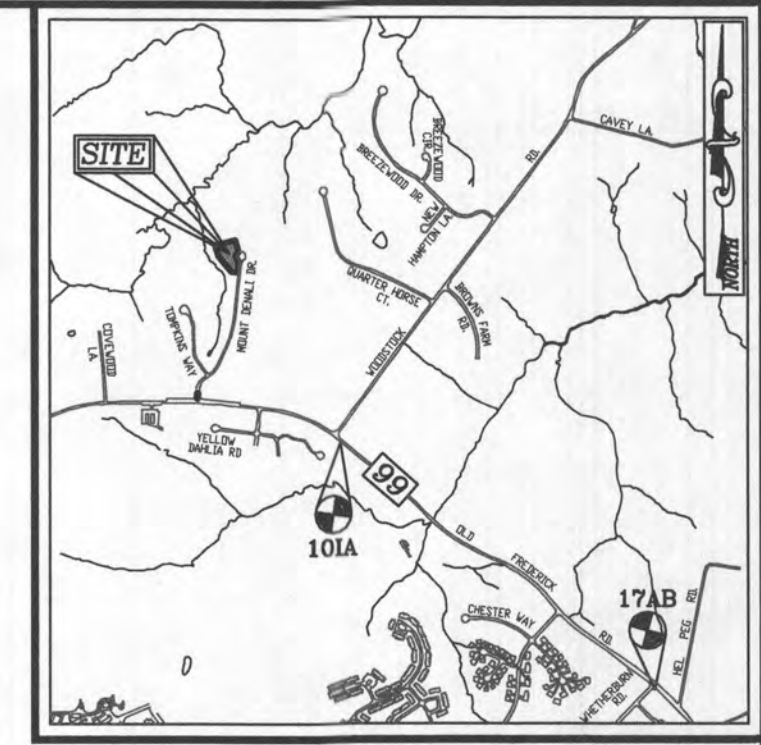
Should you have any questions, please don't hesitate to ask.

Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well & Septic Program
410.313.1786
hoswald@howardcountymd.gov

BENCHMARKS
 HOWARD COUNTY BENCHMARK 101A (CONC. MON.)
 N 600995.13 E 1345340.39 ELEV. 441.90
 LOCATION: CORNER RT-99 & WOODSTOCK ROAD
 HOWARD COUNTY BENCHMARK 17AB (CONC. MON.)
 N 598435.30 E 1348615.30 ELEV. 508.40
 LOCATION: CORNER RT-99 & WHETHERBURN ROAD



VICINITY MAP
 SCALE: 1"=2000'
 ADC MAP: 4694-J9

E 1344500
 N 603150

E 1344500
 N 602900

- LEGEND:**
- PROPERTY LINE
 - ADJACENT PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - EXISTING EDGE OF PAVING
 - EXISTING TREELINE
 - EXISTING 10' CONTOUR
 - EXISTING 2' CONTOUR
 - SOILS
 - EXISTING FOREST CONSERVATION EASEMENT (PLAT #17059-17069)
 - EXISTING 24' PRIVATE USE-IN-COMMON & UTILITY EASEMENT FOR THE BENEFIT OF LOT 18, 19 & 20 (PLAT #17066)
 - MODERATE SLOPES (15%-24.99% SLOPES)
 - STEEP SLOPES (25%-100% SLOPES)
 - APPROVED PRIVATE SEWAGE DISPOSAL AREA
 - APPROVED PRIVATE SEWAGE DISPOSAL AREA TO BE ABANDONED
 - APPROVED WELL AREA
 - PASSED PERC. TEST
 - FAILED PERC. TEST
 - ⊙ EXISTING WELL

GENERAL NOTES

1. THIS SUBJECT PROPERTY IS ZONED RC-DEO.
2. THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY VOGEL & ASSOCIATES, DATED MARCH 2001.
3. DEED REFERENCE: LIBER 6964 FOLIO 191
4. THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL TOPOGRAPHIC SURVEY PERFORMED BY POTOMAC AERIAL SURVEYS, DATED APRIL 14, 2001.
5. SOIL TYPES SHOWN HEREON ARE FROM THE USDA WEB SOIL SURVEY.
6. ALL WELLS AND SEPTIC SYSTEMS WITHIN 100' FROM THE PROPERTY BOUNDARIES HAVE BEEN SHOWN.
7. ANY CHANGE TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
8. ADJUSTMENT TO THE PRIVATE SEWAGE AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
9. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
10. EXISTING WELLS AND/OR SEWAGE AREAS AND COMPONENTS WITHIN 200 FEET OF THE PROPERTY HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION.
11. ALL BUILDING SITES SHOWN COMPLY WITH MINIMUM BUILDING RESTRICTION REGULATIONS.
12. THE PURPOSE OF THIS PERCOLATION CERTIFICATION REVISION PLAN IS TO ABANDON A PORTION OF THE APPROVED SEWAGE DISPOSAL AREA TO ACCOMMODATE A NEW HOUSE ON LOT 21.

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	HYDRIC
Gbb	GLADSTONE LOAM, 3 TO 6 PERCENT SLOPES	A	.32	NO	NO
GmC	GLENVILLE SILT LOAM, 8 TO 15 PERCENT SLOPES	C	.49	YES	NO
MdC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	.32	NO	NO
MdD	MANOR LOAM, 15 TO 25 PERCENT SLOPES, VERY ROCKY	B	.28	YES	NO

— SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
 — K VALUES PER <https://www.howardscd.org/documents> - "K" FACTORS (USE KW)
 — HOWARD COUNTY SOILS MAP NUMBER 5 - STYKESVILLE NE
NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THIS AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECORDED OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS.

Michael J. Owen
 COUNTY HEALTH OFFICER
 DATE: 2/9/22

PERCOLATION CERTIFICATION:
 I CERTIFY THAT THE LOCATIONS SHOWN HEREON ARE BASED ON FIELD LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

Michael L. Loveland
 MICHAEL L. LOVELAND
 PROFESSIONAL LAND SURVEYOR, MD REG. NO. 21746
 DATE: 2/24/22

WELL LOCATION CERTIFICATION:
 THE EXISTING WELL SHOWN FOR LOT 21 (TAG #HO-94-3936)
 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

PLAN VIEW
 SCALE: 1"=30'

OWNER
 THE PRESERVE AT WAVERLY GLEN, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

DEVELOPER
 TRINITY HOMES MARY LAND, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

NO.	REVISION	DATE

PERCOLATION CERTIFICATION REVISION PLAN
THE PRESERVE AT WAVERLY GLEN - LOT 21
 1812 MOUNT DENALI DRIVE
 WOODSTOCK, MD 21163
 (1.16 AC.)

L. 6964 / F. 191
 3RD ELECTION DISTRICT
 TAX MAP: 10 GRID: 23

PARCEL: 330
 ZONED: RC-DEO
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18183, EXPIRATION DATE: 09-27-2022

DESIGN BY: RHW
 DRAWN BY: JMR
 CHECKED BY: RHW
 DATE: FEBRUARY 2022
 SCALE: AS SHOWN
 W.O. NO.: 2017139

1 SHEET OF 1

ROBERT H. VOGEL, PE No.18183



BENCHMARKS

HOWARD COUNTY BENCHMARK 101A (CONC. MON.)
 N 600995.13 E 1345340.39 ELEV. 441.90
 LOCATION: CORNER RT-99 & WOODSTOCK ROAD

HOWARD COUNTY BENCHMARK 17AB (CONC. MON.)
 N 598435.30 E 1348615.30 ELEV. 508.40
 LOCATION: CORNER RT-99 & WETHERBURN ROAD

VICINITY MAP
 SCALE: 1"=2000'
 ADC MAP: 4694-39

LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING TREELINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SOILS
- EXISTING FOREST CONSERVATION EASEMENT (PLAT #17059-17069)
- EXISTING 24' PRIVATE USE-IN-COMMON & UTILITY EASEMENT FOR THE BENEFIT OF LOT 16, 19 & 20 (PLAT #17066)
- MODERATE SLOPES (15%-24.99% SLOPES)
- STEEP SLOPES (25%-100% SLOPES)
- APPROVED PRIVATE SEWAGE DISPOSAL AREA
- APPROVED PRIVATE SEWAGE DISPOSAL AREA TO BE ABANDONED
- APPROVED WELL AREA
- PASSED PERC. TEST (P)
- FAILED PERC. TEST (F)
- EXISTING WELL (W)

GENERAL NOTES

1. THIS SUBJECT PROPERTY IS ZONED RC-DEO.
2. THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY VOGEL & ASSOCIATES, DATED MARCH 2001.
3. DEED REFERENCE: LIBER 6864 FOLIO 191.
4. THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL TOPOGRAPHIC SURVEY PERFORMED BY POTOMAC AERIAL SURVEYS, DATED APRIL 14, 2001.
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12. THE PURPOSE OF THIS PERCOLATION CERTIFICATION REVISION PLAN IS TO ABANDON A PORTION OF THE APPROVED SEWAGE DISPOSAL AREA TO ACCOMMODATE A NEW HOUSE ON LOT 21.

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	HYDRIC
GdB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	.32	NO	NO
GmC	GLENVILLE SILT LOAM, 8 TO 15 PERCENT SLOPES	C	.49	YES	NO
MdC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	.32	NO	NO
MdD	MANOR LOAM, 15 TO 25 PERCENT SLOPES, VERY ROCKY	B	.28	YES	NO

-SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
 -K VALUES PER <https://www.howardsoil.org/documents> - *K FACTORS (USE KW)
 -HOWARD COUNTY SOILS MAP NUMBER 5 - STIKESVILLE NE

NOTE:
 HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS.

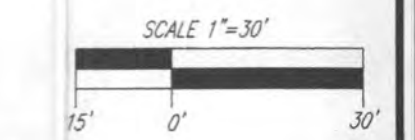
Michael L. Loveland
 COUNTY HEALTH OFFICER
 DATE: 3/9/22

PERCOLATION CERTIFICATION:
 I CERTIFY THAT THE LOCATIONS SHOWN HEREON ARE BASED ON FIELD LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

Michael L. Loveland
 DATE: 2/24/22
 MICHAEL L. LOVELAND
 PROFESSIONAL LAND SURVEYOR, MD REG. NO. 21746

WELL LOCATION CERTIFICATION:
 THE EXISTING WELL SHOWN FOR LOT 21 (TAG #H0-94-3936) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

PLAN VIEW
 SCALE: 1"=30'



OWNER
 THE PRESERVE AT WAVERLY GLEN, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

DEVELOPER
 TRINITY HOMES MARY LAND, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

NO.	REVISION	DATE

PERCOLATION CERTIFICATION REVISION PLAN
THE PRESERVE AT WAVERLY GLEN - LOT 21
 1812 MOUNT DENALI DRIVE
 WOODSTOCK, MD 21163
 (1.16 AC.)

L 6964 / F 191
 3RD ELECTION DISTRICT
 TAX MAP: 10 GRID: 23

PARCEL: 330
 ZONED: RC-DEO
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: FEBRUARY 2022
 SCALE: AS SHOWN
 W.O. NO.: 2017139

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16183, EXPIRATION DATE 08-27-2022

1 SHEET OF 1

ROBERT H. VOGEL, PE No.16183



BENCHMARKS
 HOWARD COUNTY BENCHMARK 101A (CONC. MON.)
 N 600995.13 E 1345340.39 ELEV. 441.90
 LOCATION: CORNER RT-99 & WOODSTOCK ROAD

HOWARD COUNTY BENCHMARK 17AB (CONC. MON.)
 N 598435.30 E 1348615.30 ELEV. 508.40
 LOCATION: CORNER RT-99 & WETHERBURN ROAD

VICINITY MAP
 SCALE: 1"=2000'
 ADC MAP: 4694-19

LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING TREELINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
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- APPROVED PRIVATE SEWAGE DISPOSAL AREA TO BE ABANDONED
- APPROVED WELL AREA
- PASSED PERC. TEST
- FAILED PERC. TEST
- EXISTING WELL

GENERAL NOTES

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SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	HYDRIC
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-SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
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APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS.

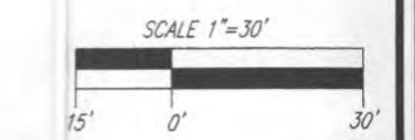
Robert H. Vogel
 COUNTY HEALTH OFFICER
 DATE: 3/9/22

PERCOLATION CERTIFICATION:
 I CERTIFY THAT THE LOCATIONS SHOWN HEREON ARE BASED ON FIELD LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

Michael L. Loveland
 DATE: 2/24/22
 MICHAEL L. LOVELAND
 PROFESSIONAL LAND SURVEYOR, MD REG. NO. 21746

WELL LOCATION CERTIFICATION:
 THE EXISTING WELL SHOWN FOR LOT 21 (TAG #H0-94-3936) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

PLAN VIEW
 SCALE: 1"=30'



OWNER
 THE PRESERVE AT WAVERLY GLEN, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

DEVELOPER
 TRINITY HOMES MARY LAND, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

NO.	REVISION	DATE

PERCOLATION CERTIFICATION REVISION PLAN
THE PRESERVE AT WAVERLY GLEN - LOT 21
 1812 MOUNT DENALI DRIVE
 WOODSTOCK, MD 21163
 (1.16 AC.)

L 6964 / F 191
 3RD ELECTION DISTRICT
 TAX MAP: 10 GRID: 23

PARCEL: 330
 ZONED: RC-DEO
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
 TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

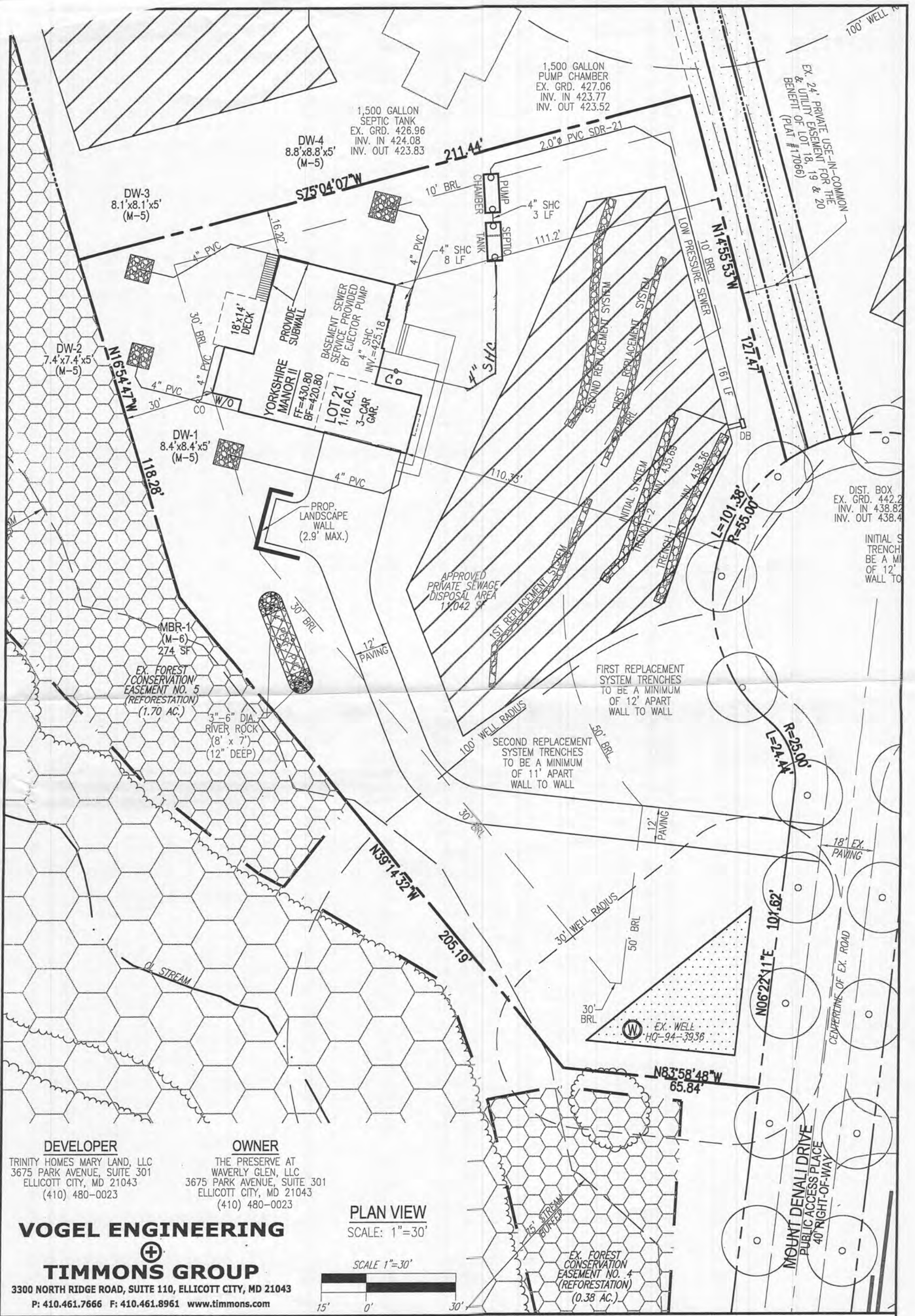
PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: FEBRUARY 2022
 SCALE: AS SHOWN
 W.O. NO.: 2017139

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 08-27-2022

1 SHEET OF 1

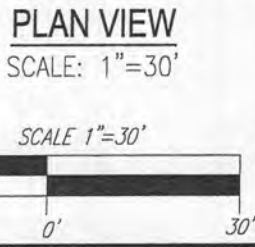
ROBERT H. VOGEL, PE No.16193



DEVELOPER
 TRINITY HOMES MARY LAND, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

OWNER
 THE PRESERVE AT
 WAVERLY GLEN, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

VOGEL ENGINEERING
 +
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com



SCALE	AS SHOWN
DRAWN BY	JMR
CHECKED BY	RHV
DATE	OCTOBER 08, 2021
W. O. #	2017139
SHEET#	1 OF 5

L. 6964 / F. 191
 3RD ELECTION DISTRICT
 TAX MAP: 10 GRID: 23

PLOT PLAN
THE PRESERVE AT WAVERLY GLEN - LOT 21

1812 MOUNT DENALI DRIVE
 WOODSTOCK, MD 21163

PARCEL: 330
 ZONED: PG-20
 HOWARD