

APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST TIME

TEST DATE(S) _____ AGENCY REVIEW:

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: CHECK AS NEEDED: CONSTRUCT NEW SEPTIC SYSTEM(S) NEW STRUCTURE(S) ADDITION TO AN EXISTING STRUCTURE REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM 1 REPLACE AN EXISTING SEPTIC SYSTEM REPLACE AN EXISTING STRUCTURE Π 0 IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR? CHECK ONE: CREATE NEW LOT(S) VES BUILD ON AN EXISTING LOT IN A SUBDIVISION đ٢ NO BUILD ON AN EXISTING PARCEL OF RECORD THE TYPE OF STRUCTURE IS: 5 PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE UNKNOWN IF APPROPRIATE) RESIDENTIAL WITH (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN) COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN) INSTITUTIONAL/GOVERNMENT SIDHAYE 4 **PROPERTY OWNER(S)** DHAYE ULATARAMANA DAYTIME PHONE FAX CEH 2.1029 MAILING ADDRESS ZIP STREF STATE ier (APPLICANT FAX DAYTIME PHONE Лĸ .10017 MAILING ADDRESS ZIP STATE STREET CITY/TOWN CONSULTANT DEVELOPER BUILDER BUYER **RELATIVE/FRIEND** REALTOR APPLICANT'S ROLE: PROPERTY LOCATION LOT NO. 3 SUBDIVISION/PROPERTY NAME REDBE 2102 4N ARKSVILLE PROPERTY ADDRESS TOWN/POST OFFICE STREET 35 PROPOSED LOT SIZE 43,58 50. FT 10 10 TAX MAP PAGE(S) GRID PARCEL(S) AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPT-ABLE 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. Canadole !! TEST RESULTS WILL BE MAILED TO APPLICANT. APPLICANT SIGNATURE Q

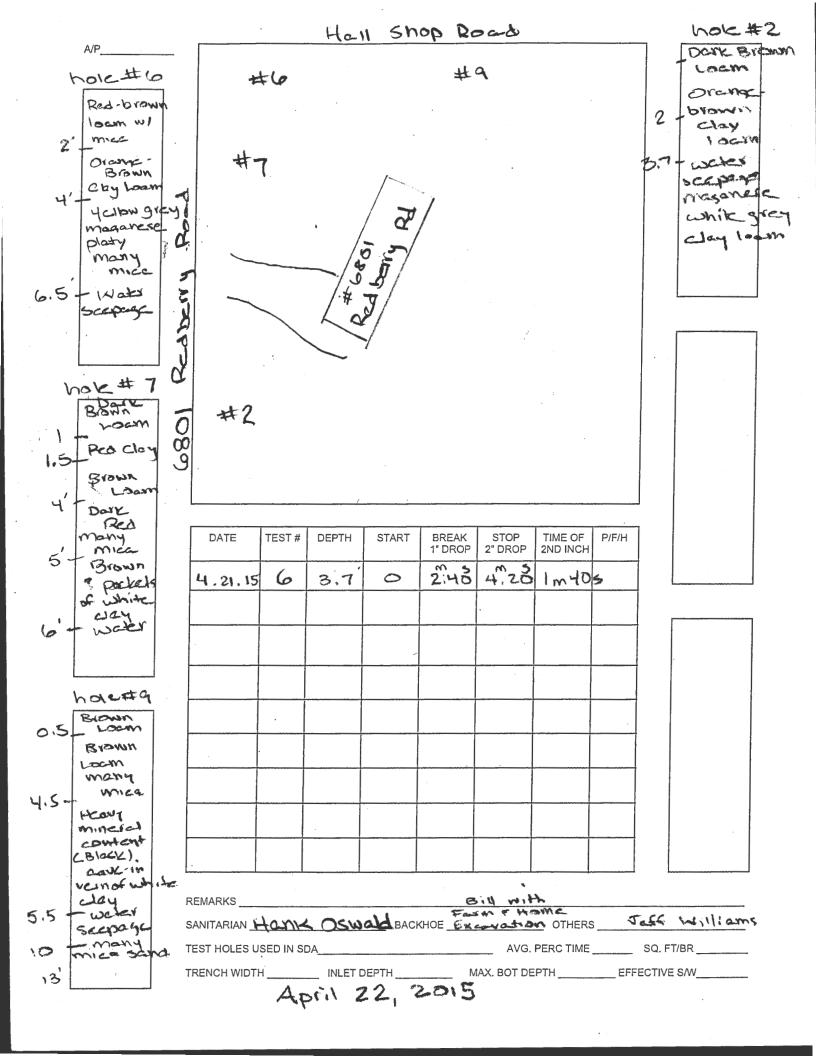
HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM 7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648 TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

HD-216 (2/03)

PLEASE SUBMIT ORIGINALS ONLY (BY MAIL OR IN PERSON)

	- 1										
										1	1
										1. A.S.	
											- -
L	1										
					and the second				•		
	D	ATE TEST #	DEPTH	START	BREAK	STOP	TIME OF	P/F/H	1		
				1					1		
					1" DROP	2" DROP	2ND INCH				
					1" DROP	2" DROP					
					1" DROP	2° DROP					
					1" DROP	2" DROP					
					1" DROP	2° DROP					
					1" DROP	2° DROP					
					1" DROP	2° DROP					
					1" DROP	2" DROP					
					1" DROP	2" DROP					
					1" DROP	2" DROP					
					1" DROP	2" DROP					
					1" DROP	2" DROP					
					1" DROP	2" DROP		-			
					1" DROP	2" DROP					
					1" DROP	2" DROP					
					1" DROP	2" DROP					
	REMA	NRKS						DE			
	SANIT	TARIAN		BAC	KHOE				C	EIVE	
	SANIT	TARIAN		BAC	KHOE					EIVE	
	SANIT	FARIAN HOLES USED IN	SDA	BAC		AVG	2ND INCH		EC MAR FECTIV	EIVE	
	SANIT	ARKS	SDA	BAC		AVG	OTHER	= EF	MAR FECTIV	EIVE	

.





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

May 4, 2015

To: Shanaberger & Lane, Applicant

RE: Percolation Test Report; 6801 Redberry Road, Clarksville, MD 21029

Percolation tests were conducted at 6801 Redberry Road (Tax Map 35, Parcel 205) on April 22, 2015. Tests and/or profile descriptions were documented for 4 locations (test hole 2, 6, 7, and 9). The remaining test holes were not tested due to standing water concerns and lower elevations relative to the holes tested at that time and possible location of the existing septic system.

Percolation test holes 2, 6, 7, and 9 *failed* due to high ground water levels. Water seepage was observed at depths as shallow as 3.7 feet down to 6.5 feet. The percolation rate for hole # 6 was less than 2 minutes. Since these test holes failed, this office cannot approve the proposed sewage disposal area on this percolation plan.

With that said, the areas in the vicinity of holes 6 and 9 may be suitable for a non-conventional sand mound system for a repair should you need a replacement system in the future.

Should you have any questions regarding this evaluation please contact me. I may be reached at (410) 313-1786 or by email <u>hoswald@howardcountymd.gov</u>

Respectfully,

Hank Oswald

Hank Oswald, L.E.H.S Bureau of Environmental Health Well & Septic Program

From:	Oswald, Hank
Sent:	Friday, August 07, 2015 4:26 PM
То:	Guihua Wang (Guihua.Wang@kci.com); 'timothywolfe@kci.com'
Subject:	6801 Redberry Road

Ms. Wang/Mr. Wolfe:

Today, I received a call from Fogle's Septic requesting a date to perform additional testing at Redberry Lane. Per our meeting on July 22, 2015, your company was supposed to field locate the existing septic system components (i.e. drywell and/or trench) using your ground radar equipment and figure out if the existing septic system meets the 4 foot buffer requirement

Prior to scheduling the next phase of testing, we will need to see this information on a revised plan showing the exact location of the existing septic system. If the system is not located in the proposed sand mound locations, and the existing septic system does not meet the 4 foot buffer requirement then we may proceed with At-Grade or Sand Mound testing.

Please note: it's extremely important to rope off the proposed sand mound areas so trucks and heavy equipment do not compact those areas and render unfit for a future system (while searching for the existing septic system). Should you need to extend your search into the proposed sand mound area, please use a probe.

Also, the Sand Mound calculations submitted for review shows a Bed Length of 80 feet but the length of the proposed sand Mound systems shown on the plan are only 65 feet.

Let me know if you have any questions.

Hank

Hank Oswald, L.E.H.S. Howard County Health Department Bureau of Environmental Health Well & Septic Program 410.313.1786 KCI Project # 13158268

Sand Mound Calculations

1.0 Slope:

2

Slope is important in sand mound design because it influences the depth of sand fill below the absorption bed and the final mound dimensions. Slope percent is estimated from site contours.

$$\% Slope = \frac{2'}{87.5'} = 2.3\%$$

2.0 Design Flow:

The design flow is estimated in gallons per day (gpd). The minimum design flow for a residence is based on 150 gpd/bedroom [1]. Assuming a three bedroom household:

$$3 BR x 150 \frac{gpd}{BR} = 450 gpd$$

3.0 Absorption Bed Area:

A design infiltration rate is not to exceed 1.2 gpd/ft^2 but rates as low as 0.8 gpd/ft^2 are suggested for sand fill that marginally meets State of Maryland specifications [1]. Absorption trenches or an absorption bed can be used but an absorption bed is recommended in most cases for typical residential systems. A method to calculate the absorption bed area is as follows:

$$Bed Area (BA) = \frac{design flow (gpd)}{design infiltration rate (\frac{gpd}{ft2})}$$

Bed Area (BA) =
$$\frac{450 \text{ gpd}}{1.2 \text{ gpd}/ft^2}$$
 = 375 ft²

4.0 Absorption Bed Length:

Bed length varies from site to site and is often determined based on site constraints such as topography, horizontal separation distances and lot size. A rectangular bed is preferred to a square bed. A rectangular bed should be constructed with the long axis parallel to the slope contour. If the direction of groundwater flow has been accurately determined, the mound should be oriented perpendicular to the flow directions (COMAR Section 26.04.02.05 Subsection U.3.a).

Typically, beds range between 42 feet and 104 feet in length. The front of the property (along Hall Shop Road) has been identified for the proposed absorption area. In the range of percolation test holes #6 and #9, there is approximately 150' by 25' of proposed sewage easement. In selecting the bed length for a particular site, it is important to remember that the final mound length will be 20 to 32 feet longer than the absorption bed. This additional length is a function of

6001 Radberry T.22 Notes · 4' buffer · rates in upper horizon · mound system · water dwersion between mad & system max min loading vat · BP Approval (3) 12 Ersting tank · area for initial plus 2 replacement - coparade tank BAT unitial plus 1'STRA. · upgrade entire Station. Under State reg (2) saved mounds

site slope and depth to water table. Assuming 32 feet for both side slopes from the allowable length provides a safe point for bed length calculations.

$$80 - 32 feet = 48 feet (bed length)$$

5.0 Absorption Bed Width:

Bed width should not be greater than 12 feet [1]. A width of 9 feet or less is preferred. Bed width is determined by the formula:

Bed Width (A) =
$$\frac{absorption \ bed \ (ft2)}{bed \ length \ (ft)}$$

Bed Width = $\frac{375 \ ft^2}{48 \ ft}$ = 7.8 or 8 ft

*Note – bed length and width can be adjusted to fit site requirements as long as the required bed area is met and the long axis of the sand mound is perpendicular to the slope.

6.0 Absorption Bed Depth

The absorption bed normally consists of six inches of ³/₄ to 2 inch-diameter clean aggregate below the distribution pipes, the distribution pipes and two inches of aggregate over the distribution pipes [1]. A slight variation of depth of aggregate above and around distribution pipes allows a standard bed depth of 10 inches to be used [1].

7.0 Upslope Sand Fill Depth

The upslope sand fill depth below the absorption bed is selected so that the depth of sand fill plus soil above the high water table or pervious bedrock is greater than or equal to 4 feet. A minimum sand fill depth of 12 inches must be maintained regardless of water table or bedrock depth [1]. The upslope sand fill depth may be calculated using the equation:

Upslope Sand Fill Depth (D) = 48 inches - depth to high water table (Z)

D = 48 inches - 44.4 inches = 3.6 inches

*Note – the depth to high water table was taken from the Howard County Health Department Percolation Test Report, May 2015

The upslope sand fill depth is less than the minimum so the minimum of 12 inches will be used for future calculations.

$$D = 12$$
 inches

8.0 Downslope Sand Fill Depth

The absorption bed must be constructed level. On sloping sites, the downslope sand fill depth will be greater than the upslope sand fill depth to compensate for the change in elevation along the slope. To calculate the downslope sand fill depth, the difference in elevation of the bed edges is determined and added to the upslope sand fill depth according to the equation:

Downslope Sand Fill Depth (E) = (bedwidth x % slope) + upslope sand fill depth

$$E = \frac{12 \text{ inches}}{foot} x (8 \text{ feet}) x \frac{2.3}{100} + 12 \text{ inches} = 14.2 \text{ inches}$$

9.0 Cap and Topsoil

The fine textured cap placed above the bed provides frost protection and promotes runoff. The cap should be at least 12 inches deep over the bed center and at least 6 inches deep over the bed edges [1]. The topsoil cover is 6 inches deep over the entire mound and provides for vegetative growth [1].

Cap + Topsoil Depth at Absorption Bed Center (H) = 12 inches + 6 inches= 18 inches (minimum)

Cap + Topsoil Depth at Absorption Bed Edge (G) = 6 inches + 6 inches = 12 inches (minimum)

10.0 Side Slope Setback

The side slope setback is the distance the mound extends past the bed ends so that the mound sides have slopes no steeper than 3:1 (COMAR Section 26.04.02.05 Subsection U.4.n). This distance is calculated using the following procedures:

- 1. Determine the sand fill depth below the absorption bed center by averaging the upslope and downslope sand fill depths.
- 2. Add the center sand fill depth to 28 inches to determine the total mound height at the bed center. The 28 inches represents the depth of the cap, top soil and bed at the center of the absorption bed [1].
- 3. Multiply the total mound height at the bed center by 3.

The procedure can be expressed by the following equation:

Side Slope Setback (K) =
$$\frac{Upslope Sand Depth + Downslope Sand Depth}{2} + 28$$
 inches X3

$$K = \frac{12 \text{ inches} + 14.2 \text{ inches}}{2} + 28 \text{ in. } x 3 = 123.3 \text{ in (approximately 10 feet)}$$

11.0 Upslope Setback

The upslope setback is the distance the mound must extend beyond the upslope edge of the bed so that 3:1 slope is provided. The upslope setback distance is determined by calculating the setback distance as if the mound were on a level site and then multiplying by an upslope correction factor in Figure 1 to compensate for slope. This is accomplished in the following steps:

1. Determine the height of the mound at the upslope bed edge by adding the upslope sand fill depth (D) to 22 inches. This 22 inches represents the depth of the cap and topsoil (G) and bed (F) at either bed edge [1].

- 2. Multiply the height of the mound at the upslope bed edge by 3 to determine the setback distance needed for a level site.
- 3. Multiply by the appropriate upslope correction factor for the site slope.

Slope %	Downslope Correction Factor	Upslope Correction Factor
0	1.0	1.0
2	1.06	0.94
4	1.14	0.89
6	1.22	0.86
8	1.32	0.80
10	1.44	0.77
12	1.57	0.73

TABLE 3.2 DOWNSLOPE AND UPSLOPE CORRECTION FACTORS FOR SAND MOUNDS ON SLOPING SITES

Source: J.C. Converse. Design and Construction Manual for Wisconsin Mounds, 1978.

Figure 1: Downslope and Upslope Correction Factors

This procedure is summarized in the equation:

Upslope Setback (J) = (Upslope Sand Fill Depth + 22 inches) x 3 x Upslope Correction Factor

J = (12 inches + 22 inches) x 3 x 0.94 = 95.9 inches (8 feet)

12.0 Downslope Setback

The downslope setback is the distance the mound must extend beyond the downslope edge of the bed so that 3:1 slope can be achieved (COMAR Section 26.04.02.05 Subsection U.4.n). This distance is determined by calculating the setback distance as if the mound were on a level site and then multiplying a downslope correction factor to compensate for slope [1].

This procedure is summarized in the equation:

```
Downslope Setback (I)
= (Downslope Sand Fill Depth + 22 inches)x 3 x Downslope Correction Factor
```

KCI Project # 13158268

 $I = (14.2 \text{ inches} + 22 \text{ inches})x \ 3x \ 1.06 = 115.1 \text{ inches} \ (9.6 \text{ ft})$

12.0 Total Mound Width

Total mound width is determined by adding the upslope setback and the downslope setback to the bed width.

Mound Width (W) = 8 ft + 8 ft + 9.6 ft = 26 ft

13.0 Total Mound Length

Total mound length is determined by adding the side slope setbacks to the bed lengths.

Mound Length (L) = 48 ft + 10 ft + 10 ft = 68 ft

14.0 Protection of Receiving Environment

A minimum 25 feet wide area downslope of the mound should be designated on a site plan as an area to be protected from compaction and free of structures such as buildings and driveways. The purpose is to protect the underground flow path the sewage will take upon exiting the mound.

15.0 Proposed Mound Layout

Based on the above design criteria the proposed layout for the absorption bed is presented on Fig. 1. The area along Hall Shop Road is sufficient to provide one replacement mound system.

References:

[1] Design and Construction Manual for Sand Mound Systems. Tech. 4th ed. N.p.: State of Maryland: Department of the Environment, 2003. Print.

M:\2015\13158268\Engr\Sand Mound Calculations.docx

From:	Oswald, Hank
Sent:	Monday, August 17, 2015 1:59 PM
То:	'Guihua Wang'
Cc:	Timothy Wolfe; Williams, Jeffrey; Ramana Sidhaye; Aniket Sidhaye;
	tlawrence@onesourcecontract.com
Subject:	RE: Septic Field Evaluation_ 6801 Redberry Road

Hi Grace:

I checked with Jeff on this. Based on the results of the percolation test conducted on April 22, 2015 and the trench spec on the septic permit from the repair in 1976, we already know there isn't a 4 foot buffer. The next step in the process is to have Fogle's field verify the location of the repair trench and then have an engineer plot it on a plan. If the trench doesn't overlap the area where the sand mound systems are being proposed, then we may proceed with testing that area with Infiltrometers.

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

Hank

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

From: Guihua Wang [mailto:Guihua.Wang@kci.com]
Sent: Monday, August 17, 2015 10:39 AM
To: Oswald, Hank
Cc: Timothy Wolfe; Williams, Jeffrey; Ramana Sidhaye; Aniket Sidhaye; <u>tlawrence@onesourcecontract.com</u>
Subject: Septic Field Evaluation_ 6801 Redberry Road

Hank,

I left a message to you. As we discussed last week, you would check with Jeff to see if any of you would be available on site to evaluate the existing septic field for the adequacy of 4' buffer zone.

The homeowner's contactor Fogle's Septic will be able to excavate a location, at your choice, for you to observe the condition. Please confirm with a date and a time.

Thanks,

Grace Wang, Ph.D., P.E., BCEE, ENV SP Environmental Discipline KCI Technologies, Inc. 936 Ridgebrook Road Sparks, MD 21152 Tel: 410-891-1762 (Office) 410-271-8158 (Cell)

Hank

Thanks for the response, and thanks for pointing out the possibility of sand mound testing/design/construction for a repair area.

Do you (the Health Dept.) see any possibility for testing the shallower soils on any part of the lot in order to find enough good soil to allow design of an alternative system (sand mound or otherwise) to accomodate the addition Mr. and Mrs. Sidhaye wish to build? Or has enough been seen already in the holes dug to know that this would fail? Thanks.

Scott

G. Scott Shanaberger Professional Land Surveyor Shanaberger & Lane 8726 Town & Country Blvd., Suite 201 Ellicott City, MD 21043 410-461-9563 410-461-9693 fax home@shanlane.com

----- Original Message -----From: Oswald, Hank To: Shanaberger & Lane Cc: Ramana Sidhaye Sent: Monday, May 04, 2015 9:52 AM Subject: RE: 6801 Redberry Road

Hi Scott:

Attached, please find the perc test results for 6801 Redberry Road. Should you have any questions, please don't hesitate to ask.

Respectfully,

Hank

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

From: Shanaberger & Lane [mailto:home@shanlane.com] Sent: Wednesday, April 29, 2015 10:16 AM To: Oswald, Hank Cc: Ramana Sidhaye Subject: Re: 6801 Redberry Road

Hank

Can you tell me when the owners and I will get the Health Department's letter summarizing the testing that was done? Thanks.

Scott

G. Scott Shanaberger Professional Land Surveyor Shanaberger & Lane 8726 Town & Country Blvd., Suite 201 Ellicott City, MD 21043 410-461-9563 410-461-9693 fax home@shanlane.com

----- Original Message -----From: <u>Oswald, Hank</u> To: <u>Shanaberger & Lane</u> Sent: Monday, April 20, 2015 3:37 PM Subject: RE: 6801 Redberry Road

Hi Scott:

I just wanted to confirm tomorrows (April 21st) perc test starting at 930. Please have a backhoe onsite capable of digging down to at least 12 feet. Should you have any questions, please don't hesitate to ask.

Thanks,

Hank

From: Shanaberger & Lane [mailto:home@shanlane.com] Sent: Friday, March 27, 2015 2:07 PM To: Oswald, Hank Subject: Re: 6801 Redberry Road

Good. This one should be "interesting" to say the least.

----- Original Message -----From: <u>Oswald, Hank</u> To: <u>Shanaberger & Lane</u> Sent: Friday, March 27, 2015 1:55 PM Subject: RE: 6801 Redberry Road

My supervisor and I will be conducting the inspection.

From: Shanaberger & Lane [mailto:home@shanlane.com] Sent: Friday, March 27, 2015 1:54 PM To: Oswald, Hank Subject: Re: 6801 Redberry Road

Hank

OK, I'll put in on our schedule and we'll stake both areas prior to testing. Will you be doing the inspection? I'll try to arrange my time so I can be out there at least some of the time testing is going on. Thanks.

Scott

----- Original Message -----From: Oswald, Hank To: Shanaberger & Lane Sent: Friday, March 27, 2015 1:48 PM Subject: RE: 6801 Redberry Road

Scott:

Tuesday April 21st. Let's stake both areas but start with the bottom easement. If it fails then we can move to the top and test same day.

Hank

From: Shanaberger & Lane [mailto:home@shanlane.com] Sent: Friday, March 27, 2015 11:18 AM To: Oswald, Hank Subject: 6801 Redberry Road

Hank

We dropped off revised perc application plans for 6801 Redberry Road on Tuesday. The revised plans show a downhill perc area, abandoning the existing well, and an uphill well area. No variance would be needed for this layout. Can we now get a perc test date? Thanks.

Scott

G. Scott Shanaberger Professional Land Surveyor Shanaberger & Lane 8726 Town & Country Blvd., Suite 201 Ellicott City, MD 21043 410-461-9563 410-461-9693 fax home@shanlane.com

No virus found in this message. Checked by AVG - <u>www.avg.com</u> Version: 2015.0.5856 / Virus Database: 4315/9392 - Release Date: 03/27/15

No virus found in this message. Checked by AVG - <u>www.avg.com</u> Version: 2015.0.5856 / Virus Database: 4315/9392 - Release Date: 03/27/15

No virus found in this message. Checked by AVG - <u>www.avg.com</u> Version: 2015.0.5863 / Virus Database: 4331/9581 - Release Date: 04/20/15

From: Sent: To: Cc: Subject: Attachments: Oswald, Hank Tuesday, September 22, 2015 3:30 PM 'Ramana Sidhaye'; Williams, Jeffrey Todd Lawrence RE: Septic Field Evaluation_ 6801 Redberry Road 1505perclocation-SANDMOUND.PDF

Hi Ramana:

The updated drawing needs to show two sand mound locations missing the existing trench plus the BAT upgrade.

Hank

From: Ramana Sidhaye [mailto:ramanasidhaye@yahoo.com]
Sent: Tuesday, September 22, 2015 1:55 PM
To: Oswald, Hank; Williams, Jeffrey
Cc: Todd Lawrence
Subject: Re: Septic Field Evaluation_ 6801 Redberry Road

Hi-

I am forwarding the updated drawings that both demonstrate our current septic drain field as well as the proposed alternative mound system.

We would like to move forward, so please let us know what the next steps are. Thanks,

Ramana

From: Ramana Sidhaye <<u>ramanasidhaye@yahoo.com</u>> To: "Oswald, Hank" <<u>hoswald@howardcountymd.gov</u>> Cc: "Williams, Jeffrey" <<u>jewilliams@howardcountymd.gov</u>> Sent: Monday, September 21, 2015 3:40 PM Subject: Re: Septic Field Evaluation_6801 Redberry Road

Hi Hank and Jeff,

We finally have the verification of the current septic system, and KCI has put together a location for the sand mound which we are trying to get the CAD drawings for, hopefully tomorrow. What are the next steps? Since this whole process seems to be moving quite slowly, I wanted to try to keep things moving as quickly as possible.

1

Thanks, Ramana From: "Oswald, Hank" <<u>hoswald@howardcountymd.gov</u>>
 To: Guihua Wang <<u>Guihua.Wang@kci.com</u>>
 Cc: Timothy Wolfe <<u>Timothy.Wolfe@kci.com</u>>; "Williams, Jeffrey" <jewilliams@howardcountymd.gov</u>>; Ramana Sidhaye
 <<u>ramanasidhaye@yahoo.com</u>>; Aniket Sidhaye <<u>asidhaye@yahoo.com</u>>; "<u>tlawrence@onesourcecontract.com</u>"
 <<u>tlawrence@onesourcecontract.com</u>>
 Sent: Monday, August 17, 2015 1:58 PM
 Subject: RE: Septic Field Evaluation_ 6801 Redberry Road

Hi Grace:

I checked with Jeff on this. Based on the results of the percolation test conducted on April 22, 2015 and the trench spec on the septic permit from the repair in 1976, we already know there isn't a 4 foot buffer. The next step in the process is to have Fogle's field verify the location of the repair trench and then have an engineer plot it on a plan. If the trench doesn't overlap the area where the sand mound systems are being proposed, then we may proceed with testing that area with Infiltrometers.

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

Hank

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

From: Guihua Wang [mailto:Guihua.Wang@kci.com]
Sent: Monday, August 17, 2015 10:39 AM
To: Oswald, Hank
Cc: Timothy Wolfe; Williams, Jeffrey; Ramana Sidhaye; Aniket Sidhaye; <u>tlawrence@onesourcecontract.com</u>
Subject: Septic Field Evaluation_ 6801 Redberry Road

Hank,

I left a message to you. As we discussed last week, you would check with Jeff to see if any of you would be available on site to evaluate the existing septic field for the adequacy of 4' buffer zone.

The homeowner's contactor Fogle's Septic will be able to excavate a location, at your choice, for you to observe the condition. Please confirm with a date and a time.

Thanks,

Grace Wang, Ph.D., P.E., BCEE, ENV SP Environmental Discipline KCI Technologies, Inc. 936 Ridgebrook Road Sparks, MD 21152

Tel: 410-891-1762 (Office) 410-271-8158 (Cell)

From:	Shanaberger & Lane <home@shanlane.com></home@shanlane.com>
Sent:	Monday, March 23, 2015 12:39 PM
То:	Oswald, Hank
Subject:	Re: Dogwood Lot 3_6801 Redberry Road

Hank

Hank

I doubt MDE will give a variance until we prove the area south of the house isn't an acceptable perc area. If it was acceptable (which you and I doubt it will be), the well could be relocated uphill near Hall Shop Road. But we can't prove that area south of the house is or is not acceptable until we test.

How about if I prepare a second plan for perc testing showing a proposed perc area south of the house, and a proposed well location up near Hall Shop Road? At the same time I'll have the owners schedule the well testing. You can give them a perc test date, and hopefully before that date the well testing will be completed. Then we'll test the area south of the house first, and either find a good area there or move up north of the house. You already have the plan for testing north of the house.

That'll let things get moving. I know you and I are smart guys, but I have difficulty imagining MDE giving a variance for the well "because Hank and Scott don't think the area south of the house will perc." Thanks.

Scot

----- Original Message -----From: Oswald, Hank To: Shanaberger & Lane Sent: Monday, March 23, 2015 12:17 PM Subject: RE: Dogwood Lot 3_6801 Redberry Road

Before we can schedule a perc test date, we will need sample results and MDE variance.

From: Shanaberger & Lane [mailto:home@shanlane.com]
Sent: Monday, March 23, 2015 12:15 PM
To: Oswald, Hank
Subject: Re: Dogwood Lot 3_6801 Redberry Road

Thanks Hank. I'll get in touch with the owner about well testing. How close are we to getting a perc test date?

Scott

----- Original Message -----From: Oswald, Hank To: Shanaberger & Lane Sent: Monday, March 23, 2015 12:11 PM Subject: RE: Dogwood Lot 3_6801 Redberry Road in 1962 according to assessment records so the current situation of uphill septic and downgradient well isn't new and hasn't been problematic.

I wouldn't ask any of these questions if it was a new lot we were creating.

But we can't change the house location or groundwater location on this lot. Thanks.

Scott

----- Original Message -----From: Oswald, Hank To: home@shanlane.com Sent: Wednesday, March 18, 2015 2:16 PM Subject: Dogwood Lot 3_6801 Redberry Road

Hi Scott:

The existing well is only 100 feet from the proposed septic area. Under local code, a down gradient well needs to be at least 200 feet from a septic system. The well will have to be moved to the back side of the property.

What if we move the septic system to the back side of the property where there seems to be more area and move the well up by hall shop road?

Hank

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

No virus found in this message. Checked by AVG - <u>www.avg.com</u> Version: 2015.0.5751 / Virus Database: 4311/9329 - Release Date: 03/18/15

No virus found in this message. Checked by AVG - <u>www.avg.com</u> Version: 2015.0.5856 / Virus Database: 4311/9364 - Release Date: 03/23/15

No virus found in this message. Checked by AVG - <u>www.avg.com</u> Version: 2015.0.5856 / Virus Database: 4311/9364 - Release Date: 03/23/15

No virus found in this message. Checked by AVG - <u>www.avg.com</u> Version: 2015.0.5856 / Virus Database: 4311/9364 - Release Date: 03/23/15

3

From: Sent: To: Cc: Subject: Oswald, Hank Wednesday, July 01, 2015 10:50 AM 'jeffrey.gernand@kci.com' Williams, Jeffrey 6801 Redberry Road_Perc Test results

Mr. Gernand:

Thank you for your inquiry about **6801 Redberry Road**. You mentioned that you were interested in assisting the homeowners with their project. Based on the perc testing conducted on April 22, 2015, the outcome was shallow water at the highest part of the yard which indicated that the existing system is likely not adequate (doesn't meet the current 4 foot buffer requirement) and there's no room for even one conventional system for a repair (should the homeowners need it).

It was mentioned that if the owners wanted to do renovations that does not include additions or increased living space, we could review it.

Should you have any questions, please let me know.

Thanks,

Hank

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

