



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

AP 538050

AGENCY REVIEW: _____

DATE 8-27-12

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH _____ PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE **UNKNOWN** IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) Paul & Astrid Connors

DAYTIME PHONE 301 854-3411 CELL 301 518-4359 FAX _____

MAILING ADDRESS 5196 Ten oaks Rd Clarksville MD 21029
STREET CITY/TOWN STATE ZIP

APPLICANT same as above

DAYTIME PHONE _____ CELL _____ FAX _____

MAILING ADDRESS _____
STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME Linden Chapel woods LOT NO. 2

PROPERTY ADDRESS 5196 Ten oaks Rd Clarksville
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) _____ GRID _____ PARCEL(S) _____ PROPOSED LOT SIZE _____

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT.

Paul E Connors

SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

Customer
is demo existing
going to house
a rebuild. So she
must submit new
Proposed percolation plans
for existing house
and all surround
wells

2012 AU 27 AM 9:52

RECEIVED
WARD COUNTY
PLANNING
DEPARTMENT

Customer
will turn
in Proposed perc
plan later.

DB
8-27-12



Office of the Health Officer

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

Main: 410-313-6300 | Fax: 410-313-6303

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: [HowardCoHealthDep](https://twitter.com/HowardCoHealthDep)

Maura J. Rossman, M.D., Health Officer

TO: John Carney
Benchmark Engineering, Inc.

FROM: Dana Bernard, REHS/RS
Well and Septic Program
Development Coordination Section

RE: 5196 Ten Oaks Road
Percolation Certification Plan

DATE: January 24, 2013

The following comments apply to the plan prepared by Benchmark Engineering Inc. Applicant is advised to revise and resubmit.

- ✚ Dry well should be labeled and must state "To Be Abandoned".
- ✚ The existing trench labeled must state if it is to be abandoned or utilized within the existing system. If you are going to utilize the existing trench it must be shown within the septic easement. Keep in mind the required setbacks for a septic easement to a house foundation.
- ✚ Do not show advanced pretreatment tank and septic tank on percolation certification plan. Show on building plan at the time of submission of building permit application.
- ✚ The septic tank and dry well must have different symbols and must be shown in the legend.

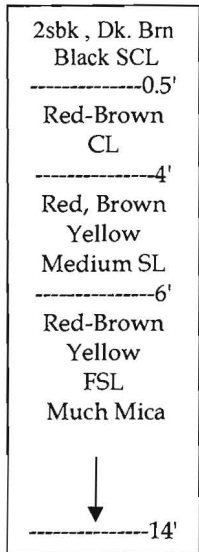
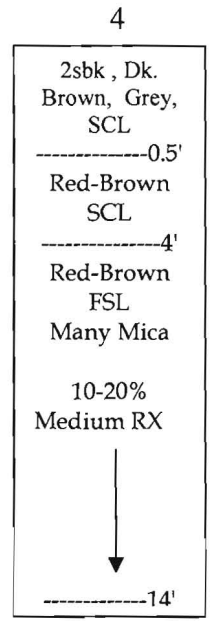
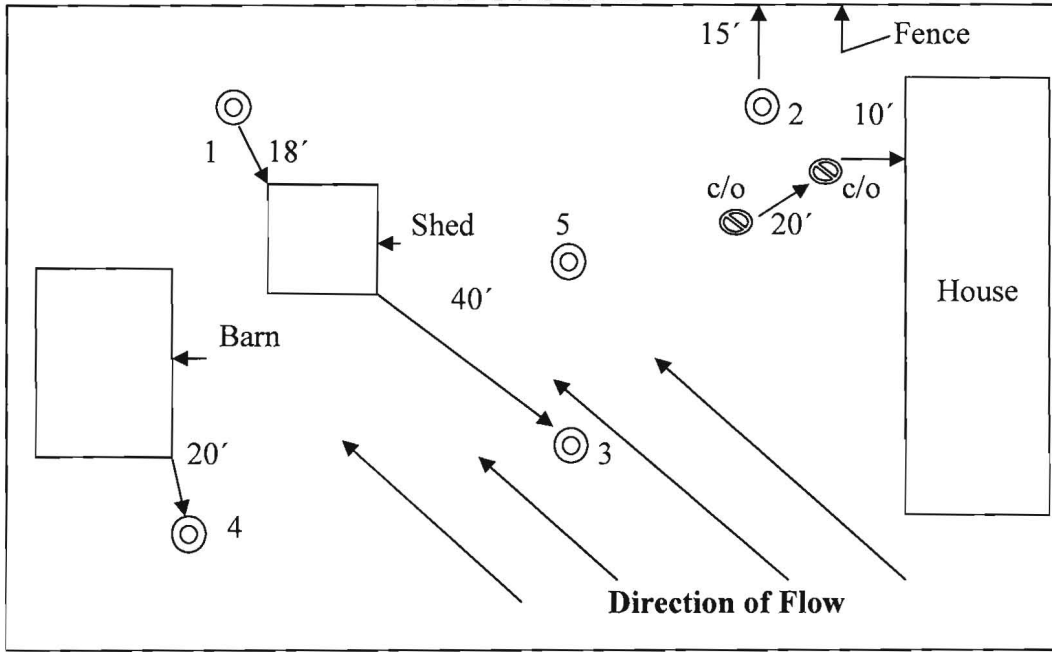
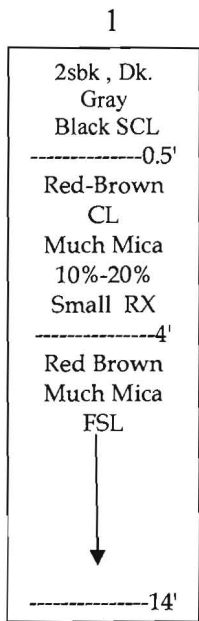
If you have any questions or correspondence, I can be reached at the above address or by telephone at (410) 313-2775.

Sincerely,

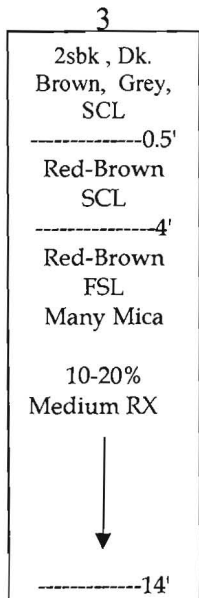
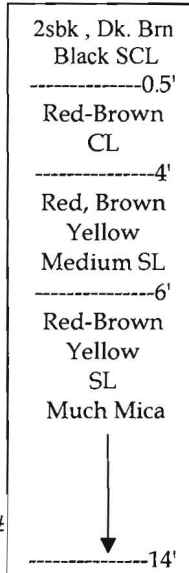
Dana Bernard, REHS/RS
Environmental Specialist II
Bureau of Environmental Health,
Well and Septic Program
Phone (410) 313-2775
Fax (410) 313-2648
E-mail: DBernard@howardcountymd.gov

Percolation Information- 5196 Ten Oaks Road

NOT TO SCALE



Date	Test	Depth	Start	Break 1" Drop	Break 2" Drop	Time of 2 nd Inch	P/F/H
11-08-12	1	5/ 14	10:51	10:53	10:58	5 min.	Pass
11-08-12	2	5 /14	10:44	10:46	10:51	5 min.	Pass
11-08-12	3	5/ 14	10:27	10:35	10:43	8 min.	Pass
11-08-12	4	—————→			Visual		Pass
11-08-12	5	5/ 14	10:29	10:40	11:47	12 min.	Pass



Remarks: Existing House to be demolished. Perc holes must be surveyed on Percolation Certification Plan. The shed and barn must be demolished or relocated before the installation and release of septic permit. Well is located 20' in front of house and is in good condition.

Sanitarian D. Bernard Backhoe Kenny/ Hatfields

Test Holes Used in SDA 5 Avg. Perc Time 9min. SQ.FT/BR
Trench Width 3 Inlet Depth 3 Max Bot. Depth 8 Effective S/W

Williams, Jeffrey

From: Steven Krieg [SKrieg@mde.state.md.us]
Sent: Monday, December 03, 2012 2:55 PM
To: Williams, Jeffrey
Cc: Bernard, Dana
Subject: Re: Downgradient well perc cert review

I guess you issuing a waiver to your 200 ft requirement in local code? If you are and are also recommending a variance to COMAR, I am ok with it BUT also require pressure distribution LPD in addition to the pretreatment. No matter what the paper says, it will be hard to fit equal length trenches in the field. Also I assume the existing shed and barn do not have foundations?

Steven R. Krieg, REHS/RS
Regional Consultant
On-site Systems Division
Wastewater Permits Program
Water Management Administration
Maryland Dept. of the Environment
Montgomery Park Business Center
1800 Washington Boulevard, Suite 455
Baltimore, MD 21230-1708

>>> "Williams, Jeffrey" <jewilliams@howardcountymd.gov> 12/3/2012 2:01 PM >>>

Attached is a perc cert proposal for a property at 5196 Ten Oaks Rd. This would be a tear down/rebuild of an existing home. We perc'd the property (test holes in black dots on the plan) prior to realizing that the location was directly upgradient of the neighboring well. We subsequently met with Benchmark to discuss options and this was their proposal.

The area they propose is slightly offset from being directly upgradient. The existing trench would be extended with a second trench added above it for the initial system, which would be ~180' from the well. They would add pre-treatment. The reserve systems would be closer but still over 100' and not directly upgradient. We are ok with recommending approval with pre-treatment for this. What do you think? The new system would be an improvement over the existing one simply because of adding pre-treatment. They show three systems fitting in the area <10,000 sq ft because it is an older recorded lot without a prior established 10,000.

Jeff Williams
Program Supervisor, Well & Septic Program
Bureau of Environmental Health
Howard County Health Dept.
410-313-4261
jewilliams@howardcountymd.gov

CONFIDENTIALITY NOTICE

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have received this communication in error, please re-send this communication to the sender and delete the original message and any copy of it from your computer system. Thank You

Wolf, Kevin

From: Wolf, Kevin
Sent: Wednesday, January 29, 2014 11:35 AM
To: 'Pat Orla'
Cc: 'John Carney'
Subject: 5196 Ten Oaks Road
Attachments: DEMO SIGNOFF-ab s, keep w 5196 Ten Oaks Rd.pdf

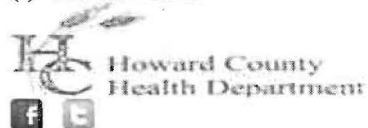
Pat – Attached is your demolition request form. Please make note that the current well (tag unknown) that will be utilized for the new home should be capped off and protected throughout demolition and new construction.

The research on this well from our office showed a very limited grout depth (aprx 5-8' below grade) according to the original well completion report. This grout limitation is substandard to our current grout requirements which in turn may lead to future problems with water quality and potability standards under the Code of Maryland Regulations. In lieu of this, we suggest you obtain water testing (bacteria, nitrates, turbidity and sand) prior to demolition so that you have a better understanding of the well water quality now rather than later when you build the new house. Repeated poor water quality tests may be an influence of substandard well construction as mentioned above and might require a new well to be drilled.

John – Please make note of the above comments. Also, noting back throughout this property file, we need you to be aware of general note number 10 on the approved Perc Cert plan... This will need to be changed. The new septic system will require low pressure dosing (lpd). The BAT site plan will need to be revised during building permit stage or sometime before to reflect an lpd design based on the current loading rates calculated. You do not need to revise the approved Perc Cert plan just the BAT site plan. Let me know if you need any additional information on the property (perc notes, etc...)

Thanks,

Kevin M. Wolf, R.S., R.E.H.S.
Bureau of Environmental Health
Well & Septic Program
Groundwater Mgmt. Sec.
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2645
(f) 410-313-2648



CONFIDENTIALITY NOTICE

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Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

MEMORANDUM

Sent via email to porla@comcast.net on 1/29/2014

TO: BPS Inc
Attn: Pat Orla

FROM: Kevin M. Wolf, R.S., R.E.H.S. 
HCHD, Well & Septic Program
Groundwater Mgmt. Sec.

DATE: January 29, 2014

RE: 5196 Ten Oaks Road
Clarksville, MD 21029
M. 28, G.14 P. 127- 1.0400AC
(Demolition of existing structure, rebuild new SFD)

This is to advise that the Howard County Health Department recommends issuance of the demolition permit for the above referenced property.

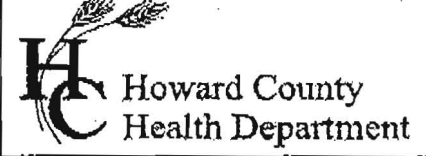
The existing well (tag unknown) that was utilized for the above referenced property has been property located and disconnected from the dwelling. This well will be utilized for the new house. Protective devices should be placed around the well to prevent any damage during demolition and new construction. This well is subject to potability testing prior to use and occupancy of the new house.

The existing septic system on this property was pumped out and abandoned by Maryland Concrete Foundations Inc on 1/23/2014. The existing septic tank was collapsed/crushed in and backfilled with clean fill. Documentation of this task was received by our office for record of completion.

Current utility records show this parcel does not have access to public utilities. If you plan to re-build on this parcel, you will need to reconnect the existing well by installing a pitless adapter and plumbing to the new dwelling. The septic system will be installed in the approved septic reserve area per Howard County specifications and regulations at time of building permit approval.

If any wells or septic systems are found during site work, you must notify this office immediately!

KMW
Cc: File



Dr. Peter Beilenson, M.D., M.P.H., Health Officer

DEMOLITION REQUEST FORM

(Please fill in all blanks)

Information of Property to be Demolished:

Cannors - Paul & Astrid 5196 Ten Oaks Rd
Current Owner's Name Property Address

Linden Chaple Woods 2
Subdivision (if applicable) Lot #

All Prior Owners' Names (if requested or known) 28 127 05-361877
Tax Map Parcel # Tax ID #

Building a new house
Purpose/Reason for Demolition

re-build
Future plans of property after demo (i.e. subdivision, parking lot, re-build new house, etc...)

If a subdivision, SDP# GP14-025 Has the structure(s) been deemed unsafe by DILP YES NO

UTILITY RECORDS:

Property currently connected to public water YES NO

Property currently connected to public sewer YES NO

Does the property currently have any wells and/or septic systems YES NO
→ Explain:

*Note: Any wells and/or septic systems that are to remain may require an approved percolation certification plan under Howard County Code Sec. 3.805
*Note: Any septic systems that are to be abandoned must be done by a septic contractor with documentation of the process.
*Note: All abandoned wells are to be sealed by a well driller licensed by the Maryland State Board of Well Drillers COMAR Sec 26.04.04.11 Abandonment Standards D (3)

COMMENTS:

BPS, Inc - Pat Orla 410-879-7848
Applicant's Name (please print) Applicant's Phone #

parla@comcast.net 410-879-7847
Applicant's Email Applicant's Fax #

[Signature] 1/3/14
Applicant's Signature Date

MARYLAND
CONCRETE FOUNDATIONS INC.

**POURED WALL FOUNDATIONS
EXCAVATION**

2240 Conowingo Road
Bel Air, MD 21015

(410) 879-4064 Office
(410) 420-8405 Fax

01/23/14

Kevin M. Wolf
Bureau of Environmental Health
Well & Septic Program

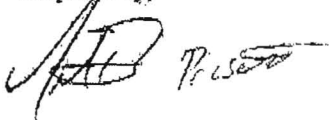
Re: Septic tank abandonment at 5196 Ten Oaks Road, Clarksville

Mr. Wolf,

Please accept this letter as formal notification that the existing septic tank has been abandoned using the following procedure:

1. The septic tank was pumped out
2. The bottom of the tank was ruptured to prevent water retention
3. The tank was filled with suitable material obtained on site and completely covered with soil

Respectfully,



Mel Braun
President

232-D Crocker Dr. Bel Air, Md 21014
410-879-7848 - Office
410-879-7847 - Fax

**Building Permit
Services, Inc.**

Fax

To: Kevin Wolf From: Pat Orla

Fax: 410-313-2648 Pages: 3

Phone: _____ Date: 1/3/14

Re: 5196 Ten Oaks Rd CC: _____

Urgent For Review Please Comment Please Reply Please Recycle

• Comments:

232-D Crocker Dr. Bel Air, Md 21014
410-879-7848 - Office
410-879-7847 - Fax

**Building Permit
Services, Inc.**

Fax

To: *Kevin Wolf* From: *Pat Orta*

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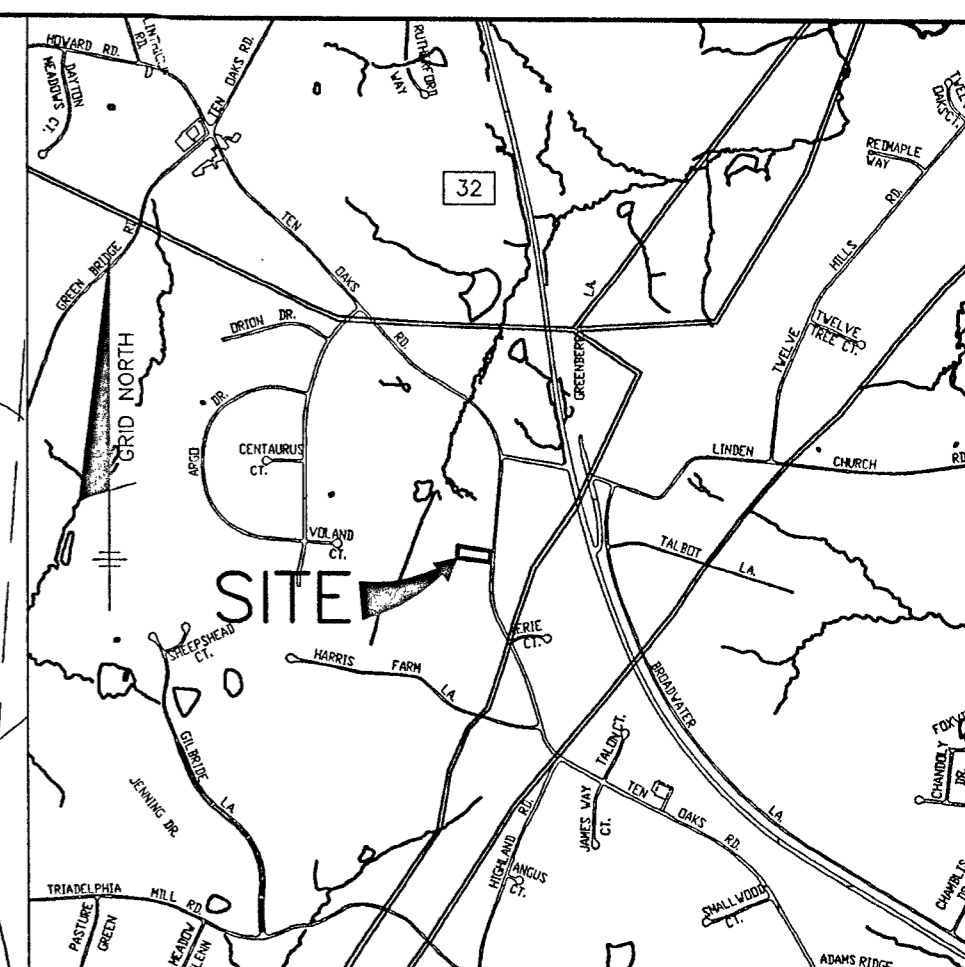
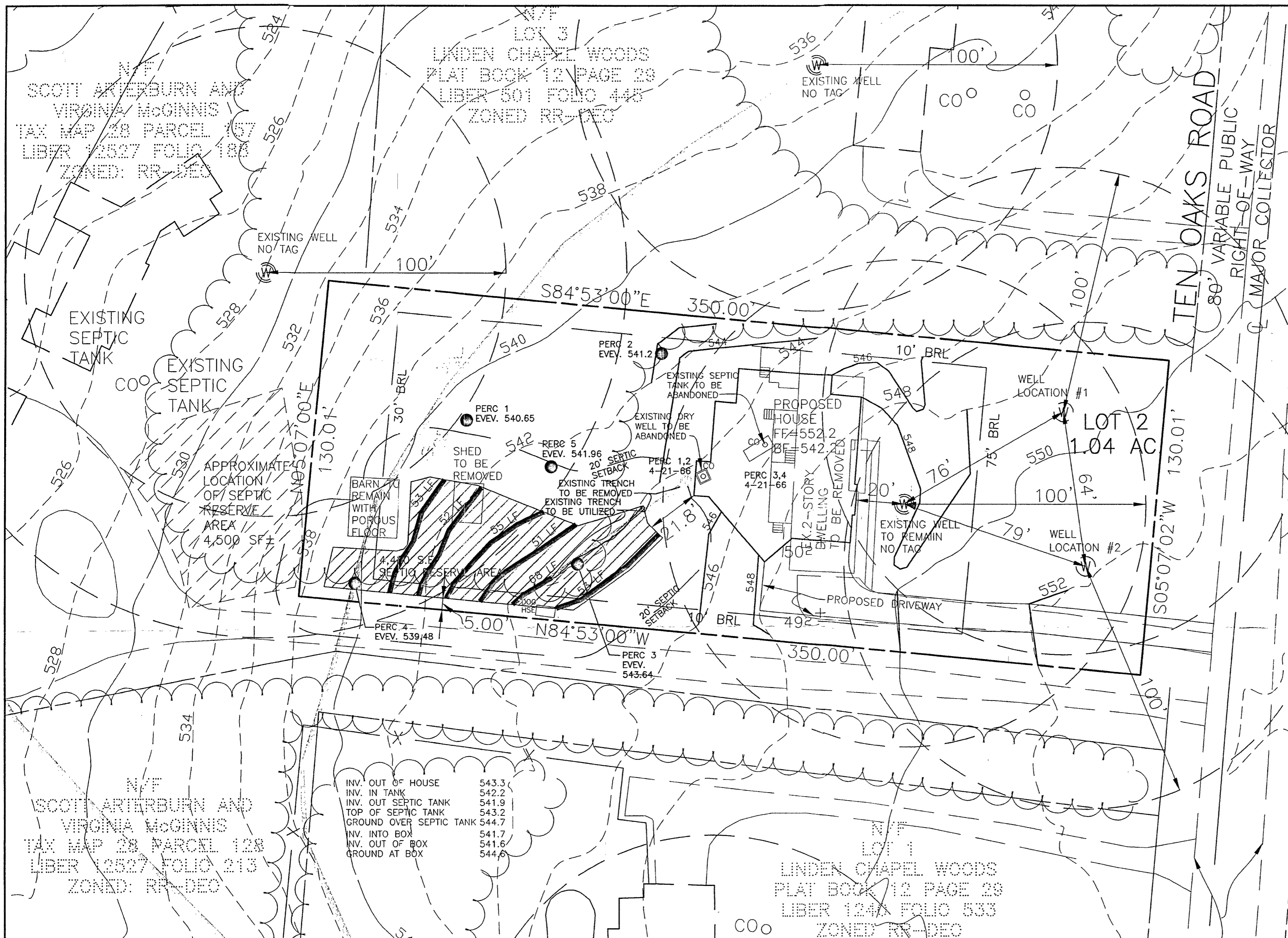
Phone: Date: *1/29/14*

Re: CC:

Urgent For Review Please Comment Please Reply Please Recycle

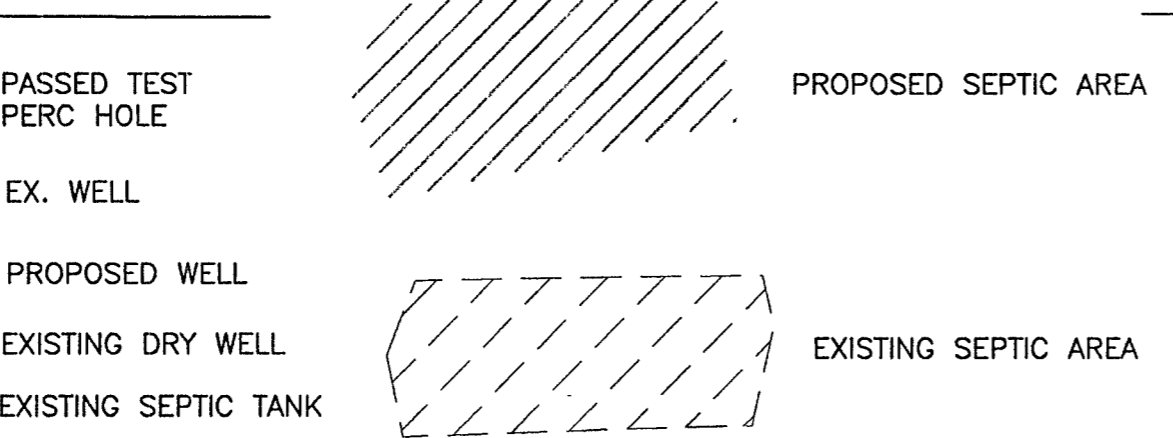
● Comments:

5196 Ten Oaks Rd.



- 1.) THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- 2.) THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE REQUIRED.
- 3.) EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
- 4.) TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS AND IS TO BE VERIFIED BY BENCHMARK ENGINEERING, INC.
- 5.) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
- 6.) THE PURPOSE FOR THIS PERCOLATION CERTIFICATION PLAN IS TO CREATE A SEWAGE DISPOSAL AREA AND TWO FUTURE WELL REPLACEMENT LOCATIONS.
- 7.) ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- 8.) THIS PLAN SHOWS THE SEPTIC DISPOSAL AREA CLOSER THAN 10' TO THE PROPERTY LINE AND THE EXISTING WELL CLOSER THAN 30' TO THE PROPOSED STRUCTURE. APPROVAL OF THESE CONDITIONS WILL REQUIRE A VARIANCE.
- 9.) CONTRACTOR TO USE THE EXISTING TRENCH FOR THE INITIAL SYSTEM IF POSSIBLE. IF THE TRENCH IS NOT DEEP ENOUGH OR IS CLOGGED AN NEW TRENCH IS TO BE CONSTRUCTED ON THE DOWNHILL SIDE AND THE LOWER TRENCHES ADJUSTED TO MAINTAIN PROPER SEPARATION.
- 10.) THE DESIGN OF THIS SEPTIC AREA REQUIRES THE USE OF A DEEP TRENCH SYSTEM. CALCULATIONS ARE BASED ON 5 BEDROOMS, 0.8 GPD/SF APPLICATION RATE AND 36" EFFECTIVE DEPTH. THE SEPTIC DISPOSAL SYSTEM FOR THIS LOT REQUIRES ADVANCED PRE-TREATMENT IN ACCORDANCE WITH MDE REGULATIONS.

LEGEND



PLAN
SCALE: 1" = 30'

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

John M. Carney 1/29/13
JOHN M. CARNEY FOR BENCHMARK ENGINEERING INC.
PLAN PREPARER

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

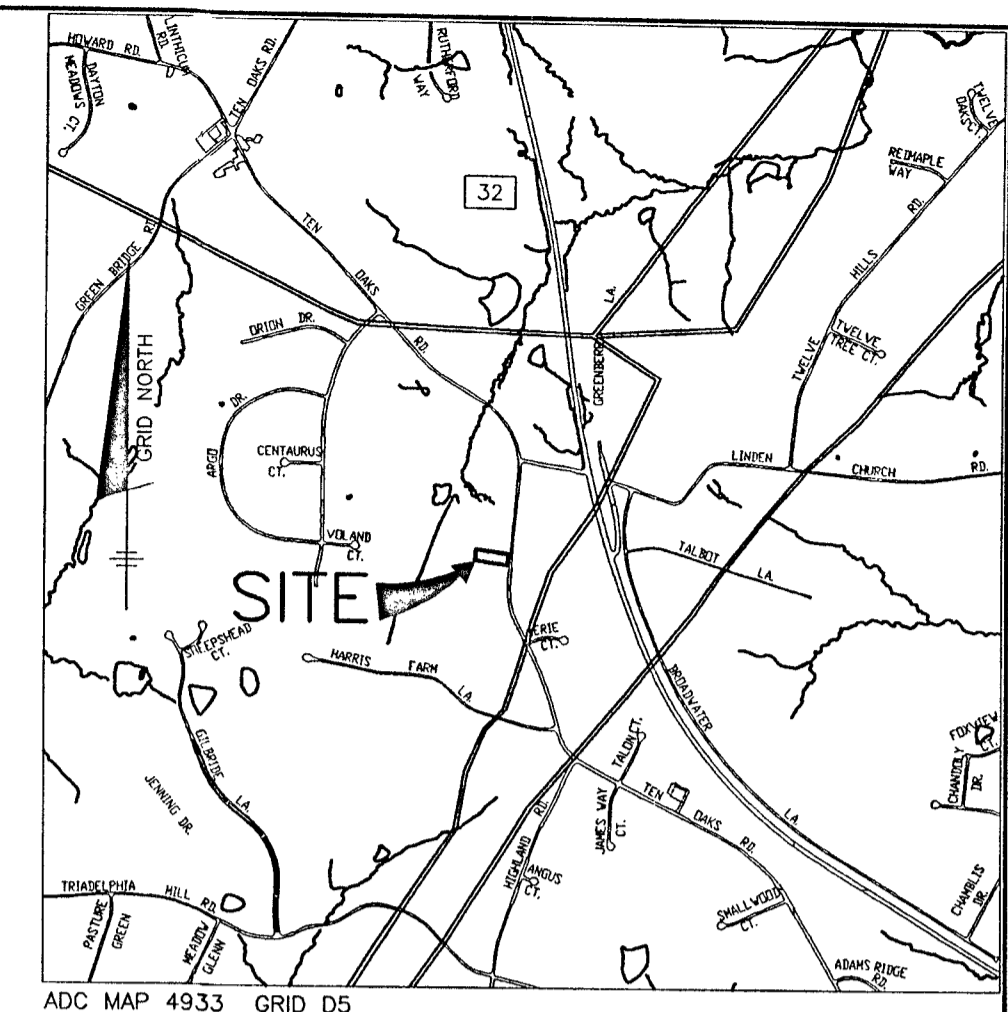
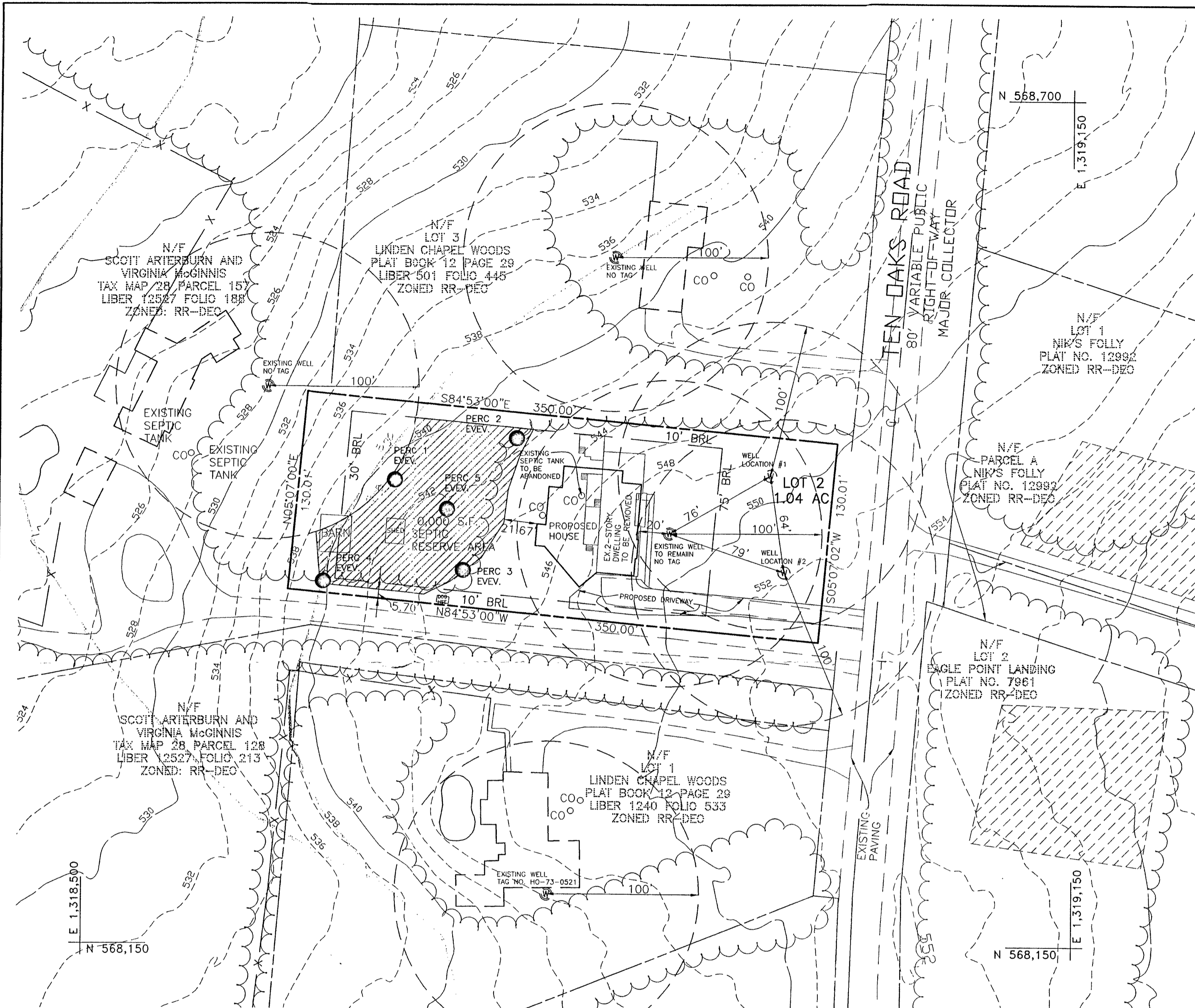
Bridgette Marie Rossman 2/22/2013
HOWARD COUNTY HEALTH OFFICER DATE

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

OWNER:		LINDEN CHAPEL WOODS LOT 2 5196 TEN OAKS ROAD CLARKSVILLE, MARYLAND 21029	
PAUL W. AND ASTRID E. CONNORS 5196 TEN OAKS ROAD CLARKSVILLE, MARYLAND 21029-1014		LOCATION: TAX MAP: 28, GRID: 14 PARCEL: 127 ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND	
DESIGN: JC		TITLE: PERCOLATION CERTIFICATION PLAN	
DRAFT: EDD		DATE: JANUARY 29, 2013	
CHECK: JC		BEI PROJ. NO. 2529	
SCALE: 1" = 30'		SHEET 1 OF 1	

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME
GgB		B		GLENELG LOAM, 3 TO 8 PERCENT SLOPES
GgC		B		GLENELG LOAM, 8 TO 15 PERCENT SLOPES



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES

- 1) THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- 2) THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE REQUIRED.
- 3) EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
- 4) TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS AND IS TO BE VERIFIED BY BENCHMARK ENGINEERING, INC.
- 5) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
- 6) THE PURPOSE FOR THIS PERCOLATION TEST PLAN IS TO CREATE A SEWAGE DISPOSAL AND 1,500 S.F. WELL BOX EASEMENT.
- 7) ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- 8) THIS PLAN SHOWS THE SEPTIC DISPOSAL AREA CLOSER THAN 10' TO THE PROPERTY LINE AND THE EXISTING WELL CLOSER THAN 30' TO THE PROPOSED STRUCTURE. APPROVAL OF THESE CONDITIONS WILL REQUIRE A VARIANCE.

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

John M. Carney 10.16.12
JOHN M. CARNEY FOR BENCHMARK ENGINEERING, INC.
PLAN PREPARER

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

HOWARD COUNTY HEALTH OFFICER _____ DATE _____

LEGEND

- 500 ——— EXISTING CONTOURS
- EXISTING TREELINE
- N41°51'10"E 300.00' LIMIT OF SUBMISSION
- TEST HOLE
- ⊕ EX. WELL
- ⊕ PROPOSED WELL
- SOILS DELINEATION
- ▨ PROPOSED SEPTIC AREA
- ▨ EXISTING SEPTIC AREA

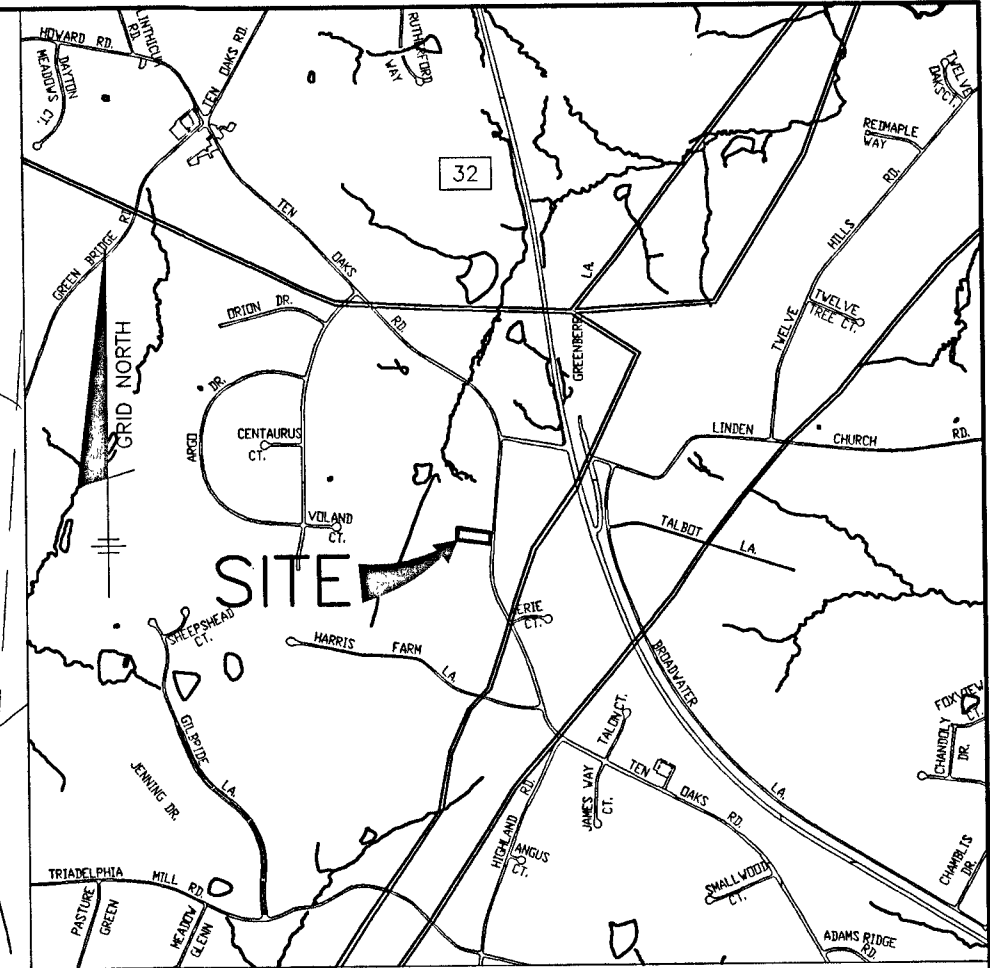
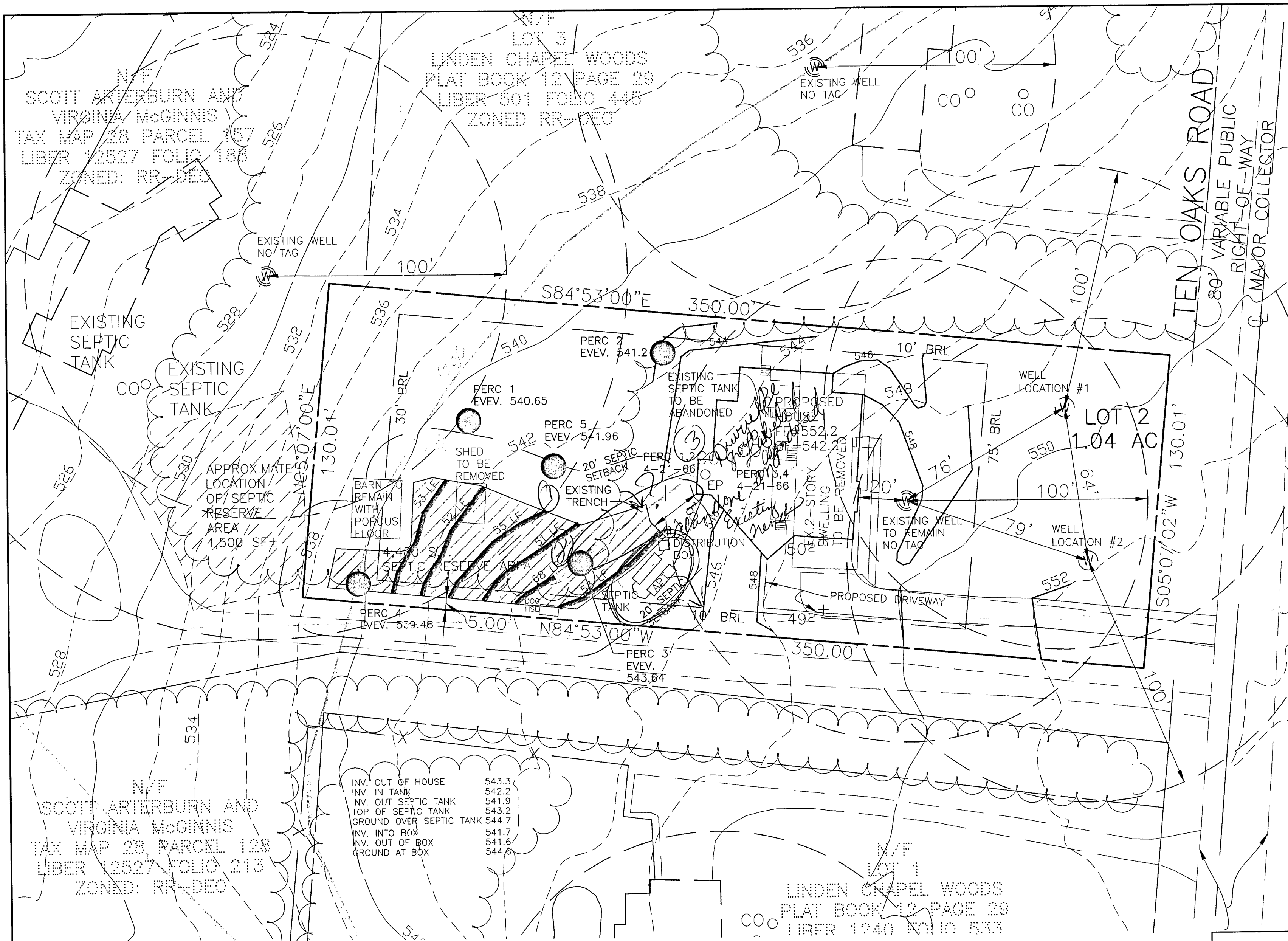
SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME
GgB		B		GLENELG LOAM, 3 TO 8 PERCENT SLOPES
GgC		B		GLENELG LOAM, 8 TO 15 PERCENT SLOPES

PLAN
SCALE: 1" = 50'

BENCHMARK
ENGINEERS • LAND SURVEYORS • PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE • SUITE 418
ELLCOTT CITY, MARYLAND 21043
phone: 410-465-6105 • fax: 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

OWNER: PAUL W. AND ASTRID E. CONNORS 5196 TEN OAKS ROAD CLARKSVILLE, MARYLAND 21029-1014		LINDEN CHAPEL WOODS LOT 2 5196 TEN OAKS ROAD CLARKSVILLE, MARYLAND 21029	
LOCATION: TAX MAP: 28, GRID: 14 PARCEL: 127 ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND		TITLE: <i>Percolation</i> PERCOLATION CERTIFICATION PLAN	
DATE: OCTOBER, 2012	BEI PROJ. NO. 2529	SCALE: 1" = 50'	SHEET 1 OF 1
DESIGN: JC	DRAFT: EDD	CHECK: JC	



VICINITY MAP
SCALE: 1" = 2000'
GENERAL NOTES

- 1.) THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- 2.) THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE REQUIRED.
- 3.) EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
- 4.) TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS AND IS TO BE VERIFIED BY BENCHMARK ENGINEERING, INC.
- 5.) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
- 6.) THE PURPOSE FOR THIS PERCOLATION CERTIFICATION PLAN IS TO CREATE A SEWAGE DISPOSAL AREA AND TWO FUTURE WELL REPLACEMENT LOCATIONS.
- 7.) ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- 8.) THIS PLAN SHOWS THE SEPTIC DISPOSAL AREA CLOSER THAN 10' TO THE PROPERTY LINE AND THE EXISTING WELL CLOSER THAN 30' TO THE PROPOSED STRUCTURE. APPROVAL OF THESE CONDITIONS WILL REQUIRE A VARIANCE.
- 9.) CONTRACTOR TO USE THE EXISTING TRENCH FOR THE INITIAL SYSTEM IF POSSIBLE. IF THE TRENCH IS NOT DEEP ENOUGH OR IS CLOGGED AN NEW TRENCH IS TO BE CONSTRUCTED ON THE DOWNHILL SIDE AND THE LOWER TRENCHES ADJUSTED TO MAINTAIN PROPER SEPARATION.
- 10.) THE DESIGN OF THIS SEPTIC AREA REQUIRES THE USE OF A DEEP TRENCH SYSTEM. CALCULATIONS ARE BASED ON 5 BEDROOMS, 0.8 GPD/SF APPLICATION RATE AND 36" EFFECTIVE DEPTH. THE SEPTIC DISPOSAL SYSTEM FOR THIS LOT REQUIRES ADVANCED PRE-TREATMENT IN ACCORDANCE WITH MDE REGULATIONS.

INV. OUT OF HOUSE	543.31
INV. IN TANK	542.2
INV. OUT SEPTIC TANK	541.9
TOP OF SEPTIC TANK	543.2
GROUND OVER SEPTIC TANK	544.7
INV. INTO BOX	541.7
INV. OUT OF BOX	541.6
GROUND AT BOX	544.6

PLAN
SCALE: 1" = 30'

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

John M. Carney
JOHN M. CARNEY FOR BENCHMARK ENGINEERING INC.
PLAN PREPARER

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

HOWARD COUNTY HEALTH OFFICER _____ DATE _____

BENCHMARK
ENGINEERS • LAND SURVEYORS • PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE • SUITE 418
ELLCOTT CITY, MARYLAND 21043
phone: 410-465-6105 • fax: 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

OWNER:
PAUL W. AND ASTRID E. CONNORS
5196 TEN OAKS ROAD
CLARKSVILLE, MARYLAND
21029-1014

LINDEN CHAPEL WOODS
LOT 2
5196 TEN OAKS ROAD
CLARKSVILLE, MARYLAND 21029

LOCATION: TAX MAP: 28, GRID: 14
PARCEL: 127
ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND

TITLE:
PERCOLATION CERTIFICATION PLAN

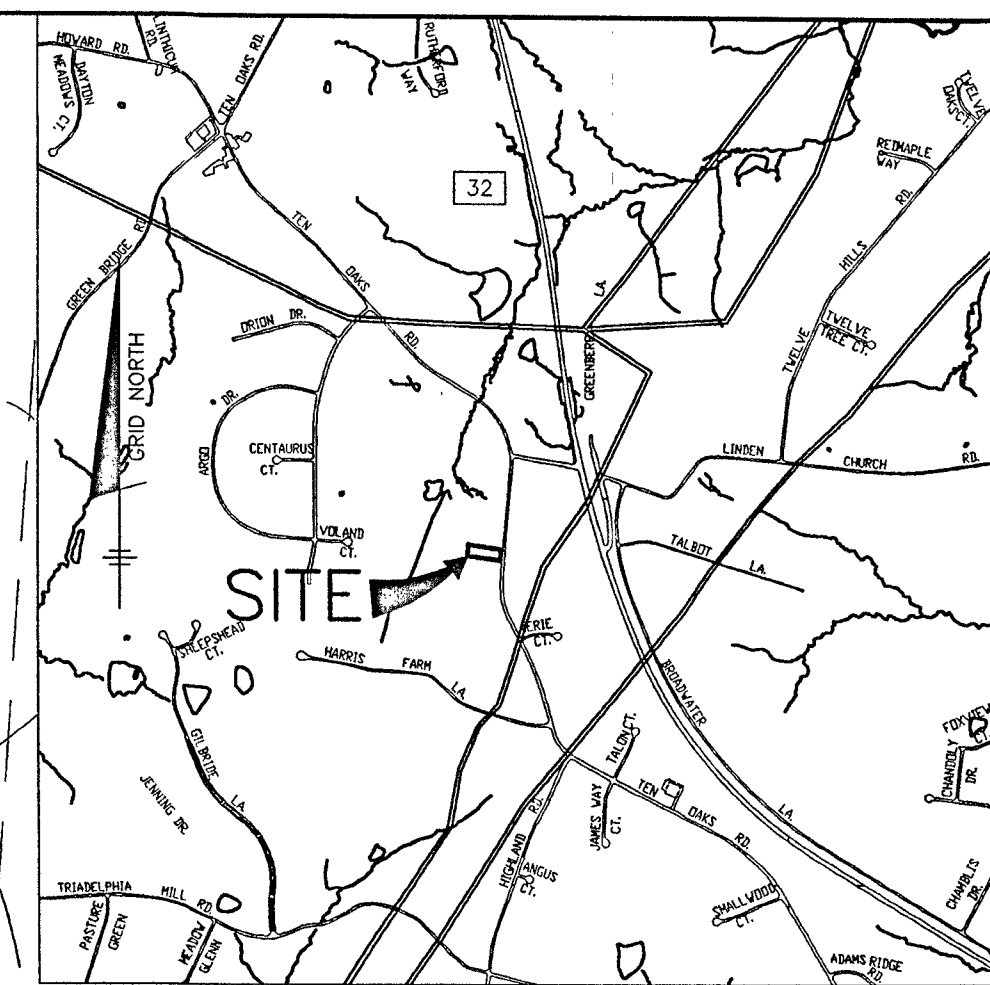
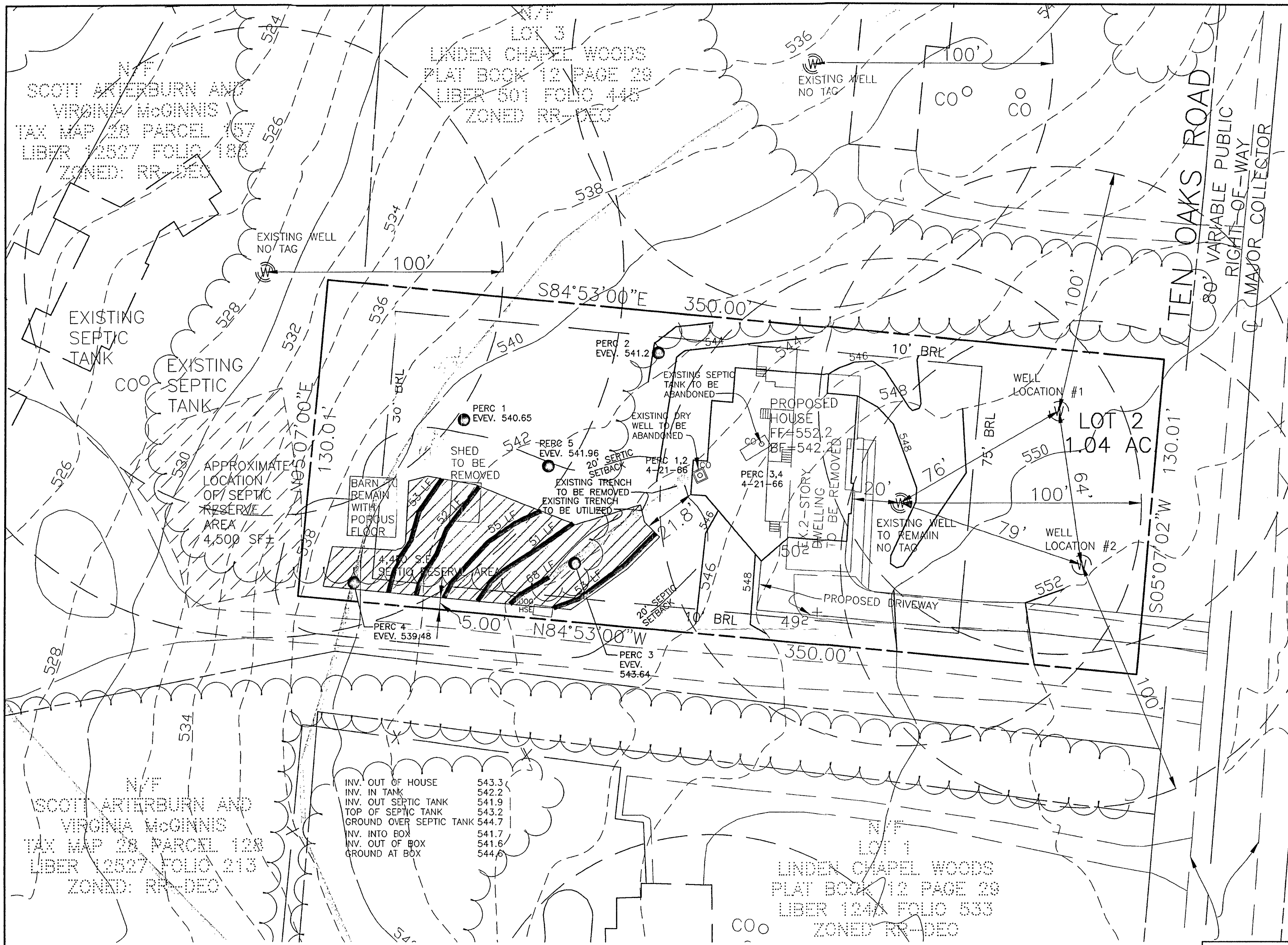
DATE: JANUARY, 2013 BEI PROJ. NO. 2529
SCALE: 1" = 30' SHEET 1 OF 1

LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- LIMIT OF SUBMISSION
- PASSED TEST PERC HOLE
- EX. WELL
- PROPOSED WELL
- SOILS DELINEATION
- PROPOSED SEPTIC AREA
- EXISTING SEPTIC AREA

SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME
GgB		B		GLENELG LOAM, 3 TO 8 PERCENT SLOPES
GgC		B		GLENELG LOAM, 8 TO 15 PERCENT SLOPES



ADC MAP 4933 GRID D5
VICINITY MAP
 SCALE: 1" = 2000'
GENERAL NOTES

- 1.) THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- 2.) THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE REQUIRED.
- 3.) EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
- 4.) TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS AND IS TO BE VERIFIED BY BENCHMARK ENGINEERING, INC.
- 5.) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
- 6.) THE PURPOSE FOR THIS PERCOLATION CERTIFICATION PLAN IS TO CREATE A SEWAGE DISPOSAL AREA AND TWO FUTURE WELL REPLACEMENT LOCATIONS.
- 7.) ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- 8.) THIS PLAN SHOWS THE SEPTIC DISPOSAL AREA CLOSER THAN 10' TO THE PROPERTY LINE AND THE EXISTING WELL CLOSER THAN 30' TO THE PROPOSED STRUCTURE. APPROVAL OF THESE CONDITIONS WILL REQUIRE A VARIANCE.
- 9.) CONTRACTOR TO USE THE EXISTING TRENCH FOR THE INITIAL SYSTEM IF POSSIBLE. IF THE TRENCH IS NOT DEEP ENOUGH OR IS CLOGGED AN NEW TRENCH IS TO BE CONSTRUCTED ON THE DOWNHILL SIDE AND THE LOWER TRENCHES ADJUSTED TO MAINTAIN PROPER SEPARATION.
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LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- LIMIT OF SUBMISSION
- SOILS DELINEATION
- PASSED TEST PERC HOLE
- EX. WELL
- PROPOSED WELL
- EXISTING DRY WELL
- EXISTING SEPTIC TANK
- PROPOSED SEPTIC AREA
- EXISTING SEPTIC AREA

PLAN
 SCALE: 1" = 30'

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.
John M. Carney 4/29/13
 JOHN M. CARNEY FOR BENCHMARK ENGINEERING INC.
 PLAN PREPARER

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
 HOWARD COUNTY HEALTH DEPARTMENT
B. Winters for Maria Rose 2/22/2013
 HOWARD COUNTY HEALTH OFFICER DATE

BENCHMARK
 ENGINEERS • LAND SURVEYORS • PLANNERS
ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
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 phone: 410-465-6105 A fax: 410-465-6844
 WWW.BEI-CVLENGINEERING.COM

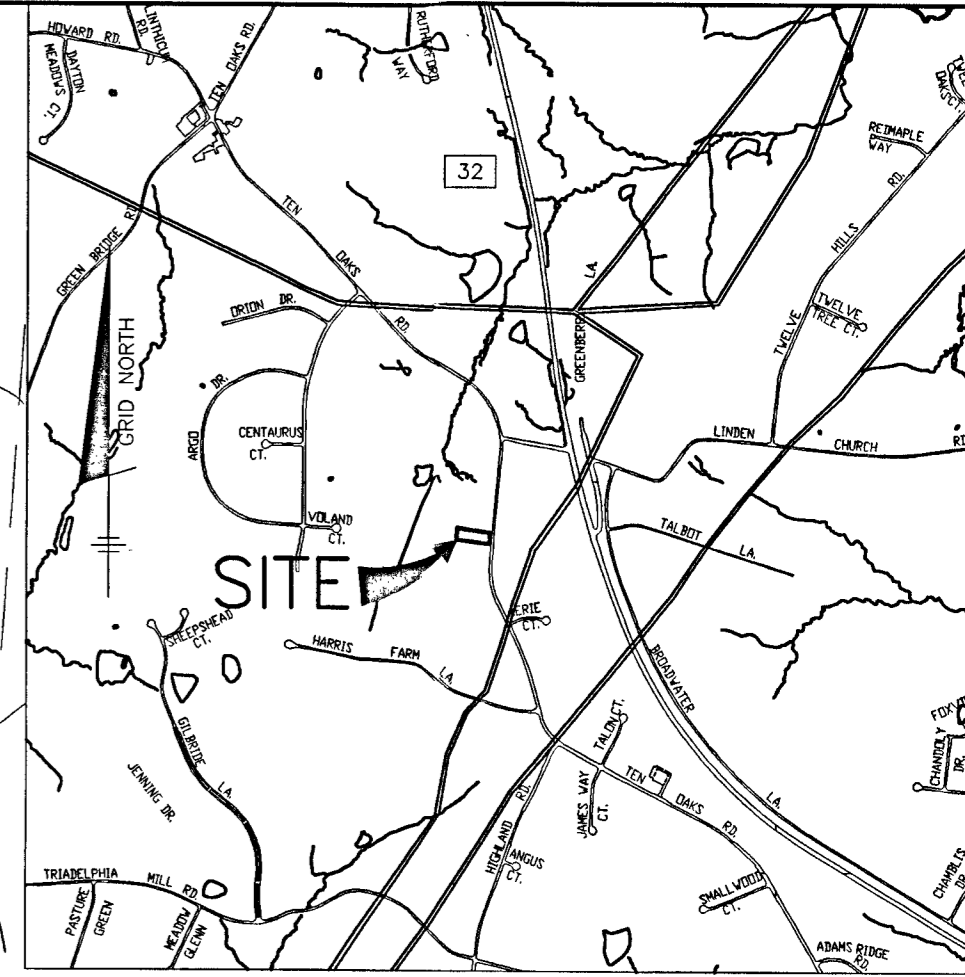
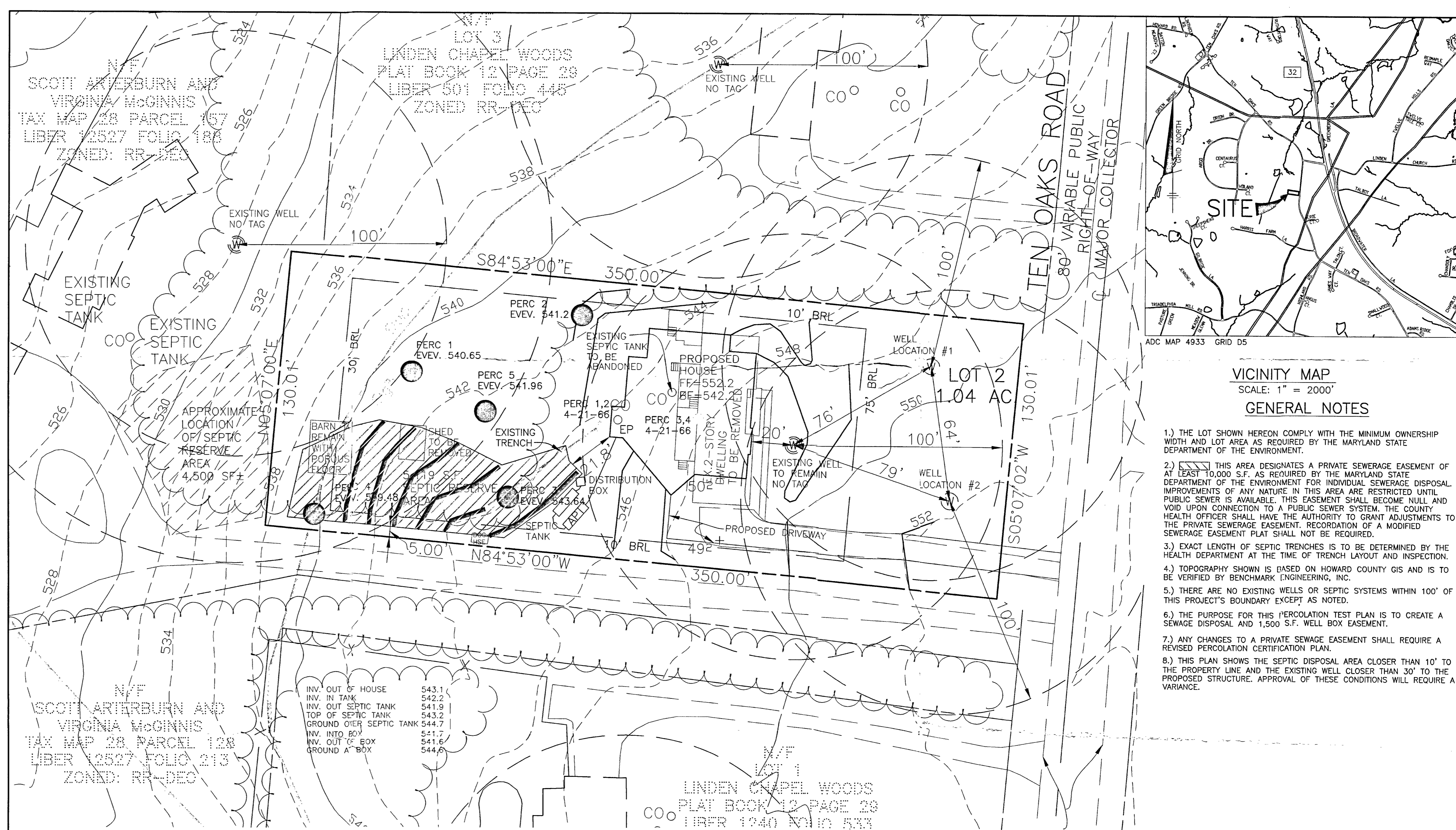
OWNER:
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 5196 TEN OAKS ROAD
 CLARKSVILLE, MARYLAND
 21029-1014

LINDEN CHAPEL WOODS
 LOT 2
 5196 TEN OAKS ROAD
 CLARKSVILLE, MARYLAND 21029
 LOCATION: TAX MAP: 28, GRID: 14
 PARCEL: 127
 ELECTION DISTRICT NO. 5
 HOWARD COUNTY, MARYLAND
 TITLE:
PERCOLATION CERTIFICATION PLAN
 DATE: JANUARY 29, 2013 BEI PROJ. NO. 2529
 SCALE: 1" = 30' SHEET 1 OF 1

SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME
GgB		B		GLENELG LOAM, 3 TO 8 PERCENT SLOPES
GgC		B		GLENELG LOAM, 8 TO 15 PERCENT SLOPES

RECEIVED
 NOV 27 2012
 HOWARD COUNTY HEALTH DEPT.
 BUREAU OF ENVIRONMENTAL HEALTH



ADC MAP 4933 GRID D5

VICINITY MAP
 SCALE: 1" = 2000"
 GENERAL NOTES

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- 5.) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
- 6.) THE PURPOSE FOR THIS PERCOLATION TEST PLAN IS TO CREATE A SEWAGE DISPOSAL AND 1,500 S.F. WELL BOX EASEMENT.
- 7.) ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- 8.) THIS PLAN SHOWS THE SEPTIC DISPOSAL AREA CLOSER THAN 10' TO THE PROPERTY LINE AND THE EXISTING WELL CLOSER THAN 30' TO THE PROPOSED STRUCTURE. APPROVAL OF THESE CONDITIONS WILL REQUIRE A VARIANCE.

INV. OUT OF HOUSE	543.1
INV. IN TANK	542.2
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TOP OF SEPTIC TANK	543.2
GROUND OVER SEPTIC TANK	544.7
INV. INTO BOX	541.7
INV. OUT OF BOX	541.6
GROUND A BOX	544.6

PLAN
 SCALE: 1" = 30'

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JOHN M. CARNEY FOR BENCHMARK ENGINEERING INC.
 PLAN PREPARER

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
 HOWARD COUNTY HEALTH DEPARTMENT

HOWARD COUNTY HEALTH OFFICER _____ DATE _____

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS
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OWNER: PAUL W. AND ASTRID E. CONNORS 5196 TEN OAKS ROAD CLARKSVILLE, MARYLAND 21029-1014		LINDEN CHAPEL WOODS LOT 2 5196 TEN OAKS ROAD CLARKSVILLE, MARYLAND 21029 LOCATION: TAX MAP: 28, GRID: 14 PARCEL: 12 ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND	
TITLE: PERCOLATION CERTIFICATION PLAN		DATE: NOVEMBER, 2012 BEI PROJ. NO. 2529	
DESIGN: JC	DRAFT: EDD	CHECK: JC	SCALE: 1" = 30' SHEET 1 OF 1

LEGEND

EXISTING CONTOURS	PASSED TEST PERC HOLE	PROPOSED SEPTIC AREA
EXISTING TREELINE	EX. WELL	EXISTING SEPTIC AREA
LIMIT OF SUBMISSION	PROPOSED WELL	
	SOILS DELINEATION	

SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND			
SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP
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CgC		B	GLENELG LOAM, 8 TO 15 PERCENT SLOPES