

Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

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

APPLICATION FOR PERCOLATION TESTING AND SITE EVALUATION

PROPERTY LOCATION

SUBDIVISION/PROPERTY NAME Trusted Information, Lot 2

PROPERTY ADDRESS 3100 Roxbury Mills Road

STREET

TOWN

ZIP

TAX ACCOUNT # 04-343840 TAX MAP 14 GRID 22 PARCEL 224 LOT NO. 2 PROPOSED LOT SIZE (ACRES) 7.840AC

ZONING CATEGORY RC-DEO TIER

PROPERTY OWNER(S) 3100 NW Roxbury Mills Road Investments LLC C/O Dave Rezendes

DAYTIME PHONE 860-984-6313 CELL EMAIL DRenzendes@montenidoaffiliates.com

MAILING ADDRESS 617 Lakeland Road South Severna Park, MD 21146

STREET

CITY, STATE

ZIP

APPLICANT Sill Engineering Group, LLC

RELATIONSHIP TO OWNER: Engineer

DAYTIME PHONE 443-325-5076 CELL EMAIL anita@sillengineering.com

MAILING ADDRESS 11130 Dovedale Court, Suite 200, Marriottsville, MD 21104

STREET

CITY, STATE

ZIP

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

PROPERTY:

- ☐ SUBDIVISION: NUMBER OF LOTS INCLUDING RESIDUE:
SUBDIVISION CLASSIFICATION (PER DEPT. OF PLANNING AND ZONING) ☐ MAJOR ☐ MINOR
- ☐ CONSTRUCT NEW OSDS ON UNDEVELOPED LOT
- ☐ REPAIR OR REPLACE FAILING OSDS
- ☒ UPGRADE EXISTING OSDS

BUILDING:

- ☐ RESIDENTIAL WITH 8/14 EXISTING OR PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE
- ☐ COMMERCIAL (PROVIDE DETAIL OF TYPE OF USE AND NUMBERS OF EMPLOYEES/CUSTOMERS ON ACCOMPANYING PLAN)

IS THE PROPERTY WITHIN 2500 FEET OF ANY RESERVOIR?

- ☐ YES
- ☒ NO

AS APPLICANT, I UNDERSTAND THE FOLLOWING:

- THIS APPLICATION IS VALID FOR TWO(2) YEARS FROM DATE OF FEE PAYMENT AND APPROVAL IS BASED UPON HEALTH OFFICER SIGNATURE OF A PERC CERTIFICATION PLAN PRIOR TO EXPIRATION OF THIS PERMIT.
- THE APPLICATION FEE IS NON-REFUNDABLE
- THIS APPLICATION MUST BE ACCOMPANIED BY ALL APPLICABLE FEES AND A SUITABLE SITE PLAN IN ORDER TO BE PROCESSED
- THIS IS A PUBLIC DOCUMENT

I declare and affirm that to the best of my knowledge, the information contained herein is correct. I declare that I am the owner of the property or duly authorized to make this application on behalf of the owner. I agree to comply with all applicable state and county regulations.

By signature of this application, I hereby grant Howard County Health Department officials the right to enter onto the property for the purpose of inspecting the property as directly related to the requested permit/service.

Anita E. Allen

SIGNATURE OF APPLICANT

2/26/2019

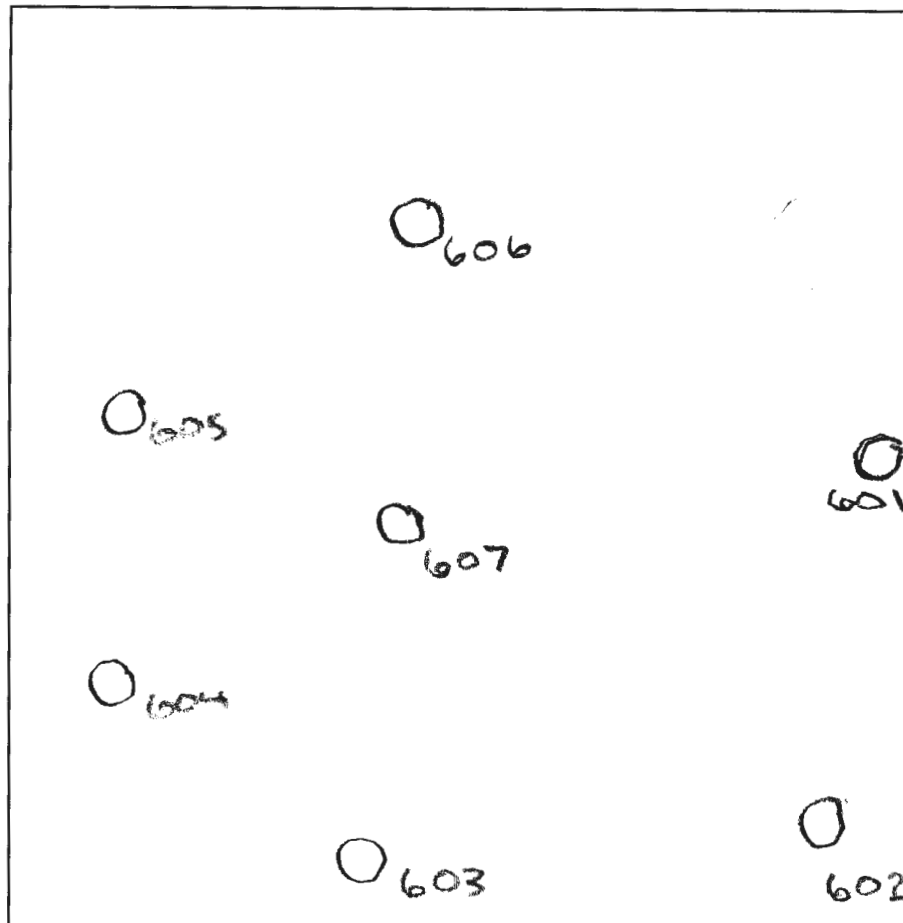
DATE

564769

601
brl
red-br
scl
4'
yel red
sl
pl
6'
tan sl
pl
12'

603
brl
red-br
scl
4'
yel red
sl
pl
9'-hard bottom
rock

604
brl
red br
scl
3'
tan sl
pl
5' rock
12'



605
brl
red br
scl
4'
yel-red
sl
pl
7'
tan
sl
12'

607
brl
red br
scl
3.5'
red br
sl
pl
10'
yel tan
sl
pl
12'

602
3'-electrical
conduit
stopped
digging
disconnected
per dig vic
owner

Roxbury Mill Rd

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
3/13/19	601	4' 9/12'	9:23	- Too	Long	-	F
3/13/19	602	5' 7/12'	12:32	12:50	12:20	30	P
3/13/19	603	5' 9'	9:52	9:56	10:20	24	P
3/13/19	604	3' 5/12'	10:25	10:59	- Too	Long	F
3/13/19	605	5' 5/12'	11:28	11:39	12:03	24	P
3/13/19	606	5' 12'	11:17	12:10	- Too	Long	F
3/13/19	607	6' 12'	12:18	12:33	1:00	27	P
3/13/19	608	4' 5/12'	10:51	11:28	- Too	Long	F
3/13/19	609	6' 12'	11:43	11:54	12:18	24	P

REMARKS 0.6 rate, 5' to 8'

SANITARIAN H. Oswald BACKHOE OTHERS Sill Eng + Oswald

TEST HOLES USED IN SDA AVG. PERC TIME SQ. FT/BR

TRENCH WIDTH INLET DEPTH MAX. BOT DEPTH EFFECTIVE SW

Onsite well HO-81-2061 has lpc cap w/ rope
tied off to outside well, pvc conduit above
grade.

AP 564769

602

Br l

10% rock

Red Br

scl (pvc conduit)

4'

Yel

sl

tan

sl

606

Br l

Red Br

scl

pl

Yel Red

sl

pl

Tansl

water seepage

608

Br l

Yel Br

scl

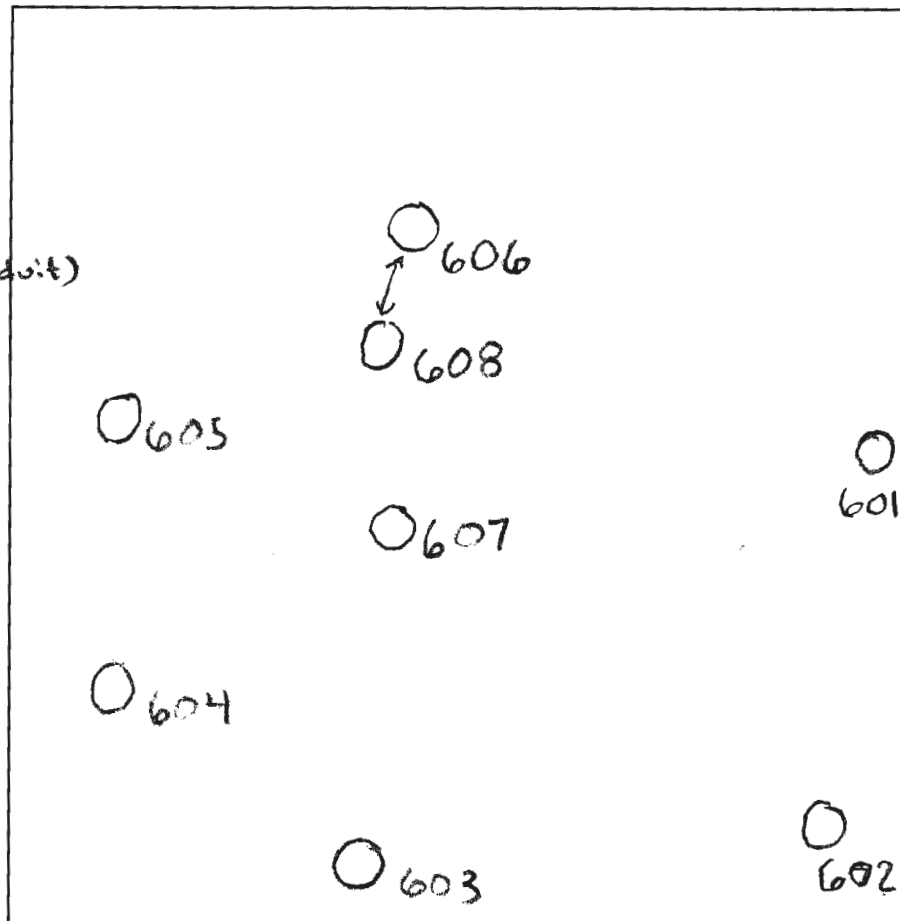
pl

Yel sl

w/mica

pl

Tansl



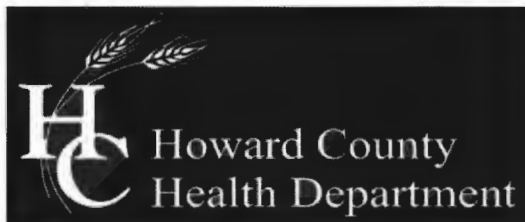
DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
3/14/19	602	6.5/13	10:39	—	11:07	14	P
3/14/19	606	6/12.8	10:30				F
3/14/19	608	7.6/12.8	11:00				F
3/14/19	608	7/12.4	11:45	11:52	12:01	9	P

REMARKS 2" sch 40 pvc conduit 250psi adjacent # 602

SANITARIAN _____ BACKHOE ☒ OTHERS Eng.

TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____

TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE S/W _____



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

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: 3100 Roxbury Mill Rd

Subdivision: Map 14 P. 224 Lot: 2

Initial system: Application rate: 0.6 Effective area beginning depth: 5 Bottom maximum depth: 8

1st Replacement: Application rate: 0.6 Effective area beginning depth: 5 Bottom maximum depth: 8

2nd Replacement: Application rate: 0.6 Effective area beginning depth: 5 Bottom maximum depth: 8

Design Flow = 150 gallons per day per bedroom

Design flow + application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage + trench width

Sidewall reduction credit formula:

$$\frac{W + 2}{W + 1 + 2D} \times 100 = \text{Percent of length of standard trench where } W = \text{trench width and } D = \text{depth between effective area beginning depth and trench bottom.}$$

Standard design requirements:

- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is $2D + W$ up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements:

* Stay away from hole # 603 due to rock @ 9', bottom trench depth @ 5',

Approved: Hank Oswald Date: 3/15/17

- 1.) How many employees per day?
- 2.) 12 potential beds; BP for 8.
(6 BRs stayed same)
- 3.) size system on structure
- 4.) 15 gal/day/employee



HOWARD COUNTY HEALTH DEPARTMENT

64769

DATE
2 14 11

Received
From

PHONE #

For

☐ CASH

☒ CHECK

NO.

2518

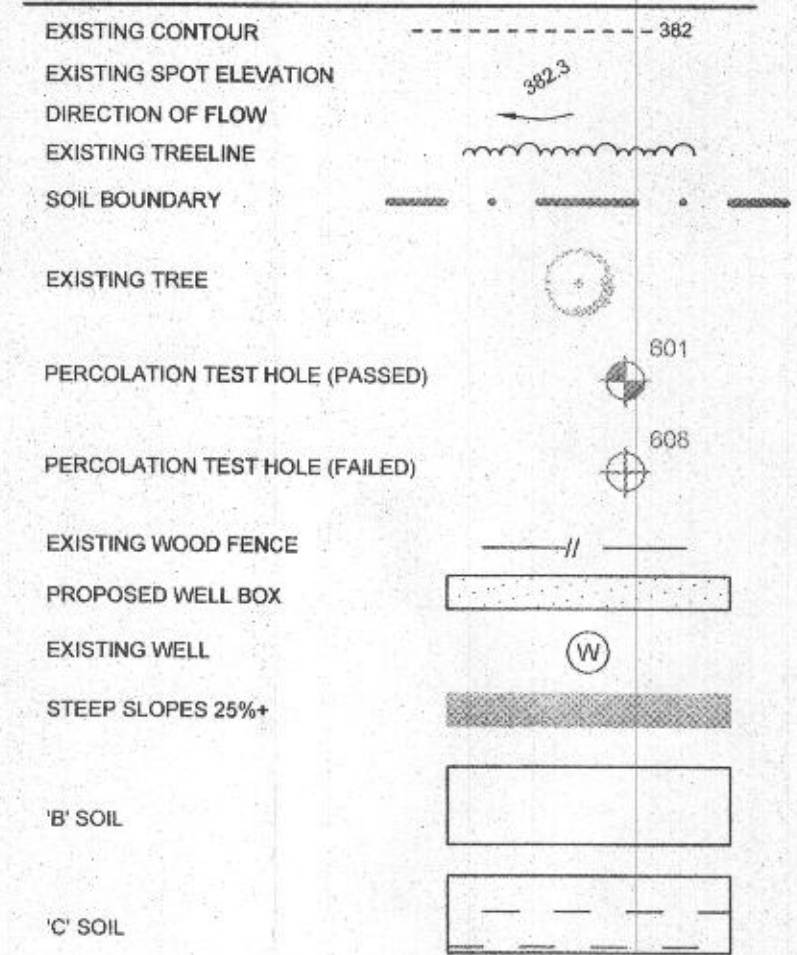
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Dollars

Received By



LEGEND



SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

INITIAL SYSTEM:
DESIGN FLOW:
- BEDROOMS AT 100 GPD + EMPLOYEES AT 15 GPD
- 14X100 GPD = 1,400 GPD + 12X15 GPD 180 GPD
- 1,400 GPD + 180 GPD = 1,580 GPD
SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
- DESIGN FLOW (1,580 GPD) = 2,633 SF
APPLICATION RATE (0.6)
- THE INITIAL SYSTEM WILL UTILIZE THE TWO EXISTING TRENCHES ON SITE, WHICH ARE SIZED TO TREAT 654 GPD. THE REMAINING 726 GPD WILL BE TREATED WITH TWO NEW TRENCHES ADDED TO THE INITIAL SYSTEM.

TRENCH 13 & 14:
DESIGN FLOW:
- BEDROOMS AT 100 GPD + EMPLOYEES AT 15 GPD
- 14X100 GPD = 1,400 GPD
- 12X15 GPD 180 GPD
- 1,400 GPD + 180 GPD = 1,580 GPD - 854 GPD = 726 GPD
SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
- DESIGN FLOW (726 GPD) = 1,210 SF
APPLICATION RATE (0.6)
SIDEWALL REDUCTION CREDIT:
- TRENCH WIDTH (W) = 3'
- TRENCH EFFECTIVE DEPTH (D) = 3'
- (W+2) / (W+1+2D) X 100 =
- (3+2) / (3+1+2(3)) X 100 =
- 5/10 X 100 = 50%
LINEAR LENGTH OF TRENCH REQUIRED:
- DRAINFIELD SQUARE FOOTAGE X SIDEWALL CREDIT
- TRENCH WIDTH
- (1,210 X 50%) = 605 LF
LINEAR LENGTH OF TRENCH PROVIDED = 202 LF
TWO TRENCHES @ 101 LF
REPLACEMENT SYSTEMS 1 & 12: FIVE TRENCHES AT 80' DESIGN FLOW:
- BEDROOMS AT 100 GPD + EMPLOYEES AT 15 GPD
- 14X100 GPD = 1,400 GPD
- 12X15 GPD 180 GPD
- 1,400 GPD + 180 GPD = 1,580 GPD
SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
- DESIGN FLOW (1,580 GPD) = 2,633 SF
APPLICATION RATE (0.6)
SIDEWALL REDUCTION CREDIT:
- TRENCH WIDTH (W) = 3'
- TRENCH EFFECTIVE DEPTH (D) = 3'
- (W+2) / (W+1+2D) X 100 =
- (3+2) / (3+1+2(3)) X 100 =
- 5/10 X 100 = 50%
LINEAR LENGTH OF TRENCH REQUIRED:
- DRAINFIELD SQUARE FOOTAGE X SIDEWALL CREDIT
- TRENCH WIDTH
- (2,633 X 50%) = 1,316 LF
LINEAR LENGTH OF TRENCH PROVIDED = 445 LF
- 5 TRENCHES @ 89 LF

GENERAL NOTES

- SUBJECT PROPERTY IS ZONED: RC-DEO PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF PROPERTY = 7.840 AC.±
- REFERENCE: LIBER 18450, 221 FOLIO PLAT NO. 11735
- PROPERTY ADDRESS: 3100 ROXBURY MILLS ROAD, GLENWOOD 21738-00
- PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
- THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA, OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS 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.
- THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY NTT & ASSOCIATES, INC. IN OCTOBER 2018.
- THE TOPOGRAPHY SHOWN HEREON WAS FIELD RUN BY NTT & ASSOCIATES, INC. IN OCTOBER 2018. OFFSITE TOPOGRAPHY IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2011 AND ARE SHOWN AT 2' CONTOUR INTERVALS.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN-GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS HAVE BEEN SHOWN.
- ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THE PURPOSE OF THIS PLAN IS TO SHOW AN UPDATED SEWAGE DISPOSAL AREA FOR THE REDEVELOPMENT OF THE LOT.
- THE EXISTING WELL TAG NO. HO-81-2061 HAS BEEN FIELD LOCATED.
- TBR = TO BE REMOVED
- THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE HOWARD COUNTY HEALTH DEPARTMENT MUST BE NOTIFIED PRIOR TO ANY WORK PERFORMED ON THE SPRING.
- Trench 13 may be collapsed and need replacement. It must be inspected & replaced if necessary prior to building permit approval.

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GnA	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	B	0.24
GnB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	0.24
GnC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B	0.24
GnD	GLENVILLE-BAILE LOAM, 0 TO 8 PERCENT SLOPES	C	0.43
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	0.28
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.28

NOTES:
1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE; NATURAL RESOURCES CONSERVATION SERVICE; WEB SOIL SURVEY
2) 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.

PERCOLATION CERTIFICATION PLAN

MONTE NIDO
TRUSTED INFORMATION, LOT 2
3100 ROXBURY MILLS ROAD

TAX MAP 14 GRID 22
4TH ELECTION DISTRICT
PARCEL 24
HOWARD COUNTY, MARYLAND

SILL ENGINEERING GROUP, LLC
11130 Doveclaw Court, Suite 200
Manassas, Virginia 20108
Phone: 434.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

DESIGN BY: AEA
DRAWN BY: AEA
CHECKED BY: PS
SCALE: AS SHOWN
DATE: APRIL 22, 2019
PROJECT #: 18-082
SHEET #: 1 of 1

PROFESSIONAL CERTIFICATION: 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. 33025, EXPIRATION DATE: JUNE 20, 2019

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

DATE: 4/26/2019

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 MY KNOWLEDGE AND BELIEF.

PAUL M. SILL, PE, LEED AP
LICENSED PROFESSIONAL ENGINEER #32025

DATE: 4/22/19

OWNER/DEVELOPER
3100 NW ROXBURY MILLS ROAD INVESTMENTS LLC.
617 LAKELAND ROAD SOUTH
SEVERNA PARK, MD 21146