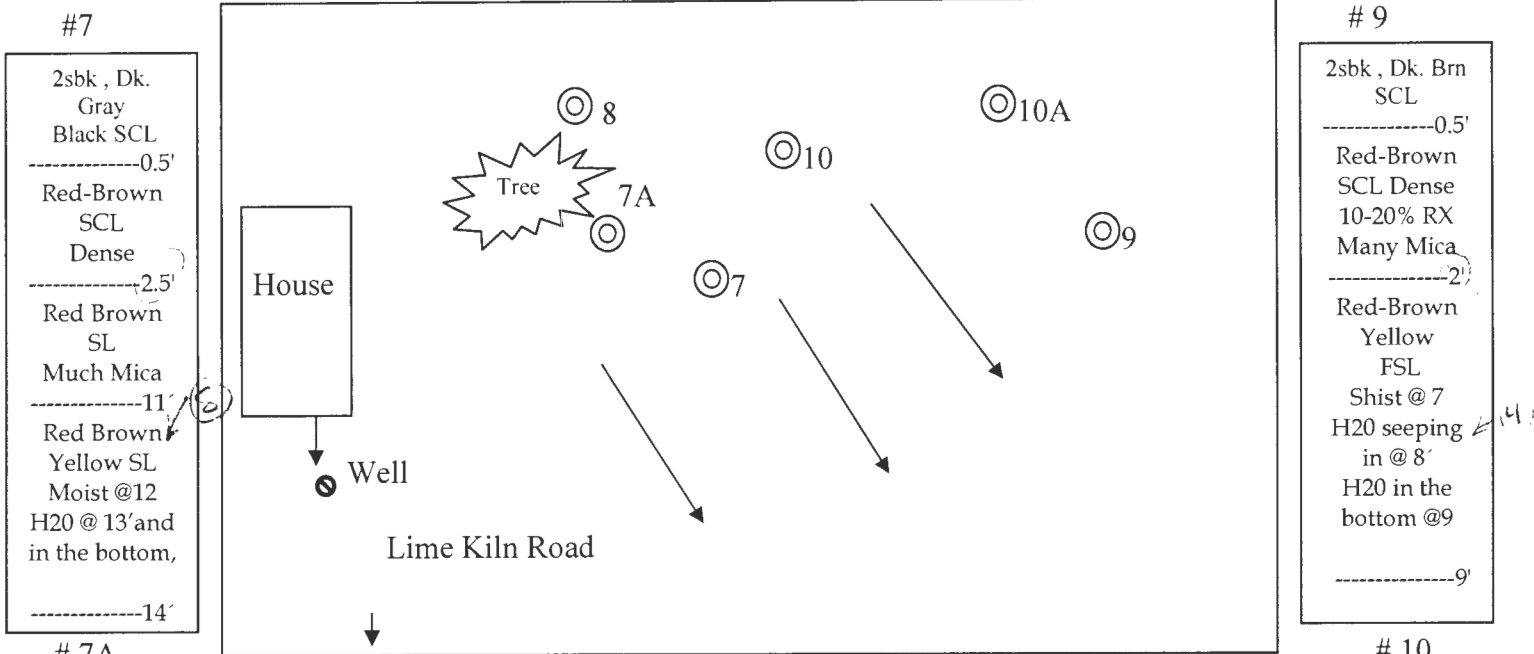


A 545025_ Percolation Information- 12671 Lime Kiln Road-Lot 2

NOT TO SCALE



#7
 2sbk , Dk. Gray Black SCL
 -----0.5'
 Red-Brown SCL Dense
 -----2.5'
 Red Brown SL Much Mica
 -----11'
 Red Brown Yellow SL Moist @12
 H2O @ 13' and in the bottom,
 -----14'

#9
 2sbk , Dk. Brn SCL
 -----0.5'
 Red-Brown SCL Dense
 10-20% RX Many Mica
 -----2'
 Red-Brown Yellow FSL
 Shist @ 7
 H2O seeping in @ 8'
 H2O in the bottom @9
 -----9'

7A
 2sbk , Dk. Brn Black SCL
 -----0.5'
 Red-Brown SCL Dense
 -----3'
 Red Brown Yellow SL
 Many Mica
 20-30% RX and Shale
 ↓
 -----14'

10
 2sbk , Dk. Gray Black SCL
 -----0.5'
 Red-Brown SCL
 -----2'
 Red-Brown Yellow SL
 Much Mica Manganese Deposits at 10'
 ↓
 10-20% RX H2O seeping in @14'
 14'

Date	Test	Depth	Start	Break 1" Drop	Break 2" Drop	Time of 2 nd Inch	P/F/H
5-13-14	7	4' / 14'	11:48	11:50	11:55	5 min.	Pass
5-13-14	7A	4' / 14'	12:40	12:54	1:21	27 min.	Pass
5-13-14	8	4' / 12'	12:53	1:05	1:23	18 min.	Pass
5-13-14	9	3.5' / 9'	12:23	12:25	12:26	1 min.	No Buffer
		Repour	12:21	12:22	12:23	1 min.	Fail
5-13-14	10	4' / 14'	12:02	12:12	12:19	7 min	Pass
5-13-14	10A	3.5' / 14'	12:53	1:05	1:23	18 min.	Pass

8
 2sbk , Dk. Brn SCL
 -----0.5'
 Red-Brown SCL Dense
 -----3'
 Red-Brown Yellow SL
 10-20% RX Many Mica
 -----8'
 Red Brown Yellow SL
 10-20%Shale @8'
 20-30% Shale @12
 -----12'

10 A
 2sbk , Dk. Gray Black SCL
 -----0.5'
 Red-Brown SCL
 Much Mica
 -----2'
 Red-Brown Yellow SL
 Many Mica 5-10% RX
 H2O in the Bottom @14'
 -----14'

Remarks: Perc holes must be surveyed on Percolation _Certification Plan.
 Area was modified to get percolation testing area. Several proposed percs were located in a swale. Cannot use Percolation hole #9 due high water table. Well must be abandoned to established area. New well must be

Sanitarian _D.Bernard___ Backhoe ___ Others___

Test Holes Used in _5_ in SDA ___ Avg. Perc Time ___ 1min. ___ SQ.FT/BR___

Trench Width _3'_ Inlet Depth _4'_ Max Bot.Depth _6'_ Effective S/W _2_

Freemon, Robert

From: Freemon, Robert
Sent: Thursday, December 15, 2016 10:42 AM
To: 'Tom & Kim Monroe'; Lynn Covey; Stephanie Tuite
Subject: RE: Septic plan approval
Attachments: 12671 Lime Kiln Rd.pdf; 12671 Lime Kiln Rd. 2.pdf; 12671 Lime Kiln Rd. Perc Test Results.pdf

Hey Lynn,

Here are the memos I have sent to the home owner and the engineer concerning what the Health Dept. needs before we can approve the building permit for the addition. I have also included the Percolation Testing Report of May 19, 2014 which was addressed and sent to Mrs. Kim Monroe for you to review. If you have any questions let me know.

Robert Freemon

Howard County Health Department

8930 Stanford Blvd. Columbia, MD 21045

Well and Septic Program

Bureau of Environmental Health

Phone: 410-313-6357

Email: rfreemon@howardcountymd.gov

<https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>

From: Tom & Kim Monroe [<mailto:md.monroes@gmail.com>]

Sent: Thursday, December 15, 2016 9:25 AM

To: Lynn Covey; Freemon, Robert; Stephanie Tuite

Subject: Re: Septic plan approval

Hello, Stephanie and Robert (Spencer?),

We (the property owners) completely concur with Lynn. If there's anything either of you needs from us, you can reach us at 301-335-4653 (Kim's cell), 301-688-1489 (my work), or 301-776-8256 (home).

Thanks for your work,
Tom and Kim Monroe

On 12/15/2016 8:23 AM, Lynn Covey wrote:

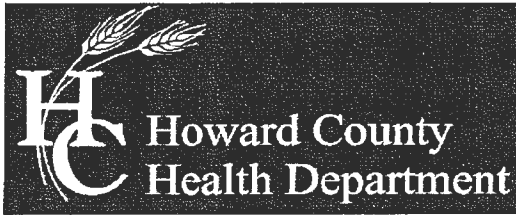
To Everyone,

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I need you Robert and Stephanie to confirm whatever might still be outstanding today and then Robert for you to sign off today so I can get the septic permit and then have the installer

confirmed on schedule asap, especially with Christmas 1 week away and then everyone closes down. We cannot afford to lose any more time and money and I need this email to be taken very serious.

Respectfully,
Lynn Covey
Owner/GC/Pres.



Bureau of Environmental Health

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Twitter: HowardCoHealthDep

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

Date: May 19, 2014

To: Mrs. Kim Monroe
12671 Lime Kiln Road
Fulton, Maryland 20759
Via E-mail: mdmonroes@gmail.com

CC: Stephanie Tuite, FCC
Via E-mail: stephanie@fcc-eng.com

RE: Percolation Testing Report
12671 Lime Kiln Road

Mrs. Monroe,

Percolation testing was conducted on the referenced property on May 13, 2014. The purpose for conducting these percolation tests was for an anticipated establishment of new sewage disposal area and to establish a sewage disposal area for the existing house. The new disposal area for the house will be used to redesign septic area to accommodate an addition.

A total of thirteen (13) test holes were evaluated and ten (10) were found to be satisfactory with moderate percolation rates. Three test hole were not acceptable due to high water table. Acceptable ranges for recommended inlet and trench bottom depth may be confirmed at the time of installation. There was no evidence of failure on the existing lot and the current absorption system is not adequately sized to accommodate an addition. Additions where the existing system is not adequate and needs to be upgraded will require the "Best Available Technology". The existing tank and trenches will have to be abandoned by a licensed septic installer. Due to the location of the newly established passed percs the well with have to be abandoned and a new well will have to be drilled. Field data collected is shown on the Percolation Test Worksheet enclosed with this letter.

All percolation tests conducted were standard tests, measuring rate of fall for a pre-wet period followed by measurement and recordation of the time required for the water level to drop 1 inch. Areas that may be included in a septic reserve are represented by test locations having satisfactory soil conditions. The area of the septic reserve must be at least 10,000 square feet, though Howard County Code [3.805.A.2.X] requires that the area be large enough to accommodate an initial drain field and two repair drain fields for the planned residence.

The next step in this process is to have your engineer/architect submit a Percolation Certification Plan to confirm the design of the septic reserve area. **Please make sure that the percolation testing sites are field located and verified.** If you have any questions regarding this evaluation or requirements for the Percolation Certification Plan, please contact me at the above address or by telephone at (410) 313-2775.

Respectfully,

Dana Bernard, REHS/RS
Environmental Sanitarian II
Well and Septic Program

Enclosures (3)

Cc: File



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

MEMORANDUM

TO: Tom & Kim Monroe
12671 Lime Kiln
Fulton, MD 20759

FROM: Robert Freeman *RF*
Well & Septic Program

RE: 12671 Lime Kiln
Fulton, MD 20759
"Before BP Approval"

DATE: 11/22/16

I have reviewed the building permit for 12671 Lime Kiln Rd. and here are my comments.

- An on-site sewage disposal system upgrade is required. The existing septic system installed in 1968 was designed and sized to serve 2 bedrooms. The submitted floor plans of the existing house with the addition show a total of 4 bedrooms (1st Floor: Office, Relocated Bedroom; 2nd Floor: Existing Bedroom, Existing Bedroom) based on the Howard County Code definition of a bedroom (Sec. 3.801[b]). The floor plans also indicate the total square footage of the proposed house to be over 1,500sqft which requires a 1,500 gal septic tank (Sec. 3.810[b, 2]).
- A Residential Septic System permit will need to be applied for along with the fee of \$395 paid to the Director of Finance. A Septic System Site Plan will need to be created and approved by the Health Dept. See the attached design plan guidelines. Once approved we may issue the septic permit and the system must be installed and approved (with abandonment of the old system) prior to Health approval of the BP.

For reference, the following is the bedroom definition in Howard County Code Section 3.801(b):

- (1) Except as provided in paragraph (2) of this subsection, a bedroom is any space in the conditioned are of a dwelling unit or accessory structure that:
 - (i) Is 90 square feet or greater in size;
 - (ii) May be used as a private sleeping area; and
 - (iii) Has at least one window and one interior door.
- (2) If a home office, library, or similar room is proposed, it may not be a bedroom if there is no closet; and
 - (i) The room contains permanently built-in bookcases around the perimeter of the room, desks, and other features that encumber the room;
 - (ii) A minimum 4 foot-wide opening, without doors, into another room;
 - (iii) A half wall (4 foot maximum height) between the room and another room; or
 - (iv) The room is a first floor room or basement area that does not have direct access to full bathrooms or "roughed in" plumbing that would provide direct access to future full bathroom facilities.



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

MEMORANDUM

TO: Stephanie Tuite
Fisher, Collins & Carter, Inc.
10272 Baltimore National Pike
Ellicott City, MD 21042

FROM: Robert Freemon *RF*
Well & Septic Program

RE: 12671 Lime Kiln Rd.
Fulton, MD 20759
"OSDS Plan"

DATE: 12/12/2016

I have reviewed the Onsite Sewage Disposal System Plan and here are my comments.

- ✓ • The title needs to be changed to "Onsite Sewage Disposal System Design Plan".
- ✓ • A cross section of the inside wall dimensions (height, width, length) of the two compartment septic tank must be shown on the plan. The name of the manufacturing company along with the make and model must be included with the cross section.
- ✓ • The location of the existing well inside the well box is not accurate. The well tag number must be labeled with the existing well in its accurate location.
- ✓ • The existing septic system must be labeled "To Be Abandoned".
- ✓ • Change Note 2 to say: "Any change to the locations or depths to any components must be approved by the engineer and the Howard County Health Department prior to installations. A revised site plan may be required".
- ✓ • Add the Note: "The maximum earth cover over the tank is 3 feet. Greater earth cover will require a heavy load bearing tank."
- ✓ • Add the Note: "Electrical work for the installation must be performed by a licensed electrician."
- ✓ • Add the Note: "The well HO-15-0048 has been field located and is accurately shown."
- ✓ • In the legend change, "Denotes Existing or Proposed Well" to "Denotes Existing Well".
- ✓ • The Profile View must include the connection and invert elevation of the gravity line coming out of the house. This does not have to be exact however we need to know where to the line is coming out of the house and its relative elevation.
- ✓ • The Inv. Out of Septic Tank elevation needs to be corrected.
- ✗ • The Profile view must include the initial set of trenching.
- ✓ • The Inv. into Distribution Box needs to be corrected.

- The trench information (Trench Length, Ground Elevation, Invert Elevation, Max Bottom Depth Elevation) needs to be shown for every trench.
- ✗• The 2" perforated pipe is not an appropriate diameter for a gravity trench. An appropriate diameter for a perforated pipe would be 4".
- The initial system has two trenches with one measuring 100ft and the other measuring 49ft. All trenches within a system must be equal length or low pressure dosed.
- The maximum trench length allowed is 100ft. The 1st replacement and 2nd replacement must be revised.
- ✗• Individual trenches cannot contain T bends in them. Bends of 45° or less could be acceptable.

Freemon, Robert

From: Freemon, Robert
Sent: Tuesday, December 20, 2016 3:11 PM
To: Stephanie Tuite
Cc: Lynn Covey; 'Tom & Kim Monroe'
Subject: 12671 Lime Kiln Rd.
Attachments: 12671 Lime Kiln Rd. 3.pdf; OSDS Option.pdf

Hey Stephanie,

Please see the attached comments concerning the OSDS. I have also attached a possible design option for the future replacement systems on the lower half of the SDA. FYI we will allow you to extend the replacement system trenches outside of the SDA (South East Portion) near perc test 10. If you have any questions let me know.

Robert Freemon

*Howard County Health Department
8930 Stanford Blvd. Columbia, MD 21045
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Phone: 410-313-6357
Email: rfreemon@howardcountymd.gov
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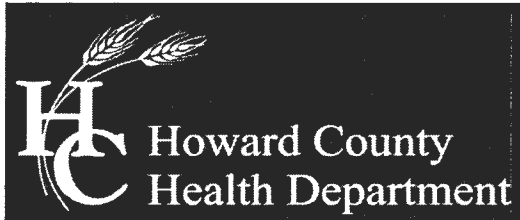
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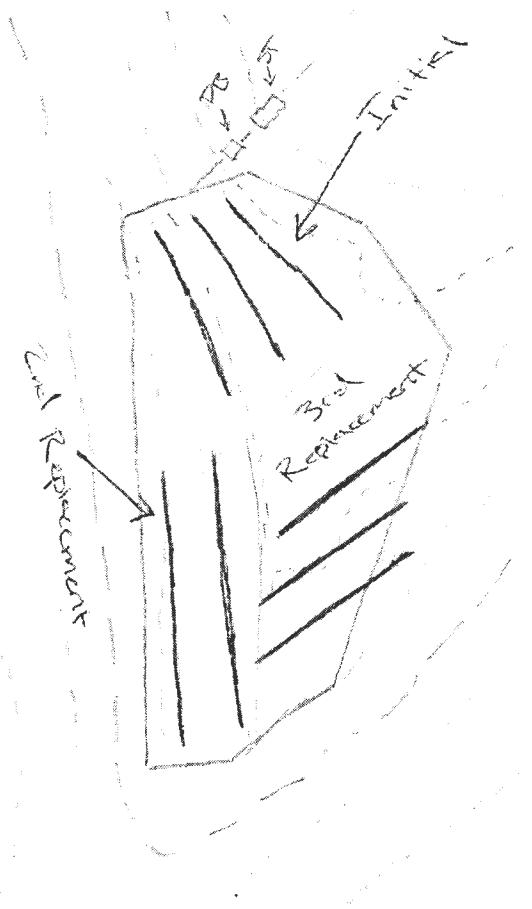
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Maura J. Rossman, M.D., Acting Health Officer

Date: May 19, 2014

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12671 Lime Kiln Road
Fulton, Maryland 20759
Via E-mail: mdmonroes@gmail.com

CC: Stephanie Tuite, FCC
Via E-mail: stephanie@fcc-eng.com

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