

#### **Bureau of Environmental Health**

8930 Stanford Boulevard, Columbia, MD 21045 Main: 410-313-2640 | Fax: 410-313-2648 TDD 410-313-2323 | Toll Free 1-866-313-6300 www.hchealth.org

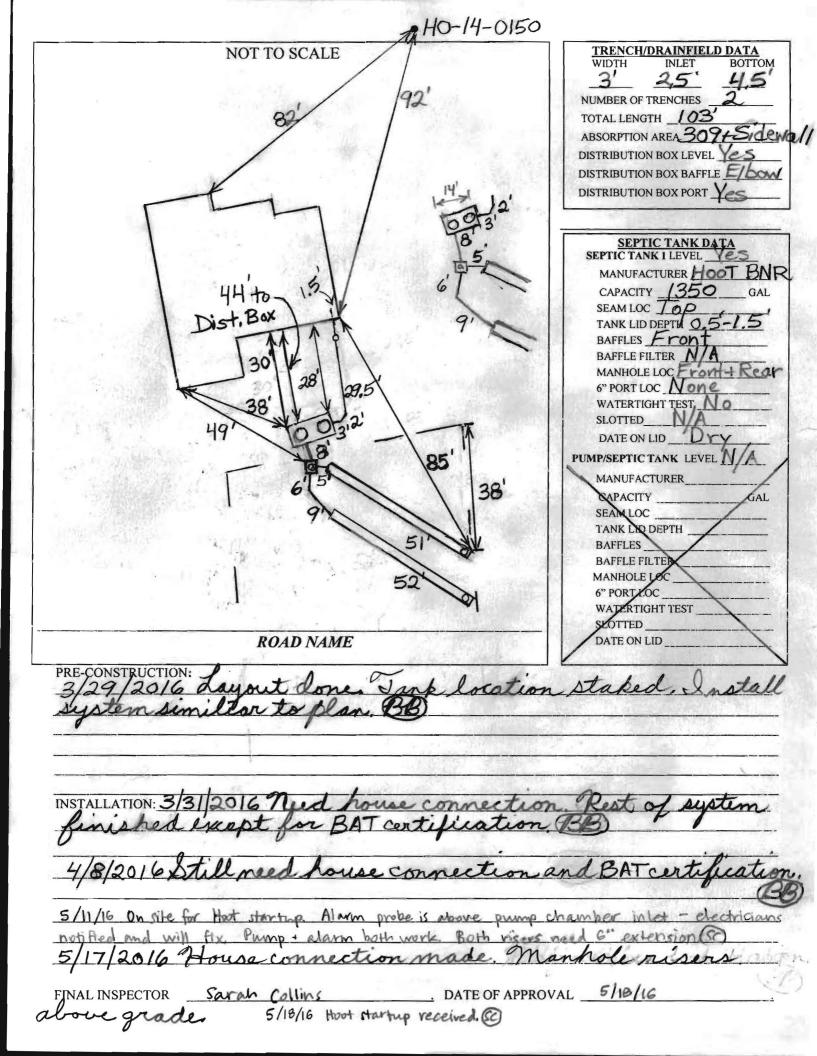
Facebook: www.facebook.com/hocohealth

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

RECEIPT DA	ATE: 2 18 16 ONSITE SEWAGE DISPOSA	AL SYSTEM P 55800)
APPROVAL DA	ATE: 5/18/16 PERMIT: CONST	FRUCTION
PROPERTY AD	DRESS: 5016 Bee Frances Way	
SUBDIVISION:	Greenberry	LOT: 4 TAX ID: <b>05-598667</b>
CONTRACTOR	: South Carroll Backhoe	EMAIL: scbackhoe@comcast.net
CONTRACTOR A	DDRESS: 4410 Salem Bottom Road	PHONE: 410-596-3618
CONTRACTO	OR CERTIFIED FOR BAT INSTALLATION: 🔀 MDE	MANUFACTURER:
PROPERTY OW	VNER: NVR Inc.	EMAIL:
OWNER ADDRES	SS: 9720 Patuxent Woods Road	PHONE: 410-379-5956
BAT UNIT MOD	DEL: Hoot 600BNR PUMP SIZE: 0.4	PUMP TANK CAPACITY: <b>750GPD</b>
OPERATION & N	MAINTENANCE AGREEMENT DATE SIGNED: 10/26/15	DATE RECORDED: /2/2/15
DISTRIBUTION	SYSTEM:   GRAVITY PRESSURE DOSED	BEDROOMS: 5 APPLICATION RATE: 1.2
	LINEAR FEET REQUIRED: 104	INLET DEPTH: 2.5 3
TRENCHES:	TRENCH WIDTH: 3	MAXIMUM BOTTOM DEPTH: 4.5 5
	MINIMUM SPACE BETWEEN TRENCHES: 10 EFFE	CTIVE AREA BEGINNING DEPTH: 2.5
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BA SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	T UNIT LOCATION MUST BE STAKED BY LICENSED
		·
NOTES:		
J		,
ISSUED BY:	Robert Bricker ISSUE DATE:	2816 EXPIRATION DATE: 21817
	ACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION	PRIOR TO BEGINNING ANY INSTALLATION
NOTE: CONTRA	ACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVA	AL OF ALL COMPONENTS PRIOR TO COVERING
NOTE: STONE	MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL	TICKET MUST BE AVAILABLE FOR REVIEW.
	RTIGHT SEPTIC TANKS REQUIRED	
	RTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGF	
	OLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAN CTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY EL	
$\boxtimes$	ELECTRICAL PERMIT ISSUED E	
	DIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR G BAT INSTALLATION.	BAT INSTALLATION MUST BE PRESENT AT ALL TIMES
NOTE: MDE RE	ECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATME SURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL	

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.





### MAYER BROS., INC.

Precast Concrete Products 6264 Race Rd. Elkridge, MD 21075

## Letter of Satisfaction Hoot System Installation

Address of Property: 5016 Bee Frances Way
Clarksville, mp. 21029
Date of Final Inspection: 5/17/16
Installer: South Carroll Backhoe Service
Hoot Technician/Inspector: Mike Sample
Thereby 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,
Name of Inspector Mayer Bros., Inc.
MAY 1 8 2016 By:

Grease Interceptors, Grease Solutions, Aerobic Treatment Units, Septic Tanks, Holding Tanks, Starra Water Structures, Hydroceptor Bench Barrier, Water Meter Vanks, Sectional Valve Vanks, Top Staks, Carb Heads, Curb Bauspers, Perministry Basement Entries. Scapewel Window Wells, Castom Procust Products

**NPCA Certified Plant** 

WBE

mayerbro@connext.net

www.mayerbrosprecast.com

PH: 410-796-1434

FX: 410-796-1438



#### Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045 Main: 410-313-2640 | Fax: 410-313-2648 TDD 410-313-2323 | Toll Free 1-866-313-6300 www.hchealth.org

Facebook: www.facebook.com/hocohealth Twitter: HowardCoHealthDep

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

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

HAVING AN ADVANCED PRE-TREATMENT SYSTEM
THIS AGREEMENT is made this Hard day of OFF 2015, among Hard DESAL SALPITA DAVE SNVE, INC., hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".
WHEREAS, Owner is the owner or contract owner of a parcel of land located at  SOIG BEE FRANCES WAY, in the Street 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 Folio PLAT # 23453
WHEREAS, The Lot is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective January 1, 2013. The pre-treatment device being installed is
NOW, THEREFORE, the parties hereto agree as follows:
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.

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

Howard County Health Department

Owner #1 Signature

Owner#2 Signature

Date

Owner #1 Print Name

//.

ver #1 Signature

Onle

Liver #2 Signatur

Owner #2 Print Name

Data

Buyer #1 Print Name

Buyer #2 Print Name

JW 8-8/2014

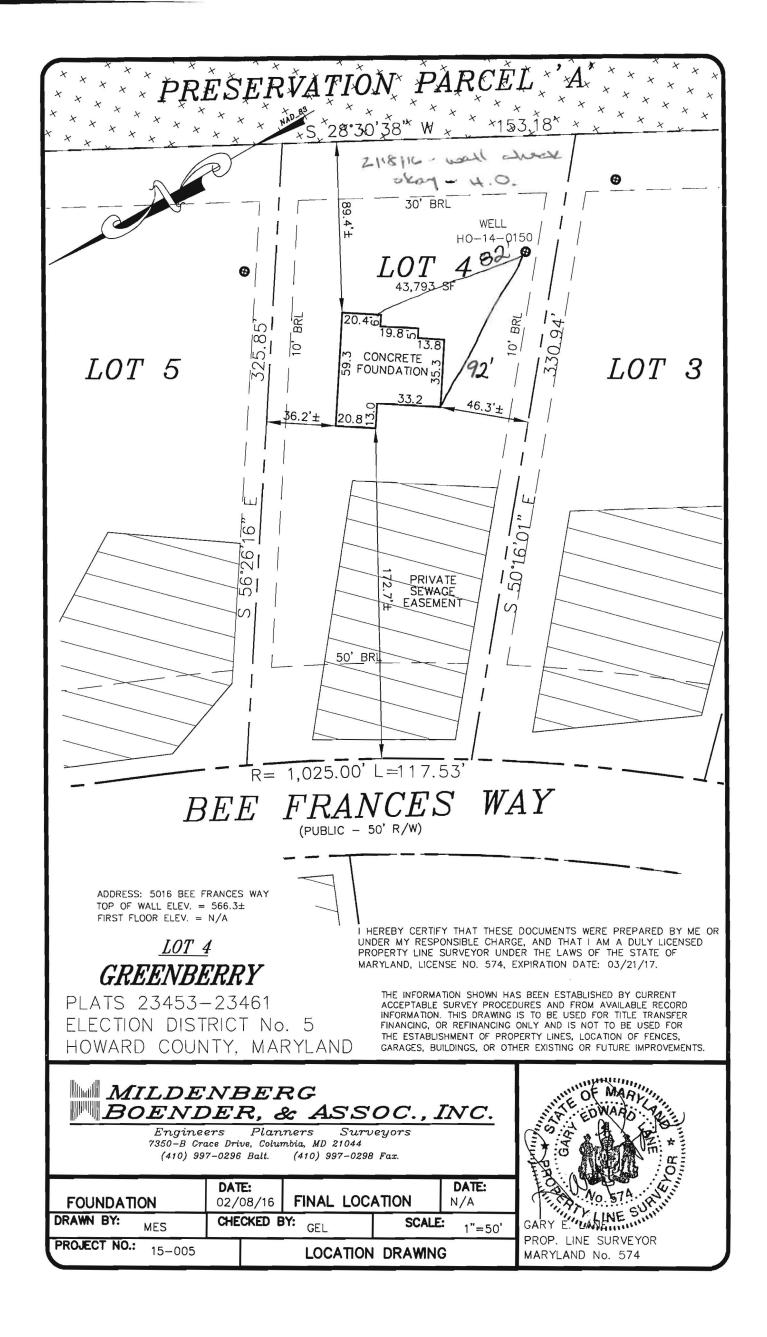
Print Date: 10/26/2015

# Lots 4,5,6,17

Clerk of the Circuit Court for Howard County Land Records/Licensing

The Thomas Dorsey Building 9250 Bendix Road Columbia, MD 21045 410-313-5850

the second secon	
	20,00
Grantor/Grantee Name: Desai Reference/Control #: 48	
LR - Agreement Surcharge	40.00
LR - Agreement Recording Fee 1x 20.00	20.00
Grantor/Grantee Name: Mendus Reference/Control #: 49	
LR - Agreement Surcharge	40.00
LR - Agreement Recording Fee	20.00
Grantor/Grantee Name: Ahmad Reference/Control #: 50	
LR - Agreement Surcharge	40.00
LR - Agreement Recording Fee	20.00
Grantor/Grantee Name: Lee Reference/Control #: 51	
LR - Agreement Surcharge 1x 40.00	40.00
======================================	240.00 240.00
REV-Check-BOA Number : 3001	240.00
12/02/2015 10:32	CC13-DS
#5240036 /1246/109 Thank you for visiting us	today~



# SOILS TABLE (WITHIN LOD)

SYMBOL	RATING	NAME	K FACTOR
GgB	(B)	GLENELG LOAM, 3-8% SLOPES.	.20

# PRIMARY TRENCH DATA

ENCH	EX. GROUND ELEVATION	INVERT ELEVATION	BOTTOM OF TRENCH EL
1	563.4	560.9	558.9
2	562.9	560.4	558.4

# SEPTIC TRENCH SIZING

SYSTEM	APPLICATION RATE (GPD / SF)	MAXIMUM FLOW RATE (GPD)	AREA OF REQUIRED TRENCH (SF)	TRENCH WIDTH (FT)	LENGTH OF REQUIRED TRENCH (LF)	EFFECTIVE DEPTH BEGINS (FT)	BOTTOM	FACTOR**	ADJUSTED LENGTH OF REQUIRED TRENCH (LF)	MINIMUM TRENCH SPACING (FT)	NUMBER OF TRENCHES	PROVIDED TRENCH LENGTH (FT
PRIMARY	1.2	600	500	3	166.7	2.5	4.5	0.62	103.4	10.0'	2	52
SECONDARY	1.2	600	500	3	166.7	3.5	5.5	0.62	203.4	10.0'	2	52
TERTIARY	1.2	600	500	3	166.7	3.5	5.5	0.62	103.4	10.0'	2	52

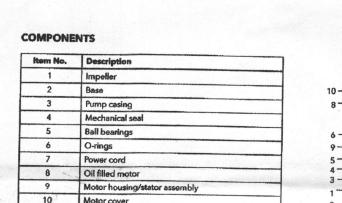
DESCRIPTION	VALUE
FINISHED GRADE AT SEPTIC TANK	564.00
INVERT INTO TANK	561.18
EXTERIOR BOTTOM OF TANK	555.93
INTERIOR BOTTOM OF TANK	553.26
PUMP OFF	554.51
PUMP ON	555.22
HIGH WATER ALARM	556.51
WATER LEVEL	557.51
INVERT OUT OF TANK	562.26
TOTAL HEAD	6.25'
DOSED RATE	50 GPN
PUMP RUNTIME	2.0 MIN

BASEMENT WILL NOT SEWER BY GRAVITY

# BAT SYSTEM ELEVATIONS

DESCRIPTION	VALUE
FINISHED GRADE AT SEPTIC TANK	564.00
INVERT INTO TANK	561.18
EXTERIOR BOTTOM OF TANK	555.93
INTERIOR BOTTOM OF TANK	553.26
PUMP OFF	554.51
PUMP ON	555.22
HIGH WATER ALARM	556.51
WATER LEVEL	557.51
INVERT OUT OF TANK	562.26
TOTAL HEAD	6.25'
DOSED RATE	50 GPM
PUMP RUNTIME	2.0 MIN

# (All dimensions are in inches, Do not use for construction purposes.)



APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

27°

DESIGN DATA & GENERAL NOTES

13 Concrete strength Fo=4,000 p.a.l. @ 28 days. Deneity = 150 pcf. 23 Cemeet - Portland Type III per ASTM C 150-92, 33 Administures & plasticiners per ASTM C 250-86 & C 494-92, 43 Reinforcing per ASTM A 185, Min. 1-1/2" cover.

Mayer Brothers, Inc.



COUNTY HEALTH OFFICER

HOWARD COUNTY HEALTH DEPARTMENT

ylem, Inc.
881 East Bayard Street Ext., Suite A
eneca Falls, NY 13148
none: (866) 325-4210
ax: (888) 322-5877
ww.gouldswatertechnology.com
oulds is a registered trademark of Goulds Pumps, Inc. and is used under license.

© 2012 Xylem Inc. B3871 R1 April 2013

			9
			1
			1
			9
			1
			11
			3
			4
			1
			1
			1
			1
and is used under lice	nse.		2
			5
			3
			6
			1
			8
			200
			8
			1
			8

. \* PROFES

48-1/2"

**600 GPD BNR SYSTEM** 

with 750 GALLON PUMP CHAMBER No Scale

3 - 2 - 1 -	15	10		20	30		— EP04		EPO5	5
2	10						EP04		EPO!	5
3	10						EP04		EPO:	5
5-4-3-									EPO:	>
5- 4-	15								EPO	
5	15					1,82			/	
2										
6	20			$\rightarrow$			1	_		
TEAD 7				$\dashv$						
	25	-					T_2	5FT		
	30					<b></b>		<b>4</b> −5 G	PM	
9-	20				+	+	+		$\neg$	
METERS FEI	ET	T		Т	 	1	Т		T	Т
	ET	T	1						,	

Order No.	НР	Volts	Amps	Minimum Circuit Breaker	Phase	Float Switch Style		Discharge Connection	0-	Minimum Off Level	Minimum Basin Diameter	Maximum Solids Size	Weight
EP0411	.4	115	12	20	1	Plug / No Switch	10'	1%"	Manual	Manual	15°	%°	20 / 9.1
EP0411A						Piggyback / Wide-Angle	10'	1%*	12"	6"	15"		21/9.5
EP0411F						Plug / No Switch	20'	1½"	Manual	Manual	15"		20/9.1
EP0411AC						Piggyback / Wide-Angle	20'	1½*	12"	6"	15"		21/9.5
EP0412		230	6	10		Plug / No Switch	10'	1½"	Manual	Manual	15"		20/9.1
EP0412F						Plug / No Switch	20'	1%"	Manual	Manual	15"		20/9.1
EP0511F	.5	115	13	20		Plug / No Switch	20'	1½"	Manual	Manual	15"		22/10
P0511AC						Piggyback / Wide-Angle	20'	1½"	12"	6"	15"		23 / 10.4
EP0512F		230	6.5	10		Plug / No Switch	20'	1½"	Manual	Manual	15"		22/10

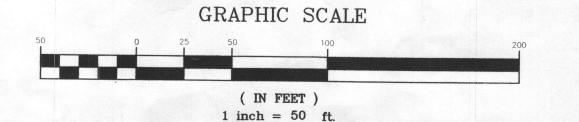
OR APPROVED BY ME AND THAT I AM A DULY LICENSED

R. JAOOB HIKMAT, P.E.

PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/2016.

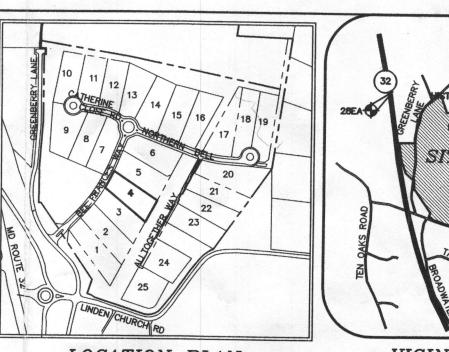
WELL CERTIFICATION: THE EXISTING WELL, TAG NO. HO-14-0150, HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

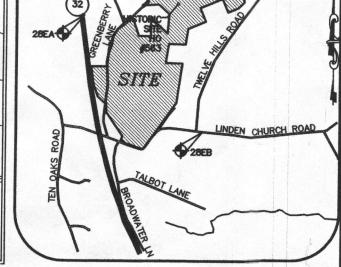
# STOCKPIL FF=567.83 G=565.83 B=557.83 N 569700



# ON-SITE SEWAGE DISPOSAL SYSTEM:

RESIDENTAL SYSTEM DESIGN: HOOT 600 BNR 4 BEDROOM HOUSE (LIVING AREA = 2,288 SQ.FT.) 150 GALLONS X # OF BEDROOMS = VOLUME OF WASTEWATER /DAY  $150 \times 4 = 600 \text{ GPD}$ PERC RATE = 2-5 MINUTES/INCH APPLICATION RATE = 1.2 GPD/SQ.FT. DESIGN FLOW + APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED  $600 \div 1.2 = 500$  SQ.FT. SQ.FT. REQUIRED : WIDTH OF TRENCH = LENGTH OF TRENCH  $500 \div 3.0' = 166.7 \text{ FT}$ USE 24" OF GRAVEL BELOW DRAIN PIPE  $166.7 \times 0.62 = 103.3$ USE TWO (2) TRENCHES (52') A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT. MINIMUM TANK CAPACITY = 750 GALLONS PUMP: GOULDS MODEL 3871, EP04 SERIES





LOCATION PLAN
SCALE: 1"=600'

VICINITY MAP

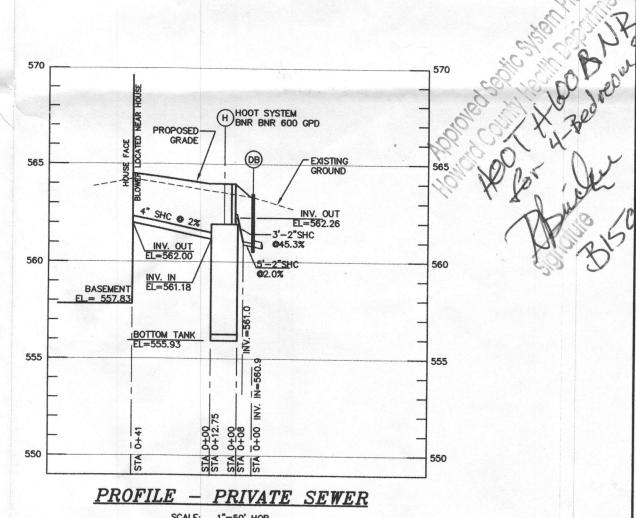
SCALE: 1" = 2000'
ADC MAP 24 GRID F6

# GENERAL NOTES:

- 1. THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- PARCEL BACKGROUND: TAX MAP: 28
- PARCEL: 48 DEED REFERENCE: LIBER 5891 FOLIO 307 ELECTION DISTRICT: FIFTH ZONING: RR—DEO.
- AREA: 43.793 S.F. DPZ FILES: ECP-13-025, SP-13-010, F-14-095, GP-15-081
- 3. 2' TOPOGRAPHY FOR THE DEVELOPED AREAS IS BASED ON AERIAL SURVEY FLOWN BY WINGS TOPOGRAPHY INC. ON OR ABOUT MARCH 2007.
- 4. PRIVATE WELL AND SEPTIC WILL BE UTILIZED.
- 5. SOILS DATA BASED ON THE USDA SOIL SURVEY OF HOWARD COUNTY, MD, DATED
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- 7. ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.
- 8. EXISTING WELLS, SEPTIC SYSTEMS, AND SEWERAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.

# BEST AVAILABLE TECHNOLOGY SITE PLAN NOTES

- 1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- 2. THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTOR'S SPECIFICATION IS 3.0'
- 3. THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON MANUFACTURER'S SPECIFICATIONS.
- 4. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE
- 5. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE
- 6. WITHIN ONE (1) MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
- 7. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED
- 8. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY.
- THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE



SCALE: 1"=50' HOR 1"=5' VER

OF '