

LAYOUT _____ INSP 4 _____
INSP 2 _____ INSP 5 _____
INSP 3 _____ INSP 6 _____

ISSUE DATE: 8/31/09

APPROVAL DATE: 10/28/09

SEPTIC PERMIT

LPD SYSTEM WITH PRETREATMENT

Tax ID: 04-326474

**ON-SITE SEWAGE DISPOSAL SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH**

P 531004

A 530329

Ronnie Heaps IS PERMITTED TO INSTALL ALTER

ADDRESS: 425 Obrecht Road, Sykesville, MD 21784 PHONE NUMBER: (443)277-7526

SUBDIVISION _____ LOT _____

ADDRESS: 1909 Long Corner Road PROPERTY OWNER: Joseph Stubbings

HOOT (nitrogen pretreatment unit) 2000 **Top Seamed**

PUMP CHAMBER CAPACITY (GALLONS): _____ **Top Seamed**

LPD Distribution System – see detailed design plans by CLSI, dated _____, 2009

LOCATION:	Trench locations to be staked at the site.
NOTES:	Call for layout inspection prior to beginning construction. System must be approved and I&A agreement signed prior to release of funding.

PLANS APPROVED: Brian Baker DATE: 8/31/2009

NOTES: PERMIT VOID AFTER 2 YEARS
CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
WATERTIGHT SEPTIC TANKS REQUIRED
ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL UNLESS SPECIFICALLY AUTHORIZED
MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED
CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE REGULATIONS, GUIDELINES AND THE TERMS OF THIS PERMIT

**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 FOR INSPECTIONS**

NOT TO SCALE

See As-Built Drawing
On Separate Sheet

5/18 Layout

7/30/09 Layout

8/17/09 Root tank installed but
not connected to house. Existing
system shows signs that it is failing. (BB)

10/21/09 Third layout.

10/22 Received Start-up Certification

10/22 Drywell Pumped

10/28 Received agreements.

ROAD

WIDTH	INLET	BOTTOM
_____	_____	_____
NUMBER OF TRENCHES _____		
TOTAL LENGTH _____		
ABSORPTION AREA _____		

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL _____	
CAPACITY _____	GAL
SEAM LOC _____	
TANK LID DEPTH _____	
BAFFLES _____	
BAFFLE FILTER _____	
MANHOLE LOC _____	
6" PORT LOC _____	
WATERTIGHT TEST _____	
SEPTIC TANK 2 LEVEL _____	
CAPACITY _____	GAL
SEAM LOC _____	
TANK LID DEPTH _____	
BAFFLES _____	
BAFFLE FILTER _____	
MANHOLE LOC _____	
6" PORT LOC _____	
WATERTIGHT TEST _____	
PUMP OPERATIONAL _____	
ALARM OPERATIONAL _____	

~~PRE CONSTRUCTION~~ _____

INSTALLATION _____

(I & A) AGREEMENT RECORDED IN LAND RECORDS ON _____ (date)

FINAL INSPECTOR Brian Baker

DATE OF APPROVAL 10/28/09

Well

28' to Fence

99' to Corner

NOT TO SCALE

75'

41'

75'

130' to Top Trench

71'

1909 Long Corner Road

145'

63'

5.5'
2.5'

22° 30'

78'

45'

45'

37.5'

17'

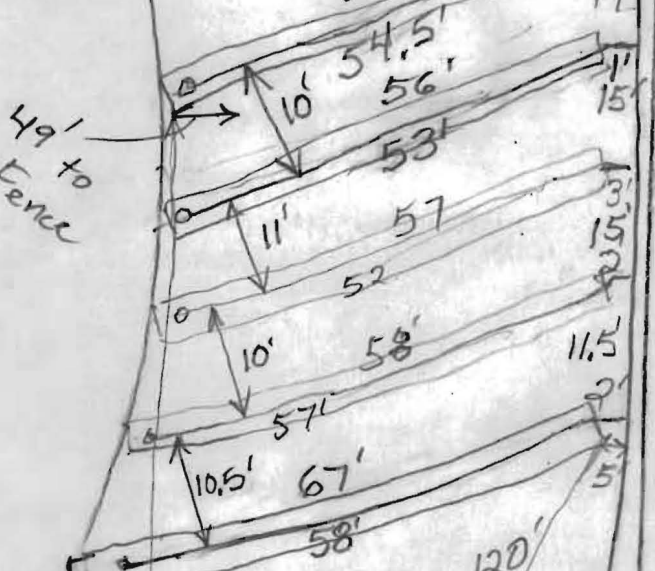
~39'

Fence

23' to Center of Road

49' to Fence

56



120'

Well

28' to Fence

99' to Corner

49' to Fence

130' to Top Trench

1909 Long Corner Road

NOT TO SCALE

75'

41'

75'

71'

145'

63'

5.5'

2.5'

22°

30'

78'

27.5'

45'

45'

17'

~39'

Fence

23' to Center of Road

56

54.5'

56'

53'

57

52

58'

57'

67'

58'

120'

11.5'

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**OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 2 day of September, among Joseph E. Stubbings and Ellyn M. Sharkey, hereinafter collectively referred to as "Owner" and the Howard County Health Department hereinafter referred to as the "County".

000130

WHEREAS, Owner is the owner or contract owner of a parcel of land located at 1909 Long Corner Rd, in the Election District of Howard County, Maryland, and the deed to same is recorded or shall be recorded among the Land Records of Howard County, Maryland, in Liber 11463 Folio 238.

WHEREAS, The Lot is suitable for the installation of an innovative on-site sewage disposal system, but an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, must be installed as part of the sewage disposal system. While the existing house with the addition will have 3 bedrooms, the septic system has been designed to accommodate a 4 bedroom home.

NOW, THEREFORE, the parties hereto agree as follows:

20
20
1/3

A. Owner hereby grants to the County the right to enter upon the Lot at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County to develop accurate and thorough test results.

B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.

C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.

D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-

treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.

E. This agreement shall run with the land and upon Owner's taking title to the Lot shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Lot that the system shall require maintenance or other attention. Upon taking title to the Lot, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

**AGREEMENT AND EASEMENT FOR
INSTALLATION OF AN INNOVATIVE AND ALTERNATIVE
ON-SITE SEWAGE DISPOSAL SYSTEM WITH THE USE OF
BEST AVAILABLE TECHNOLOGY THROUGH
BAY RESTORATION FUNDS**

000135

THIS AGREEMENT is made this 4th day of June, among Joseph E. Stubbings, hereinafter referred to as "Owner", the Howard County Health Department hereinafter collectively referred to as the "County", and the Department of the Environment, hereinafter referred to as the "Department".

WHEREAS, Owner owns a tract of land located on 1909 Long Corner Road, in the 4th Election District of Howard County, Maryland, and the deed to same is recorded among the Land Records of Howard County, Maryland, in Ellicott City, and in Liber 11463 Folio 238.

WHEREAS, Owner's land is improved and the existing means of sewage disposal has been found to be prejudicial to the environment and/or public health.

WHEREAS, Owner's land is unsuitable for the installation of a conventional on-site sewage disposal system and owner has requested the Department's approval to install an innovative/alternative system of sewage disposal.

WHEREAS, Owner understands that participation in the Bay Restoration Fund and the innovative/alternative program is voluntary.

NOW, THEREFORE, the parties hereto agree as follows:

20
20
MS
A. Owner must install and maintain a water meter on the incoming side of the water system or an event counter on the sewage pumping system.

B. Owner hereby grants to the Department and the County the right to enter upon the property at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data requested and needed by the Department to develop accurate and thorough test results.

C. Owner acknowledges and agrees that the proposed innovative/alternative system is experimental and that his or her participation is voluntary. Owner agrees that there shall be no liability on the part of the County or Department to Owner if this innovative/alternative system fails, and that the County and the Department do not warrant or guarantee that the system will adequately or properly function.

D. Owner acknowledges and agrees that a manufacturer-approved installer will install the best available technology (BAT) system.

E. Owner acknowledges and agrees the manufacturer will provide for Operation and Maintenance of the BAT for a period of 5 years as a condition of sale of the BAT. After the 5-year period the Operation and Maintenance contract can be further extended at the behest of the property owner. The Department and County encourage the property owner to continuously maintain an Operation and Maintenance contract during the lifetime of the system.

F. Owner acknowledges and agrees that the manufacturer appointed Operation and Maintenance provider will have access to the BAT system at all times.

G. Owner acknowledges and agrees that neither the County nor the Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.

H. The Owner will devote such care and effort to the maintenance of the whole system so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.

I. The Department and/or County agree to grant \$ 13,100.00 toward the cost of installation of the BAT System, and financial responsibility is limited to this amount. Owner will present to the County a signed proposals from manufacturer and County certified system installers demonstrating the total cost of installation. Operating costs will be at the Owner's expense.

J. The Owner acknowledges that the BRF grant can only be used for that portion of the OSDS attributable to (BAT) for the removal of nitrogen.

OPER 12072 REV 038

2

C. Owner acknowledges and agrees that the proposed innovative/alternative system is experimental and that his or her participation is voluntary. Owner agrees that there shall be no liability on the part of the County or Department to Owner if this innovative/alternative system fails, and that the County and the Department do not warrant or guarantee that the system will adequately or properly function.

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G. Owner acknowledges and agrees that neither the County nor the Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.

H. The Owner will devote such care and effort to the maintenance of the whole system so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.

I. The Department and/or County agree to grant \$ 13,100.00 toward the cost of installation of the BAT System, and financial responsibility is limited to this amount. Owner will present to the County a signed proposals from manufacturer and County certified system installers demonstrating the total cost of installation. Operating costs will be at the Owner's expense.

J. The Owner acknowledges that the BRF grant can only be used for that portion of the OSDS attributable to (BAT) for the removal of nitrogen.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated above.

DATE: SEPT-11-2009

[Signature]
Owner

DATE: 11 Sep 09

[Signature]
Owner

DATE: 9/17/09

B Wilson for Peter Beilenson
Howard County Health Department
Peter L. Beilenson, M.D., M.P.H., Health Officer

IMP FD SURE \$ 20.00
RECORDING FEE 20.00
TOTAL 40.00
Reg# CH06 Rcpt # 52220
MIR KLB BIK # 187
Oct 02, 2009 09:46 am

ORDER 12072 FILED 439

3

K. Owner acknowledges in the event the total BRF project cost is greater than \$25,000 the proposal will have to be approved by the Maryland State Board of Public Works.

L. The Owner must install BAT system according to the manufacturer recommended plans and specifications approved by the Department.

M. The Owner agrees and acknowledges that if installation deviates substantially from the approved plans or changes such that performance of the system is compromised or reduced, BRF funding will not be provided.

N. The Owner agrees, that, should the system be determined by the Department to pose a threat to the public health, safety or comfort, the Department may order any necessary changes or corrections and the Owner agrees to pay for all such changes or corrections. System modifications may include requirements for holding of sewage waste in tanks and regular pumping from the holding tanks. Upon the Department's request, the Owner agrees to enter into a contract acceptable to the Department to allow and pay either Howard County, Maryland, its agents or a private entity to pump on a regularly scheduled basis an approved holding tank system.

O. The Owner agrees to contact both the Water Management Administration, On-Site Systems Division of the Wastewater Permits Program and the County at least forty-eight (48) hours prior to system installation, so that the Department may lay out the system in the field with the contractor. The Owner must install this system according to the plans and specifications approved by the Department and any changes required by the Department as a result of the field layout. If installation deviates substantially from the approved plans or changes such that experimental data will be compromised or reduced, the Owner agrees to pay for all necessary corrections.

P. This agreement shall run with the land and binds the Owner, his heirs, successors, assigns except that the provisions of paragraph A & B shall be binding for a period of 5 years only after installation of the system and occupation of the home. Owner further agrees that he shall inform in writing

12072 F00440

any purchaser or lessee of the property that the system may require maintenance or other attention. The Owner agrees to record this agreement in the land records of Howard County.

Q. This agreement shall not be construed to limit any authority of the Department to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

R. This agreement may be voided at the discretion of the Department if the system construction is not completed within six (6) months of the effective date of this agreement.

S. This agreement contains the entire agreement and understanding between the County and the Owner and the Department. There are no additional terms other than as contained in this agreement. This agreement may not be modified except in writing signed by each of the parties or by their authorized representatives.

T. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated

above.
DATE: JUNE 12 2009
JUNE 12 2009

[Signature]
[Signature] "JOSEPH E STUBBS" "NGS"
Owner
[Signature] 9/29/09
Jay Prager, Deputy Program Manager
Wastewater Permits Program
Maryland Department of the Environment

DATE: 6/9/09

DATE: _____

IMP FD SURE \$	20.00
RECORDING FEE	20.00
TOTAL	40.00
Rest# CH06	Rcpt # 52520
NDR KLB	Blk # 186
Oct 02, 2009	09:44 am

County



MAYER BROS., INC.

Precast Concrete Products

6264 Race Rd. Elkridge, MD 21075

Federal ID 52-0706744

Letter of Satisfaction

Hoot System Installation

Address of Property: 1909 Long Corner Rd
Mt. Airy MD 21771

Date of Final Inspection: 10-21-09

Installer: J.M. Contracting

Hoot Technician/Inspector: [Signature]

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

Sincerely,

[Signature]

Name of Inspector
Mayer Bros., Inc.

10-22-09
Howard Co. MD
To: Brian Baker
Fax: 410-313-2648




Howard County
Health Department

7178 Columbia Gateway Drive, Columbia MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

MEMORANDUM

TO: Joseph Stubbings

FROM: Sara Sappington 
Well and Septic Program

RE: 1909 Long Corner Rd.

DATE: September 3, 2009

Enclosed you will find Howard County's "OPERATION AND MAINTENANCE AGREEMENT FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM HAVING AN ADVANCED PRE-TREATMENT SYSTEM." This agreement, along with the agreement from Maryland Department of the Environment (MDE) for BRF technology, must be signed by the homeowner and recorded with the county. Prior to the release of the approved septic system permit, copies of the recorded documents must be submitted to the Health Department.

DESIGN FLOW (in gallons/day)?
 Elevation of the PUMP OFF SWITCH, in feet?
 Elevation of the upper LATERAL, in feet?
 DELIVERY PIPE distance, from pump to manifold, in feet?
 DELIVERY PIPE diameter, in inches (if not 2"--use 2" min)?
 Design DISTAL PRESSURE, in feet (if not 2.5)? (hd)
 IS MANIFOLD CENTER-FED & SYMMETRICAL (yes or no)?
 How many orifices in the MANIFOLD?
 MANIFOLD ORIFICE diameter, in inches (if not 5/16")
 MANIFOLD DIAMETER (if not 2"--use 2" min)?
 TOTAL LENGTH OF MANIFOLD
 Does MANIFOLD drain to FIELD after dose (yes or no)?
 How many LATERALS?
 Pumping chamber weep hole size (usually .25")
 PROGRAM WILL CALCULATE UP TO 26 LATERALS AND UP TO 50 ORIFICES PER LATERAL
 TRENCH LENGTH

600	
781.35	Yellow cells inputs
792.5	
60	
3.068	(Inside Diameter)
3	
0	PRETREATED EFFLUENT REQUIRED
no	GO TO MANIFOLD DESIGN <50 feet up to 75 usually END FEED
0	(Ignore)
0	0.3125 (Ignore)
3.067	3.067 (Inside Diameter)
58	
no	(Are you pumping downhill)
5	
0.25	USE 0 IF FORCE MAIN DOES NOT DRAIN Back to Pump Chamber
56	56 54 57 61

Your HIGHEST elevation lateral MUST be LATERAL 1:
 (first orifice from lateral 1/2 of orifice spacing)

Length of each LATERAL, in feet?
 Diameter of each LATERAL, in inches (1.5" min)?
 Elevation of each LATERAL, in feet?
 Number of ORIFICES per lateral
 Distance from Manifold to closest Orifice, in feet
 ORIFICE SPACING, in feet (2-6 ft ok 3-6 preferred)
 Diameter of ORIFICES, in inches? (D)
 Square feet of leachfield per laterals (can ignore)
 Maximum number of orifices in any one lateral
 Minimum lateral diameter

Lateral 1:	Lateral 2:	Lateral 3:	Lateral 4:	Lateral 5:
54.00	53.50	51.75	54.63	58.00
1.5	1.5	1.5	1.5	1.5
792.5	792	791.5	791	790.5
14	13	12	12	12
2.00	2.50	2.25	2.38	2.50
4.00	4.25	4.50	4.75	5.00
0.25	0.25	0.25	0.25	0.25
168	168	162	171	183
14				
1.5				

RESULTS

FRICITION CALCULATIONS (using Hazen Williams friction $f_t = Ld((3.55Qm/Ch(Dd^2.63)))^{1.85}$)
 PRESSURE CALCULATIONS (using orifice discharge equation $Q = 11.79 D^2 hd^{.5}$)

	Lateral 1:	Lateral 2:	Lateral 3:	Lateral 4:	Lateral 5:
LATERAL DISCHARGE (first approximation)	17.87	16.59	15.32	15.32	15.32
MANIFOLD ORIFICE DISCHARGE	0.00				
TOTAL SYSTEM DISCHARGE (first approximation)	80.41				
TOTAL DISCHARGE PER LATERAL	17.97	18.02	17.77	18.85	19.88
DISCHARGE PER SQUARE FOOT OF LEACHFIELD	0.1069931	0.107252531	0.109695848	0.110250948	0.108618381
ORIFICE MAXIMUM DISCHARGE BY LATERAL	1.30	1.40	1.49	1.58	1.67
ORIFICE MINIMUM DISCHARGE BY LATERAL	1.28	1.38	1.47	1.56	1.65
ORIFICE % DIFFERENCE DISCHARGE within LATERAL	1.6%	1.5%	1.3%	1.4%	1.4%
MAXIMUM DISCHARGE LATERAL	19.88				
MINIMUM DISCHARGE LATERAL	17.77				
MAXIMUM DISCHARGE PER SQUARE FOOT	0.11				
MINIMUM DISCHARGE PER SQUARE FOOT	0.11				
% DIFFERENCE DISCHARGE for SYSTEM by orifice	23.7%	as percent of maximum orifice in system			
% DIFFERENCE DISCHARGE for SYSTEM by laterals	10.6%	as percent of maximum lateral in system			
% DIFFERENCE DISCHARGE for SYSTEM by square feet	3.0%	as percent of maximum square foot in system			

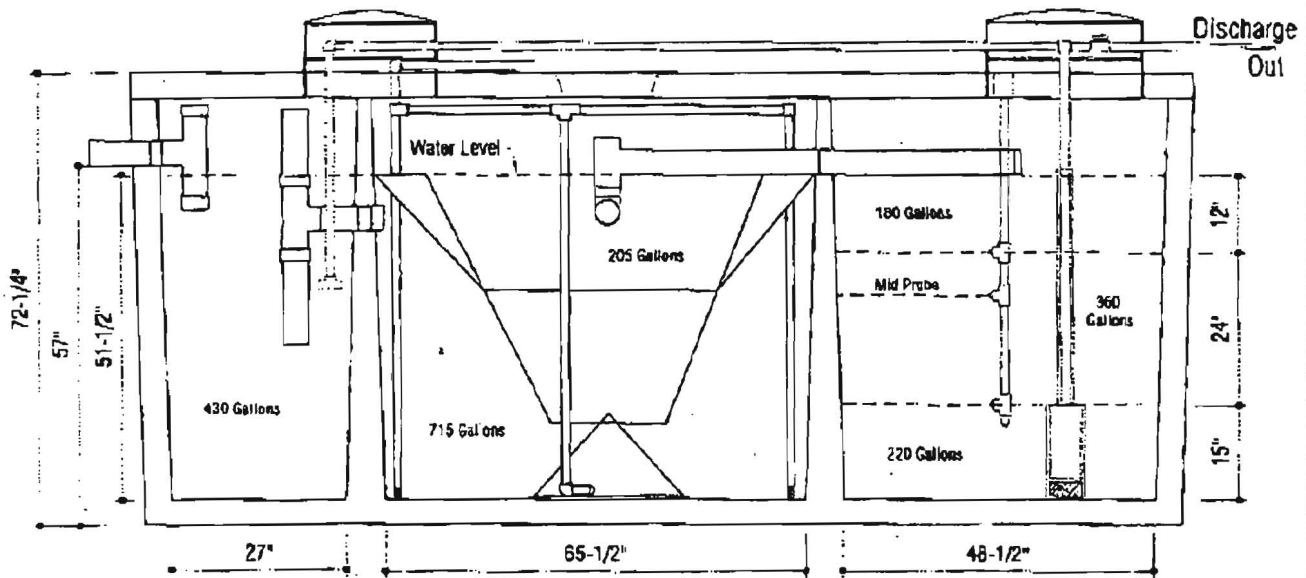
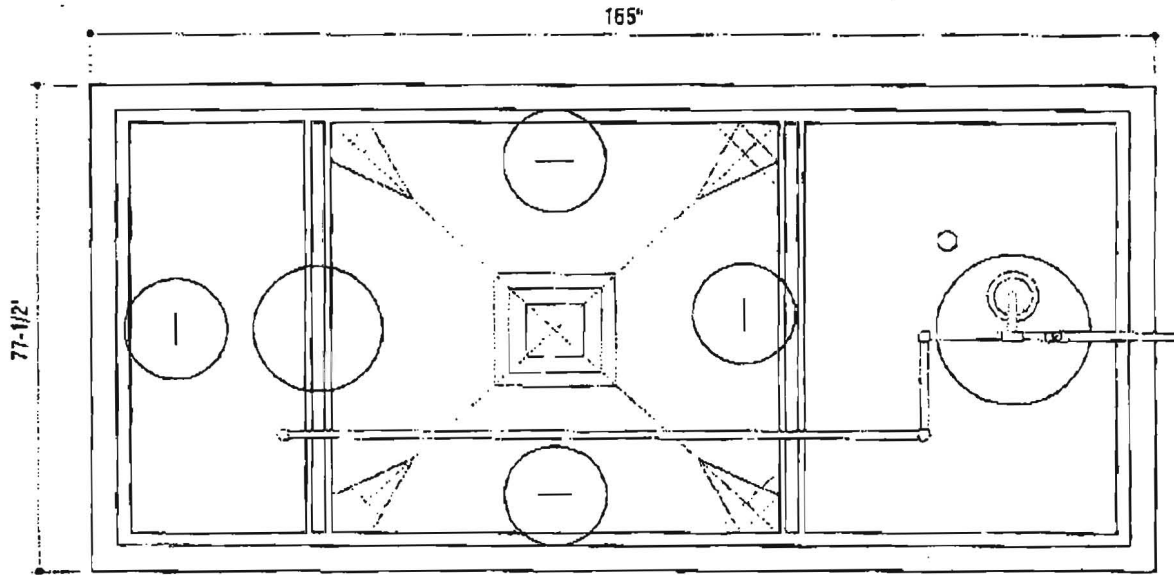
WEEP HOLE DISCHARGE (usually a 1/4" weep hole) 2.75 weep hole= 0.25 inch

WARNING: THERE IS GREATER THAN A 15% DIFFERENCE IN ORIFICE DISCHARGE RATES

VOID VOLUME IN DELIVERY PIPE	23.04				
VOID VOLUME IN MANIFOLD	13.82	Volume from Manifold Design			
VOID VOLUME IN EACH LATERAL	4.96	4.91	4.75	5.01	5.32
TOTAL LATERAL VOID VOLUME	24.96				0.00

MINIMUM DOSE VOLUME (based on void volume) 124.78 to 249.57 MIN
 ACTUAL MINIMUM IS BASED ON DAILY DESIGN FLOW
 (weep hole, usually 1/4", not counted for dose, effluent is repumped during process and not counted for friction, except as fitting headloss)
 TOTAL HEAD LOSS IN EACH LATERAL 0.68 0.69 0.66 0.77 0.90

MAXIMUM TOTAL LATERAL HEADLOSS IN SYSTEM 0.90
 MANIFOLD HEADLOSS (center-fed unless manifold design) 0.29
 DELIVERY PIPE HEADLOSS 1.09 w/ delivery 3.068 inch diameter
 FITTING LOSS (headloss *.15) 0.45 add extra head if fittings are more than absolute minimum
 DISTAL PRESSURE HEAD 3.00
 STATIC HEAD (OFF-SWITCH TO HIGH LATERAL/MANIFOLD) 11.15
 HEADLOSS PUMP TO WEEPHOLE (assume 3' run) 0.06
 PUMP MUST BE ABLE TO PASS SOLIDS AT 95.24 G.P.M 16.94 FEET OF HEAD
 or
 After OTIS (network losses =1.3*distal head) 95.24 G.P.M. 19.23 FEET OF HEAD



DESIGN DATA & GENERAL NOTES

- [1] Concrete strength $f_c = 4,000$ p.s.i. @ 28 days. Density = 150 pcf.
- [2] Cement - Portland Type /M 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.

13" x 133" x 69.5"

1.08' x 11.08" x 5.79' =

518

Gallons

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

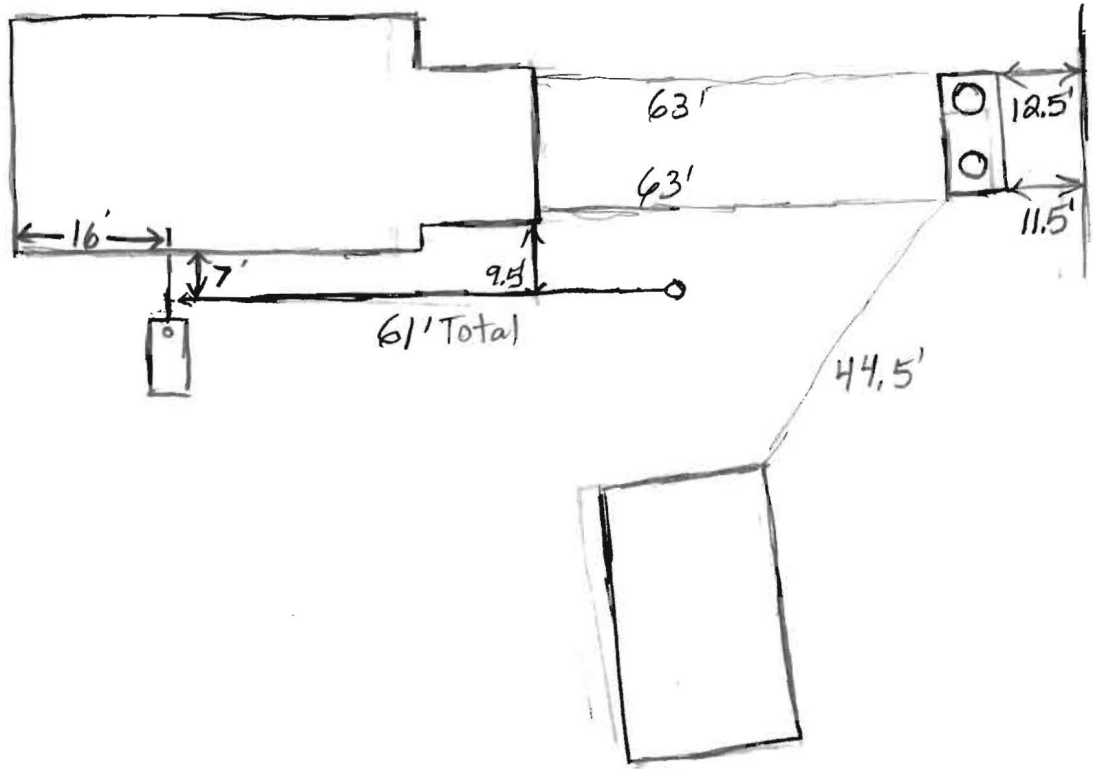
Septic Tank Level - Yes

Capacity 2000+

Seam Location - Top

Tank Depth - 0.5' - 2'

8/6/09





MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

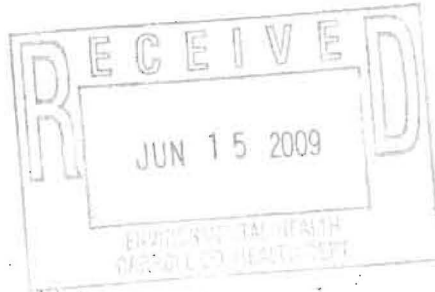
Shari T. Wilson
Secretary

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Deputy Secretary

May 7, 2009

Joseph E. Stubbings
1909 Long Corner Rd,
Mt Airy, Maryland 21771



Dear Joseph E, Stubbings:

Thank you for completing an application for the Bay Restoration Fund (BRF) Onsite Sewage Disposal System (OSDS) Program. The application submitted is for the property located at 1909 Long Corner Rd, Mt Airy, Maryland 21771 and shown on Tax Map 6, Grid 22, Parcel 136. This letter is to notify you of preliminary approval and high priority for funding from the BRF for the installation of best available technology (BAT) for removing nitrogen as part of your on-site sewage disposal system.

This notification letter is intended to assist you through the process of contracting a vendor for the purchase and installation of a BAT, and invoicing procedures to obtain funding from the BRF. The following sections outline the requirements necessary for proceeding with the project.

➤ **Vendor Selection:**

(Option 1): Applicant Selects a Fixed Price Pre-Approved Vendor:

Maryland Department of the Environment has preselected the following three BAT vendors who will provide and install the technology at a predetermined cost:

• **Hoot Aerobic Systems, Inc. (Hoot BNR®):**

Distributor: Mayer Brothers, Inc.

Contact: Nancy Mayer

Phone: (410) 796-1434

Website: www.hootsystems.com

Email: mayerbro@connext.net

Region	Bedrooms	Fixed Price
Western ¹	3 to 6	\$14,200
Central ²	3 to 6	\$13,100
Southern ³	3 to 6	\$13,500
Eastern ⁴	3 to 6	\$13,700

¹ Allegany, Garrett, Frederick, Washington,

² Baltimore, Harford, Howard, Carroll, Montgomery, Anne Arundel, Cecil

³ Prince George's, Charles, Calvert, St. Mary's

⁴ Caroline, , Queen Anne's, Dorchester, Kent, Somerset, Talbot, Wicomico, Worcester

- Orenco Systems, Inc. (AdvanTex® AX)**
Distributor: Atlantic Solutions, Ltd. Contact: Bob Johnson
 Phone: 1-877-214-9283 Website: www.orenco.com Email: bjohnson@septicssystems.net

Region	Bedrooms	Fixed Price
Western	3 to 4	\$14,868.40
	5	\$16,606.80
	6	\$20,422.80
Central	3 to 4	\$12,950.40
	5	\$14,464.80
	6	\$18,280.80
Southern	3 to 4	\$12,700.40
	5	\$14,264.80
	6	\$18,080.80
Eastern	3 to 4	\$13,068.40
	5	\$14,806.80
	6	\$18,622.80

- Bio-Microbics, Inc. (MicroFast®)**
Distributor: Feemire & Associates
 Phone: (410) 768-8500 Website: www.biomicrobics.com Email: www.freemire.com

Region	Bedrooms	Fixed Price
Western	3 to 4	\$11,625
	5 to 6	\$13,807
Central	3 to 4	\$11,425
	5 to 6	\$14,107
Southern	3 to 4	\$11,525
	5 to 6	\$14,507
Eastern	3 to 4	\$10,625
	5 to 6	\$13,807

The applicant may choose any of the three pre-approved technologies and must contact the vendor directly. When choosing from the above technologies the applicant may want to request information on the annual cost of power consumption from the vendor. After vendor selection, the homeowner must provide MDE with a signed contract between the homeowner and the vendor. **MDE will provide BRF funding for 100% of the chosen technology.**

(Option 2): Applicant Selects Vendor and Procures Bids

Applicants may also select from other MDE approved BAT vendors, which are listed below. The applicant can procure bids from the other vendors however the grant amount will be limited to the least expensive of the preapproved vendor technologies appropriate for the designated region. Your property is located in the region and the total grant allotment is capped based on the following table:

Region	Bedrooms	Fixed Price
Western	3 to 4	\$11,625
	5 to 6	\$14,200
Central	3 to 4	\$11,425
	5 to 6	\$13,100
Southern	3 to 4	\$11,525
	5 to 6	\$13,500
Eastern	3 to 4	\$10,625
	5 to 6	\$13,700

The following is the list of other approved technologies:

Amphidrome

Manufacturer: **F.R. Mahony & Associates, Inc.** www.frmahony.com
 Distributor: David Kershner (610) 351-0963 d.kershner@ketllc.com

Bioclere

Manufacturer: **Aquapoint, Inc.** www.aquapoint.com
 Robbie Tippet (240) 298-7572 rtipp4@aol.com
 Sam Seymour (585) 473-3300 sseymour@aquapoint.com

Ecoflex

Manufacturer: **Premier Tech Environment**
 Allison Blodig (785) 250-3215 bloa@premiertech.com

Hoot H-Series, ANR

Manufacturer: **Hoot Aerobic Systems, Inc.** www.hootsystems.com
 Distributor: Nancy Mayer (410) 796-1434 mayerbro@connext.net

Nitrex

Manufacturer: **Lombardo Associates, Inc** www.lombardoassociates.com
 Pio Lombardo (617) 964-2924 pio@lombardoassociates.com

ReCip RTS

Manufacturer: **Bio-Concepts, Inc.** www.bioconceptsinc.com
 Al Privette (252) 249-7040 alprivette@coastal.net

SeptiTech

Manufacturer: **SeptiTech, Inc.** www.septitech.com
 Distributor: Bruce Melton (410) 878-2952 rbmelton@progressiveseptic.com
 Western MD, Scott Everhart (304) 676-3823 www.cseenterprises.net

Singular Model TNT

Manufacturer: **Norweco, Inc.** www.norweco.com
 Distributor: Eastern Shore - John Short (443) 786-0594 btowers62@gmail.com
 Western Shore - Jeff Earnshaw (301) 274-3772 superiortank@olg.com

Waterloo Biofilter

Manufacturer: **Waterloo BioFilter Systems, Inc.** www.waterloo-biofilter.com
 Distributor: Jones Pump Service (410) 836-9206 manager@jonespumpservice.com

If you choose to acquire bids according to this option, you are advised that MDE will provide BRF funding up to the aforementioned dollar amount, and you will have to pay any difference.

Conditions of Financial Assistance Document

By reading and signing this form, you agree to the limitations and conditions set forth in this document. This form must be returned with your submission of bids or vendor contract. Your submission will not be processed if this form does not accompany the bids or vendor contract when you submit them.

➤ **Award of Grant:**

- MDE will review the contract or bids submitted by the applicant. The grant award will be obligated based on the predetermined vendor/technology list or the lowest acceptable bid. The applicant may pay the cost difference of a more expensive bid.
- No change orders will be accepted by MDE.

- The applicant will be notified with an Award Letter with the amount of the grant obligation, Agreement and Easement document and further instructions.
- The award amount is available for reimbursement within 6 months of Department signature on the Agreement and Easement document. Upon request of the applicant, the original 6-month period may be extended at the discretion of the Department.

Agreement and Easement Document

The Agreement and Easement you will receive with the award letter must be signed by all parties and recorded in the Land Records of Howard County, Maryland. The cost of recordation is not eligible for BRF funding. A draft copy of the Agreement and Easement is provided to you in this letter for your review. A completed Agreement and Easement will be provided to you after you are notified of the grant approval amount.

➤ Local Permitting Requirements:

- All required local permits must be obtained.
- The County has the right to determine your availability to connect to public sewer. If you have access and your system is failing or your property is in an area that is scheduled to have a public sewer line your request for funds may be denied.
- Contact Howard County Health Department for more information.

➤ Issuance of Funds From the BRF:

After review of the submitted invoice and associated documents, the Office of the Comptroller of the State of Maryland will issue a check to the property owner.

Once again the Department thanks you for participating in this important program. If you have any questions, please feel free to contact me at 410-537-3678 or by email at jboris@mde.state.md.us.

Sincerely,



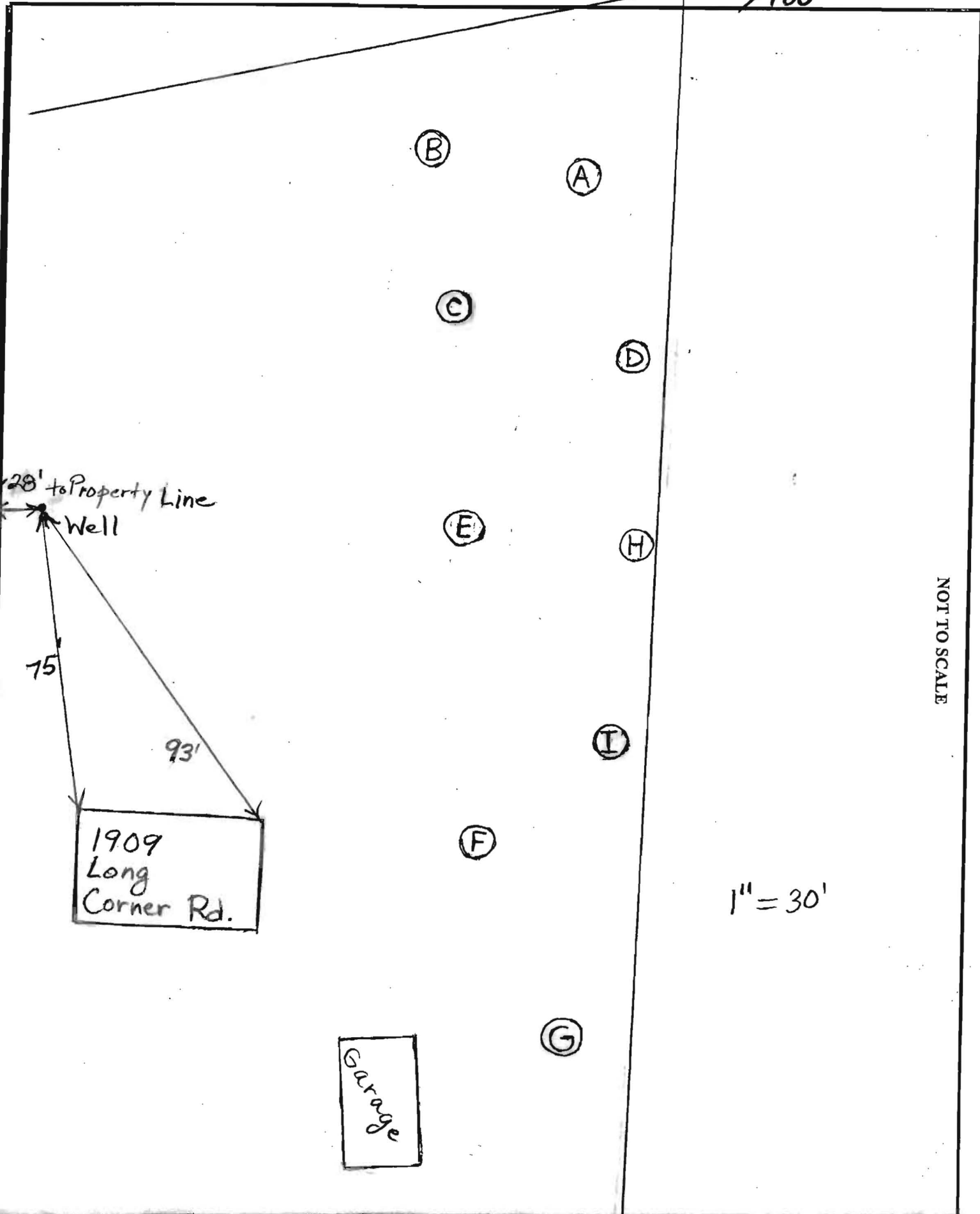
John Boris
Bay Restoration Fund Project Manager

Enclosure

cc: Jay Prager
MDE Regional Sanitarian
County Health Department or other related department

2009 AU 10 AM 8:42
RECEIVED
HOWARD COUNTY HEALTH DEPT
ENVIRONMENTAL HEALTH

> 100'



NOT TO SCALE

1" = 30'

Long Corner Road



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

Shari T. Wilson
Secretary

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Deputy Secretary

June 4, 2009

Joseph E. Stubbings
1909 Long Corner Road
Mt. Airy, MD 21771

RE: Tax Map 6, Grid 22, Parcel 136

Dear Mr. Stubbings:

Your bid package for the Bay Restoration Fund (BRF) Onsite Sewage Disposal System (OSDS) Program has been approved for the use of funds totaling not more than \$13,100.00. The accepted bid amount is for the installation of a Hoot 600 by J.M. Contracting for your property located at 1909 Long Corner Road.

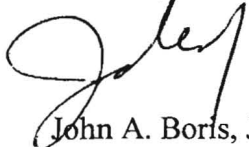
You have 45 days from the date of this letter to install the chosen system and submit to the Maryland Department of the Environment (MDE) the items below for disbursement. An extension may be granted due to site conditions if you supply MDE a request in written letter form. You may choose to deviate from the selected unit, however the grant award for acceptable reimbursable expenses may not exceed \$13,100.00. All grants awarded through the MDE are reimbursable. This means that all work done prior to this letter cannot be considered for reimbursement. In order to be eligible for reimbursement you must sign and record a copy in the land records of Howard County the Agreement and Easement for Installation of Best Available Technology Systems with Bay Restoration Funds. You must provide MDE with the following:

- The contractor's and manufacturer's invoice. These invoices should include everything quoted in the bid. All expenditures greater than the bid amount will not be covered.
- A copy of the installation inspection performed by the Howard County Environmental Health program.
- A completed State Grant or Loan Payment Disbursement Request Form
- A copy of the Agreement and Easement for Installation of Best Available Technology Systems with Bay Restoration that shows that it has been recorded in the land records of Howard County.

All submitted documentation would be reviewed for compliance. Once all documentation is submitted, you will receive a payment directly from the State Comptroller's office.

The Maryland Department of the Environment thanks you for participating in this important program. If you have any further questions, please feel free to contact me at 410-537-3678 or 800-633-6101 ext 3678 or email at jboris@mde.state.md.us.

Sincerely,



John A. Boris, Jr., R.S.
Bay Restoration Fund Project Manager

Enclosure

cc: Jay Prager
Steve Krieg, Regional Consultant
Howard County Health Department

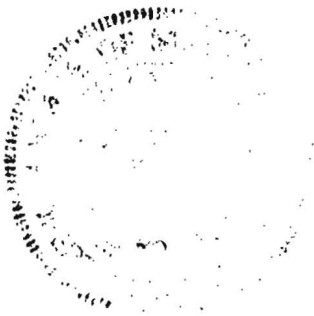
CONSUMER INFORMATION NOTES:

1. This plan is a benefit to a consumer insofar as it is required by a lender or a title insurance company or its agent in connection with contemplated transfer, financing or re-financing.
2. This plan is not to be relied upon for the establishment or location of fences, garages, buildings, or other existing or future improvements.
3. This plan does not provide for the accurate identification of property boundary lines, but such identification may not be required for the transfer of title or securing financing or re-financing.
4. Building line and/or Flood Zone information is taken from available sources and is subject to interpretation of originator.

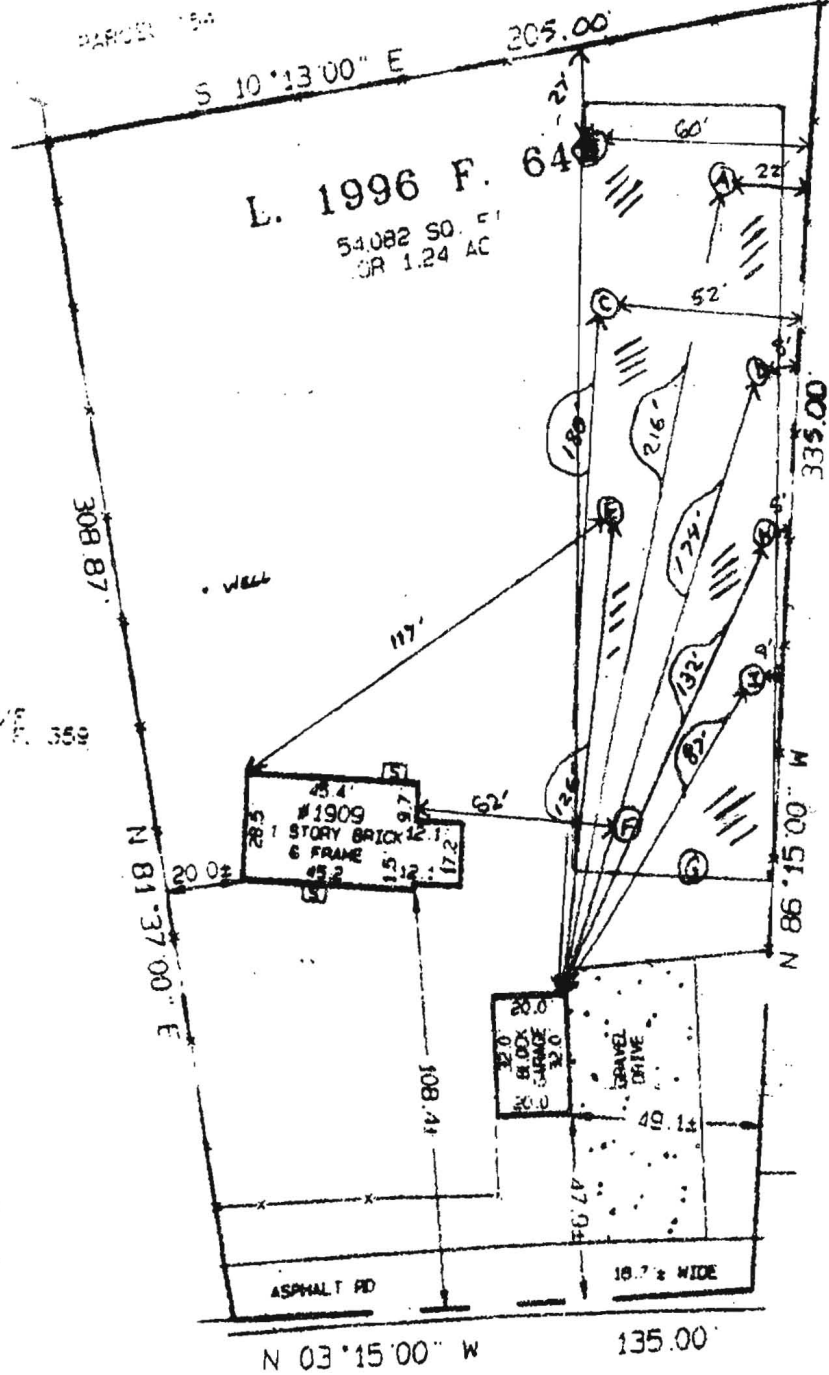


Notes

1. Flood zone "C" per H.U.D. panel No 240044-0006B
2. Setback distances as shown to the principal structure from property lines are approximate. The level of accuracy for this drawing should be taken to be no greater than plus or minus 1 Foot.



LOCATION DRAWING
GRAY PROPERTY
 L. 1996 F. 643
 HOWARD COUNTY, MARYLAND



1909 LONG CORNER ROAD

SURVEYOR'S CERTIFICATE

"THE INFORMATION SHOWN HEREON HAS BEEN BASED UPON THE RESULTS OF A FIELD INSPECTION PURSUANT TO THE DEED OR PLAT OF RECORD. EXISTING STRUCTURES SHOWN HAVE BEEN FIELD LOCATED BASED UPON MEASUREMENTS FROM PROPERTY MARKERS FOUND OR FROM EVIDENCE OF APPARENT OCCUPATION."

Jeffrey A. Foster
 MARYLAND PROPERTY LINE SURVEYOR REG. NO. 227

REFERENCES

PLAT BK.
 PLAT NO.
 LIBER 1996
 FOLIO 643



SNIDER & ASSOCIATES
 SURVEYORS - ENGINEERS
 LAND PLANNING CONSULTANTS
 2 Professional Drive, Suite 216
 Gaithersburg, Maryland 20879
 301/948-5100, Fax 301/948-1288

DATE OF LOCATIONS
 WALL CHECK:
 HSE. LOC.: 2-8-98
 SCALE: 1" = 50'
 DRAWN BY: C.W.T.
 JOB NO.: 98-221



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

May 13, 2009

Joseph Stubbings
1909 Long Corner Road
Mt. Airy, Maryland 21771

RE: Bay Restoration Fund On-site Sewage Disposal
System Program

Dear Joseph Stubbings,

The Health Department received your preliminary approval letter from the Maryland Department of the Environment for funding from the Bay Restoration Fund. This funding is for the installation of best available technology (BAT) for removing nitrogen as part of your on-site sewage disposal system.

Once the specific technology has been determined and approved by the Maryland Department of the Environment, you or your consultant will be responsible for providing a detailed cross-sectional/spec sheet of what is proposed to be installed at your property, i.e. new tank, BAT to be used with existing tank, etc. If a new tank is to be used, a drawing showing the new, detailed tank along with a profile showing the depth and amount of earth cover shall be submitted to this office. These details should be available from the manufacturer. If the existing tank is to be used, a structural analysis of the tank, i.e. water tightness, mid or top seam, cosmetic or physical damage, slotted, etc., needs to take place and approved by the manufacturer.

In addition, a scaled site plan showing the exact locations of the well and septic components, i.e. septic tank and dry well, must be submitted to this department for review. Neighboring septic systems and wells may need to be included on the site plan. Elevations of system components may be required based on site characteristics. Also submit contact information of the contractor that is to install the system, including a phone number. BAT systems may be subject to Howard County Health Department Code and the Annotated Code of Maryland Regulations (COMAR), i.e. setback to dwelling, existing drive, existing well, slopes, etc.

Once these comments have been reviewed by the Health Department, and a copy of the Agreement and Easement for Installation of Best Available Technology Systems with Bay Restoration has been received in the Health Department, the septic permit can be released. A fee of \$396.00 is required in order to receive this septic permit for installation of the pretreatment system for the above referenced property.

If you have further questions regarding this matter, please contact me at (410) 313-1771.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sara Sappington', written over a horizontal line.

Sara Sappington, R.S.
Well and Septic Program



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

April 14, 2009

Joseph Stubbings
1909 Long Corner Rd
Mt. Airy, Maryland 21771

RE: Bay Restoration Fund On-site Sewage Disposal
System Program

Dear Mr. Stubbings,

The Health Department received your preliminary approval letter from the Maryland Department of the Environment for funding from the Bay Restoration Fund. This funding is for the installation of best available technology (BAT) for removing nitrogen as part of your on-site sewage disposal system.

Once the specific technology has been determined and approved by the Maryland Department of the Environment, you or your consultant will be responsible for providing a detailed cross-sectional/spec sheet of what is proposed to be installed at your property, i.e. new tank, BAT to be used with existing tank, etc. If a new tank is to be used, a drawing showing the new, detailed tank along with a profile showing the depth and amount of earth cover shall be submitted to this office. These details should be available from the manufacturer. If the existing tank is to be used, a structural analysis of the tank, i.e. water tightness, mid or top seam, cosmetic or physical damage, slotted, etc., needs to take place and approved by the manufacturer.

In addition, a scaled site plan showing the exact locations of the well and septic components, i.e. septic tank and dry well, must be submitted to this department for review. Neighboring septic systems and wells may need to be included on the site plan. Elevations of system components may be required based on site characteristics. Also submit contact information of the contractor that is to install the system, including a phone number. BAT systems may be subject to Howard County Health Department Code and the Annotated Code of Maryland Regulations (COMAR), i.e. setback to dwelling, existing drive, existing well, slopes, etc.

Once these comments have been addressed and allocated by the Health Department for completion in its entirety, the septic permit can then be released. A fee of \$396.00 is required to receive this septic permit for the above referenced property.

If you have further questions regarding this matter, please contact me at (410) 313-1771.

Sincerely,

Sara Sappington, R.S.
Well and Septic Program



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

Shari T. Wilson
Secretary

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Deputy Secretary

March 6, 2009

Joseph E. Stubbings
1909 Long Corner Rd,
Mt Airy, Maryland 21771

RE: 1909 Long Corner Rd, Mt Airy, Maryland 21771, Tax Map 6, Grid 22, Parcel 136

Dear Joseph E, Stubbings:

Thank you for completing an application for the Bay Restoration Fund (BRF) Onsite Sewage Disposal System (OSDS) Program. The pre-application submitted is for your property located at 1909 Long Corner Rd, Mt Airy, Maryland 21771, and shown on Tax Map 6, Grid 22, Parcel 136. A review of the application indicates a high priority for funding. This letter is to notify you of preliminary approval for funding from the BRF for the installation of best available technology (BAT) for removing nitrogen as part of your on-site sewage disposal system.

This notification letter is intended to assist you through the process of obtaining proper BAT installation bids and invoicing procedures to obtain funding from the BRF. The following sections outline the requirements necessary for proceeding with the project.

Submission of Bids

The applicant must acquire bids from at least three separate manufacturers and at least 2 different installers for a minimum total of 3 bids to MDE for review. The installer can act as agent on behalf of the applicant but still must also supply a separate installer bid. A list of manufacturers is included in this letter. If you need additional participating installer information please contact your designated Project Manager or go to http://www.mde.state.md.us/Water/CBWRF/osds/bat_installers.asp for a list of installers. Bids must include the following:

- The installer, whether they are a manufacturer representative or one chosen by the property owner, must submit a separate installation quote with each manufacturer bid on a separate piece of paper from the manufacturer quote or the bid will be considered incomplete.
- Bids must be itemized. The manufacturer bid is to include the purchase cost of the unit and all other MDE requirements while the installation cost of the unit is to include the unit installation, components, and labor (including electrical connections) directly related to upgrading an onsite sewage disposal system to the best available technology for removing nitrogen are eligible for funding.

The following BAT Technologies have undergone MDE review and are eligible for BRF grants:

Model Name

AdvanTex AX

Manufacturer: **Orenco Systems, Inc.** www.orenco.com
 Distributor: Robert Johnson 1-877-214-92837 bjohnson@septicssystems.net

Amphidrome

Manufacturer: **F.R. Mahony & Associates, Inc.** www.frmahony.com
 Distributor: David Kershner (610) 351-0963 d.kershner@ketllc.com

Bioclere

Manufacturer: **Aquapoint, Inc.** www.aquapoint.com
 Robbie Tippet (240) 298-7572 rtipp4@aol.com
 Sam Seymour (585) 473-3300 sseymour@aquapoint.com

Ecoflex

Manufacturer: **Premier Tech Environment**
 Allison Blodig (785) 250-3215 bloa@premiertech.com

Hoot H-Series, BNR & ANR

Manufacturer: **Hoot Aerobic Systems, Inc.** www.hootsystems.com
 Distributor: Nancy Mayer (410) 796-1434 mayerbro@connext.net

MicroFAST & RetroFAST

Manufacturer: **Bio-Microbics, Inc.** www.biomicrobics.com www.freemire.com
 Distributor: Freemire & Associates (410) 768-8500 rsf@freemire.com

Nitrex

Manufacturer: **Lombardo Associates, Inc** www.lombardoassociates.com
 Pio Lombardo (617) 964-2924 pio@lombardoassociates.com

ReCip RTS

Manufacturer: **Bio-Concepts, Inc.** www.bioconceptsinc.com
 Al Privette (252) 249-7040 alprivette@coastal.net

SeptiTech

Manufacturer: **SeptiTech, Inc.** www.septitech.com
 Distributor: Bruce Melton (410) 878-2952 rbmelton@progressiveseptic.com
 Western MD, Scott Everhart (304) 676-3823 www.cseenterprises.net

Singulair Model TNT

Manufacturer: **Norweco, Inc.** www.norweco.com
 Distributor: Eastern Shore - Randy Clark (800) 773-9128 ranjodan@yahoo.com
 Western Shore - Jeff Earnshaw (301) 274-3772 superiortank@olg.com

Waterloo Biofilter

Manufacturer: **Waterloo BioFilter Systems, Inc.** www.waterloo-biofilter.com
 Distributor: Jones Pump Service (410) 836-9206 manager@jonespumpservice.com

Conditions of Financial Assistance

By reading and signing this form, you agree to the limitations and conditions set forth in this document. This form must be returned with your submission of bids. Your bid submission will not be processed if this form does not accompany the bids when you submit them.

Award of Grant

- MDE will review the bids. The grant award will be obligated based on the lowest acceptable bid, however the applicant may pay the cost difference of a more expensive bid.
- The applicant will be notified by MDE as to the amount of the grant obligation and with further instructions as to how to pursue reimbursement of obligated funds.
- For awards greater than \$25,000 MDE must present a proposal to the Board Public Works for approval.
- No change orders will be accepted by MDE.
- The award amount is available for reimbursement within 6 months of Department signature on the Agreement and Easement document. Upon request of the applicant, the original 6-month period may be extended at the discretion of the Department.

Agreement and Easement

An Agreement and Easement must be completed, signed by all parties and recorded in the Land Records of Howard County Maryland. A draft copy of the Agreement and Easement is provided to you in this letter for your review. A completed Agreement will be provided to you after bids are submitted to MDE when you are notified of the grant approval amount. The purpose of this Agreement is to accomplish the following:

- To establish your voluntary participation in this program.
- To ensure that a minimum of five years operation and maintenance is performed by an approved provider (included in the upfront cost of the system).
- Allows access for State, County and the Manufacturer designee's to inspect and collect samples from the system.
- Establishes the amount of the grant award.

Local Permitting Requirements

- All required local permits must be obtained.
- Permit fees are not eligible for BRF funding.
- Contact Howard County Health Department for more information.

Issuance of Funds from the BRF

After review of the submitted invoice and associated documents, the Office of the Comptroller of the State of Maryland will issue a check to the property owner.

Once again the Department thanks you for participating in this important program. If you have any questions, please feel free to contact me at 410-537-3678 or by email at jboris@mde.state.md.us.

Sincerely,



John Boris
Bay Restoration Fund Project Manager

Enclosure

cc: Jay Prager, Deputy Program Manager
Steven Krieg, Howard County, Regional Consultant
Howard County Health Department

2013 JUN 17 AM 9:00

From: Michael J. Davis
To: Krieg, Steven
Date: 4/9/2009 9:23 AM
Subject: Re: 1909 Long Corner Road

CC: Baker, Brian; Glotfelty, Barry; Sappington, Sara

Steve,

26.04.02.04 C (1) allows for the use of >50% in the treatment zone with if rates are not faster than 2 min. I'm confused by your position that 1 ft. with >50% rock eliminates the possibility of a conventional design. Is it MDE's policy that >50% rock in the treatment zone defines this as non-conventional? Please clarify.

Mike

>>> "Steven Krieg" <SKrieg@mde.state.md.us> 4/8/2009 4:29 PM >>>

Mike

If you can satisfy yourself that there is a natural four foot (or two foot) for sand mounds treatment zone with less than 50% rock by volume and you have an infiltrative surface above that four foot treatment zone that percs in conventional or alternative rates, and enough area for two systems (pretreating the initial system and repair area is established for the second as per your code), you are justified in your decision to allow the full expansion as long as you are convinced the public health and the environment is protected.

However, from what I can describe from the soils and talking to Brian, there isnt a natural four foot treatment zone with less than 50% rock by volume within the 4 feet treatment zone if the trenches are installed at 6.5 feet or deeper, so therefore it doesnt meet 26.04.02.04 C for a conventional system. Knowing exactly what the rock percentage is, is critical. We dont advise 50% or greater being considered as approvable even if the rates are 5 minutes or slower as groundwater contamination may still occur and has in nearby Carroll County when they used to allow >50% treatment zones as long as the perc was greater than 5.

An artificial treatment zone consisting sand lined trenches makes the system Non-conventional and in the innovative category. I am under the impression, that it is your County Policy (complying with the certification process for Building permits of 26.04.02.02 (D) 4 and perhaps other requirements of your code), to not allow non-conventional systems that dont meet 26.04.02.04 C for building permits or new construction.

Additionally, I dont think a dense clay loam would be suitable for drip and be protective of the public health or the environment unless I got more information. Also digging several backhoe pits tends to ruin the area for drip or so Im told by consultants so the area may already be trashed.

Upon further soils evaluations, further discussion and additional information, if we are convinced that an innovative system can be installed and be protective of environment and public health we may want to consider some sort of an expansion but to my knowledge this may set a precedent for future approvals and has been frowned upon in the past by MDE policy in 2000 and later correspondence to Howard County regarding new construction for Underwood Lot 6 (I think applicants name was Stewart Smith and Jay sent a letter to Frank Skinner)

Basically its a case by case evaluation, and expect to run into more of these types of situations since your County Code now requires a perc cert and soils evaluations for additions and repair area. Im open to further discussion on this matter, however.

Steven R. Krieg, R.S.
Regional Consultant
On-site Systems Division
Wastewater Permits Program
Maryland Dept. of the Environment
Montgomery Park Business Center

1800 Washington Boulevard, Suite 455
Baltimore, MD 21230-1708

>>> "Michael J. Davis" <mjdavis@howardcountymd.gov> 4/8/2009 10:51 AM >>>
Steve,

I've reviewed this file and question whether we are justified in our conclusion that there is not a four foot treatment zone. Perc holes B, C, & E were not deep enough (stopped at hard bottom) to confirm the treatment zone, but water was poured in the bottom of perc hole I at 11 feet and rate was not too slow or too fast. Ideally we should have had the contractor bang away another one foot in holes B,C,& E to evaluate the full four feet. Brian's verbal description of the hard bottom material eliminated my concern of groundwater contamination. If we have concerns about groundwater contamination we should be requiring a holding tank or recommending the owner hire a consultant for a drip evaluation.

Using or most restrictive application rate 0.6, there is adequate area for an initial and one replacement in there areas of A, B, C, D, E & H; two systems 250 ft. of 3 ft wide trench, 6.5 ft. deep. I would approve a waiver to our code area requirement and require pretreatment and LPD design. Additionally, we haven't reviewed discussed the drip option. It is premature to deny the building permit. At a minimum we should require additional depth in a two more holes to evaluate the hard bottom material.

What are your thoughts?

Mike

>>> "Steven Krieg" <SKrieg@mde.state.md.us> 4/7/2009 5:08 PM >>>
Mike,

I discussed this with Barry, and because the lot does not have a four foot treatment zone, it doesnt meet .02 and the addition shouldnt be approved, nor does it meet your code for area or soils. See 3.804 c (2).

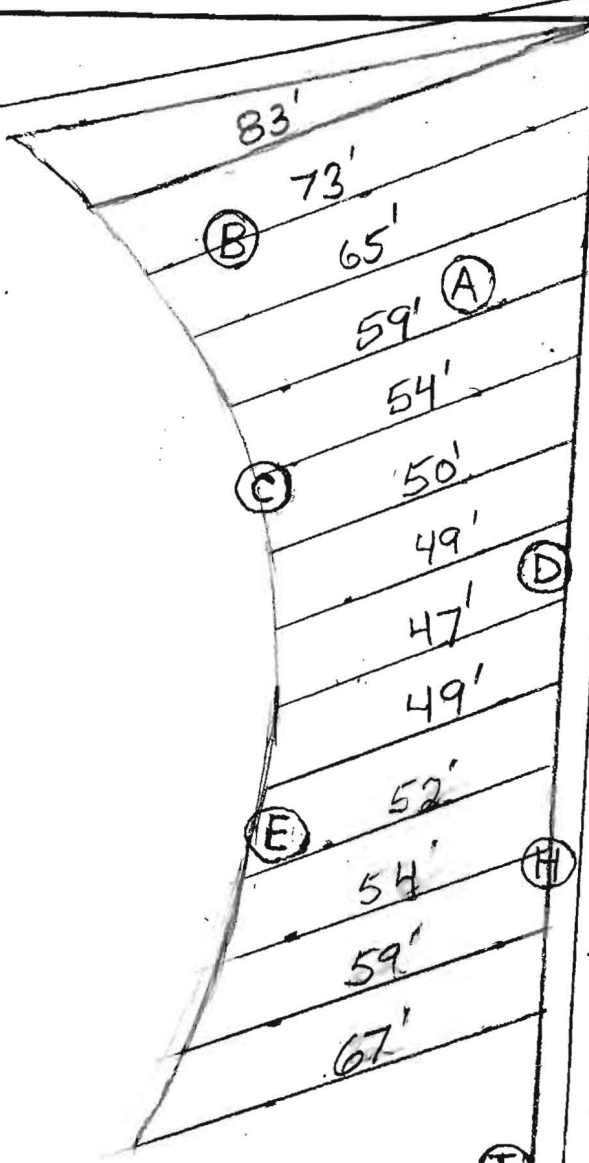
Steven R. Krieg, R.S.
Regional Consultant
On-site Systems Division
Wastewater Permits Program
Maryland Dept. of the Environment
Montgomery Park Business Center
1800 Washington Boulevard, Suite 455
Baltimore, MD 21230-1708

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If you have received this communication in error, please re-send this communication to the sender and delete the original message and any copy of it from your computer system. Thank you.

<<<<GWIASIG 0.07>>>>

> 100'

Well -
•
Approx.
Location



333' each system

~ 760' will fit?

- Need Well Location
- Need Trench Layout
- 5' Property Line Waiver
- Trees in Way

NOT TO SCALE

1" = 30'

1909
Long
Corner Rd.

Garage

Long Corner Road