



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

AP 530307-C

AGENCY REVIEW: _____

DATE 2/18/09

DO NOT WRITE ABOVE THIS LINE

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 UNKNOWN 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) RONALD REGAN & SCOTT REGAN TRUSTEE

DAYTIME PHONE _____ CELL _____ FAX _____

MAILING ADDRESS 12859 ROUTE 108 HIGHLAND MD 20777
STREET CITY/TOWN STATE ZIP

APPLICANT SAME AS OWNERS

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 REGAN PROPERTY LOT NO. 3

PROPERTY ADDRESS POINT RIDGE DRIVE
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 34 GRID 24 PARCEL(S) 200 PROPOSED LOT SIZE 1 AC.

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.

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

A/P _____

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H

REMARKS _____

SANITARIAN _____ BACKHOE _____ OTHERS _____

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

TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

Regan Property

24

27

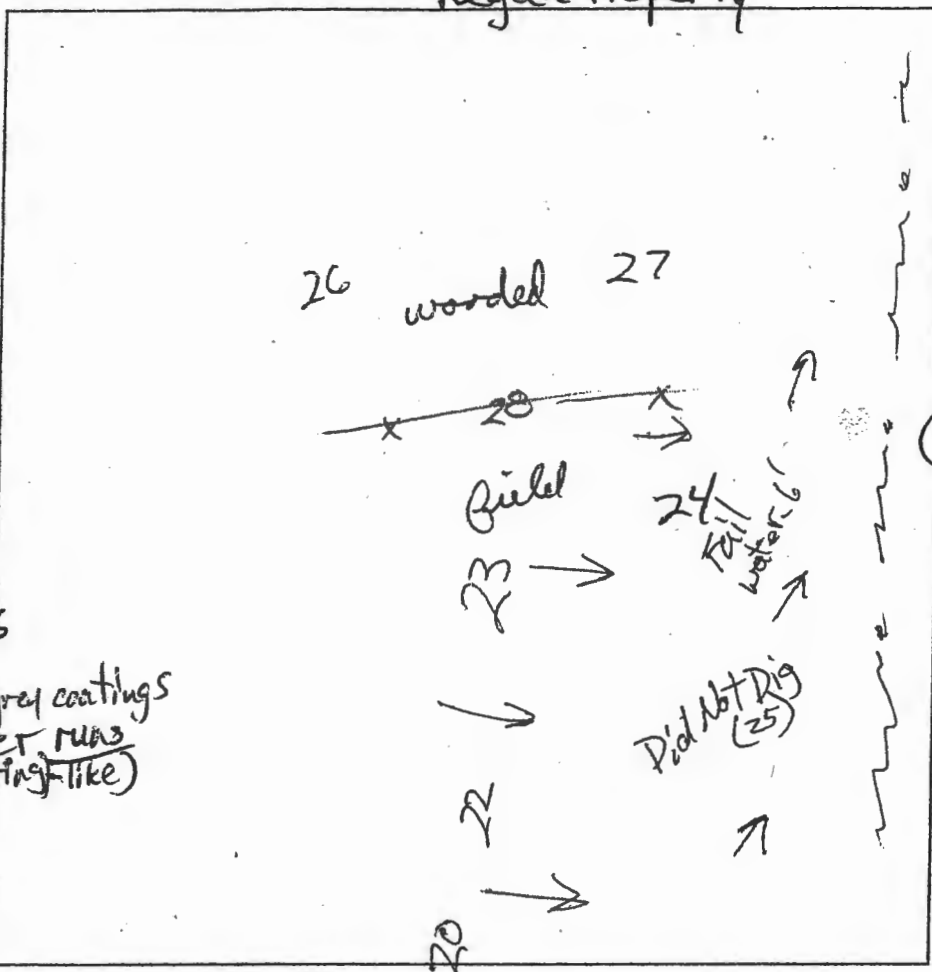
0.3' brn sl
brn scl
common mica

1' yel-red sl
2' yel-red scl

5' yel & lt. brn
stsl few
mica

6.5' brn sl
few stone
peckers yel-red ls

8.5' dk brn sl
few stones - grey coatings
water runs
platy saprolite (spring-like)



0.8' brn sl

2' lt. brn sl
heavy

2.5' dk brn loam
common mica

4.5' dk brn scl
to brn scl w/ very wet

6' stsl common mica
water

50% vst loam
quartzite pale yel
c3d grey

8.5' yel-red loam
c3d grey & common
Mn conc

10' seeps

11.5' grey brn sl
saturated

12' dk grey & white
striations
saturated sl

0.2' dk brn loam
brn sl
few mica

dk brn loam
zeptite zone sbk

brn scl
yel-red sl

pale yel & dk brn
sl, common mica

11.5' water
seeps

13' dk grey-white
& pale yellow
sl, platy saprolite

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
5/18/09	27	5.9'	0	1.2	4	2.8	P
5/18/09	24	6'	Visual	water seeps at stony layer			F
5/18/09	23	6.5' 11.5'	0	0.5	repair		↘
repair	23	6.5' 11.5'	0	1.2	3.4	2.2	P
5/18/09	20	6.5' 13'	7				
reshelf	20	7'	7	gt	pulled very slow		
5/18/09	20	8' 13'	0	4.3'	10.5'	6.2'	P

20

1' brn sl

4' brn scl
yel-red sl-heavy
micaceous

6.5' yellow & brn
saprolite
pale red

9' sl

13' yellow & brn
sl

REMARKS _____

SANITARIAN PB BACKHOE Bruce OTHERS Brace, Andy

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

TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

A/P _____

1' 29
brn l sck
org red / brn
scl floor

3.5' yellow
brn scl

7' whitish
brn fsl
supralite
(decomp.
quartz?)

12' yellow brn scl
H₂O filling between
fast
@ 11'

1' 22
brn l
msbk

red brn
msbk scl
fmsbk
5% boulders

4' org brn
sl
supralite

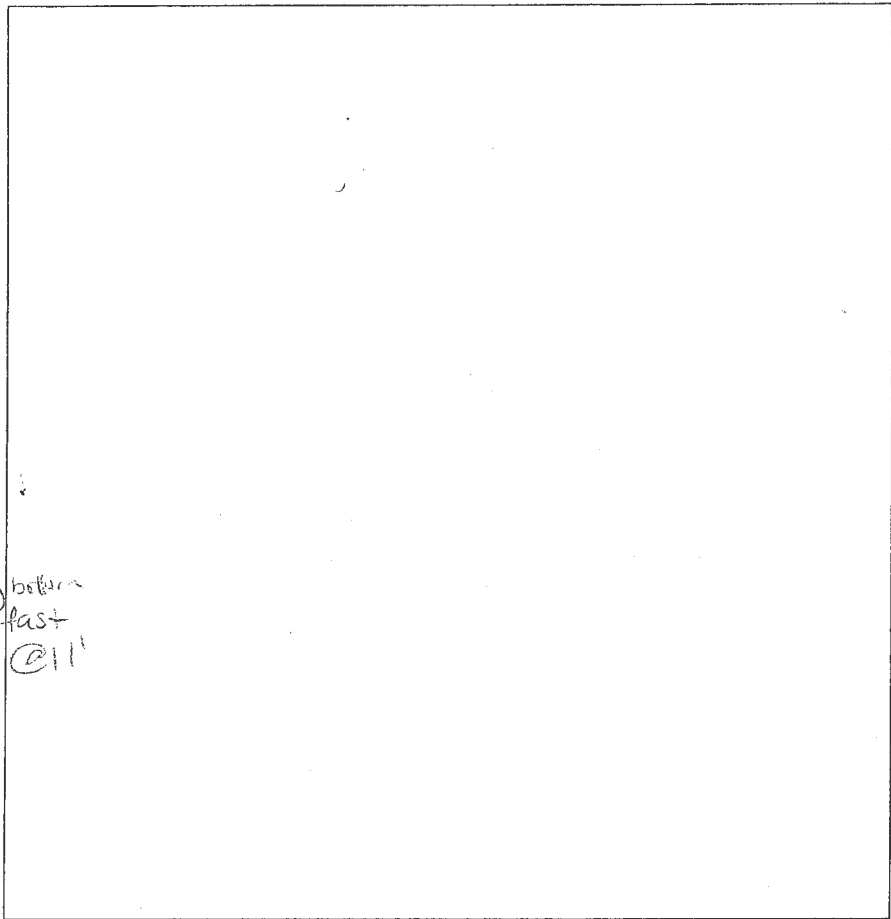
brn fsl
5% channels

8' whitish
supralite
fsl

8' sand with
shells w/

11' brn coatings
dk brn
sl

10' HB
H₂O



67
65%
flaggy
channels
brn BS
25%
flaggy
boulders
refusal
@ 7.5'

68
1' brn l
red brn
scl msbk

2' red brn
sl fmsbk

4' brn fsl
supralite
micaceous

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
5-18-01	28	5.5' / 12'	12:52	12:54	1:02	6	P
	22	5.8' / 12'	1:59	2:02	2:06	4	P
	67	7.5'	visual				F
	68	6.8' / 13'	3:05	3:06	3:08	2	P
	15	8.8'	visual				F

15
brn l
sck

brn scl
2msbk moist

net
brn scl
15%
quartz
channels
H₂O
@ 7.8'
refusal 8.8'

REMARKS _____

SANITARIAN _____ BACKHOE Anderson Backhoe Service OTHERS _____

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

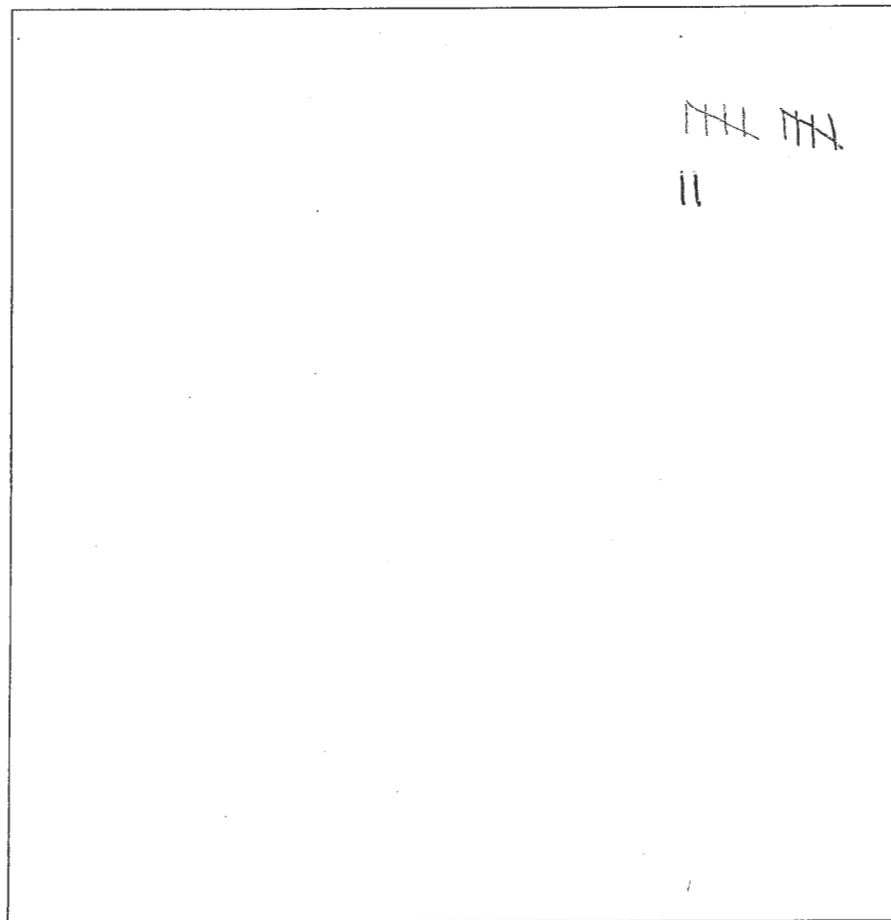
TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

AVP _____

44
 1' brn l / f s b k
 3.5' brn s e l / m s b k
 6' brn s e l
 brn f s l
 micaceous
 Saprolite
 ↓
 brn v f s l
 12'

34
 6" brn l
 3' brn s e l
 2 m s b k
 brn s e l
 ↓
 brn f s l
 micaceous
 Saprolite
 ↓
 12'

29
 1' brn l / f s b k
 5' brn s e l / l c s b k
 brn ch s e l
 quartz
 chipmunks
 ↓
 merge in in
 side wall on
 brn
 vch s e l
 10% boulders
 7'
 10 5' HB



DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
6-10-09	44	4.9' / 12'	10:24	10:25	10:27	2	D
	34	5.5' / 12'	10:42	10:45	10:50	5	P
	29	10.5	visual				F
	31	5.5' / 12'	11:04	11:05	11:07	2	P
	19	5.5' / 12'	11:52	11:53	11:56	3	P
	61A	4.8' / 13'	1:42	1:43	1:45	2	P

REMARKS _____
 SANITARIAN HS/PP/DR BACKHOE Andrew OTHERS _____
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

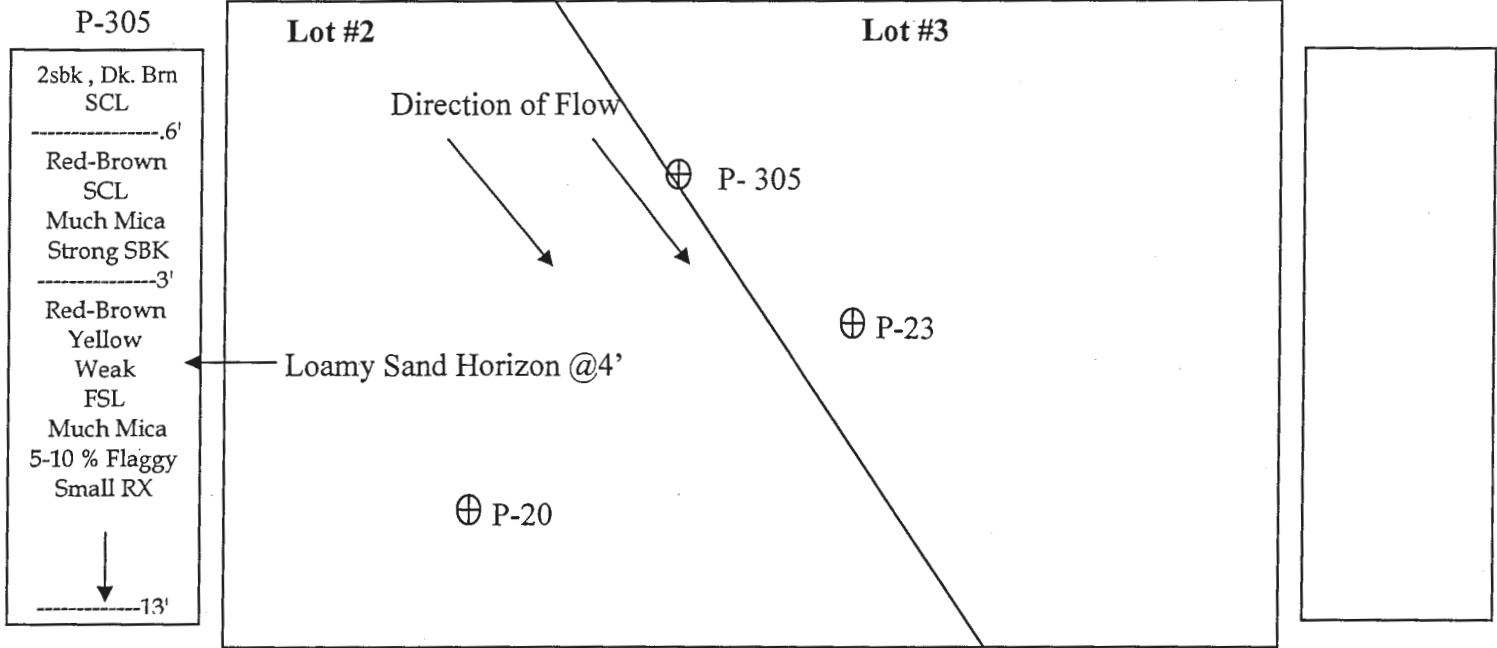
31
 brn l / f s b k
 brn s e l
 l c s b k
 2.5'
 brn s e l
 micaceous
 Saprolite
 ↓
 brn v f s l
 20% ch boulders
 ↓
 12'

19
 brn l / f s b k
 8"
 red brn
 ch s e l
 1 m s b k
 4'
 ch brn s e l
 few boulders
 brn f e l
 ch 15%
 flaggy boulders
 12'

brn l
 6"
 red brn
 s e l
 1 m s b k
 4.5'
 red brn
 s e l
 Saprolite
 7'
 red brn
 f e l
 micaceous
 Saprolite

Percolation Information- Regan Property

NOT TO SCALE (Round IV of Testing)



Date	Test	Depth	Start	Break 1" Drop	Break 2" Drop	Time of 2 nd Inch	P/F/H
12-6-11	P-305	5'/13'	10:04	10:06	10:09	3 min.	Pass

Remarks: Additional testing for community Septic Reserve.

Sanitarian D. Bernard Backhoe Bruce Anderson Others

Test Holes Used in Avg. Perc Time 4 min. SQ.FT/BR

Trench Width Inlet Depth Max Bot. Depth Effective S/W

BENCHMARK



ENGINEERING, INC.

8480 Baltimore National Pike • Suite 315 • Ellicott City, Maryland 21043
410-465-6105 410-465-6644 (Fax)

LETTER OF TRANSMITTAL

TO: Health Dept.

DATE <u>11/27/13</u>	PROJECT No. <u>2171</u>
ATTENTION <u>Jeff Williams</u>	
RE: <u>Rocan Lot 3</u>	
<u>Revised Perc Cert</u>	

- WE ARE SENDING YOU Attached Under separate cover via _____ the following items
- Photocopies Prints Originals Samples
 - Specifications Invoices Change Order Other _____

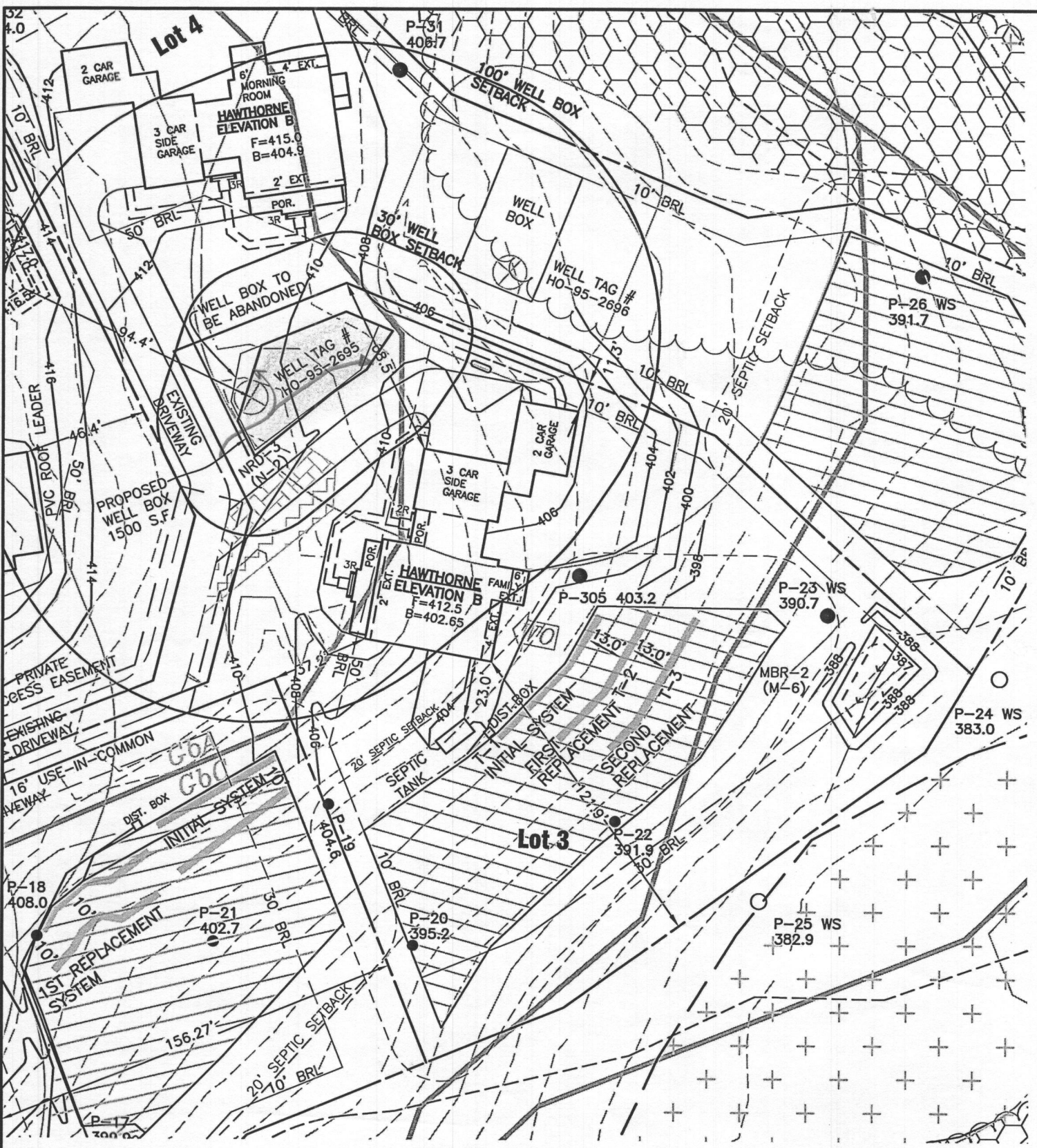
COPIES of	No. of SHEETS	DESCRIPTION
<u>3</u>	<u>1</u>	<u>Revised Perc Cert</u>

- THESE ARE TRANSMITTED as checked below
- For Comment For your use For Approval
 - For Review As requested Other _____

REMARKS: Jeff this is the property we
spoke about on 11/13. We have
revised the lot 5 Building Permit
plan to remove the MTR liner requirement.
This plan revised the well box on Lot 3
to provide as much better as possible.

COPY TO: _____
 RECEIVED BY: [Signature]
If enclosures are not as noted, kindly notify us at once.

SIGNED: [Signature]



PLAN VIEW
1" = 50'

SOILS LEGEND		
MAP SYMBOL	SOIL GROUP	SOIL TYPE
BaA*	D	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES
GbA	B	GLADSTONE LOAM, 0 TO 3 PERCENT SLOPES
GbB	B	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES
GbC	B	GLADSTONE LOAM, 8 TO 15 PERCENT SLOPES
GmB*	C	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES
MaD	B	MANOR LOAM, 15 TO 25 PERCENT SLOPES

FROM NATURAL RESOURCES CONSERVATION SERVICES WEB SOIL SURVEY 2.0
* ERODIBLE SOILS

LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING STREAM
- EXISTING STREAM BUFFER
- PROPOSED STRUCTURE
- SOIL DELINEATION
- SOILS DELINEATION
- EXISTING WELL
- EXISTING WELL BOX
- PROPOSED WELL BOX
- PASSED PERCOLATION TEST
- Failed percolation test

PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063-23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2012.
4. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2695, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
5. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
6. ANY CHANGES TO A PRIVATE SEWAGE EASEMENT OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
7. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED TO BE PROVIDED BY MICRO-BIORETENTION FACILITY (MDE M-6) AND DISCONNECTION OF NON-ROOFTOP RUNOFF.
8. NO DRIVEWAY CULVERT IS REQUIRED FOR THIS LOT.
9. MICRO-BIORETENTION FACILITIES SHOULD HAVE EITHER 4" OR 6" ROOF LEADERS DEPENDING ON THE SIZE OF THE ROOFTOP AREA.
10. THE PURPOSE OF THIS PLAN IS TO REVISE THE WELL BOX ON LOT 3 DUE TO THE LOCATION AND SIZE OF THE MICRO-BIORETENTION FACILITY ON LOT 5.
11. THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA 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.
12. THE LOT SHOWN HEREIN COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.
13. INITIAL SYSTEM IS TRENCH T-1, FIRST REPAIR IS TRENCH T-2, AND SECOND REPAIR IS TRENCH T-3.

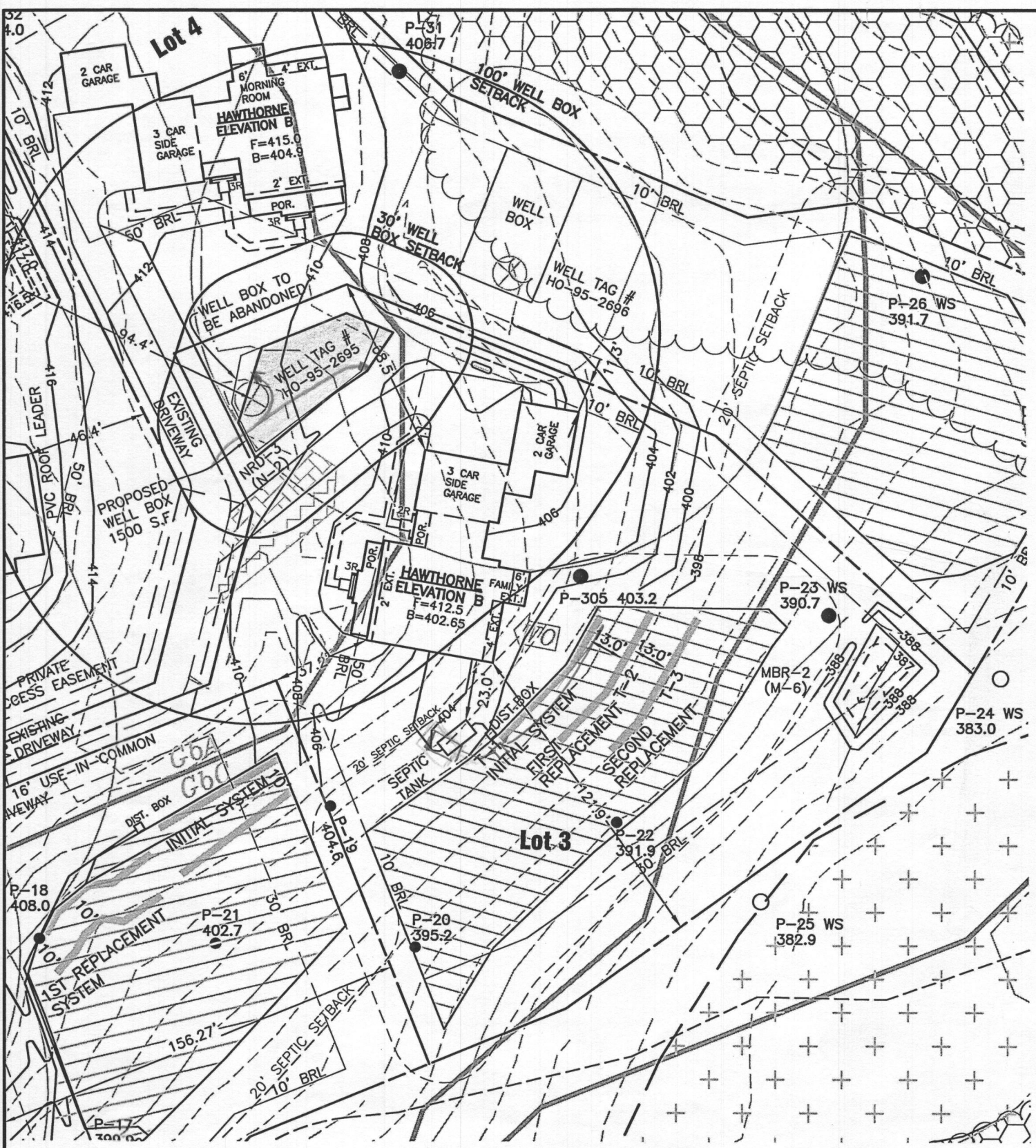
OWNER/BUILDER:	BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 ▲ (F) 410-465-6644 WWW.BEI-CIVLENGINEERING.COM	
PROJECT:	REGAN PROPERTY LOT 3	
LOCATION:	12340 POINT RIDGE DRIVE HIGHLAND, MD 20777 TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597436	
TITLE:	REVISED PERCOLATION CERTIFICATION PLAN	
HOUSE TYPE:	HAWTHORNE - ELEVATION B	
DATE:	NOVEMBER, 2018	PROJECT NO. 2171
SCALE:	AS SHOWN	DRAWING <u>1</u> OF <u>1</u>

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.

PLAN PREPARER: JOHN M. CARNEY
FOR BENCHMARK ENGINEERING, INC.

APPROVED:
APPROVED FOR PRIVATE WATER SYSTEM AND PRIVATE SEWER SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER DATE 12/2/18



PLAN VIEW
1" = 50'

SOILS LEGEND		
MAP SYMBOL	SOIL GROUP	SOIL TYPE
BaA*	D	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES
GbA	B	GLADSTONE LOAM, 0 TO 3 PERCENT SLOPES
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FROM NATURAL RESOURCES CONSERVATION SERVICES WEB SOIL SURVEY 2.0
* ERODIBLE SOILS

LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING STREAM
- EXISTING STREAM BUFFER
- PROPOSED STRUCTURE
- SOIL DELINEATION
- SOILS DELINEATION
- EXISTING WELL
- EXISTING WELL BOX
- PROPOSED WELL BOX
- PASSED PERCOLATION TEST
- Sailed Percolation test



PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063-23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2012.
4. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2695, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
5. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
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7. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED TO BE PROVIDED BY MICRO-BIORETENTION FACILITY (MDE M-6) AND DISCONNECTION OF NON-ROOFTOP RUNOFF.
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John M. Carney
PLAN PREPARER: JOHN M. CARNEY
FOR BENCHMARK ENGINEERING, INC.

APPROVED:
APPROVED FOR PRIVATE WATER SYSTEM AND PRIVATE SEWER SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Maura Rossman 12/18/18
COUNTY HEALTH OFFICER *Per* DATE

OWNER/BUILDER:	BENCHMARK ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315 ELLCOTT CITY, MARYLAND 21043 (P) 410-465-6105 ▲ (F) 410-465-6644 WWW.BEI-CVILENGINEERING.COM	
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