**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.orgFacebook: www.facebook.com/hocohealth

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

RECEIPT DATE: 3/11/16**ONSITE SEWAGE DISPOSAL SYSTEM**P 558026APPROVAL DATE: 3/29/16**PERMIT:****REPAIR**

A _____

PROPERTY ADDRESS: 17105 Spring Hollow CourtSUBDIVISION: Spring HollowLOT: 2TAX ID: 04-362748CONTRACTOR: Fogle's Septic Clean Inc.EMAIL: kevin@foglesinc.comCONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784PHONE: 410-795-5670PROPERTY OWNER: Mike Baker

EMAIL: _____

OWNER ADDRESS: 17105 Spring Hollow Court, Mount Airy, MD 21771PHONE: 301-461-5751

SEPTIC TANK SIZE (GALLONS): _____

PUMP CHAMBER CAPACITY (GALLONS): _____

PUMP SIZE: _____

NUMBER OF BEDROOMS: 6

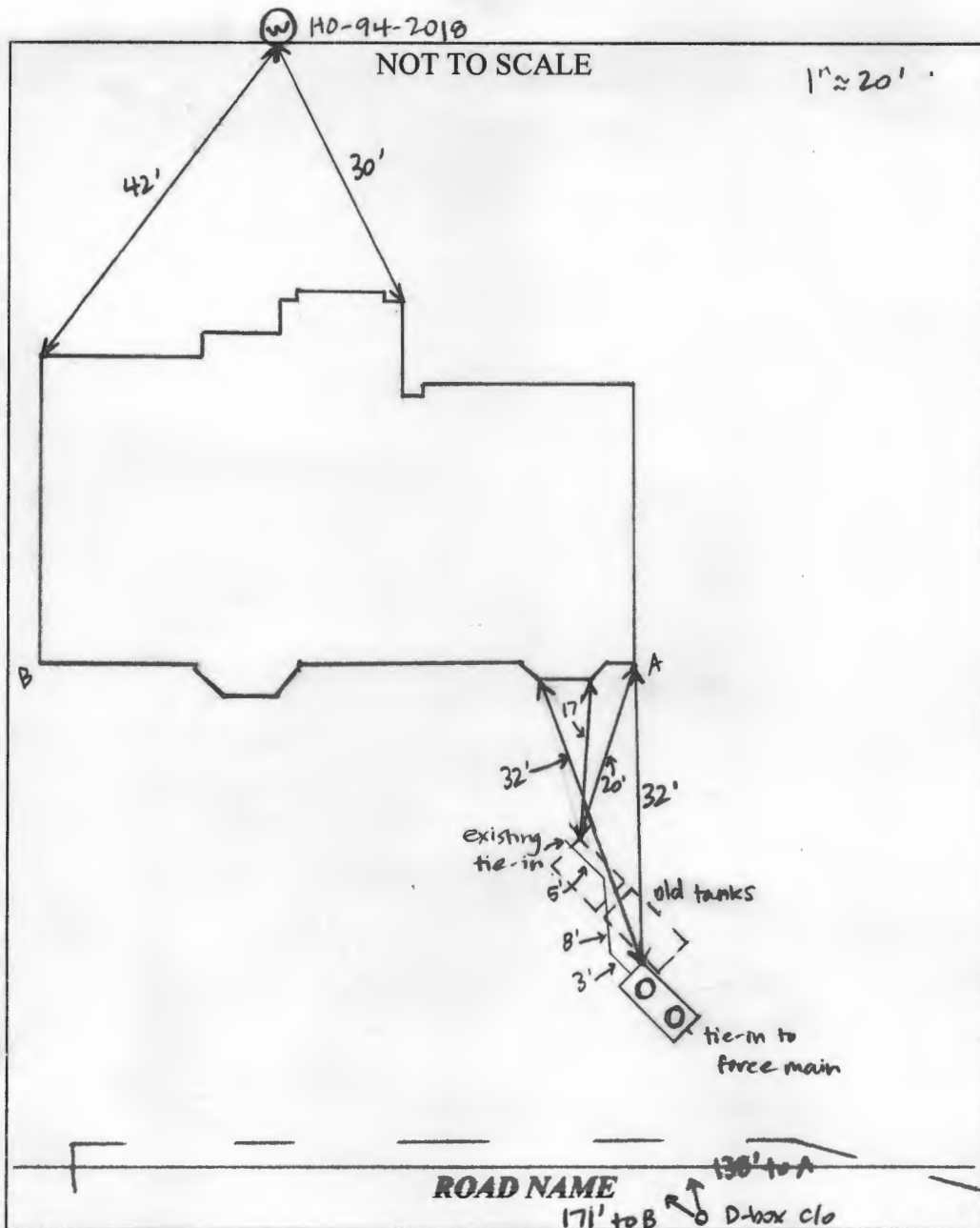
HOUSE SQ. FT. _____

APPLICATION RATE: _____

DISTRIBUTION SYSTEM: GRAVITY FED ☐LOW PRESSURE DOSED ☐

TRENCHES:	LINEAR FEET REQUIRED: _____	INLET DEPTH: _____
	TRENCH WIDTH: _____	MAXIMUM BOTTOM DEPTH: _____
	MINIMUM SPACE BETWEEN TRENCHES: _____	EFFECTIVE AREA BEGINNING DEPTH: _____
LOCATION:	TO BE STAKED BY SANITARIAN DURING PRE-CONSTRUCTION INSPECTION.	
NOTES:	Properly abandon existing septic tank & install new 3NA H-600 BAT unit. Additionally install separate line from water softener inside house to new trench. See BAT plan for details	

ISSUED BY: H. D. SwartzISSUE DATE: 3/11/16EXPIRATION DATE: 3/11/17**NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION****NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING****NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.****NOTE: WATERTIGHT SEPTIC TANKS REQUIRED****NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADE FROM ANY WATER WELL****NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS****NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM**☐ ELECTRICAL PERMIT ISSUED E 16001376**NOTE: THE HCHD DOES NOT WARRANTY ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKNOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIDANCE.****NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA****NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.****PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.****CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
NUMBER OF TRENCHES		
TOTAL LENGTH		
ABSORPTION AREA		
DISTRIBUTION BOX LEVEL		
DISTRIBUTION BOX BAFFLE		
DISTRIBUTION BOX PORT		

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL YES

MANUFACTURER MAYER BROS./HOOT

CAPACITY 1500 GAL

SEAM LOC TDP

TANK LID DEPTH 2'

BAFFLES YES

BAFFLE FILTER NO

MANHOLE LOC FRONT + REAR

6" PORT LOC None

WATERTIGHT TEST NO

SLOTTED NO

DATE ON LID

PUMP/SEPTIC TANK LEVEL

MANUFACTURER

CAPACITY GAL

SEAM LOC

TANK LID DEPTH

BAFFLES

BAFFLE FILTER

MANHOLE LOC

6" PORT LOC

WATERTIGHT TEST

SLOTTED

DATE ON LID

PRE-CONSTRUCTION:

INSTALLATION: 3/18/16 Fogle's on site. Existing tank uncovered, new tank hole dug. Waiting on tank delivery. Well is not in location shown on BAT site plan. Informed Mike (homeowner) that water softener discharge into BAT tank could affect performance and potentially reduce efficiency and lifespan of septic system. (SC) 3/18/16 On site during tank delivery. No obvious cracks on sides or bottom of tank. Fogle's to abandon old tanks. (SC) 3/21/16 Old tanks filled in with #57 stone. House connection made covered but I saw pics. Fogle's connecting pump line. RO discharge line tied into ^{main} sewer. Need Hoot startup certification. (SC) 3/28/16 Hoot startup received. (SC) ^{line goes into tank}

3/29/16 On site for Hoot startup. Fogle's added an observation port to D-box - pump pumps effluent to D-box. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 3/29/16



MAYER BROS., INC.

Precast Concrete Products
6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 17105 Spring Hollow Ct.
MT. Airy, MD. 21797

Date of Final Inspection: 3/25/16

Installer: Fogles Septic

Hoot Technician/Inspector: Mike Sample

I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.

Sincerely,

H. Michael Sample
Name of Inspector
Mayer Bros., Inc.

time - dosed
recirc. 3 mins
pump 1 min
1x every 2 hrs.
short + frequent dose

PH: 410-796-1434

FX: 410-796-1438

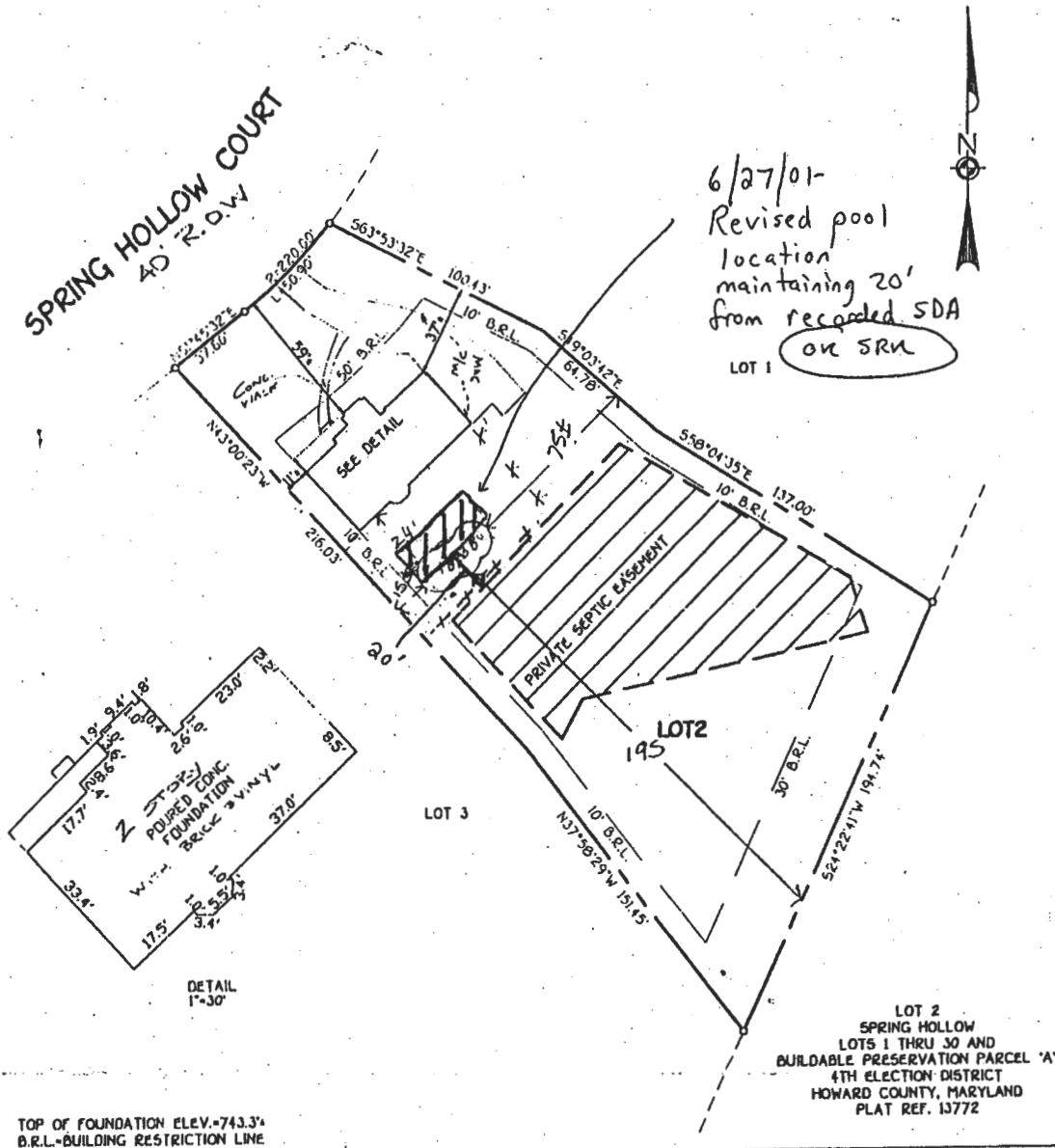
WBE
NPCA Certified Plant

mayerbro@connext.net
www.mayerbrosprecast.com

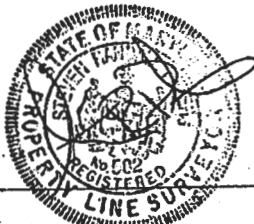
Grease Interceptors, Grease Solutions, Aerobic Treatment Units, Septic Tanks, Holding Tanks, Storm Water Structures, Hydroceptors,
Bench Barrier, Water Meter Vaults, Sectional Valve Vaults, Top Slabs, Curb Heads, Curb Bumpers, PermEntry Basement Entries,
Scapewell Window Wells, Custom Precast Products

GENERAL NOTES:

- 1) THIS PLAT IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INSOFAR AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR RE-FINANCING. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS PLAT IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS PLAT DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINE, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR RE-FINANCING.
- 2) SUBJECT PROPERTY IS SHOWN IN ZONE C ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 240044 0007, EFFECTIVE DATE: DEC. 1, 1986.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF 0.5' PLUS OR MINUS (±).



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 464-2055



PROFESSIONAL LAND SURVEYOR
REG. # 686
DATE 4/5/01

HOUSE LOCATION DRAWING

FOUNDATION LOCATION: 1/12/00
FINAL LOCATION: 4/5/01
BOUNDARY SURVEY:

SCALE: 1"=60'
DATE: 1/18/00
DRAWN BY: T.P.E.
CHECKED BY: C.C.
PROJECT No. 61434

Oswald, Hank

From: Kevin Davis <kevin@foglesinc.com>
Sent: Monday, March 14, 2016 7:59 AM
To: Oswald, Hank
Cc: Karen@transformingarchitecture.com
Subject: Hoot specs for 17105 Spring Hollow Ct.
Attachments: Hoot BBlaster.pdf; Hoot Details.pdf

Hank,

Attached are some specs for the HOOT system for 17105 Spring Hollow Ct.
The pump included with this unit is the 20EB blaster pump. Pump curve and specs are also attached.

Let me know if you need anything further

Kevin Davis
Fogle's Septic Clean
240.278.8925 cell
410.795.5670 office

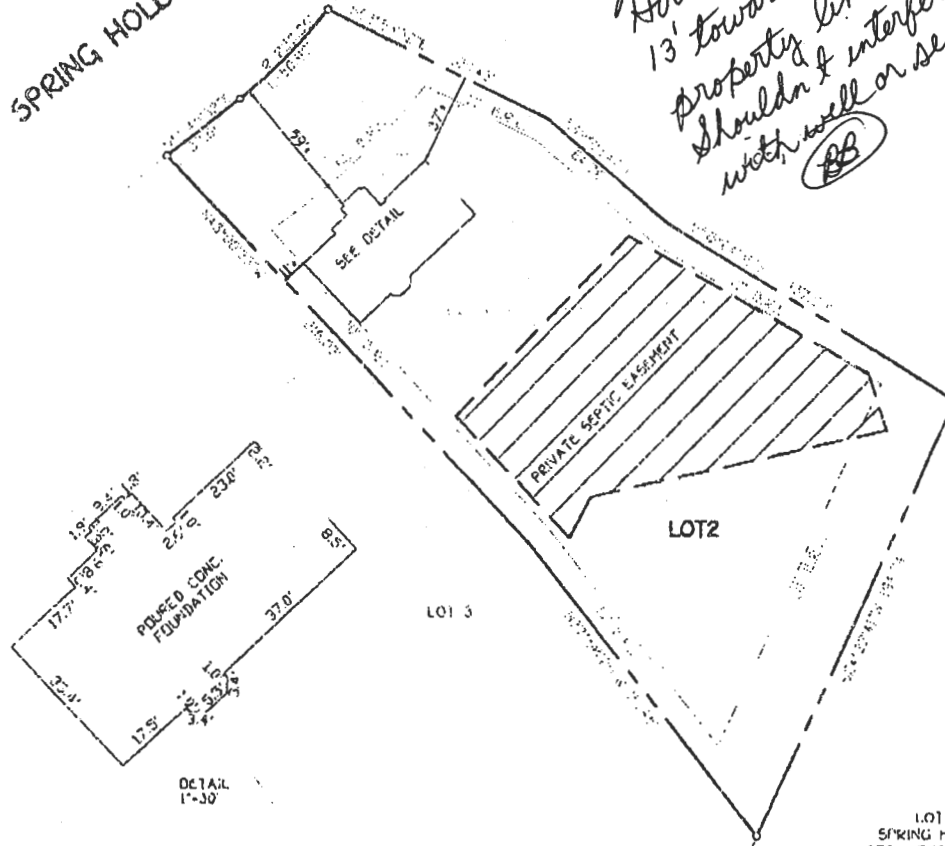
GENERAL NOTES:

1. THIS PLAT IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM, INsofar as it is required by a LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR RE-FINANCING. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS PLAT IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS PLAT DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINE, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR RE-FINANCING.
2. SUBJECT PROPERTY IS SHOWN IN ZONE C ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 240044-0002, EFFECTIVE DATE DEC. 1, 1996.
3. THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF 0.5' PLUS OR MINUS (1).

SPRING HOLLOW COURT

4/6/00

House moved
13' toward right
property line.
Shouldn't interfere
with well or septic.
(BB)



LOT 2
SPRING HOLLOW
LOTS 1 THRU 30 AND
BUILDABLE PRESERVATION PARCEL 14
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PLAT REF. 13772

REF. OF FOUNDATION SURV. 7433
BY SURVEYING RESTRICTION LINE

STANLEY, COLLINS & CARTER, INC.
SURVEYING, ENGINEERING & LAND DEVELOPMENT
1000 W. 10TH STREET, SUITE 100
TULSA, OKLA. 74106-3005
(918) 486-1000



Clayton
PROFESSIONAL LAND SURVEYOR
REG. 10763
DATE 4/6/00

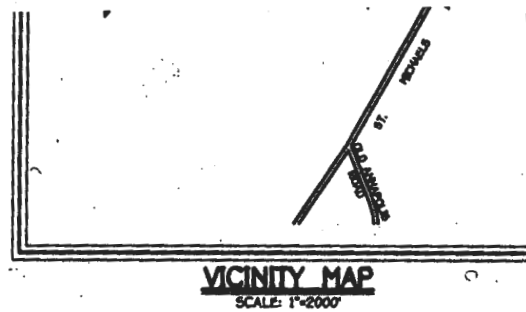
HOUSE LOCATION DRAWING

FOUNDATION LOCATION: 1377200
FINAL LOCATION:
BOUNDARY SURVEY:

SCALE: 1"=60'
DATE: 3/19/00
DRAWN BY: L.P.C.
CHECKED BY: C.C.
PROJECT No. 61431

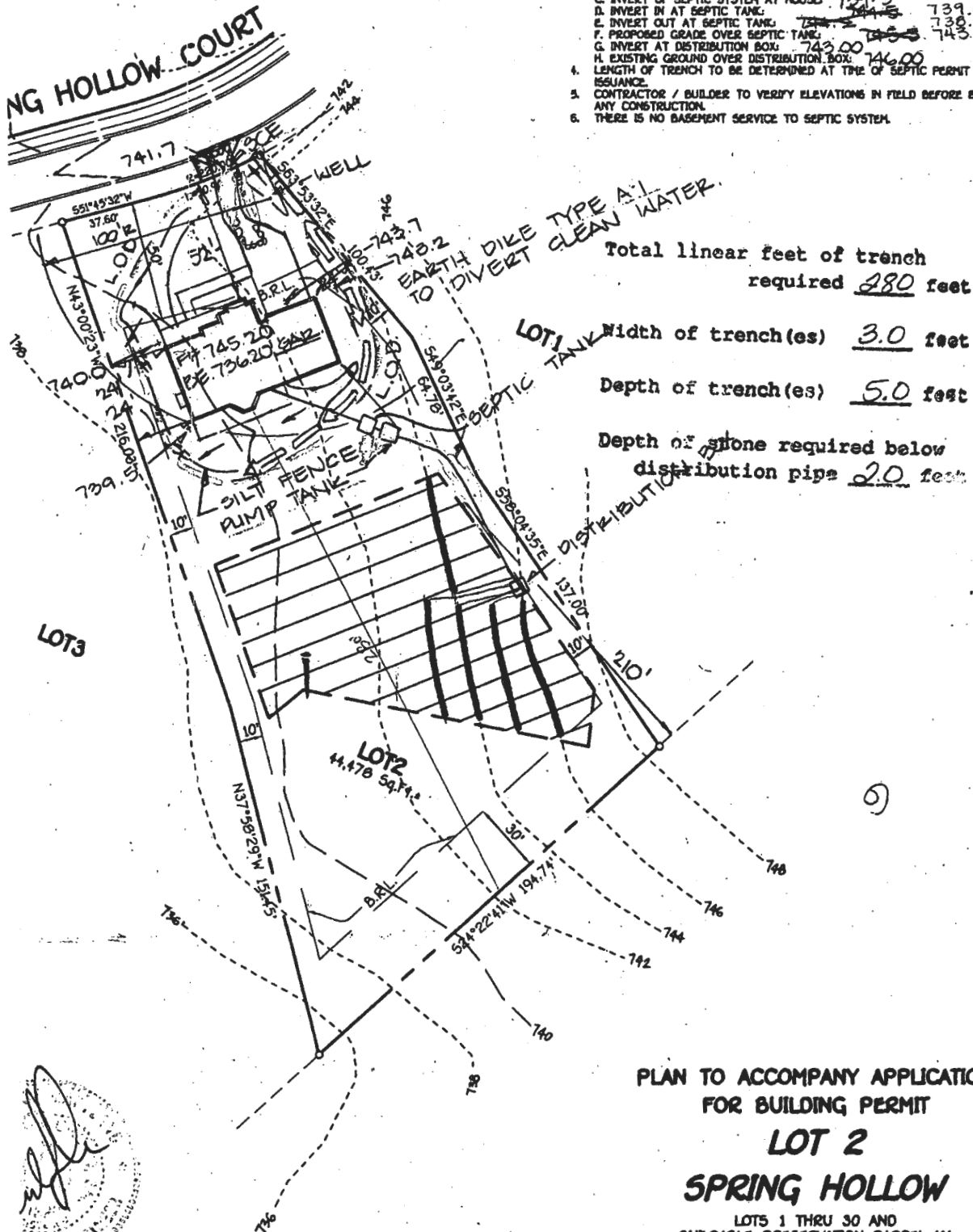
Approved Septic System Plan
Howard County Health Department

Amel M. Miller 11/24/99
Signature Date



GENERAL NOTES

1. SEPTIC EASEMENT SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT No.
2. PROPOSED 1500 GALLON SEPTIC TANK.
3. A. FIRST FLOOR ELEVATION: 739.5
B. BASEMENT ELEVATION: 734.5
C. INVERT OF SEPTIC SYSTEM AT HOUSE: 739.0
D. INVERT IN AT SEPTIC TANK: 738.7
E. INVERT OUT AT SEPTIC TANK: 738.0
F. PROPOSED GRADE OVER SEPTIC TANK: 743.0
G. INVERT AT DISTRIBUTION BOX: 743.0
H. EXISTING GROUND OVER DISTRIBUTION BOX: 746.0
I. LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
5. CONTRACTOR / BUILDER TO VERIFY ELEVATIONS IN FIELD BEFORE BEGIN ANY CONSTRUCTION.
6. THERE IS NO BASEMENT SERVICE TO SEPTIC SYSTEM.



Total linear feet of trench required 280 feet

Width of trench(es) 3.0 feet

Depth of trench(es) 5.0 feet

Depth of stone required below distribution pipe 2.0 feet

RDY

ROAD

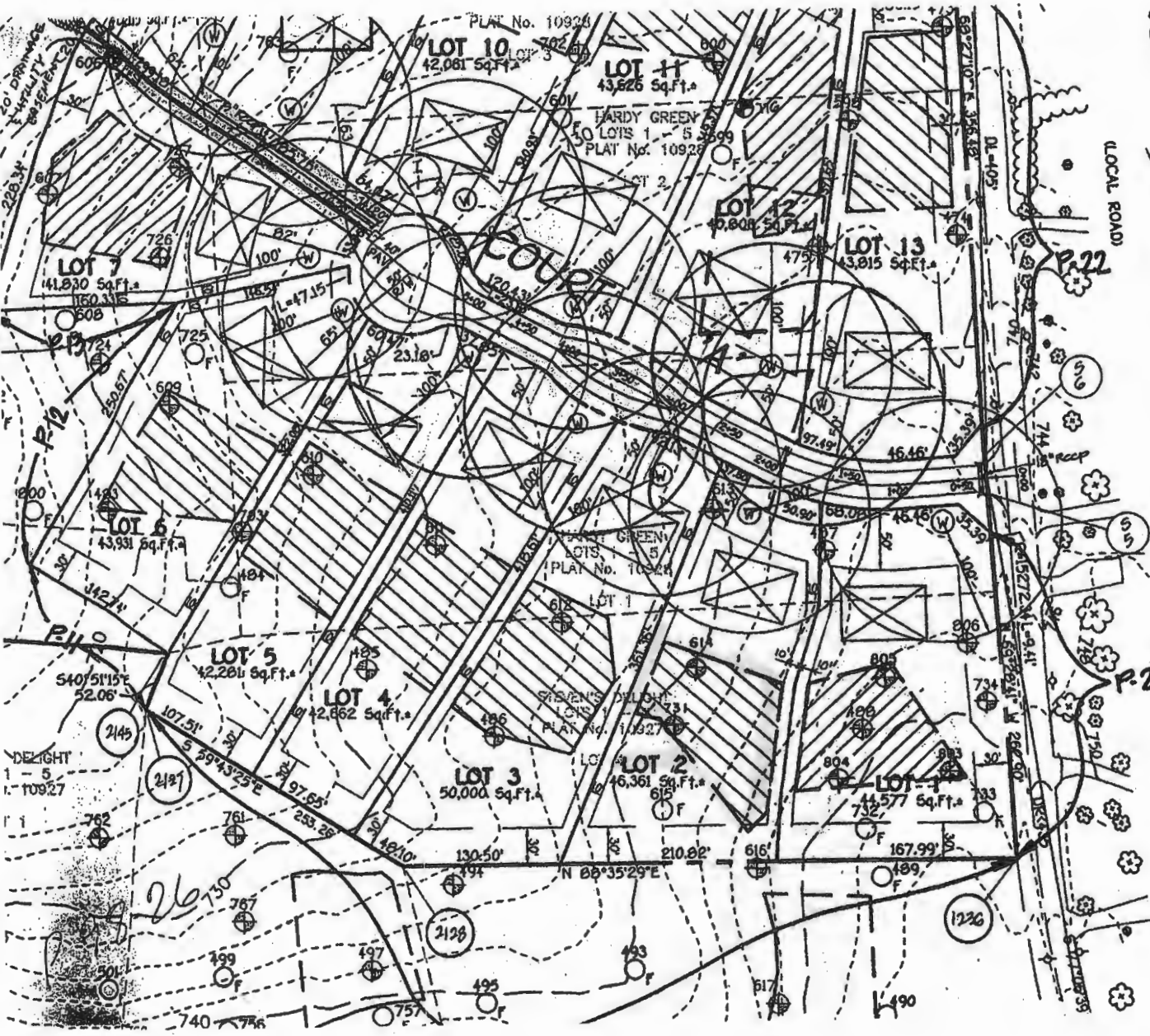
E CURB
P.C. 518.1-19.90

N 60°25'0" E 1201.250'

LOCAL ROAD

P-23

P-22



SITE INFO:
 17105 SPRING HOLLOW COURT
 MT. AIRY, MD 21771
 LOT 2
 PARCEL: 0528
 ELECTION DISTRICT: 4
 HOWARD COUNTY
 ZONED - RC-DEO

DISTRIBUTION
BOX

PRIVATE SEPTIC
EASEMENT

PUMP
TANK

SEPTIC
TANK

PROPOSED
GARAGE

EX HOUSE

50' BRL

EXISTING
WELL

SITE PLAN

SCALE: 1" = 50'

SPRING HOLLOW CT

ARCHITECT

13662

KAREN LYNN PITSLEY
STATE OF MARYLAND

exp. 10/22/17



7612 Browns Bridge Rd
 Highland, MD 20777
 301-776-2666
 301-776-2886 fax
 1-877-828-7267
 info@TransformingArchitecture.com
 www.TransformingArchitecture.com

The Baker Residence

17105 Spring Hollow Ct. Mt. Airy, MD 21771

SCALE: AS NOTED

DATE 02-05-16

PROJECT No: 11-069



17105 Spring Hollow
Kenta w/ Fogles
240-278-8925
H₂O softener Discharge
(~100-160 gallons/week)
Avg - 38-40g/2x week

Oswald, Hank

From: Oswald, Hank
Sent: Tuesday, February 16, 2016 1:03 PM
To: 'Karen Pitsley, AIA'
Subject: RE: 17105 Spring Hollow Septic Issue
Attachments: BAT Site Plan Requirements.pdf

Hi Karen:

My phone is currently down. To receive BP approval by the Health Department, the septic tank and pump tank would have to be upgraded to a BAT unit designed for 6 bedrooms and pump tank capable of handling one day of emergency storage for a 6 bedroom house (Under current standards, septic systems are designed by # of bedrooms - COMAR 26.04.02). The existing trenches are large enough to accommodate 6 bedrooms so nothing has to be done with them. In addition to the tank and pump tank upgrades, we need to see how one replacement trench system will fit inside the existing sewage disposal area. This information would have to be outlined on a BAT Plan usually designed by an engineer for review and approval. Please see attached BAT Plan requirements. Also, a septic permit and inspection will also be required by this office for this upgrade. Should you have any questions, please don't hesitate to ask

Hank

From: Karen Pitsley, AIA [mailto:karen@transformingarchitecture.com]
Sent: Tuesday, February 16, 2016 10:11 AM
To: Oswald, Hank
Cc: 'Baker, Mike (Hunt Valley)'; 'Claudine Baker'; 'Bernadette Roussel'; 'Paul Lewis'
Subject: 17105 Spring Hollow Septic Issue

Hank,

I left a message, but I have several questions about this property and what we can do to keep moving forward. Please call me when you get a chance. 301-776-2666.
See history below.

Warm regards,

Karen Pitsley, AIA, CAPS
President, Transforming Architecture

2015, 2013 & 2011 Maryland's Top 100 Women
2014 Top 100 MBE in Mid-Atlantic Region
2012 Woman of Distinction, Business Women's Network of Howard County
2011 Innovator of the Year

301-776-2666
www.TransformingArchitecture.com
[Houzz.com Profile](#)

Do we know if the septic tank is the issue that HoCo is citing? How can we work around this issue? To gain a full understanding of the options, how much is a 2000 gallon septic tank, installed? I presume we would need another permit for this? Obviously, if this ends up being the solution, we would want to do this before Paul starts (or gets too far along with) the garage. Any other considerations?

-Mike

**Michael S.
Baker**

Department Manager
Environmental & Transportation Planning
Environmental Construction Management
D +1-410-891-9222
M +1-443-286-1780
mike.baker@aecom.com

AECOM

4 North Park Drive, Suite 300
Hunt Valley, Maryland 21030, United States
T +1-410-785-7220
aecom.com

Built to deliver a better world

[LinkedIn](#) [Twitter](#) [Facebook](#) [Instagram](#)

Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, February 10, 2016 2:12 PM
To: 'Paul Lewis'
Subject: RE: B16000185_17105 Spring hollow Court_Floor Plans for the Remaining House

Hi Paul:

The existing system is currently sized for 4 bedrooms. The floor plan shows a total of 6 bedrooms. Before this office can approve the building permit, the septic system would have to be upgraded to a BAT unit sized for 6 BR's and a pump tank capable of handling 1 day of emergency storage. The existing trenches are sized properly for the proposed use but we will need to see how one replacement system will fit inside the existing sewage disposal area (SDA).

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

Hank

From: Oswald, Hank
Sent: Tuesday, February 09, 2016 3:32 PM
To: 'Paul Lewis'
Subject: RE: B16000185_17105 Spring hollow Court_Floor Plans for the Remaining House

The floor plan needs to include windows, full and half bathrooms, and rooms in the house. It can be hand drawn. A list will not suffice.

Thanks,

Hank

From: Paul Lewis [<mailto:lewisandassociatescontracting@gmail.com>]
Sent: Tuesday, February 09, 2016 2:28 PM
To: Oswald, Hank
Subject: Re: B16000185_17105 Spring hollow Court_Floor Plans for the Remaining House

Hank,

How detailed do you need this floor plan? Would a list of the number of bathrooms and half bathrooms suffice?

Paul Lewis

Lewis & Associates Contracting, LLC
10611 Gramercy Place Unit 124
Columbia, MD 21044
443-597-2657

On Feb 9, 2016 11:57 AM, "Oswald, Hank" <hoswald@howardcountymd.gov> wrote:

Paul Lewis:

Thank you for submitting the revised site plan & floor plan for the first floor plus changes to existing garage. In order to determine if the existing septic system is sized properly for the existing house plus proposed changes, this office will also need to see a floor plan of the existing basement and second floor.

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

Thanks,

Hank

Hank Oswald, L.E.H.S.

Howard County Health Department

Bureau of Environmental Health

Well & Septic Program

8930 Stanford Boulevard

Columbia, MD 21045

410.313.1786 (Office)

410.313.2648 (Fax)

SITE INFO:
 17105 SPRING HOLLOW COURT
 MT. AIRY, MD 21771
 LOT 2
 PARCEL: 0528
 ELECTION DISTRICT: 4
 HOWARD COUNTY
 ZONED - RC-DEO

DISTRIBUTION
BOX

52°22'41"W 194.74'

30' BRL

N37°58'29"W 151.45'
BRL 0.1

PRIVATE SEPTIC
EASEMENT

PUMP
TANK

SEPTIC
TANK

PROPOSED
GARAGE

EX HOUSE

50' BRL

EXISTING
WELL

SITE PLAN

A-4

SCALE: 1" = 50'

R=222.00' N51°45'32"E
L=50.90' 37.60'

SPRING HOLLOW CT

ARCHITECT

13662



KAREN LYNN PITSLEY
STATE OF MARYLAND

exp. 10/24/17



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The Baker Residence

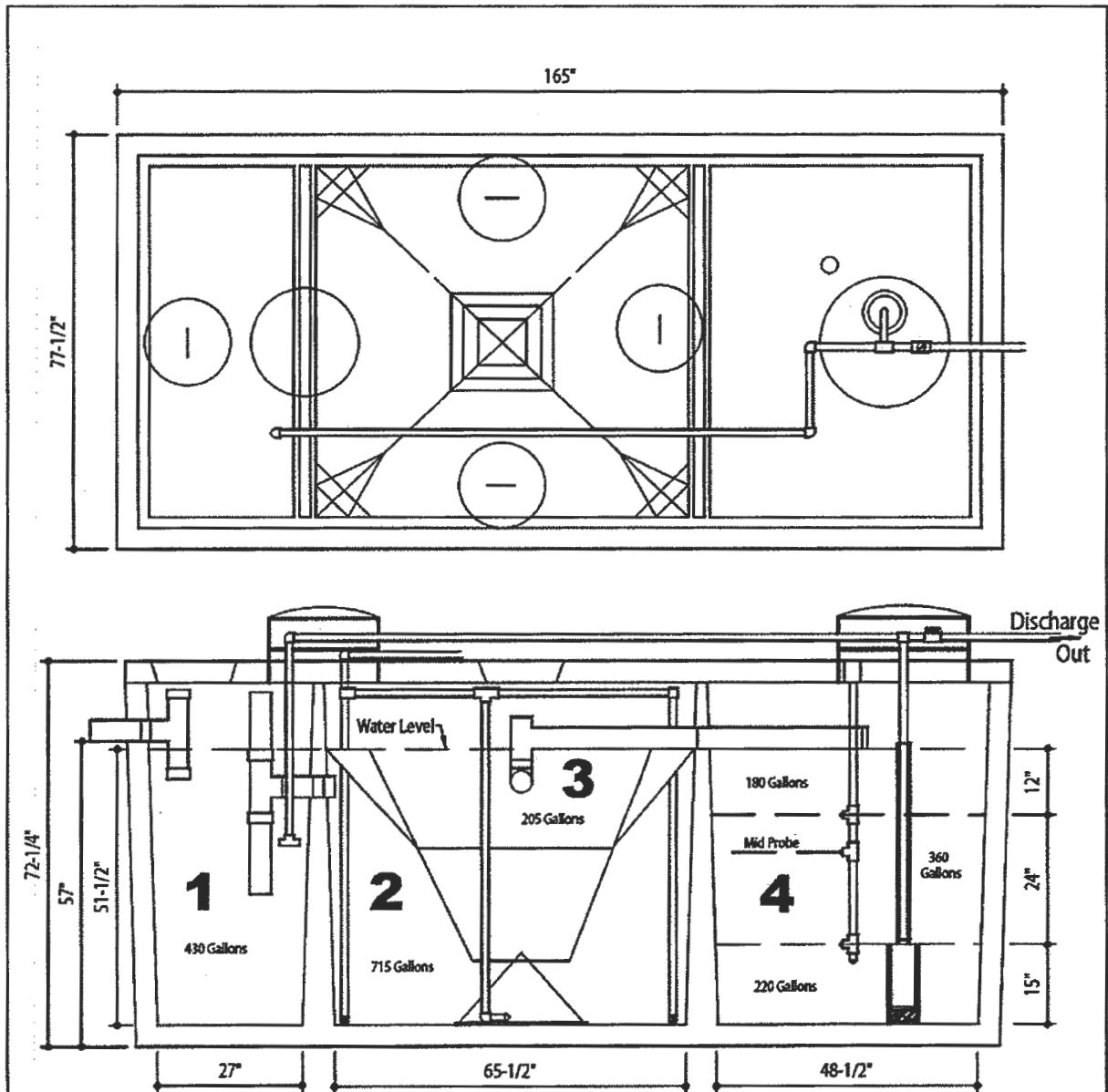
17105 Spring Hollow Ct. Mt. Airy, MD 21771

SCALE: AS NOTED

DATE: 02-05-16

PROJECT No: 11-069

I. HOW THE HOOT SYSTEM WORKS



DESIGN DATA & GENERAL NOTES

- [1] Concrete strength $f'_c=4,000$ p.s.i. @ 28 days. Density = 150 pcf.
- [2] Cement - Portland Type I/II per ASTM C 150-92.
- [3] Admixtures & plasticizers per ASTM C 260-86 & C 494-92.
- [4] Reinforcing per ASTM A185. Min. 1-1/2" cover.

Mayer Brothers, Inc.

6264 Race Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1438
www.mayerbrosprecast.com



**600 GPD BNR SYSTEM
H-600 ABNR**

with 750 GALLON PUMP CHAMBER

Dwg. No. Hoot Form #1

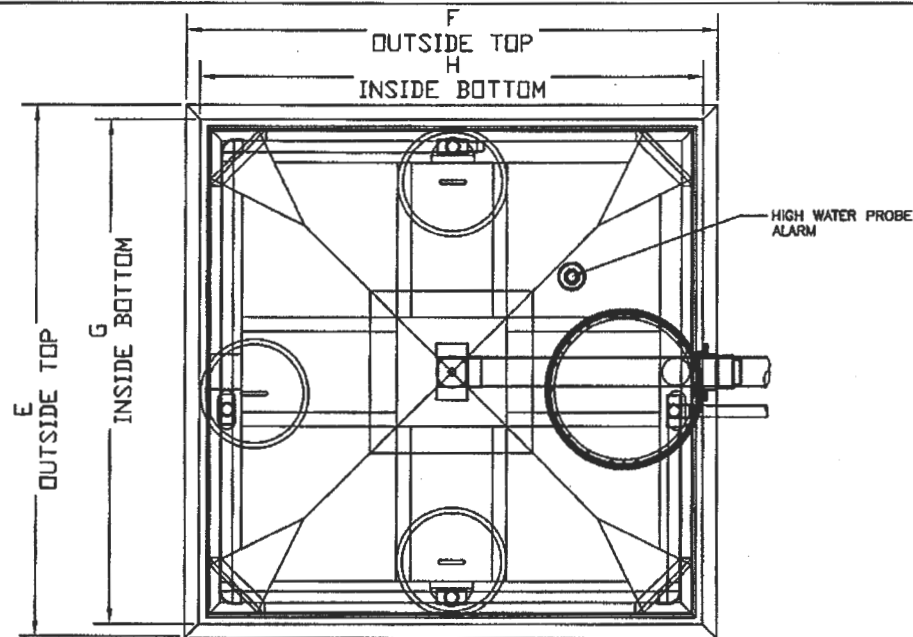
No Scale

March 19, 2009

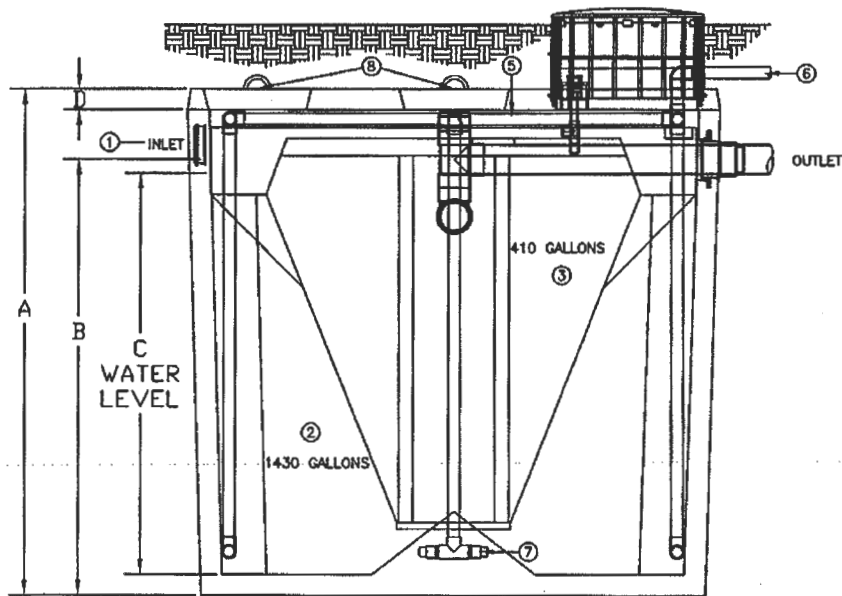
GENERAL HOOT INFORMATION

VERY IMPORTANT

1. Electrical requirements: 110V 30 AMP (NOT 20 AMP) with a stand-alone breaker. Less than 30 AMPS will cause the system to malfunction.
2. Probes should be installed according to the following site evaluations:
 - a. If there is less than 15" of cover over tank, install standard probe in top of tank as usual (through precut 3" opening in top of tank).
 - b. If there are 15" to 36" of cover over tank, install probe inside the riser, and seal the precut probe opening with a 3" cap.
 - c. **If the tank is more than 50' from the control panel, a Float Probe must be installed.** Please call Mayer Bros. in advance to order parts and discuss.
3. **DO NOT GLUE** the sensor probe staff into the 3" collar cast into the lid, since it may need to be removed for inspection or repair. Tapping it firmly into the sleeve is sufficient.
4. **USE ONLY SILICON II** (Silicon I gives off gas when drying, which may cause flame.)
5. **Locating Control Panel:** All systems ordered from Mayer Bros. include a Remote Mounting Kit for the control panel, to mount the panel remotely from the tank (usually at the house). If the tank is located within 100' of the house, attach the Control Panel box to the house (preferably in an area where the homeowner will see and hear the alarms). If the tank is further than 100' from the house, the panel should be mounted at tank location - typically on a **Panel Pole** (...a 2x10 plank of treated lumber 10' long, inserted vertically along the side of the excavated tank and backfilled in place, leaving 3-4 feet above grade on which to mount the panel.) The length of wires attached to the probe staff determines where the panel should be located. **THESE WIRES CANNOT BE SPLICED.**
6. Locate the Blower adjacent to the Control Panel, for ease of operation & maintenance. It must be within 100' of the tank location to assure sufficient air pressure.
7. Maryland Distributor BNR Hoot System Tank Dimensions:
 - a. Width at Top Slab: 77.5"
 - b. Length at Top Slab: 165"
 - c. Overall Height: 72.25"
 - d. Bottom of Tank to Bottom of Inlet: 57.5"
8. All *PolyLok* Risers over the trash/aeration chamber (20" dia) and pump chamber (24" dia) must be brought to grade with Riser extensions. Grade should be finished so that homeowner can mow over them.
9. Versions of the Control Chip located in the Control Panel box are as follows:
 - a. Version Universal 1.02 (all installations since May 2009)
10. Version 6.98 BNR (units older than May 2009)



PLAN VIEW



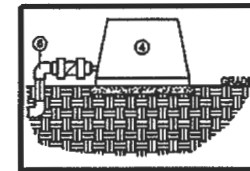
SIDE ELEVATION

REVISIONS	DESCRIPTION

CRITICAL DIMENSIONS

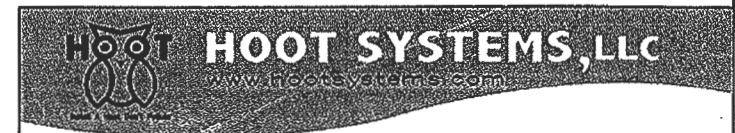
A	80.00"
B	70.25"
C	65.00"
D	4.00"
E	92.00"
F	92.00"
G	80.00"
H	80.00"

TROY AIR BLOWER



THE HOOT AEROBIC TREATMENT SYSTEM

- 1) SEPARATE PRETREATMENT TANK REQUIRED (MIN. 800 GALLONS) - WHERE ANAEROBIC DIGESTION OCCURS AND STORAGE FOR NON-BIODEGRADABLE MATERIALS.
- 2) AERATION CHAMBER - WHERE AIR IS INTRODUCED INTO SEWAGE FOR DIGESTION.
- 3) CLARIFIER - A STILL CHAMBER WHERE SOLIDS SETTLE OUT AND THE CLEAR EFFLUENT RISES.
- 4) TROY AIR LINEAR AIR BLOWER - LONG LIFE, EFFICIENT LINEAR BLOWER WHICH COMPRESSES ATMOSPHERIC AIR AND UNDER PRESSURE DELIVERS IT TO THE TANK. MAY BE REMOTELY MOUNTED UP TO 150' FROM SYSTEM. MUST MAINTAIN 1/8" SLOPE TOWARDS TANK FOR DRAINAGE TO TANK.
- 5) AIR MANIFOLD - DELIVERS THE AIR FROM THE LINE TO THE STONES FOR DIFFUSION INTO THE SEWAGE.
- 6) AERATION LINE - DELIVERS THE AIR FROM THE PUMP TO THE MANIFOLD. CHECK VALVE INCLUDED.
- 7) AERATION STONE - AIR IS FINELY DIFFUSED FROM THE STONE INTO THE AERATION CHAMBER.
- 8) 15" COVERS - PROVIDE ACCESS TO EACH COMPONENT OF THE SYSTEM FOR REPAIR. ARE BROUGHT TO GRADE IF REQUIRED PER LOCAL CODE.



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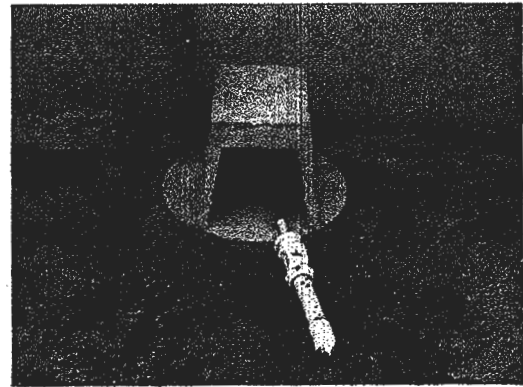
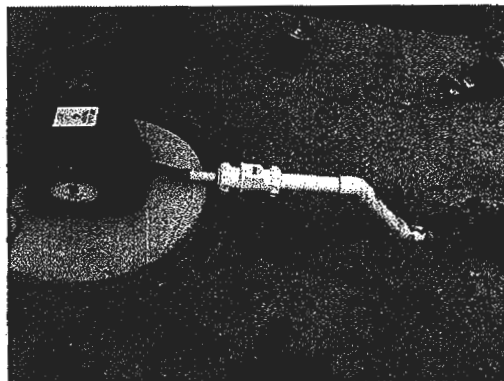
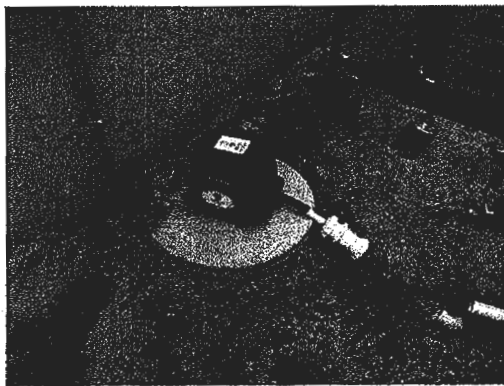
DESCRIPTION: 1000 GPD GRAVITY DISCHARGE SYSTEM
H-1000-A w/ POLYLOK ACCESS 4" WALLS

PART #

H-1000-A

DATE: 9-11-10
DRAWN BY: AY
CHECK BY: RS
SCALE: N.T.S.

- j. If the 90 degree bends line up, then **prime and glue** the pieces in place.
- k. Measure the distance between the 90 degree bends, and cut piping to connect them. (NOTE: This section of pipe is useful in supporting the check valve to best advantage. While the blower itself should always rest firmly on the level pad, the check valve should be not be touching the concrete pad. The vibrations caused by air flowing through it can cause it to rub against the concrete and wear out prematurely. Use the vertical pipe coming up from the trench to support the valve a little above the concrete pad. To accomplish this, the air pipe itself must be well supported from underneath in the trench, particularly underneath the 45 or 90 degree bend turning upward. Tamp the earth well in this area, or place a brick under the end of the pipe.)



Installing the air blower and connecting it to the air pipe.

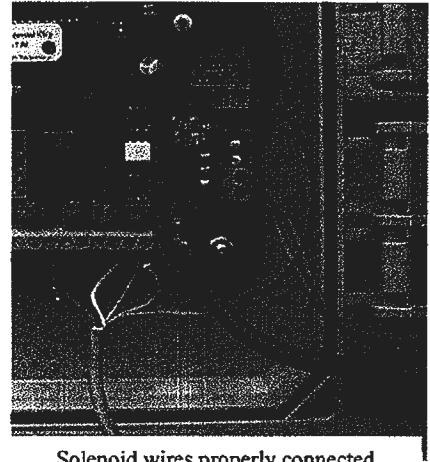
- l. **Prime and glue in place, once all is right.**

Attach the back-pressure hose:

- m. **Locate the small black rubber hose line that is wound up inside the control panel. This is the back-pressure hose that will connect to the blower, and enable the control panel to monitor the amount of air being pumped into the aeration chamber. For the system to function properly, it MUST be installed correctly.**

16. WIRING THE RECIRCULATION SOLENOID IN THE PANEL

- a. **Locate** the two remaining wires that you have pulled into the panel for the recirculation solenoid.
- b. **Locate** the small solenoid terminal on the control panel door.
- c. Strip back each wire $\frac{1}{4}$ " and twist very tightly. (REMINDER: Leave enough wire inside so that the door can be fully opened, but not so much that it will interfere with panel operation.)
- d. Insert the two wires into either terminal point and secure. (NOTE: It does not matter which way you connect these two wires, since the current here is D.C.)

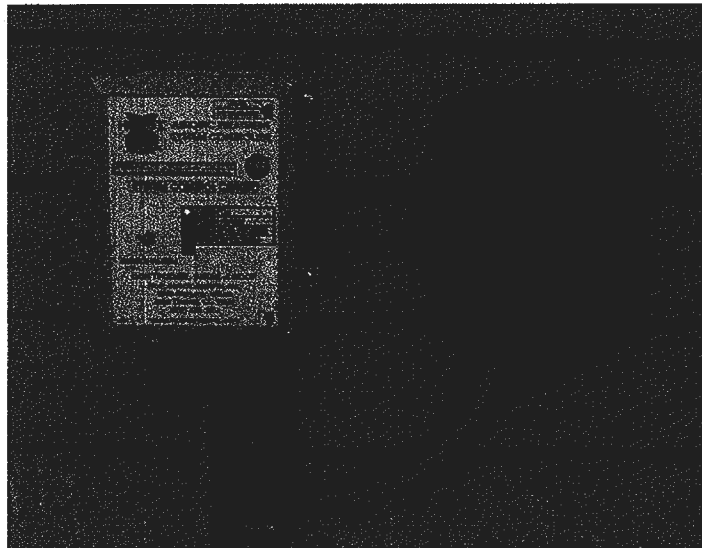


Solenoid wires properly connected

(REMINDER: Always use standard wire – not solid – so that it is flexible.)

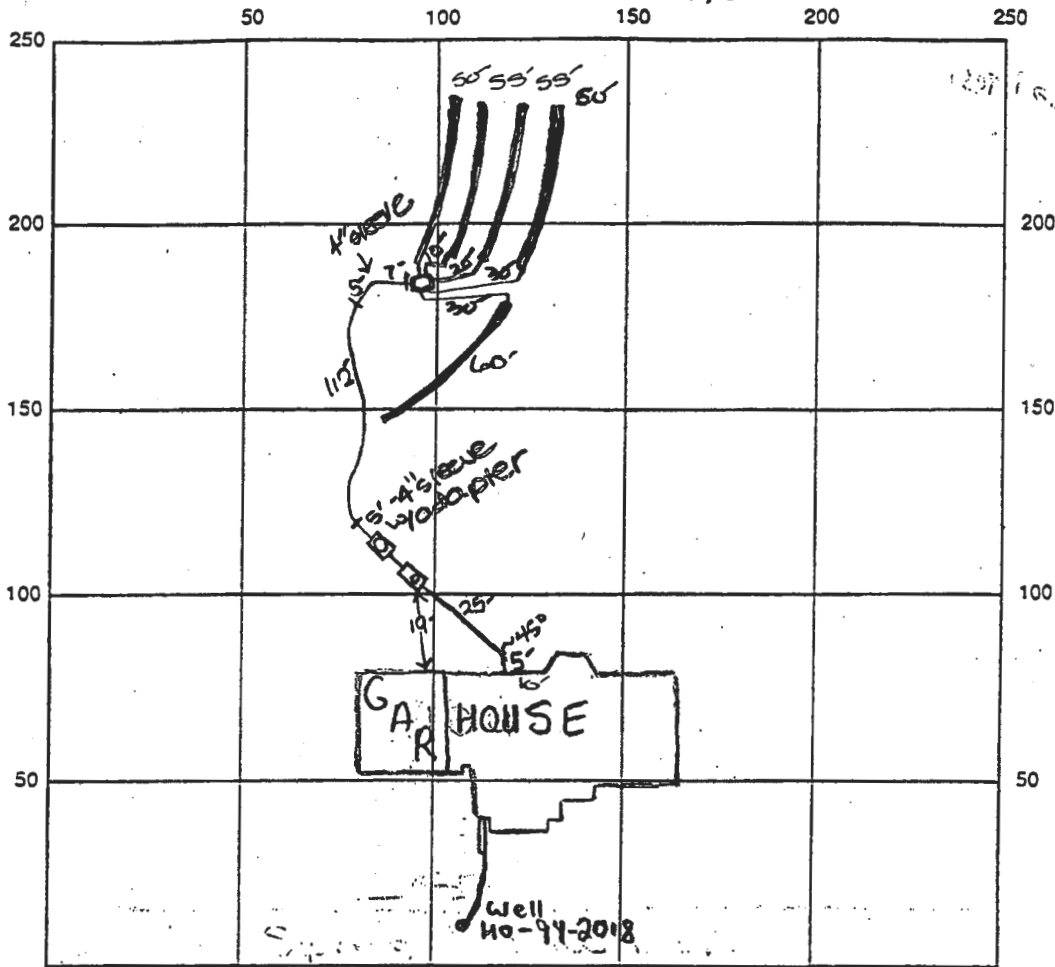
17. CLOSE AND SECURE THE CONTROL PANEL DOOR.

- a. **Silicone** all conduit penetration points where the wires entered to keep out pests, moisture, and gases. Wiggle wires to make certain seals are complete.
- b. Tuck all the wires in neatly, close and secure the panel door.
- c. Leave the quick disconnect power disconnected. The startup technician will do this.
- d. Before leaving make certain the 30 AMP breaker inside the house is ON.



Completed control panel installation

NOT TO SCALE



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE
SPRING HOLLOW COURT

SEPTIC TANK LEVEL OK-1250 gal p.p.s.t. CLEANOUTS one on s.t., manhole on pp

DISTRIBUTION BOX LEVEL OK

TILE DRAIN FIELD/TILE DEPTH 5 FT. TRENCH WIDTH 3 FT. INLET DEPTH 3 FT.

EFFECTIVE GRAVEL DEPTH 2 FT. TOTAL LENGTH 280 FT.

NUMBER OF TRENCHES 5 ~~ONE SIDEWALL~~ BOTTOM AREA 840 SQ. FT.

DRYWELL INSIDE DIAMETER N/A FT. EFFECTIVE DEPTH BELOW INLET N/A FT.

ABSORBENT AREA N/A SQ. FT.

REMARKS: 4/20/00 OK to cover all septic work. Need pump performance test for final approval. DKS

1/4/01 PUMP/ALARM OK (MR)

DATE SYSTEM APPROVED 1/4/01 INSPECTOR M. Ripkin

PERMIT

SEWAGE DISPOSAL SYSTEM

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

04-362721

HOWARD COUNTY HEALTH DEPARTMENT

BUREAU OF ENVIRONMENTAL HEALTH

~~XXXXXX~~ 410-313-2640

4/26/00 Needs pump p
perf. test

P 513373

A 57610-B

DISTRICT _____

DATE 4-6-2000

DATE SYSTEM APPROVED 1/4/01

INSPECTOR M. Riskin

INDEXED

WTC III Plumbing & Heating

IS PERMITTED TO INSTALL ☒ ALTER _____

ADDRESS 1820 Gillis Falls Road, Woodbine, MD 21797 PHONE 410-489-4457

SUBDIVISION Spring Hollow LOT 2 ROAD 17105 Spring Hollow Court

PROPERTY OWNER Vance Merson ANNE LINN

ADDRESS _____

SEPTIC TANK CAPACITY 1250 GALLONS

NUMBER OF BEDROOMS 4

210 SQUARE FEET PER BEDROOM

LINEAR FEET OF TRENCH REQUIRED 280

Pumped Septic System Proposed

INSTALL: 1-1250 Gallon Pump Chamber

- NOTES:
- Septic pump detail to be provided by installer prior to issuance of septic permit.
 - Pump performance test is necessary prior to Health Department approval of pumped septic system.

TRENCHES - Trench to be 3 feet wide. Inlet 3.0 feet below original grade. Bottom maximum depth 5.0 feet below original grade. Effective area begins at 3.0 feet below original grade. 2.0 feet of stone below distribution pipe.

LOCATION - Begin trenches 225 feet off the front lot line and 10 feet off the left lot line as seen when facing the lot from Spring Hollow Court. Run trenches on contour as shown on approved septic plan.

NOTES - No trench to exceed 100 feet in length. Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank. 12/24/99 O.K. (B)

PLANS APPROVED BY Amy McMillen DATE 11-24-1999

COVER NO WORK UNTIL INSPECTED AND APPROVED

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM

NOTE: CLEANOUT REQUIRED EVERY 70 FEET OF SEWER LINE AND/OR AT 90° SWEEPS IN LINES FROM HOUSE TO DRAIN FIELDS. 90° ELBOWS NOT ACCEPTABLE.

NOTE: ALL PARTS OF SEPTIC SYSTEMS (I.E. TANK, DISTRIBUTION BOX TRENCHES) TO BE 100 FEET FROM WELL (UNLESS OTHERWISE SPECIFICALLY AUTHORIZED)

NOTE: IF DEEP TRENCH(ES) ARE USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH(ES)

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER NO ABSORPTION TRENCH TO EXCEED 100 FEET IN LENGTH

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON OR SCHEDULE 35/40 PVC OR ABS

PERMIT VOID AFTER TWO YEARS

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL STAND PIPES MUST BE 6 INCHES IN DIAMETER CAST IRON, CONCRETE OR TERRA COTTA OR PVA OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET. MANHOLE TO GRADE REQUIRED.

NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT

*CALL 461-9933 FOR INSPECTION OF SEPTIC SYSTEM.

UG. PERMIT SIGNED
AND RETURNED 6/14/01
B00130849 - deck

OLD PERMIT SIGNED
AND RETURNED 6/27/01
B00131174 - inground pool

A 57610B

$$\frac{w+2}{w+1+2(d)} = \frac{3+2}{3+1+2(2)}$$

$$\frac{5}{8} = 0.625$$

$$280' \times 3' = \boxed{840}$$

$$840 \div 0.625 =$$

$$\boxed{1,360} \times .8 =$$

$$\boxed{1,088}$$

* Lots created aft
march 72' 10,000 sq.ft.

* Lots created before

march 72' 1 initial

+ 2 replacements

SITE INFO:
17105 SPRING HOLLOW COURT
MT. AIRY, MD 21771
LOT 2
PARCEL: 0528
ELECTION DISTRICT: 4
HOWARD COUNTY
ZONED - RC-DEO

DISTRIBUTION
BOX

PRIVATE SEPTIC
EASEMENT

PUMP
TANK
SEPTIC
TANK

PROPOSED
GARAGE

EX HOUSE

EXISTING
WELL

SITE PLAN

A-4

SCALE: 1" = 50'

R=222.00' N51°45'32"E
L=50.90' 37.60'

SPRING HOLLOW CT

ARCHITECT

13662

KAREN LYNN PITSLEY
STATE OF MARYLAND
exp. 10/22/17



7612 Browns Bridge Rd
Highland, MD 20777
301-776-2666
301-776-2886 fax
1-877-828-7267
info@TransformingArchitecture.com
www.TransformingArchitecture.com

The Baker Residence

17105 Spring Hollow Ct. Mt. Airy, MD 21771

SCALE: AS NOTED

DATE: 02-05-16

PROJECT No: 11-069